In-depth Monitoring Report
on
HYV Jute & Jute Seed Production and Improved Jute Retting Project (2nd Revised)

Industry and Power Sector
Implementation Monitoring and Evaluation Division (IMED)
Ministry of Planning
Government of the People's Republic of Bangladesh

June 2016

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Abbreviations

ADP	**Annual Development Program**
BADC	**Bangladesh Agricultural Development Corporation**
BBS	**Bangladesh Bureau of Statistics**
BJMC	**Bangladesh Juts Mills Corporation**
BJRI	**Bangladesh Jute Research Institute**
BJSA	**Bangladesh Juts Seed Association**
BMTF	**Bangladesh Machine Tools Factory Ltd**
CPTU	**Central Procurement Technical Unit**
CRDS	**Center for Resource Development Studies Ltd**
DAE	**Department of Agricultural Extension**
DPM	**Direct Procurement Method**
DPP	**Development Project Proposal**
FGD	**Focus Group Discussion**
GDP	**Gross Domestic Products**
HYV	**High Yielding Variety**
IMED	**Implementation Monitoring and Evaluation Division**
KII	**Key Informant Interview**
OM	**Quotation Method**
OTM	**Open Tendering Method**
PPA	**Public Procurement Act**
PPR	**Public Procurement Rules**
RDPP	**Revised Development Project Proposal**
SWOT	**Strength Weakness Opportunity Threats**
TLS	**Truthfully Labeled Seed**
ToR	**Terms of Reference**

Executive Summary

Jute in Bangladesh known as “Golden Fibre” of yesteryears started to disappear from our mind. With the aim of strengthening country’s economy; firm steps taken to bring back the lost glory of jute and keeping the heritage high, the golden past of the golden fibre has started to come back. In consideration of the economic, social, cultural and environmental contribution, the production of Jute is an unavoidable activity. Integrated Jute Production and Marketing Pilot Project (Phase - II), High Yielding Variety (HYV) Jute Production and Exchange Programme at the Farmers’ Level and the ongoing HYV Jute and Jute Seed Production and Improved Jute Retting Project were undertaken by the Department of Jute under Ministry of Textiles and Jute to attain self sufficiency in HYV jute seed production by reducing dependence on import and motivating and giving continuing support to the production of high quality Tossa Jute. The projects have been undertaken and is being implemented by own fund of the Government of Bangladesh. The ongoing project is being implemented from July 2011 to June 2016 in 200 upazilas of 44 districts at an estimated cost of BDT 18,386.948 lakh.

Main objectives of the project are: (1) Rapid introduction of new varieties of HYV jute seed invented / developed by Bangladesh Jute Research Institute (BJRI) and others organizations among the farmers and extending and transferring of advanced technology for production, preservation and distribution of HYV jute seed at farmers’ level to meet the national demand. (2) Producing 60-70 lakh maund of HYV Tossa Jute by replacing low quality jute and 1500-2000 mt of HYV jute seed. (3) Increasing the yield and quality of jute by distributing HYV seeds (4) Motivating the jute farmers in using improved process of retting by use of water hyacinth, straw, concrete slab, bamboo stick etc, and discouraging them from using harmful materials like banana trees, clay etc. and (5) imparting necessary training to 100,000 farmers on improved method and technique of cultivation of HYV jute and jute seed production and improved jute retting process.

In-depth monitoring has been conducted to assess if the project was implemented properly following all relevant government rules and regulations. SWOT analyses of the project were carried out to get guidance for the implementation. Data were collected from 2,400 project associated farmers and 600 project outside jute farmers for this in-depth monitoring. A total of 3,000 respondents involved with jute and jute seed production were randomly selected by statistical formula. Besides the sampled 3,000 farmers data were collected from 52 field level officers of the directorate in 40 sampled upazila of 12 regions. The in-depth monitoring report has been prepared based on data collected from farmers and 12 focus group discussions (FGD) conducted with stakeholders related with jute and jute seed production, one local level and one national workshop conducted at IMED.

From the inception to March, 2016 the cumulative expenditure of the project was Tk. 10,640.43 lakh against RDPP provision of Tk. 18,386.94 Lakh and this is 57.86% of total RDPP provision and in last 5 years in the RADP the actual allocation was Tk. 12,172.00 Lakh and this expenditure is 87.42% of total allocated money of RADP provision. The major heads of expenditure by components are: (a) salary and allowances of staff (37.7%); (b) training (91.97%); (c) seed purchase (87.83 %); (d) purchase of fertilizer (36.74%); (e) purchase of transport vehicle (98.88%); (f) purchase of equipment and other accessories (57.61%); (g) purchase of office equipment (89.17%); (h) purchase of office furniture (81.12%); (i) purchase of jute canvass sheet and signboard (42.60%). The physical achievement against target of the

major components of the project up to March, 2016 are (a) training (86.04%); (b) foundation & certified seed purchase respectively (95.37% & 44.5%); (c) purchase of transport vehicle (100%); (d) purchase of equipment and other accessories (58.97%); (e) purchase of office equipment (72.65%) and (f) purchase of jute canvass sheet and signboard (42.71%).

An amount of 5,032 m ton of jute seed has been produced against a target of 8,238 m.ton during the period 2011- 12 to 2015 -16 by cultivating 39,084 acres of land. The achievement against the target is 61%. During the period 2011 -12 to 2015-16 a total of 436.98 lakh maund of jute was produced against a target of 426.88 lakh maund. The production is 102% of the target. The land, the production and increase in price of jute fibre in 2015 with respect 2011 are 0.1%, 0.9% and 15.9% respectively. The area, the production and price of jute seed in the fifth year have increased by 13.8%, 11.1% and 39% respectively. In case of farmers outside the project the increment in land, production and price for jute are 9.9%, 21.1% and 48.2% respectively

From the beginning to the fifth year the number of farmers cultivating O-9897 variety increased to 1256 from 61, the number of jute seed producing farmers increased to 439 from 2. Before beginning of the project, 74.8% farmers purchased seeds from market. During project period 97% farmers got seed from the project. During project period 94% of the jute producing farmers and 89.4% of the jute seed producing farmers cultivated (O-9897) variety.

56.5% Jute producing farmers, 47% jute seed producing farmers and 60.8% outside project farmers reported that the purity of seeds was 81-90%. 48.8% jute seed producing farmer, 45.2% jute producing farmers and 37.7% project outside farmers reported that germination of jute seed was 81-90%. 53.5% outside project farmers reported that the germination of jute seed was 71-80%.

The price of jute of farmers of project area was Tk. 48.60 per kg and that of the project outside farmers was Tk. 43.86 per kg. The price of jute seed was Tk. 181 per kg. Average price of the jute stick was Tk. 6.32- 7.0 per kg. The total income of project area jute producing farmers per acre was Tk. 56,036 and that of the jute seed producing farmers was Tk. 35,625. The income of farmers of project outside area was Tk. 43,065 per acre. The cost of production of one acre of jute by project area farmers, jute seed producing farmers and farmers of project outside area was Tk. 28,425, Tk. 27,831 and Tk. 32,462 respectively,

Among sample 1800 jute producing farmers only 145 farmers (9.1%) and 7 (1.2%) farmers out of 600 samples outside project area farmers marketed jute fibre after grading. Farmers will be financially more benefited if they marketed jute fibre after grading.

Among the jute producing farmers and jute seed producing farmers; 67.6% and 89% respectively received one day training. The training met their need and was beneficial for them. According to the opinions of 85% jute seed producing farmers and 80% jute producing farmers that their efficiency has increased as a result of the training. Each and every jute farmer got a production assisting booklet. 49% jute farmers informed that visual aids were used for conducting training. Besides, 83.4% jute producing farmers and 93.4% jute seed producing farmers reported that jute production technologies were practically demonstrated.

About 53% of jute producing farmers and 99% jute seed producing farmers informed that exhibition on production of jute using modern technology was arranged . Now about 60% farmers do not use clay lumps or banana trunks as before for jute retting. Now, they use water hyacinth, rice straw & concrete slabs for jute retting. Ribbon retting method was used by only

8.4% farmers. Modern ribbon retting method was demonstrated to 27% farmers. Field days were arranged in demonstration fields and 50% of participants showed interest for adopting the technology.

The farmers under the project could acquire knowledge on use of agricultural inputs and got necessary fertilizer, seed and training. The measures for producing high quality jute and HYV jute seeds were possible due to free distribution of seed, fertilizer and other inputs among farmers. Transports were supplied from the project for appropriate implementation of the project programmes; as a result proper monitoring at the field level was possible with limited manpower. The quantity of jute fibre and yield of jute seed have increased as a consequence of cultivation of jute using modern technology introduced through training. Different recent steps taken by the government for diversifying use of jute has cast positive influence on the in demand of jute in the country and consequently jute cultivation.

Although the mentioned programme exists under the project but there is dearth of technical manpower in the field. The marginal farmers are being deprived of the opportunities of inclusion in the project due to the precondition of obligatory ownership of at least one acre of land. Besides, no initiative was taken from the project for marketing of fibre or jute seed. Initiative for marketing of foreign (Indian) seed in addition to locally produced HYV seed under the project was observed. Imparting one day training to only 100 out of 1250 farmers selected in each upazila under the project is contradictory to the philosophy of the project.

The following recommendations may be considered for overall improvement of Jute Sector.

- The HYV jute seed production programme of the project is to be extended up to door step of every jute farmer with a view to increasing the production of jute
- Adequate and timely supply of agricultural inputs under the project, especially seed, fertilizer and pesticides are to be maintained
- Arrangement of purchasing jute seeds at fair price and selling those with proper packaging and certification is to be ensured to overcome the crisis of jute seeds faced in the country and motivating the farmers for producing jute seeds
- Jute farmers are to be imparted two days' training for motivating them on grading of jute and marketing that after grading
- It is recommended that 4 steps (sandwich) training be imparted to the officers and staff of the project on technology for production of high quality jute and jute seed.
- A sustainable programme for increasing jute seed production, storage and distribution is to undertaken instead of a distribution programme dependent on imported seed.
- Coordination among the Department of Jute, Department of Agricultural Extension (DAE) and Bangladesh Jute Research Institute is to be enhanced for research, technology development and extension in the field to ensure the diversified use of jute
- Initiative for year round programmes is to be taken to ensure continuous increase of production of jute and enhancement of its quality
- According to Rules of Business 1996 and its allocation of Business, commercial use of jute and expansion of jute industries related activities are included in the charter of the Textile and Jute Ministry. Project activities could not be extended up to each jute farmer due to want of inadequate manpower in the field. Most of the activities of the project are relevant to the activities of Agriculture Ministry. In case of undertaking any project of this type for implementation in the future; allocation of business needs to be reviewed under Rules of Business 1996.

Chapter 1
Description of the Project

1.1 Project Background[1]

Jute, the golden fibre of yesteryears, was the only major source of foreign exchange earning of the country until late seventies when its contribution was around 80% of the total earning. Livelihood of over 4 million farmers in Bangladesh was directly or indirectly dependent on production of jute. Thus, jute occupied a very important position in the economy of Bangladesh as the main cash crop. Besides, jute provided the largest employment in the industrial and trade sector, wide scale of income generation, poverty alleviation and higher contribution to GDP. But from eighties, with the advent of cheap synthetic substitutes, bulk handling, containerization and storage in silos, jute and jute goods started losing markets sharply, particularly in the developed countries, leading to decline in their demand for traditional jute goods. This situation has had a serious adverse impact not only on the jute industry but also on the millions of marginal farmers growing jute and thereby contribution of foreign currency earning of this jute sector has been gradually reducing and now it stands at 5% of the total earning.

Amongst the jute growing countries, Bangladesh stood at the top till 1970 having 20 lakh acres of land under jute production which has now come down to 10-12 lakh acres. As a consequence, the total quantity of jute production dwindled from 68 lakh bales to nearly 40-50 lakh bales during the same period. Alongside with an alarming decline in the quantity of jute production, deterioration in quality has also set in. Further, in the present backdrop of rising price of rice, farmers are, by and large, transferring their land from cultivation of jute to paddy and other crops. Yet Bangladesh supply about 90% in raw jute and 55% in jute products demand in the world. But there is no denying that jute, the major foreign exchange earning item of our country in the recent past, has still enormous opportunities to raise its standard and status up the level to compete successfully in regional and global market by taking appropriate steps production of jute in the Perspective of modern technology, maintaining quality, standard and reasonable price envisaging innovative approaches for multi-dimensional uses of jute

Jute sector is the backbone of our national economy. The jute sector provides about 10% of total employment in the country, contributes about 4% to GDP and about 5% to gross export earnings. Jute is biodegradable and it replenishes plant nutrients in the soil. Jute and allied fibre can be used as an industrial raw material for many intermediate and end use products having wide market demand. Jute and jute products not only retard ecological degradation but also conserves environmental and atmosphere as a whole.

Jute is the principal crop among the cash crops of Bangladesh. The quality of jute fibre is dependent on its retting process. The low quality jute fibres are produced due to lack of practice of improved retting process even from HYV jute fibres. For this reason, jute crop is different from the other crop. The jute retting is being occurred by the existing micro-organisms of water. Fibre quality deteriorate due to using of banana tree, clay etc. on the piles of jute during retting period.

BJRI has been working relentlessly from its very establishment in 1957 with seed development and they have so far successfully improved/developed a good number of varieties of seeds of both capsuleries and olitorious. BJRI's 0-9897 and O-72 HYV jute seeds are found to be

[1] Approved DPP, Page-74-80

very successful in production and marketing of jute at farms level under the projects so far implemented by the Department of jute.

Bangladesh needs approximately 4,500-5,000 mt. of HYV Jute seed for about 13 Lakh (considering some increase over the land under jute in 2008-09). Out of this quantity, BADC supplies 900-1000 mt. HYV Jute seed. The listed growers of the on-going program of department of jute produce 400-412 mt. HYV jute seed per year. The Govt. of Bangladesh imports 2000-2500 metric ton (mt) jute seed in each year.

At the time of project preparation as per DPP information on jute cultivation mentioned above updated statistics presented below:

Year	**land cultivation (Lakh Acres)**	**production** (lakh **bales**)	Yield(**bales/ Acre)**
2011-12	18.78	80.03	4.53
2012-13	16.83	76.11	4.52
2013-14	16.45	74.36	4.52

Source: BBS

The data mentioned above showed that jute cultivated area and jute production gradually declining from 2011-12 to 2013-14 financial years.

1.2 Project Objectives

1. To accelerate and assist introduction of new varieties of HYV jute seed invented / developed by, BJRI and others organization among the farmers and also extend & transfer of advanced technology for production, preservation and distribution of HYV jute seed at farmers' level to meet the national demand; (***Chapter-6, page: 68)***
2. To produce 1,500-2,000 mt HYV jute seed per year by cultivating about 9,300 acre land by involving 50,000 farmers;**(Chapter-6, page: 68)**
3. To Produce 60-70 lakh maunds of HYV tosses jute per year through cultivation of 200,000 acre land by involving 200,000 farmers and to replace low quality jute seed by introduction of HYV jute seed; (***Chapter-6, page: 68)***
4. To bring about a quantitative as well as qualitative improvements in the overall production of jute in the country through distribution of high yielding variety of jute seed; (***Chapter-6, page: 68)***
5. To reduce production cost of jute by increasing per acre yield; (***Chapter-6, page: 69)***
6. To motivate the jute farmers for jute retting by using improved process through use of water hyacinth, straw, concrete slab, bamboo stick etc, and discouraging them from using harmful materials like banana trees, clay etc. (***Chapter-6, page: 69)***
7. To impart necessary training to 100,000 farmers on improved method and technique of cultivation of HYV jute and jute seed production and improved jute retting process. (***Chapter-6, page: 69)***

1.3 Project Approval and Revision

On 13/09/2011 the Executive Committee of National Economic Council (ECNEC) approved the project with an estimated expenditure of Tk. 16,903.0290 lakh. Original implementation period was July 2011-June 2016. The project initiated at a cost total cost of Tk. 17,697.218 lakh was first revised on 27- 03- 2013 to raise the cost by Tk. 794.189 lakh for importingof 1000 metric ton high yielding JRO-524 and Tossa seed from India and additional procurement of 20,000 nos of agricultural machinery, furniture etc. Later on, the cost was increased to Tk. 18386.948 lakh, an increase of 689.73 lakh at a Second Revision by the Planning Minister on 15/04/2014. There is no provision of foreign assistance for the project.

Revised Cost and Implementation Period of the Project

Type of DPP	Implementation Period	Project Cost (In lakh taka)	Cost increase (% of original cost)
a. Original	July 2011- June 2016	16903.029	-
b. 1st Revised	July 2011- June 2016	17697.218	794.189 (4.70%)
c. 2nd Revised	July 2011- June 2016	18386.948	1483.919 (8.78%)

1.4 Major Components of the Project

1. To select 200,000 jute growers and 50,000 jute seed growers for the project in the 200 suitable upazilas of 44 major jute growing districts of the country.
2. To motivate 4,000 jute farmers for improving jute retting practices in 200 upazilas by using improved jute retting method as demonstration.
3. To impart necessary training to the 100,000 jute farmers on production of HYV jute and jute seed production and improved jute retting.
4. To purchase of 81.275 metric ton foundation seed, 4,046.37 metric ton certified seed from BADC and import of 1983 metric ton high yielding jute seed JRO-524 from India to meet production target of 7,500-10,000 metric tons HYV jute seed for project period.
5. To distribute 26,175 metric ton chemical fertilizers, 59.30 metric ton insecticides and 77,000 Nos. of agricultural equipment and other essential materials for production of HYV jute and jute seed among the listed farmers free of cost.
6. To Introduce advanced technology for HYV jute production.

1.5 Information about Projects Approved & Implemented and Programme before Current Project.

Before current project of "HYV Jute and jute seed production & improved jute retting project (2nd revised), Department of Jute implemented 4 developing projects and one programme. Brief tabular description of their objectives, programmes, activities, achievements, manpower, project area, selected farmers and training moment presented below:

1. Integrated Jute Production and Marketing Pilot Project

Project period	:	January, 1994 to February 1997, Duration: 3 years.
Project objectives	:	Increasing yield of jute per acre by practicing of modern cultivation method and consequent reduction of production cost and motivating farmers to grow more tossa jute in place of deshi jute.
Major activities of the project	:	The variety O-9897 contrived by the BJRI are to be cultivated by the selected 6000 farmers in 18000 acres of land in 60 upazilas of 30 districts; The farmers have been trained and seed, fertilizers, insecticides, hand sprayer, seed sowing and weeding equipment have been distributed free of cost among the farmers.
Achieved result	:	The number of farmers benefited was 5,640 and area cultivated was 16,200 acres which were 94% and 90% of the respective targets. The yield with BJRI variety wih improved technology was 30-32 maunds per acre compared to 18 -20 maunds production per acre following traditional method.
Manpower	:	152 Nos.
Project area	:	60 upazilas of 30 districts
Selected farmers	:	6,000 Nos (Target)
Farmers training	:	2,825 Nos

2. Production and Exchange Program of HYV Jute Seeds at Farmers Level

Project period	:	July 1996 to June 2002, Duration: 6 years.
Project objectives	:	Replacing low quality jute seed by, introducing of high quality jute seed gradually; improving quality of fibre reducing of use of low quality seed and Bringing 26,000 farmers under the project.
Major activities of the project	:	Distribution of foundation seed, fertilizer and insecticides free of cost to selected farmers for HYV jute seed production and imparting training to the farmers on modern technologies and techniques of jute seed production.
Achieved result	:	Out of 26,000 selected farmers 22,360 farmers were benefited. Every farmer cultivated 0-9897 variety of jute in 10 decimal lands to produce tossa jute seed. Farmers used their own produced seed in jute seed production and sold or exchanged surplus seed with other farmers.
Manpower	:	12 nos
Project area	:	100 upazilas of 32 districts.
Selected farmers	:	26,000 Nos (Target)
Farmers training	:	6,041 nos

3. Integrated Jute Production and Marketing Project

Project period	:	March 1997 to June 2002, Duration: 5 years.
Project objectives	:	Increasing jute production per acre consequently reducing production cost, improving quality of jute and, motivating farmers to grow more tossa jute in place deshi jute.
Major activities of the project	:	Distribution of agriculture inputs (certified jute seed, fertilizer, insecticide and farm equipment) among selected farmers free of cost Imparting training to the farmer on tossa variety jute production using modern technology.
Achieved results	:	The number of farmers benefited was 49,000 and area cultivated was 92577 acres which were 94.2% and 94.5% of the respective targets. The yield with HYV variety wih improved technology was 30-34 maunds per acre compared to 18 -20 maunds per acre following traditional method. An additional 16.58 lakh maunds of jute were produced.
Manpower	:	152 nos
Project area	:	100 upazilas in 32 districts (As per revised DPP) 92577 acres
Selected farmers	:	52,000 nos (Target)
Farmers training	:	12,256 nos

4. Integrated HYV Jute and Jute Seed Production (2nd phase)

Project period	:	July 2002 to June 2011, Duration: 9 years. (including 4 year extension till 2011)
Project objectives	:	Reducing production cost by increasing of per acre yield Increasing production of jute seed and fibre by use of modern high yielding varieties (HYV).Transferring improved jute retting method/technologies and replacement of low quality jute seed used by the farmers by HYV jute seed gradually.
Major activities of the project	:	Every year in 100 upazilas of 35 districts (100 farmers per upazila), in 2000 acres land of 10,000 selected farmers (20 decimals per farmer) gradually/phase wise 150-400 m.ton 0-9897/0-72 tossa varieties seed to be produced and in 20,000 acres (one acre per farmer) by 20,000 farmers 6-7 lakh maund of tossa jute fibre to be produced. Selected farmers to be trained. Distribution of foundation and certified seed, fertilizers, insecticide, hand sprayer riboner, other facilitating materials, signboard and guide book to be distributed.
Achieved result	:	In place of 18-20 maunds production of jute fibre per acre 30-34 maunds production per acre was achieved. The technology of late season jute seed production was extended to farmer's level.Farmers received seed, fertilizer, insecticides and other inputs free of cost from the project.
Manpower	:	142 nos
Project area	:	100 upazilas of 35 districts
Selected farmers	:	60,000 farmers (1^{st} phase 20,000, 2^{nd} phase 20,000, 3^{rd} phase 20,000, total 60000)
Farmers training	:	Target 37,500, achievement 36,570 nos

1.6 The Role of Manpower Transferred from Project/Program to Revenue Head

There was a provision of transferring manpower from one project to the other in PCP. Information related to this issue is presented below:

1. There were 152 persons employed in the pilot project "Integrated Jute Production and Marketing" (January, 1994 to February, 1997) with financial assistance from European commission.
2. The project implemented under the ADP was "Production and Exchange Program of HYV Jute Seed at the Farmer's Level" (July 1996 - June 2002) and as per PCP/PP manpower was 12.
3. There was a provision of 455 manpower as per project PCP/PP "Integrated Jute Production and Marketing'' (March 1997-June 2002) under. As per decision taken in ECNEC meeting held on 24.01.1997, 152 employees were transferred to this project from EC funded pilot project.
4. The manpower and activities of two projects "Production and Exchange Program of HYV Jute Seed at Farmers Level" and "Integrated Jute Production and Marketing" were merged together to form "Integrated HYV Jute and Jute Seed Production Project (2nd phase), (July 2002-June 2011) under ADP. As per project PCP provision, 142 manpower of 2 completed projects were transferred to Integrated HYV Jute and Jute Seed Production 2nd phase" Project.

Out of 142 Officers and employees of the "Integrated HYV Jute and Jute Seed Production Project (2nd phase) 121 persons were transferred to Revenue Head in 2011. Out these employees 97 employers were instructed to perform in the "HYV Jute and Jute Production and Improved Jute Retting Project (2nd Phase) temporarily. That means 97 officers/employees of previous projects now under Revenue Head are presently are working in the project. The list of these persons along working place is presented in Appendix-A.

The manpower transferred to Revenue having received many training on Jute, Jute seed production and Retting from 1994 exchanged knowledge and skill with the farmers. Under their direct supervision in all projects/program, the production has successively increased and fibre quality improved due to improved retting practices.

Chapter 2
Methodology of In-depth Monitoring Study

2.1 Background In-depth Monitoring Study

Implementation Monitoring and Evaluation Division (IMED) conducts monitoring and evaluation of the development projects under its Annual Development Program (ADP). As a consequence, a clear cut understanding in respect of proper implementation of projects by ministries and implementation agencies may be obtained. IMED through its intense monitoring reports informs the relevant authorities in respect of discrepancies observed in the process of implementation and suggests remedial measures. IMED through its monitoring of a project implementation informs relevant authority in respect of actual implementation progress, quality of work and steps to be taken in future. By identifying the problems of project implementation, it suggests steps to be taken in this respect.

Every year, IMED conducts In-depth monitoring of a limited number of ongoing projects through consulting firms to monitor the implementation progress of the projects included in the ADP. In pursuance of this IMED took the initiative to carry out, under its revenue budget for FY 2015-16, in-depth monitoring of "HYV Jute and Jute Seed Production and Improve Jute Retting Project" (2nd revised) implemented by Department of Jute under the Textile and Jute Ministry. Accordingly, IMED engaged Center for Resource Development Studies Ltd. (CRDS) as a consulting firm for monitoring the above mentioned project through a circular by following all necessary process of procurement.

2.2 Terms of Reference (ToR) for the in- depth Monitoring Firm

The objectives of the In-depth Monitoring study as per Terms of Reference are:

1. Review the progress of implementation of all major activities mentioned in the progress reports prepared by the Ministries / Departments / Agencies and verification through field visits; (***Chapter-3, page: 15-24)***
2. Review and analysis of all major activities implemented under the project such as: ensuring quality jute production, long-term training for farmers, the exhibition of the plots at farmer's level, making the quality of jute farmer's motivation measures (guidance, according to design); (***Chapter-4, page: 25-46)***
3. Review of the Human Resources' engaged in the project implementation for achieving the objective of the project and its sustainability; (***Chapter-4, page: 50-61)***
4. Review and analysis of the policies formulated, technologies applied and activities conducted to attain the project objectives and the project activities for effective and prompt and expansion; (***Chapter-4, page: 25-71)***
5. Review and analysis of the procurement goods and services (tendering evaluation, approval process, orders etc.) to check whether they followed the guidelines (Indicator) of PPA 2006 and PPR 2008; (***Chapter-5, page: 63-65)***
6. Review to check whether the activities are conducted in accordance with the approved RDPP; (***Chapter-3, page: 15-24)***
7. Compare the outcome of the project activity with any other area where no activities were taken under the project; (***Chapter-4, page: 25-46)***
8. SWOT analysis of the project along with recommendations; (***Chapter-7, p: 68-71 & Chapter-8 p: 72-73)***
9. Assess whether the project needs any further improvement in the design to meet its ultimate goal; ***Chapter-7, p: 68-71 & Chapter-8 p: 72-73)***
10. To compare and analyses current project objectives and results with previous completed projects and programme continuity***(Chapter-1, page 4-6)***

2.3 Methodology

This chapter includes review of literature, selection of study area, determination of parameters, questionnaire development, sampling of respondents, recruitment and training of data collectors, data source identification, primary data collection, conducting key informant interview, focus group discussions, collection of secondary data, data management and statistical analyses and reporting. It may be mentioned here that, both qualitative and quantitative evaluation methods have been followed to meet the need and objectives of in-depth monitoring study.

2.3.1 Review of Literature

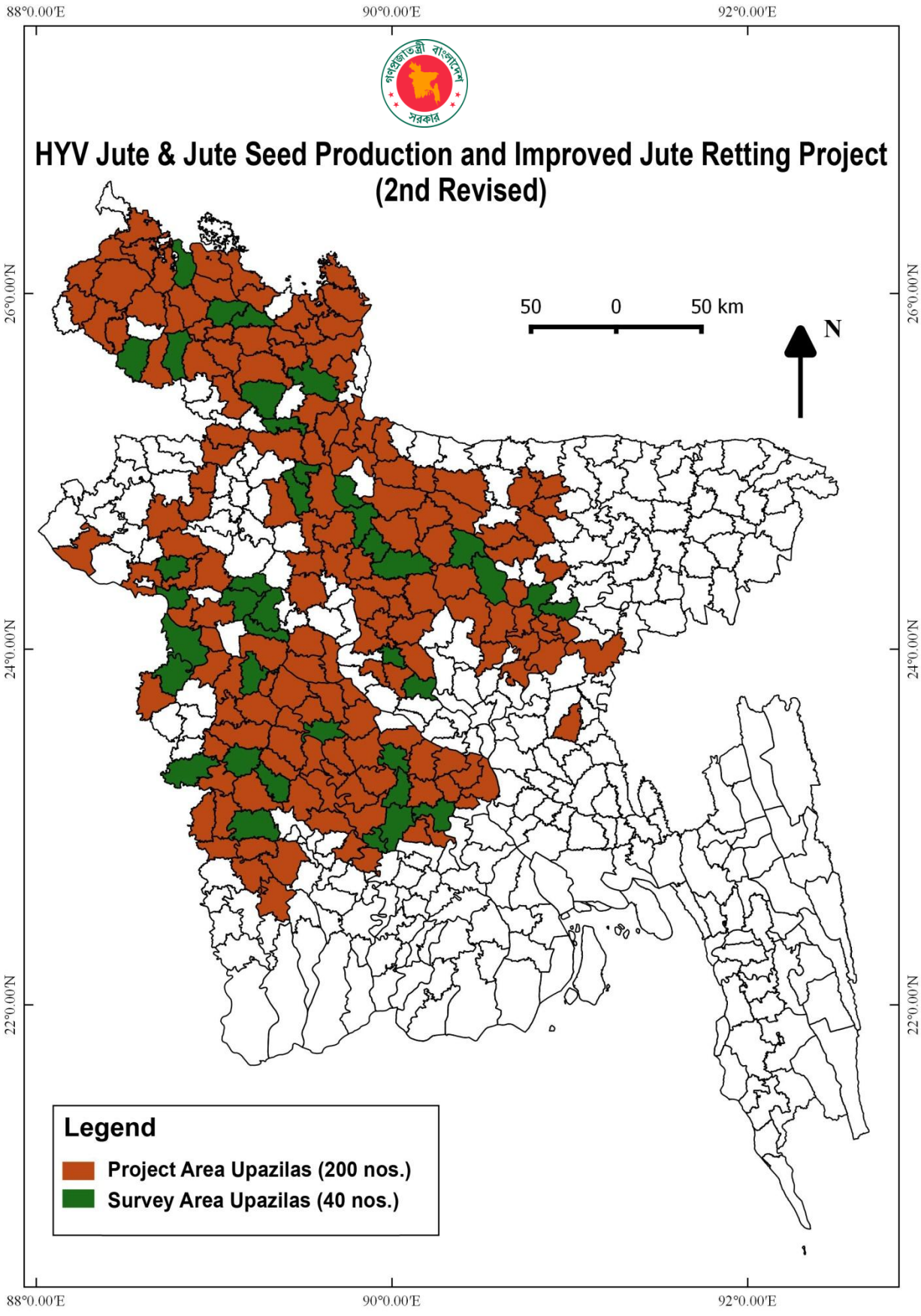
Relevant documents providing information on project activities and documents providing secondary information in respect of the project and associated activities were reviewed. The evaluation team collected the DPP, Progress Reports and other related documents. Besides, related data and information were collected from the Department of Jute and Department of Agricultural Extension.

2.3.2 Study Area

Activities of the project were dispersed over 200 districts of Bangladesh. For the present study 40 upazilas were sampled randomly from 200 upazilas out of 44 districts divided in 12 regions (Table 1). Information for in-depth monitoring study of the project was collected from these 40 jute growing upazilas. A location 40 sample upazilas in the jute growing area is shown in Bangladesh Map (Picture -1).

Table 1: List of project area and selected districts and upazilas for In-depth monitoring study

Region	Project District	Selected districts and upazilas for In-depth monitoring study	
		District	Upazila
1. Gazipur	Dhaka, Gazipur, Manikgonj, Norshindi, Comilla	1. Manikgonj	Saturia, Singair
2. Tangail	Tangail, Sherpur, Jamalpur	2. Tangail	Ghatail, Gopalpur
		3. Jamalpur	Sarishabari, Madargonj
3. Mymensingh	Mymensingh, Netrokona, Kishoregonj, B-Baria	4. Mymensingh	Gaforgaon, Trishal
		5. Kishoregonj	Katiadi, Bajitpur
4. Faridpur	Faridpur, Rajbari, Magura	6. Faridpur	Bhanga,Modhukhali
5. Madaripur	Madaripur, Shariatpur, Gopalgonj, Barisal	7. Madaripur	Kalkini, Rajoir
		8. Gopalgonj	Kotalipara,Tungipara
6. Jessore	Jessore, Khulna, Sathkhira, Narail,Bagerhat, Jhenidah	9. Jessore	Bagerhat,Monirampur
		10. Jhenidah	Kaligonj, Moheshpur
7. Kushtia	Kushtia, Chuadanga,Meherpur	11. Kushtia	Doulatpur, Kumarkhali
		12. Meherpur	Gangi, Mujibnagar
8. Rajshahi	Rajshahi, Naogaon, Chapainowabgonj	13. Rajshahi	Durgapur, Charghat
9. Natore	Natore,Pabna,Sirajganj	14. Pabna	Atghoria, Chatmohar
		15. Natore	Baraigram, Gurudashpur
10. Bogra	Bogra, Joypurhat, Gaibandha	16. Bogra	Gabtali, Sonatala
		17. Gaibandha	Sundargonj, Palashbari
11. Rangpur	Rangpur, Kurigram, Lalmonirhat, Nilphamari	18. Rangpur	Gangachara, Pirgonj
		19. Nilphamari	Kishoregonj, Domar
12. Dinajpur	Dinajpur, Panchagor, Thakurgaon	20. Dinajpur	Chirirbandar, Birol
Total =12	**44**	**20**	**40**



Picture -1: Project & Survey Area Map

2.3.3 Sample Selection Procedure and Sample Size

For determining sample size the following formula was used developed by Daniel (1999).

$$\mathrm{n} = \frac{z^2 . \mathrm{p} . \mathrm{q}}{e^2} x\ D.eff \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where,
n = the desired sample size
z = the standard normal deviate, set to 1.96 at 95% level of confidence
p = target proportion (%), we assume that at least 20% farmers are using jute seed
q = 1 – p;
D.eff = design effect, set to 2.0
e = the precision level, which is considered to be 2%

Using the formula stated above, the estimated sample size was

$$n = \frac{1.96^2 x 0.2 x 0.80}{0.02^2} \times 2 = 3073$$

For this study, we considered a round figure of sample size 3000.

3000 samples derived as shown above were equally divided in 40 sampled upazilas. Accordingly by equal allocation for each upazila the numbers of farmers stand at 75 for (Total from 40 sampled upazilas stood at 3000).The study has been completed by interviewing project area beneficiaries as well project adjacent farmers on sample basis. In each upazila 45 number of jute fibre producing farmers were interviewed i.e. a total of (45*40=1800) sample farmers were interviewed. Similarly, 15 number of jute seed producers farmers were interviewed in each sampled upazila (The sample number in study upazilas stand at (15*40=600). Besides, 15 number of jute producers of outside project area of from each sample upazila were interviewed during the evaluation process (The sample number in study upazilas stand at (15*40=600). In addition, Information was collected through 12 Focus Group Discussions (FGD) held in each of the 12 regions with stakeholders related with from Jute and jute seed production. Besides key informant's interviews (KII) were carried out with Senior Assistant Project Director (Coordinator) of each region. Similarly, KIIs were held with Upazila Jute Development Officers in each of the sample upazilas. Thus in all 52 KIIs were carried out by using KII checklist. Distribution of sample respondents in the study areas is given in Table 2.

Table 2: Distribution of Sample Respondent by Study Areas

Region	Project District	Sample upazilas	Statistically Representative Sample Size					
			Beneficiary Group		Control Group	Nos. of FGD & upazila name	KII with Project Officer	
			jute fibre producers	jute seed producers	jute producers of outside project area	Jute and Jute Seed related all Stakeholder	Senior Assistant Project Director (Coordinator)	Upazila Jute Development Officer
1. Gazipur	1. Manikgonj	1. Saturia	45	15	15	1 (Singair)	1	1
		2. Singair	45	15	15			1
2. Tangail	2. Tangail	3. Ghatail	45	15	15	1 (Gopalpur)	1	1
		4. Gopalpur	45	15	15			1
	3. Jamalpur	5. Sarishabari	45	15	15			1
		6. Madargonj	45	15	15			1
3. Mymensingh	4. Mymensingh	7. Gaforgaon	45	15	15	1 (Gaforgaon)	1	1
		8. Trishal	45	15	15			1
	5. Kishoregonj	9. Katiadi	45	15	15			1
		10. Bajitpur	45	15	15			1
4. Faridpur	6. Faridpur	11. Bhanga	45	15	15	1 (Bhanga)	1	1
		12. Modhukhali	45	15	15			1
5. Madaripur	7. Madaripur	13. Kalkini	45	15	15	1 (Rajoir)	1	1
		14. Rajoir	45	15	15			1
	8. Gopalgonj	15. Kotalipara	45	15	15			1
		16. Tungipara	45	15	15			1
6. Jessore	9. Jessore	17. Bagharpara	45	15	15	1 (Bagharpara)	1	1
		18. Monirampur	45	15	15			1
	10. Jhenidah	19. Kaligonj	45	15	15			1
		20. Moheshpur	45	15	15			1
7. Kushtia	11. Kushtia	21. Doulatpur	45	15	15	1 (Gangi)	1	1
		22. Kumarkhali	45	15	15			1
	12. Meherpur	23. Gangi	45	15	15			1
		24. Mujibnagar	45	15	15			1
8. Rajshahi	13. Rajshahi	25. Durgapur	45	15	15	1 (Charghat)	1	1
		26. Charghat	45	15	15			1
9. Natore	14. Pabna	27. Atghoria	45	15	15	1 (Baraigram)	1	1
		28. Chatmohar	45	15	15			1
	15. Natore	29. Baraigram	45	15	15			1
		30. Gurudashpur	45	15	15			1
10. Bogra	16. Bogra	31. Gabtali	45	15	15	1 (Sonatala)	1	1
		32. Sonatala	45	15	15			1
	17. Gaibandha	33. Sundargonj	45	15	15			1
		34. Palashbari	45	15	15			1
11. Rangpur	18. Rangpur	35. Gangachara	45	15	15	1 (Gangachara)	1	1
		36. Pirgonj	45	15	15			1
	19. Nilphamari	37. Kishoregonj	45	15	15			1
		38. Domar	45	15	15			1
12. Dinajpur	20. Dinajpur	39. Chirirbandar	45	15	15	1 (Birol)	1	1
		40. Birol	45	15	15			1
Total =12	**20**	**40**	**1800**	**600**	**600**	**12**	**12**	**40**

2.3.4 Questionnaire and Checklist Development

The following questionnaires (Interview schedule) and checklists were prepared based on objectives, need and monitoring indicators for the in-depth monitoring study. A list of the interview schedule prepared for data collection is presented as Appendix-B.

Interview Schedule No -1	**:**	**Jute Fibre Producers: Farmers of the project**
Interview Schedule No -2	**:**	**Jute Seed Producers: Farmers of the project**
Interview Schedule No -3	**:**	**Jute Fibre Producers: Farmers of outside project**
Key Informant Interview Checklist-4	**:**	**KII with Upazila Jute Development Officer and Senior Assistant Project Director (Coordinator)**
Focus Group Discussion Checklist-5	**:**	**Jute and Jute Seed related all Stakeholder**
Evaluation of Procurement Process Checklist-6	**:**	**Project Headquarter**

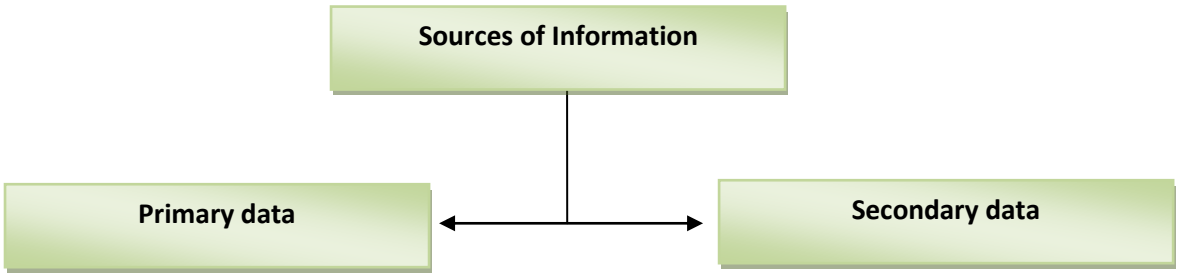
2.3.5 Recruitment and Training of Data Collector

A training programme was organized at CRDS based on approved Schedules and checklists. A total of 27 experienced enumerators were hired following appropriate selection process and one day long training was imparted at CRDS (Picture- 2).

Picture-2: Training on Questionnaires at CRDS Office.

2.3.6 Data Sources

For completion of the evaluation, required data were collected from primary and secondary sources as shown in the figure below. Primary data were collected by administering questionnaires through face to face interview.



The main sources of secondary data were DoJ, BADC, DAE, BBS, IMED and other organizations, who normally perform these types of project activities.

2.3.7 Primary Data Collection

Primary data were collected by administering of questionnaires on sample respondents and carrying out KII and FGDs with relevant persons.

2.3.7.1 Questionnaire Survey/Quantitative Information

Data were collected though direct interview with; sample beneficiaries of upazilas and farmers not included in the project. In each of the selected upazila 45 jute fibre producing farmers of the project, 15 jute seed producing farmers of the project and 15 jute producing farmers from outside project area were interviewed (Picture- 3) in connection with the study.

Picture-3: Interview with Jute Farmers

2.3.7.2 Key Informant Interview (KII)

In all 52 officers (key informants) of jute directorate were consulted (Picture-4) with KII checklist. Through this interview the progress achieved by the project in the project area could be assessed.

Picture-4: Interview with Upazila Jute Development Officers

2.3.7.3 Focus Group Discussion (FGD)

Information were collected through one focus group discussion in each of the 12 regions. The discussions were participated by jute and jute seed producing farmers (Stakeholders) and representatives of farmers groups (Picture-5) and others through.

Picture -5: FGD with Stakeholders

2.3.8 Secondary Data Collection

Different publications and documents from DoJ, DAE, BJRI and IMED were collected and reviewed. Necessary secondary data, both qualitative and quantitative, were also collected. Besides, secondary data from BBS and other relevant organizations were collected. Collected primary data were compared with the secondary data for reliability and acceptability.

2.3.8.1 Collection of Information on Procurement Process of Goods and Discussion with Officers of Project Director's Office

Discussions meetings were organized with the personnel of HQ and office of the Project Director for collecting various information in connection with project implementation. Through these discussions data on strengths and weakness of the project could be discerned. In order to understand the physical target and progress data on expenditure, different head wise financial and physical target and progress and data on procure of goods were collected.

In addition to these, information on the compliance PPR-2008 in procuring goods, services and construction of civil works was collected. In all data on 16 packages were collected and assessed in detail.

2.3.9 Survey Planning

Field sample survey was completed as per field work plan in selected upazilas of the project area. In 40 upazilas a total of 3064 questionnaires were filled up and completed within 18 days as planned. Data were collected from related regions and upazilas by filling in 3064 questionnaires and administering checklists. Consultants of the project visited & supervised field activities of the enumerators in respect of primary and secondary data collection. They themselves carried out interviewed relevant persons in the field and physically inspected the Project area.

2.3.10 Quality Assurance Process

The consultants of the In-depth Monitoring supervised all activities related to the work. In all 27 experienced enumerators were engaged following appropriate procedures of recruitment. They were given appropriate orientation on data collection and questionnaire filling process. Enumerators collected information by staying in the field and collected required information by filling questionnaire. The supervisors regularly verified the filled in questionnaires to ensure that those were filled in properly (Picture-6). The consultants of the study team also monitored the work by checking the filled in forms at the time of their field inspection (Picture -7).

Picture-6: Verified filled-in questionnaires during field visit.

During the field survey, the Project Director also inspected the works of field data collectors. The Officers of the IMED also evaluated the performance through a local level workshop (Picture-8). All these activities helped in collecting correct and quality data.

Picture-7: Physical observation of machinery by the evaluation team.

Picture-8: Workshop at local level

2.3.11 Data Processing and Analysis

After necessary checking and processing, collected data were entered in a data base using MS Access software. Subsequently data were analyzed using SPSS software. Statistical analyses of collected data have been included in the report.

Chapter 3

Analysis of Implementation Status and Achievements of the Project

Project management and implementation is the process of planning, organizing, motivating and managing resources to achieve specific goal of the project. In this section attempt has been made to assess the overall management of the project with relation to the objectives and DPP targets. The head wise financial and physical progress has been assessed and if there was any deviation identified. The findings are presented hereunder:

3.1 RADP Allocation and Total Expenditure of the Project till March, 2016

Information on the year wise fund allocation in the approved Revised Annual Development Program (RADP), expenditure and percentage of expenditure from the beginning of the project to March, 2016 are shown in Table 3.

Table 3: RADP Allocation and Total Expenditure (Lakh Taka) of the Project till March, 2016

Financial Year	DPP Provision	RDPP Allocation	Proposed Demand	ADP Allocation	RADP Allocation	Expenditure	Expenditure against RADP allocation (%)
2011-12	3555.19	1689.05	3385.90	825.00	1777.00	1689.05	95.05%
2012-13	3582.12	3321.90	3508.00	3004.00	3504.00	3321.90	94.80%
2013-14	3064.51	4901.88	3235.70	1701.00	2993.00	2888.25	96.50%
2014-15	3371.63	4855.29	3572.08	1998.00	1998.00	1916.73	95.93%
2015-16	3329.56	3618.82	2897.00	1900.00	1900.00	824.50*	43.39%
Total	**16903.02**	**18386.94**	**16594.68**	**9428.00**	**12172.00**	**10640.43**	**87.42%**

Source: Office of the Project Director * Expenditure up to March, 2016

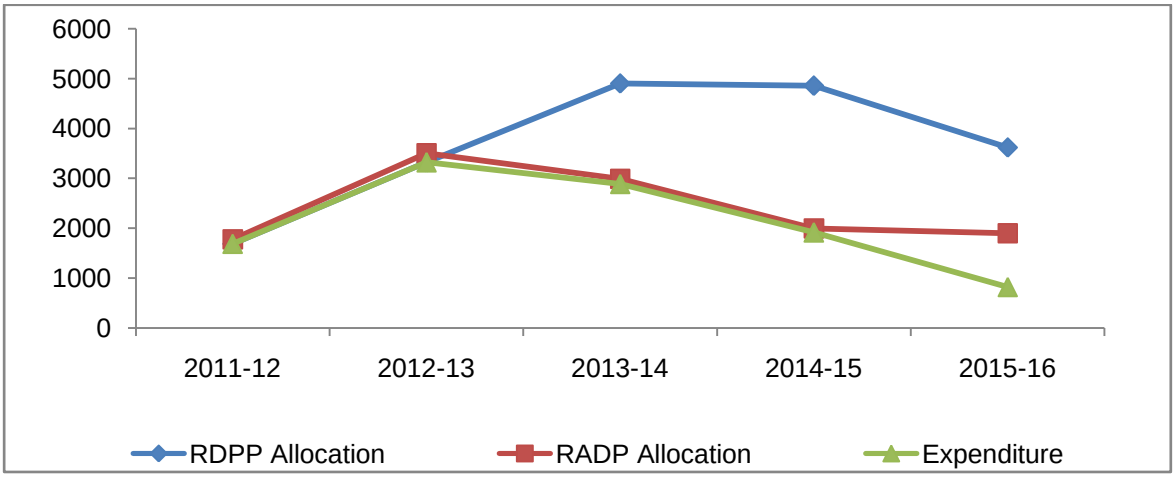
On assessment of the year wise fund provision in the DPP/RDPP from the beginning of the project to March 2016 it was found that an amount of Tk. 18,386.94 Lakh was provided in the RDPP. Against the provision there was a cumulative requisition for Tk. 16,598.68 Lakh and the actual allocation was Tk. 12,172.00 Lakh. The cumulative expenditure over the period was Tk. 10,640.43 lakh. This expenditure is equivalent to 87.42% of allocated money and 57.86% of RDPP provision.

An amount of Tk. 1,900 lakh has been allocated against the RADP of the current fiscal year and this year's expenditure up to March, 2016 is Tk. 824.50 lakh. It may noted that, if the allocated amount is spend in the current fiscal year the total expenditure over the project period would stand at Tk. 11,715.93 Lakh and this will be equivalent to 63.72% of the RDPP provision.

The amount allocated in the RADP could not be spent due to the absence of a realistic planning for the utilization of the fund. Had there been a realistic and practical work plan, the total money could have been spent.

The latest expenditure up to May, 2016 against RADP allocation is Tk. 1,303.90 lakh, which is 68.62% of the allocation. The detailed component wise financial progress up to May 2016 has been provided at Appendix C.

Figure-9: RDDP Allocation, RADP Allocation and Total Expenditure (Lakh Taka) of the Project



3.2 Component wise Financial Target and Progress up to March, 2016 in the Light of RDPP

On analysis of available data it was found that from the beginning of the project to March, 2016 the cumulative expenditure of the project was Tk. 10,640.43 lakh against RDPP provision of Tk. 18,386.94 Lakh and this is 57.86% of total RDPP provision. The main heads of expenditure includes:

a) Salary and allowances of staff: Amount spent is Tk. 1,036.8 lakh, which is 37.7 % of estimated amount of Tk. 2,745.29 lakh
b) Training: Amount spent was Tk. 932.37 lakh, which is 91.97 % of estimated amount of Tk. 1,014.0 lakh
c) Seed Purchase: Amount spent was Tk. 4411.06 lakh, which is 87.83 % of estimated amount of Tk. 5,021.76 lakh
d) Fertilizer Purchase: Amount spent was Tk. 1856.27 lakh, which is 36.74 % of estimated amount of Tk. 5051.52 lakh
e) Transport Vehicle Purchase: Amount spent was Tk. 468.27 lakh, which is 98.88 % of estimated amount of Tk. 473.70 lakh
f) Equipment and other Accessories Purchase: Amount spent was Tk. 466.72 lakh, which is 56.61 % of estimated amount of Tk. 810.00 lakh
g) Office Equipment Purchase: Amount spent was Tk. 89.17 lakh, which is 89.17 % of estimated amount of Tk. 191.96 lakh
h) Office Furniture Purchase: Amount spent was Tk. 147.83 lakh, which is 81.12 % of estimated amount of Tk. 181.00 lakh
i) Jute Canvass Sheet and Signboard Purchase: Amount spent was Tk. 244.98 lakh, which is 42.60 % of estimated amount of Tk. 557.00 lakh

The component wise financial and physical target and progress of the project has been given at Table 4 and component wise detailed description has been given at Appendix D.

Table-4: Component-wise Financial and Physical Target and Achievement(In Lakh Taka)

Components (As per RDPP)	Unit	Target (As per RDPP)		Cumulative Progress as of June 2015				2015-2016				Cumulative Progress as of March 2016			
		Physical	Financial	Target		Achievement		Target		Achievement (March, 2016)		Target		Achievement (March, 2016)	
				Physical	Financial	Physical	Financial	Physical	Financial	Physical	Financial	Physical	Financial	Physical	Financial
a) Revenue															
Salary and Allowance	Nos	300	2745.29	191	924.84	191	742.94	184	526.47	184	293.86	188	1451.31	184 (61.33%)	1036.8 (37.77%)
Supply and Services	-	-	1052.4	-	539.55	-	470.52	-	195.25	-	121.22	-	734.8	-	591.74 (56.23%)
Training	Nos	100300	1014	72200	831.29	71347	811.92	20300	162.8	15262	120.75	92200	994.09	86609 (86.34%)	932.67 (91.98%)
Transport and others	-	-	230	-	107.25	-	99	-	29.25	-	8.92	-	136.5	-	107.92 (46.92%)
Seed Purchase	.ton	6110.65	5021.76	3462.675	4452.86	3455.978	4386.22	439.9	622.43	405.5	24.84	3902.575	5075.29	3861.478 (63.19%)	4411.06 (87.84%)
Insecticides Purchase	-	-	543	-	97	-	90.08	-	20	-	18.88	-	117	-	108.96 (20.07%)
Fertilizer Purchase	M.ton	26175	5051.52	8876	1739.62	8791	1683.95	1020	182.8	960	172.32	9896	1922.42	9751 (37.25%)	1856.27 (36.75%)
Repair & Maintenance	-		100	-	40	-	22.65	-	11	-	4.56	-	51	-	27.21 (27.21%)
Sub-Total (Revenue)			**15757.97**	**-**	**8733**	**-**	**8376.45**	**-**	**1750**	**-**	**765.25**	**-**	**10483**	**-**	**9141.7 (58.01%)**
Capital															
Transport Vehicle Purchase	Nos	265	473.7	265	473.7	265	468.4					265	473.7	265 (100%)	468.4 (98.88%)
Equipment and other Accessories Purchase	Nos	77000	810	36998	409.98	36980	407.47	15000	150	8430	59.25	51998	559.98	45410 (58.97%)	466.72 (57.62%)
Office Equipment Purchase	Nos	501	191.96	384	197.7	364	171.18					384	197.7	364 (72.65%)	171.18 (89.17%)
Others	Nos	115000	575	49220	296	49120	244.98					49220	296	49120 (42.71%)	244.98 (42.61%)
Sub-Total (Capital)			**2231.66**	**-**	**1539**	**-**	**1439.48**	**-**	**150**	**-**	**59.25**	**-**	**1689**	**-**	**1498.73 (67.16%)**
Total (Revenue + Capital)			**17989.63**	**-**	**10272**	**-**	**9815.93**	**-**	**1900**	**-**	**824.5**	**-**	**12172**	**-**	**10640.43 (59.15%)**
Contingency			**397.31**	-	-	-	-	-	-	-	-	-	-	-	-
Grand Total (a+b+c)			**18386.94**	**-**	**10272**	**-**	**9815.93**	**-**	**1900**	**-**	**824.5**	**-**	**12172**	**-**	**10640.43 (57.87%)**

Source: Office of the Project Director *** Component wise detailed description has been given at Appendix D**

3.3 Analysis of Implementation Status and Achievements of the Major Components of the Project

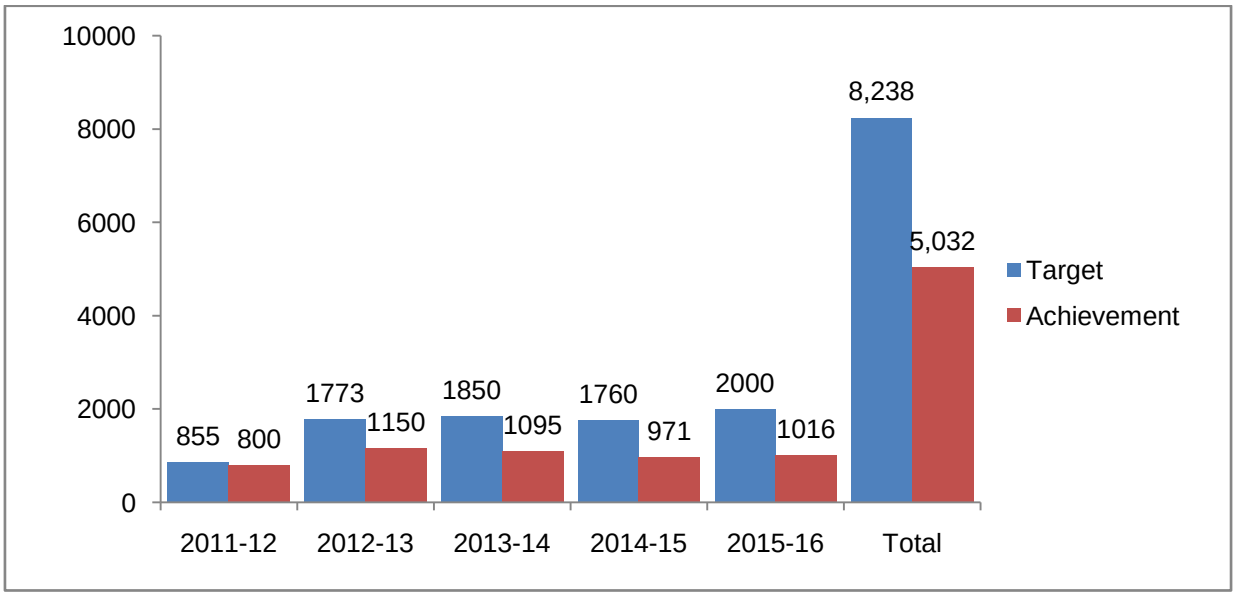
3.3.1 Jute and Jute Seed Production Programme

Every year quality jute and jute seeds are being produced through farmers. At the beginning of each year the target for production of Jute and jute seeds are set and accordingly jute and jute seeds are produced. Data on, the area of land cultivated, the amount of seed and jute produced against the set target during the period 2011-12 to 2015-16 under the project, have been collected and analyzed. The analytical outputs have been produced in the following sections.

3.3.1.1 Jute Seed Production

The main objective of the project is to produce HYV Jute and HYV Jute seeds at a progressive rate at the farmer's level to meet the need of the nation. In the RDPP there was a target of producing 7,500- 10,000 metric tons of quality jute seed from approximately 9,300 acre of land of 50,000 farmers annually; each farmer using 20 decimal of land. It was found by analysis of data obtained from the office of the Project Director that an amount of 5,032 m ton of jute seed has been produced in 39084 acres (91.71%) against a target of 8,238 m ton during the period 2011- 12 to 2015 -16. The achievement against the target is 61% as shown in Figure 10.

Figure 10: Year wise Area Production of HYV Jute Seed against Target under the Project (m.ton)



It is to be mentioned here that due to short supply of foundation seed from the BADC and occurrence of drought and excessive rainfall during the project period, jute seed could not be produced according to the target (Table 5). The value of the jute seed produced under the project is Tk. 75.48 crore. The target and production (m ton) and rate of achievement of seed production under the project during the period 2011-12 to 2015 -16 is illustrated at Table 5 below:

Table 5: Year wise Area of Cultivated Land and Production of HYV Jute Seed against Target

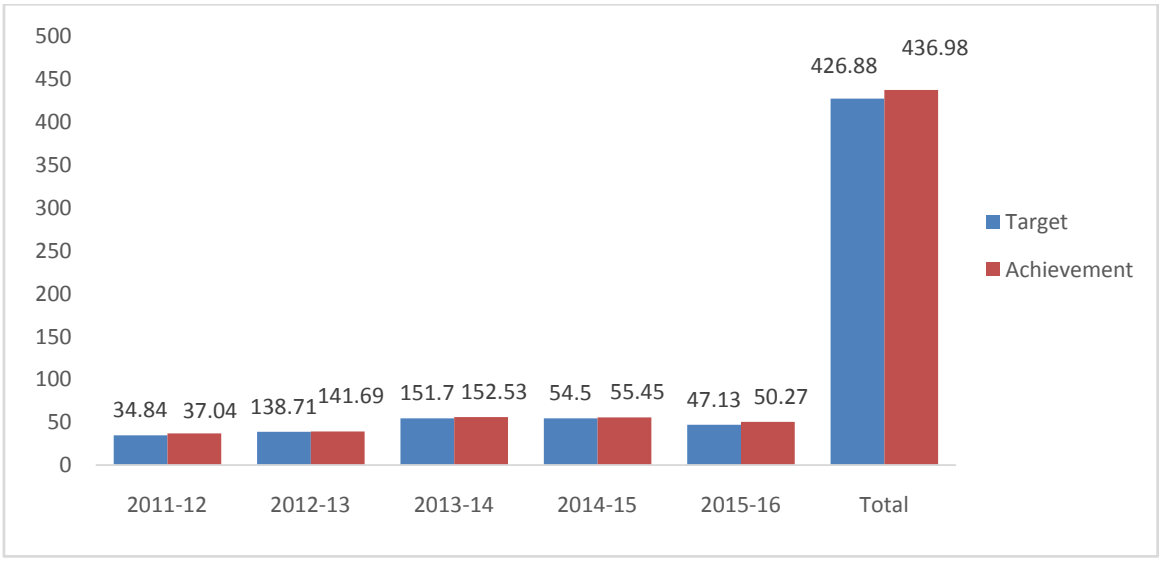
Year	Cultivated area (acre)		Rate of achievement (%)	Supply of foundation jute seed (ton)	Production of HYV Jute Seed (ton)		Rate of achievement (%)
	Target	Achievement			Target	Achievement	
2011-12	5700	4275	75.00	13.125	855	800	93.57
2012-13	8865	8250	93.06	15.75	1773	1150	64.86
2013-14	9253	8900	96.19	16.194	1850	1095	59.19
2014-15	8800	8115	92.22	15.437	1760	971	55.17
2015-16	10000	9544	95.44	17.01	2000	1016	50.80
Total	**42,618**	**39,084**	**91.71**	**78.01**	**8,238**	**5,032**	**61.08**

Source: Office of the Project Director

3.3.1.2 Jute Production

One of the main objectives of the project is to improve the quality of Jute fibre at the farmer's level gradually by replacing the low quality jute seeds now used by the farmers with HYV jute seeds. During the project period a target of production of 300–350 lakh maund of jute, at the rate of 60 -70 lakh maund of jute per year, by cultivating 200,000 acre of land through 200,000 farmers, was set. After analysis of data on annual production obtained from the office of the Project Director , it is found that during the period 2011 -12 to 2015-16 a total of 436.98 lakh m ton of Jute was produced against a target of 426.88 lakh m ton. The production is 102% of the target (Table 6).

Figure 11: Year wise Jute Production against Target under the Project (lakh maund)



This is to be mentioned here that it was possible to exceed the target, as JRO 524 and Tossa jute seeds imported from India in 2012-13 and 2013 -14 and distributed among farmers free of cost.

Table 6: Year wise Cultivated Land under Jute & HYV Jute Production under the Project

Year	Cultivated area (acre)		Supply of certified jute seed (ton)	Production of Jute (ton)		Rate of achievement (%)
	Target	Achievement		Target	Achievement	
2011-12	1,16,130	1,17,142	270.00	34.84	37.04	106.31
2012-13	1,29,032	1,27,656	300.00	38.71	39.00	100.75
Indian seed	3,33,334	3,43,985	1112.00	100.00	102.69	102.69
2013-14	1,81,678	1,83,7,29	422.40	54.50	55.92	102.61
Indian seed	3,24,000	3,24,047	870.00	97.20	96.61	99.39
2014-15	1,81,678	1,81,602	422.40	54.50	55.45	101.74
2015-16	1,57,107	1,57,107	388.00	47.13	50.27	106.66
Total	**14,22,559**	**14,35,268**	**3784.80**	**426.88**	**436.98**	**102.37**

Source: Office of the Project Director

3.3.2 Training

Imparting training to Jute Development Officers (JDO) s of the project and jute and jute seed producing farmers on HYV jute and jute seed production and jute retting techniques was one of the main activities of the project. A target, of imparting training to 100,000 jute and jute seed producing farmers and 300 Jute Development Officers on modern techniques of HYV Jute and jute seed production and jute retting techniques, storage, was set in the RDPP. On analysis of the Data obtained from the office of the Project Director, it is found that 86,047 jute and jute seed producing farmers and 300 JDOs were trained against the set target of 100,000 farmers and 300 JDOs respectively. This is 86.04% and 100% of the set target respectively. In addition, under this head of the project one seminar, two workshops, 37 farmers' rally were held and 50 officers were sent abroad on study trip. The expenditure till March, 2016 against an estimated cost of Tk. 1010.0 lakh was Tk. 932.67 Lakh, being 91.97 % of estimated cost. (Table 4)

3.3.2.1 Influence of Foreign Training through study Tour

Information on foreign training and study Tour under this project has been collected. There is no provision of foreign training under the project. However, 50 officers went on study tour under eight packages. Reports of three out of eight packages have so far been received. The list of participants, duration of tour and country of visit is given at Appendix-E. The summary of performance in countries visited is given hereunder.

A team visited Department of Plant Biotechnology of Universidade do Estado do Rio De Jeneiro in Rio De Jeneiro and a business organization (Distribution Center) namely Castanhal Companhla in Sao Paulo. There was exchange of opinion with Divisional Advisors along with Professors and researchers of relevant departments related to research on Jute and Jute seed, multipurpose Jute goods production and marketing. In this connection favorable opinion was expressed for taking positive steps subject to discussion between two countries at government level on how research may be coordinated and jute goods from Bangladesh may be imported. Besides two other organizations, who procure multipurpose jute goods were visited. These organizations exhibit and supply products like Jute bag, hessian, carpet, caps and threads to international and local markets .They opined that both the countries would be benefitted if various jute goods are produced and marketed in the local and international market by taking raw jute from Bangladesh on the basis of partnership. It may be mentioned here that no tariff is required to be paid for producing and marketing of Jute goods in South American countries.

There was discussion and exchange of opinion with Divisional Advisors along with Professors and Researchers of Department of Agriculture of Casesart Agricultural University, Thailand on Jute and Jute seed. In this connection favorable opinion was expressed for taking positive steps, subject to discussion between two countries at government level, on how Jute goods may be imported from Bangladesh.

There was discussion with Nepal Agricultural Research Council (NARC) and related organizations on Jute Research Programs along with jute and jute seed production. Similarly there was discussion and exchange of opinion on Jute research program with the Central Department of Biotechnology of Tribhuban University. Opinion was expressed in favour of undertaking collaborative research with Bangladesh.

Vietnam is also an agricultural country. It is one of the main rice exporting countries of the world. Now poly bags are used for exporting rice. Vietnam is quite aware and active in protecting environment and prohibiting the use of polythene. Initiatives through visit of high level officials of Bangladesh to Vietnam may be usefulto have bilateral discussions to attract them in using jute bags. If the market of Jute and Jute goods of Vietnam is opened, it will be possible to export a lot of jute and jute goods to that country.

During a visit to NorthIndia Textile Research Association (NITRA) at Gaziabad, Uttar Pradesh, India the visiting team became aware of a programme on work based training on improving the professional standard, increasing efficiency of production, development of jute goods and evaluation of quality. After exchange of opinion and detailed discussion between the team of representatives, different laboratories of the organization were shown. If the ideas acquired during the visit could be utilized in performing our activities, there would be significant improvement in our national field. In addition, exchange of opinion and discussions were held with the representatives of National Jute Board (NJB), India, India Jute Industries Research Association (IJIRA) and Central Research Institute for Jute and Allied Fibres. After having detailed discussion importance was given on the development of good relations between two countries and maintaining co-ordination in respect of jute and jute seed production, quality maintenance and use of improved quality jute goods. Jute Corporation of India expressed its desire to work together for jute production, monitoring, marketing in India and co-operate on research programs and extension activities.

In India jute and jute seeds are mainly produced in West Bengal and Andhra provinces. India is continuing its programme on the development of high yielding variety of jute. They are very eager to supply improved quality seeds to Bangladesh. They want to put preference to Bangladesh to supply jute seeds imbedded with information at appropriate time. The use of jute and jute bags is significantly high in India as a law on obligatory use of jute goods for packaging exists. At present, Government of India does not give any significant subsidy on jute and jute goods.

It is to be mentioned here that among the 50 officers, who participated in the study tour, only six were associated with the project and at present only two of them are working in the project.

3.3.3 Seed and Fertilizer Purchase

In the RDPP there was provision of Tk. 5021.76 lakh and Tk. 5051.52 Lakh for purchase of 3 types of seed (81.276 m ton of foundation seed, 4046.375 m tons of certified seeds and 1983 m ton of JRO 524 and Tossa jute seed) and fertilizer respectively, with a view to producing HYV Jute and HYV Jute seed in increased quantity. The project up to March 2016 purchased seed 77.51 m ton Foundation seed (95.37%), 1,801 m ton certified seed (44.53%) and 1,982 m ton JRO and Tossa Jute seed (99.94%)] and 9,751 m ton fertilizer at a cost of Tk. 4,411.06 Lakh and Tk. 1,856.27 Lakh respectively. Here, it is to be mentioned that it was not possible to purchase targeted quantity of jute seed BADC could supply according to demand; the cost of BADC seed was higher than DPP cost and more time was taken for importing jute seed from India. Only 9751 m Ton of fertilizer was distributed among Jute and Jute seed producing farmers against a target of 26,175 m tons fixed by Upazila Committee, who purchased and distributed it through quotation. The supply was 37.25% of the target. The target for fertilizer purchase was revised according to the year wise allocation in the ADP.

Here it is to be mentioned that, as there was no provision of fund for fertilizer in the ADP against the estimated allocation in the RDPP, the selected jute producers could not be supplied with fertilizer during the last two years of the project. Every year jute seed producing farmers were supplied with fertilizer much less than requirement. The details of the purchased seeds and fertilizer against RDPP target is given at Appendix D.

3.3.4 Purchase of Transport Vehicles

There was provision of Tk. 473.70 lakh in the RDPP for purchasing four types of transport vehicles for proper implementation of the project. In all 265 vehicles that included one jeep, one pick up one microbus and 262 motor bikes were purchased. On this head the amount spent up to March, 2016 is Tk. 468.40 lakh, which is 98.88% of the target (Table 4). Detailed list of vehicles purchased against RDPP provision is given at Appendix D. It is to be mentioned that 262 motor cycles were distributed among officers on hire purchase basis and fund was allocated for fuel and lubricants. Money spent on motor cycle have been realized in installments from the salary bills of the concerned staff and deposited to government Exchequer at the end of the project.

3.3.5 Purchase of Equipment and Accessories

There was a provision of Tk. 820.00 lakh in the RDPP for purchasing 77,000 Number of four types equipment for assisting farmers in production of HYV jute and jute seeds and retting of jute. But only 45,410 numbers which included 13,363 riboners, 13381 hammers, 16,666 polythene sheets and 2000 hand sprayers were purchased. The amount spent on this Equipment and accessories head up to March 2016 was Tk. 466.72 lakh which is 56.61 % of target (Table 4). Detailed list of equipments and accessories purchased against RDPP provision is given at Appendix D.

3.3.6 Purchase of Office Equipment

In order to increase the sphere of activities of the officers and staff and for increasing the capacity of determining quality of seeds in favour of the farmers, there was a provision of Tk. 191.96 lakh for purchasing 501 office equipment of 10 types. These included 214 computers, four (4) photo copiers, one (1) duplicator, 13 multimedia projectors, 13 fax machine, 13 germinators, 12 moisture meters, 12 humidity meters, 3 air coolers and 92 telephone sets. The amount spent on this head up to March 2016 was Tk. 171.18 lakh which is 89.17 % of the

target (Table 4). Detailed list of furniture and equipments purchased against RDPP provision is given at Appendix D.

3.3.7 Purchase of Office Furniture

In order to meet the need of increased sphere of activities of the officers and staff, there was a provision of Tk. 181.0 lakh for purchasing 213 sets of furniture under 10 types. The amount spent on this head up to March 2016 was Tk. 146.83 lakh, which is 81.12 % of the target (Table 4). Detailed list of Office Furniture purchased against RDPP provision is given at Appendix D.

3.3.8 Other Programs

There was a provision of purchasing two types of materials; 100,000 Jute canvas sheets and 15,000 signboards for demonstration plots under this project. The provision in the RDPP was Tk. 575 lakh. The amount spent, for purchase of 34,220 Jute canvas and 14,900 signboards under this head up to March 2016, was Tk. 244.98 lakh, which is 42.60 % of the target (Table 4). Detailed list of other accessories purchased against RDPP provision is given at Appendix D. It may be mentioned here, that the progress under this head was less due to lesser provision of fund in the ADPs for purchase of jute canvas and signboards.

3.3.9 Other Expenditures (Travel, Fuel and Lubricant, Stationery, Publicity & Advertisement and Literature and Journals)

There was a provision of Tk. 1,052.4 lakh under this head in the RDPP. The amount spent, on this head up to March 2016, was Tk. 591.74 lakh, which is 56.22 % of the target (Table 4). Details of Other expenditures against RDPP provision is given at Appendix D.

3.3.10 Manpower

For implementation of the project manpower was engaged on 282 posts against 300 posts approved in the RDPP at different stages. At present, there are 18 vacant posts. The list of approved posts according to the RDPP and number employed now is given hereunder.

Here, it is to be mentioned that, in the first year no manpower was recruited under the project and as 97 persons from revenue budget was engaged in the implementation of the project for that period, the expenditure on this head was less. The project has been implemented and is being currently implemented with manpower less than required; as a consequence the progress of work has been affected. In the project there are 200 upazilas, but the number of Jute Development Officers (JDO) is only 46. In most of the cases one JDO is in charge of, on average, four upazilas for which the progress of work is not as desired. Besides, all JDOs engaged on the project are not adequately equipped with appropriate technical knowhow for which the progress of the work has been affected. Had the educational qualification of all the JDOs been Diploma in Agriculture, further progress could have been achieved. On the other hand, the number of Jute Development Assistants (JDA) is only 196, for which farmers could not get assistance from the office in case of emergency, when the JDAs remain away from office on field supervision.

Name of post (As per RDPP)	Number of post (As per RDPP)	Number of manpower posted				
		Deputation	Temporary	Direct recruitment	Outsourcing	Number of vacant posts
Project Director	1	1	-	-	-	-
Deputy Project Director	1	1	-	-	-	-
Assistant Project Director (Purchase)	1	-	1	-	-	-
Assistant Project Director (Accounts & Administration)	1	-	1	-	-	-
Senior Assistant Project Director (Coordinator)	6	-	5	-	-	1
Assistant Project Director (Coordinator)	6	-	-	-	-	6
Upazila Jute Development Officer	50	-	43	3	-	4
Accounts Officer	1	-	1	-	-	-
Statistics Officer	1	-	-	1	-	-
Personal Assistant	1	-	-	-	-	1
Sub-asst. Jute Development Officer	200	-	45	151	-	4
Cashier	1	-	1	-	-	-
Office Assistant cum-Computer Typist	14	-	-	12	-	2
Driver	3	-	-	-	3	-
Machine Operator	1	-	-	-	1	-
Dispatch Rider	1	-	-	-	1	-
MLSS	8	-	-	-	8	-
Messenger	1	-	-	-	1	-
Sweeper	1	-	-	-	1	-
Night Guard	1	-	-	-	1	-
Total	**30**	**2**	**97**	**167**	**16**	**18**

Source: Office of the Project Director

3.3.11 Information Related to the Project Director

There is a provision of engagement of a full time Project Director in the RDPP. After approval of the project Dr. Mangal Chandra Chanda was engaged as Project Director from 02/01/ 2011 to 17/01/ 2016. At present Dr. Sheikh Md. Rezaul Islam, Joint Secretary, has been engaged as fulltime Project director, on deputation with effect from 15/05/2016. It is to be mentioned that, both of the present and the previous Project Directors are Agriculturists and have high level of technical capability.

Chapter 4
Data Collection through In-depth Monitoring and Analysis

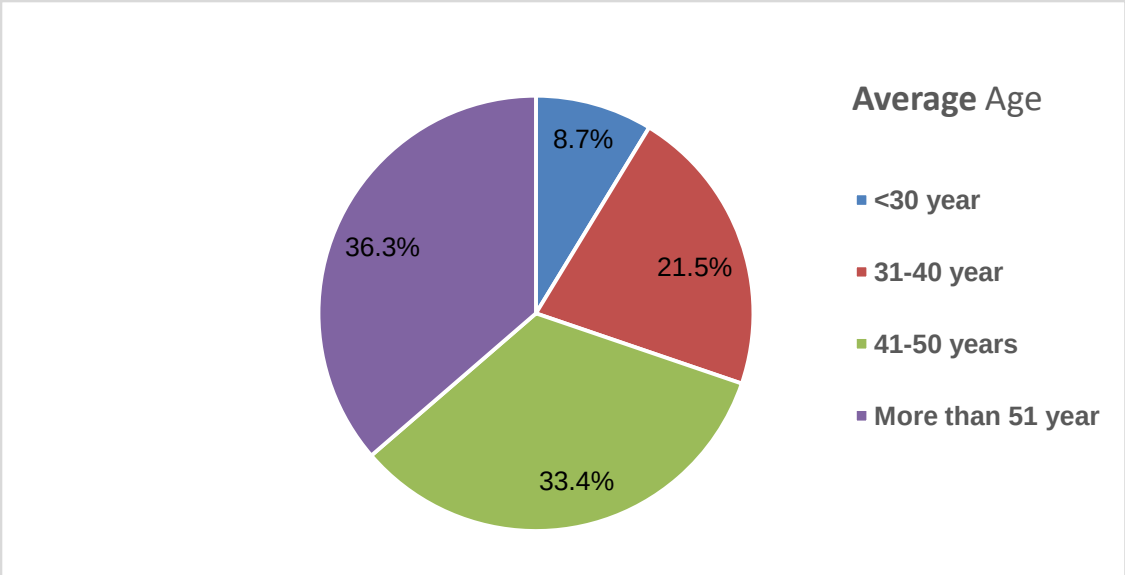
In respect to the in-depth monitoring and evaluation of the "HYV Jute and Jute Seed Production & Improved Jute Retting Project (2nd Revised)" data were collected from project beneficiary farmers and non-project farmers in different regions of the project through direct interviewing of jute fibre producing and jute seed producing farmers. Collected data were grouped on regional basis vise Gazipur, Mymensingh, Tangail, Faridpur, Madaripur, Jessore, Kushtia, Natore, Rajshahi, Bogra, Rangpur & Dinajpur. Data were collected from jute fibre producers, jute seed producers of the project area and jute producers of outside project area. Besides these, twelve focus group discussions (FGD) were held in 12 regions and selected 40 Upazila Jute Development Officers and 12 Regional Senior Assistant Project Director (Coordinator) were also interviewed using key Informant Interview (KII) checklist. Analyses of collected data through in-depth monitoring tools are presented below:

4.1 Demographic and Socio-Economic Data of the Surveyed Farmers

4.1.1 Age of Surveyed Farmers

Age based numbers of the surveyed farmers and their percentage are presented in Table-7. Highest 36.3% farmers' age was more than 51 years, 33.4% farmers' age ranged between 41-50 years and 8.4% farmers' age were less than 30 years (Figure-12).

Figure 12: Average Age of Surveyed Farmers



Same patterns of age were observed in project and outside project farmers (Table-7). In analyzing age of the jute farmers, it was found that more than two-third of the total jute farmers' age was below 50 years. This means they were more active in jute farming and there are many opportunities to employ them in development activities.

Table-7: Age of the Project Surveyed Farmers

Item	Jute fibre producing farmers		Jute seed producing farmers		Jute Farmer (outside project area)		Average	
	N	%	N	%	N	%	N	%
<30 year	127	7.1	61	10.1	75	12.5	263	8.7
31-40 year	372	20.7	128	21.3	145	24.2	645	21.5
41-50 year	617	34.3	210	35.0	176	29.3	1003	33.4
More than 51 year	684	38.0	201	33.5	204	34.0	1089	36.3
Total	**1800**	**100.0**	**600**	**100.0**	**600**	**100.0**	**3000**	**100**

Source: Survey, 2016

4.1.2 Time Spend for Jute Production of Surveyed Project Farmers

Table-8 shows that on average 17% farmers were engaged for 5 years, 40% farmers for 4 years, 24% farmers for 3 years, 8% farmers for 2 years and 11% farmers for 1 year in the project activities. About 55% jute producing farmers and 51% jute seed producing farmers attained experience for 4 years on modern jute cultivation technologies which will accelerate extension of modern jute technologies.

Table-8: Time Spend for Jute Production of the Project Surveyed Farmers

Subject	Jute fibre producing farmers		Jute seed producing farmers		Average	
	N	%	N	%	N	%
1 year	202	11.2	60	10.0	262	10.9
2 year	162	9.0	30	5.0	192	8.0
3 year	442	24.6	143	23.8	585	24.4
4 year	698	38.8	261	43.5	959	40.0
5 year	296	16.4	106	17.7	402	16.7
Total	**1800**	**100.0**	**600**	**100.0**	**2400**	**100**

Source: Survey, 2016

4.1.3 Number of Family Members Actively Engaged in Agriculture Activities

All surveyed respondents were male farmers and they were actively engaged in jute cultivation. About 57.6% surveyed farm families engaged only 1 male member for agriculture activities, 34.6% farm families engaged 2 male members and 7.6% farm families engaged 3 male members; whereas 82.1% farm families engaged 1 female member, 13.9% farm families engaged 2 female members and 3.1% farm families engaged 3 female members for agriculture activities (Table-9). In Future more programs need to be developed to engage more young male and female family members in agriculture.

Table-9: Number of Family Members Engaged Directly in Agriculture

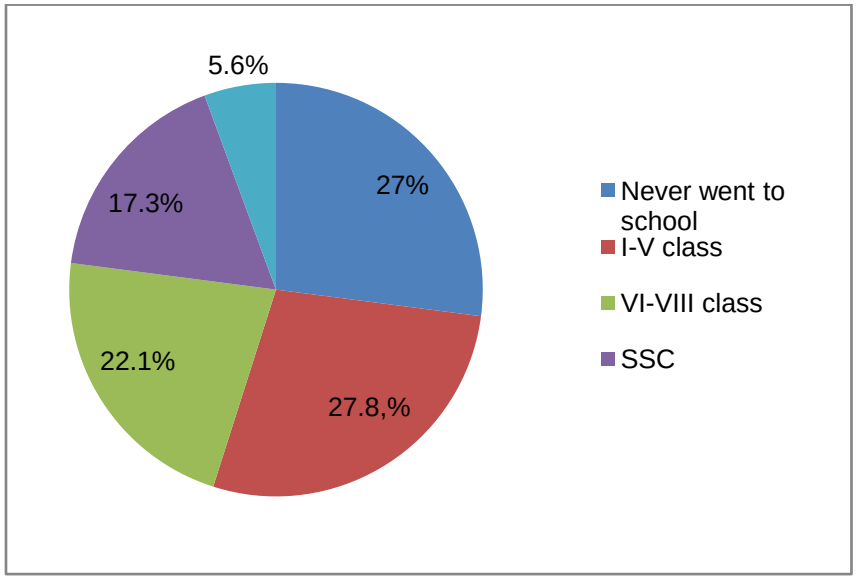
Item	Member No.	Jute fibre producing farmers		Jute seed producing farmers		Jute Farmers (Project Outside Area)		Average	
		N	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Male	1	970	56.1	349	65.8	311	54.7	1630	57.6
	2	625	36.2	159	30.0	196	34.4	980	34.6
	3	133	7.70	22	4.1	62	10	217	7.6
	Total	1728	100.0	530	100.0	569	100.0	2827	100
Female	1	899	83.3	309	84.7	291	76.4	1499	82.1
	2	139	12.9	45	12.3	70	18.4	254	13.9
	3	41	3.9	11	3.0	20	5.3	72	3.9
	Total	1079	100.0	365	100.0	381	100.0	1825	100

Source: Survey, 2016

4.1.4 Educational Status of the Surveyed Farmers

Table-10 shows that 27.0% farmers never went to school, 27.8% farmers attended up to class V, 22.1% farmers attended up to class VI-VIII, 17.3% farmers passed SSC and only 5.6% farmers passed HSC and more. Educational qualification was more in case of project farmers compared to outside project farmers (Figure-13).

Figure-13: Educational Qualification of the Surveyed Farmers



About 25.6% project farmers never went to school, which was about 5% less than outside project farmer 32.5% (Table-10). About 70% farmers have functional education which will be very much helpful for extension of modern agricultural technologies.

Table-10: Educational Qualification of the Surveyed Farmers

Subject	Jute fibre producing farmers		Jute seed producing farmers		Jute Farmers (Project Outside Area)		Average	
	N	%	N	%	N	%	N	%
Never went to school	485	26.9	130	21.7	195	32.5	810	27.0
I-V class	498	27.7	174	29.0	164	27.3	836	27.8
VI-VIII class	412	22.9	140	23.3	113	18.8	665	22.1
SSC	309	17.	116	19.3	96	16.0	521	17.3
HSC	96	5.3	40	6.7	32	5.3	168	5.6
Total	**1800**	**100.0**	**600**	**100.0**	**600**	**100.0**	**3000**	**100**

Source: Survey, 2016

4.1.5 Financial Status of the Surveyed Farmers

In project surveyed farmers; 73.8% Jute producing farmers' average cash surplus was Tk. 33,802, 3.3% farmers' annual average deficit amount was Tk. 24,022/- and 16.1% farmers reported to be neither surplus nor deficit. About 65.2% jute seed producing farmer's annual average surplus was Tk. 41,293, 8.2% farmers annual deficit amount was Tk. 27,286 and 26.7% farmer reported to be neither surplus nor deficit. About 62.0% outside project farmer's annual average surplus was Tk. 32,467. 6.2% farmers annual deficit was Tk. 23,229 and 31.8% farmers reported to be neither surplus nor deficit.

Project farmers were observed to be more financially solvent than outside project farmers (Table-11). About 74% farmers were observed to be financially solvent. This means they were capable of taking risk to adopt modern agricultural technologies.

Table-11: Financial Status of the Surveyed Farmers

Subject	Annual cash surplus			Annual District			Approximately equal	
	N	%	Amount (Tk)	N	%	Amount (Tk.)	N	%
Jute fibre producing farmers	1452	80.7	36802	59	3.3	24022	289	16.1
Jute seed producing farmers	391	65.2	41293	49	8.2	27286	160	26.7
Jute Farmer(outside project area)	372	62.0	32467	37	6.2	23229	191	31.8
Average	**2215**	**73.8**	**36867**	**145**	**4.8**	**24923**	**640**	**21.3**

Source: Survey, 2016

4.2 Year-wise Area, Variety and Source of Seed for Production of Jute and Jute Seed of Surveyed Farmers

4.2.1 Area, Yield and Price of Year-Wise Production of Jute and Jute Seed

Year wise area, yield and price of jute fibre producing farmers, jute seed producing farmers and outside project area farmers are presented in detail in Table-12. Land area for jute fibre producing farmers is increased from 88.8 decimals at the beginning of the project (2010-2011) to 95 decimals at the end. During the project period per year yield increased from 8.73 to 10.43 kg/dec, price of jute fibre increased from 27.0 to 82.0 Tk. /kg. Land area of jute producing project farmers increased 81.4 decimals at the beginning of the project (2011-2012) to 87.5 decimals at 5th year of the project (2015-2016), yield increased from 10.6 to 10.70 Kg/dec, price of jute fibre increased from 38.9 to 45.1 tk./kg. That is land area at the rate of 0.1%, yield 0.9% and price 15.9% increased. It may be mentioned that project farmers land area during 2013-14 and 2014-15 was 88.5 & 86.2 decimals per farm respectively.

In case of jute seed producing farmers, land area increased from at the beginning of the project (2010-2011) 25.1 dec to 34.8 dec at the end of the project (2015-2016) is 5th year, seed yield increased from 1.45 to 1.47 kg/dec and price of jute seed increased from 89.4 to 164.1 Tk. /kg That means land area at the rate of 38.6%, yield 1.4% and seed price 83.6% increased respectively. land area under jute seed producing project is increased from project beginning year (2010-11) 17.7 dec to project end year at 5th year (2015-16) 19.0 dec, seed yield 1.71 Kg/dec to 1.90 kg/dec and seed price 117.1 to 162.8 Tk./kg increased. That means land area at the rate of 13.8%, yield 11.1% and price 39.0% increased respectively.

In case of outside project farmers land area increased from 65.9 dec at the beginning of project (2010-11) to 72.4 dec/farm at the end of the project (2015-16) at 5th year of the project, yield increased 7.93 to 9.6 kg/dec and jute fibre price increased 27.0 to 40.0 Tk. /kg Land area, yield and price were found to be higher in case of project jute farmers than outside project area farmers (Table-12, figure-14.5).

Table-12: Year Wise Land Area, Yield and Price of Project Area Farmers

Subject	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Jute fibre producing farmers						
Total land area (dec/farmer)	88.8	92.8	96.5	98.9	97.7	95
Yield (kg/dec)	8.73	9.44	9.69	10.27	10.45	10.43
Fibre price (Tk./kg)	27.	32.4	35.4	37.1	40.2	42.0
Project land area (dec/farmer)	-	81.4	82.0	88.5	86.2	81.5
Yield (kg/dec)	-	10.06	10.14	10.54	10.59	10.70
Project fibre price (Tk/kg)	-	38.9	40.7	40.5	42.9	45.1
Jute seed producing farmers						
Total land area (dec/farmer)	25.1	26.8	27.3	30.0	30.4	34.8
Yield (kg/dec)	1.45	1.63	1.56	1.49	1.50	1.47
Seed price (Tk/kg)	89.4	103.4	121.5	127.1	141.5	164.1
Project land area (dec/farmer)	-	16.7	18.2	18.6	18.9	19.0
Yield (kg/dec)	-	1.71	1.64	1.75	1.83	1.90
Seed price (Tk/kg)	-	117.1	121.8	128.1	139.2	162.8
Jute Farmer (outside project area)						
Land area (dec/farmer)	65.9	66.3	67.3	70.5	71.3	72.4
Yield (kg/dec)	7.93	8.51	8.78	9.49	9.52	9.6
Fibre price (Tk/kg)	27.0	30.5	33.1	35.2	38.6	40.0

Source: Survey, 2016

Figure-14: Year Wise Land Area of Jute production under Project Area Farmers (dec/farmer)

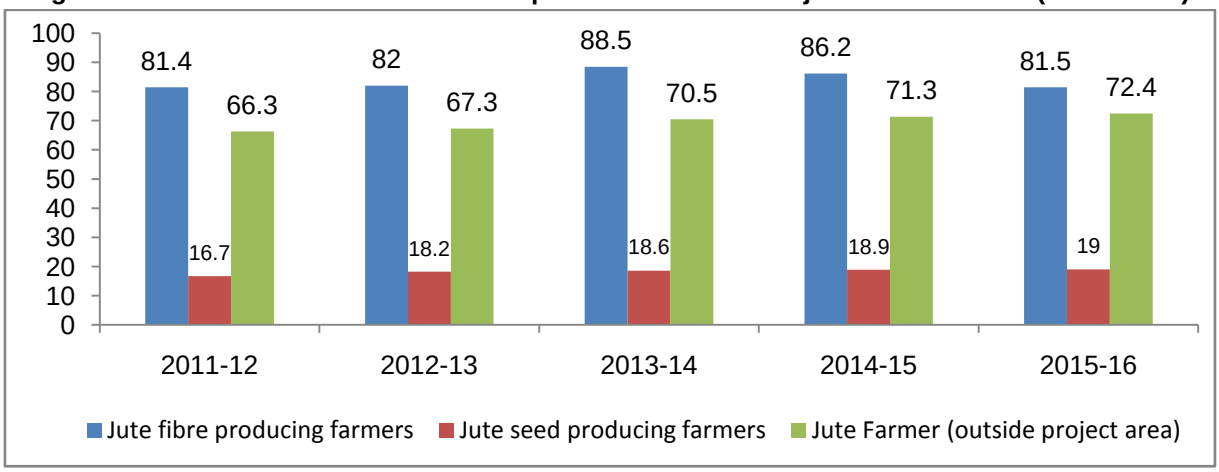
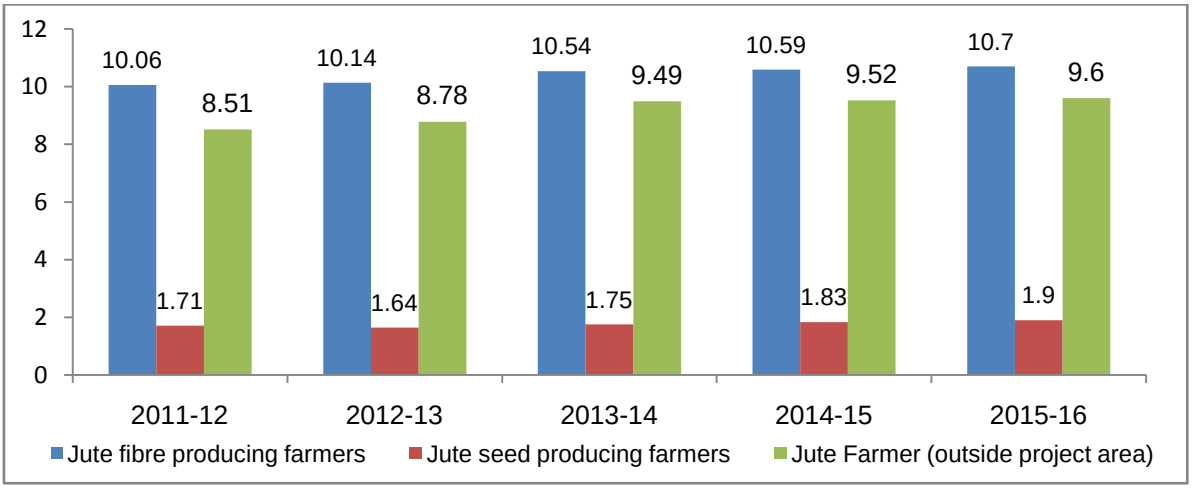


Figure-15: Year Wise Yield of Jute production under Project Area Farmers (dec/farmer



4.2.2 Year Wise Varity Used for Production of Jute

Year wise use of variety for the production of jute fibre and jute seed by the farmers is presented in Table-13. In case of jute fibre producing farmers; variety 0-9897 was used by 61 farmers at the beginning of the project (2010-11) and increased 1256 farmers at the 5th year, at end of the project (2015-16). It can be mentioned here it was highest (1595) at the 4th year of the project (2014-15). In case of variety 0-72 used by 88 farmers at the beginning of the project (2010-11) and increased to 89 farmers at the 5th year of project (2015-16), but in year (2013-14) it was highest 113 farmers. In case of variety JRO-524 used by 47 farmers at the beginning of the project year (2010-11) and increased to 134 farmers at the 3rd year of the project (2013-14). But in the following years this variety was not cultivated due to non-supply of seed. Beside, the cultivation of capsularies varieties of jute (D-154, CVL-1) was done by 267 farmers before beginning of the project (2010-11).

It was decreased due to start of the project. In case of jute seed producing farmers variety 0-9897 used by 2 farmers at the beginning of the project (2010-11) and increased to 439 farmers at the end of the project (2015-16). But in 2014-15 year it was highest 518 farmers. The seed of variety 0-72 supplied to 30 farmers, which was increased to 57 farmers in year 2013-14, again it was decreased to 30 farmers in year 2015-16 because of less supply of seed. In case of variety JRO-524 was cultivated of 59 farmers at the beginning of the project (2010-11) but its cultivation year wise decreased at the end of the project (2015-16). At beginning of the project (2010-11) capsulary varieties were cultivated by 155 farmers, but its cultivation year wise decreased and stopped on project year 2012-13. After analyzing collected data, it may be concluded that cultivation of jute variety depend on supply of seeds. Therefore, supply of seed jute variety must be arranged on the basis of farmers demand.

Table-13: Year Wise Variety Used for Jute Production

Year	Variety							
	0-9897		0-72		JR O-524		Capsularies (D-154, CV2-D)	
	N	%	N	%	N	%	N	%
Jute fibre producing farmers								
2010-11	64	13.7	88	18.9	47	10.1	267	57.3
2011-12	634	96.1	9	1.4	15	2.3	2	.3
2012-13	1051	90.4	32	2.8	79	6.8	1	.1
2013-14	1289	83.9	113	7.4	134	8.7	1	.1
2014-15	1595	94.2	99	5.8	-	-	-	-
2015-16	1256	93.4	89	6.6	-	-	-	-
Jute seed producing farmer								
2010-11	2	0.8	30	12.2	59	24.0	155	63.0
2011-12	201	91.0	18	8.1	1	.5	1	.5
2012-13	397	90.2	41	9.3	2	.5	-	-
2013-14	484	87.9	57	10.4	9	1.6	-	-
2014-15	518	89.9	56	9.7	2	.3	-	-
2015-16	439	93.6	30	6.4	-	-	-	-

Source: Survey, 2016

4.2.3 Source of Seed, Variety, Sowing, Jute Cutting and Jute Seeds Harvesting Time and Jute Seed Producing Farmers

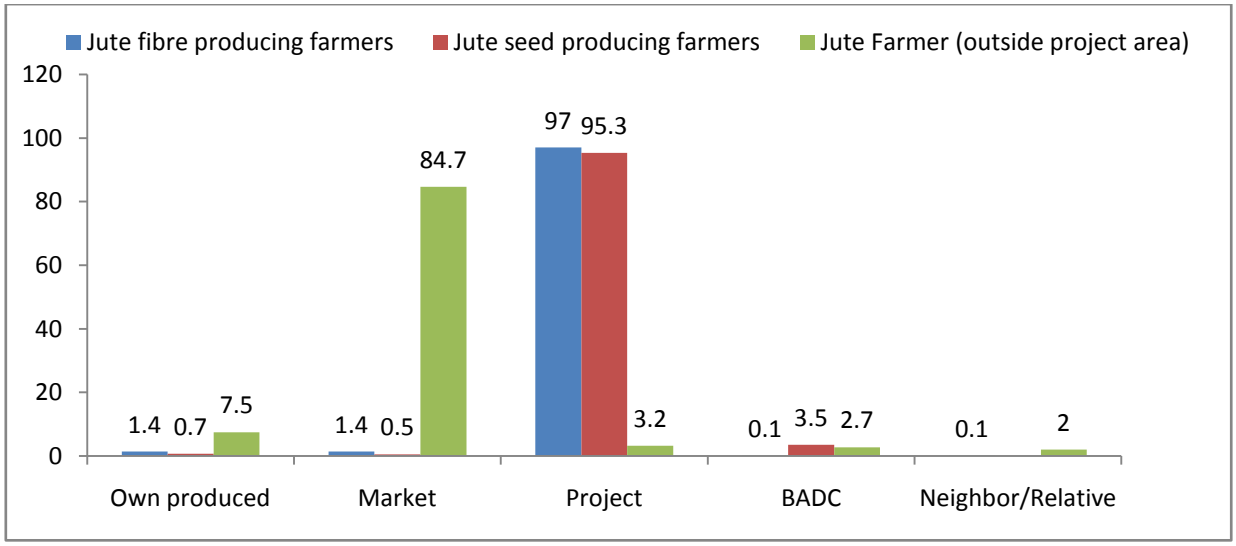
Source of seeds, variety, sowing, jute cutting and jute seed harvesting time and jute seed producing farmers are presented in Table-14. Before beginning of the project, 74.8% farmers purchased seeds from market. During project period 97% farmers collected seed from the project.

In case of jute seed producing farmers 30% farmers used own seed and 55% farmers used collected seeds from market. During the project period 97% project farmers collected seed from the project. But in case of outside project farmers 85% farmers collected seeds from market at the beginnings and during project period. Before beginning of the project jute farmers and jute seed farmers and outside project farmers used capsularies seeds 45%, 54%, and 61% respectively. Field data clearly demonstrated that after beginning of the project cultivation of capsularies varieties decreased in project area.

During project period 94% of the jute producing farmers and 89.4% of the jute seed producing farmers cultivated 0-9897 variety and outside project farmers in 2010-11 year cultivated JRO-524 variety 30%, 27% and 29% farmers respectively. Although after beginning of the project in 2014-15 year 1%, 3% and 24% farmers cultivated respectively. Due to supply of HYV jute seed variety, jute producing and jute seed producing 100% and 99% of the farmer's cultivated HYV varieties respectively. On the other hand due to shortage of HYV seed supply in the market 24% outside project, farmers cultivated HYV tossa varieties from abroad. Sufficient supply of HYV seed needs to be ensured for successful jute production in the country.

Before and during project period 74%-81% farmers sowing seeds in the month of Chaitra and 19%-23% farmers in the month of Baishakh for producing jute fibres. In case of jute seed production 53% farmers sowed seed in themonth of Bhadra and 25% farmers in the month of Ashin for production on jute seed. Maximum jute fibre producing farmer (62%-74%) cut jute during the month of Shravan and in case of jute seed production maximum farmers (49%-58%) harvested jute seed during the month of Poush (Table-14) and Fig-16. Maximum project farmers in case of jute producing and jute seed producing farmers collected seeds from recognized seed sources and sowed in time and collected jute seeds in time. Expected results were achieved in case of modern jute cultivation and production of seeds by the project farmers. If successful overcome of the project weaknesses, continuation of the project activities and marketing through project could be done. Jute production will again go back to its old sonali days.

Figure-16: Source of Seed and Variety of Jute and Jute Seed Producing Farmers



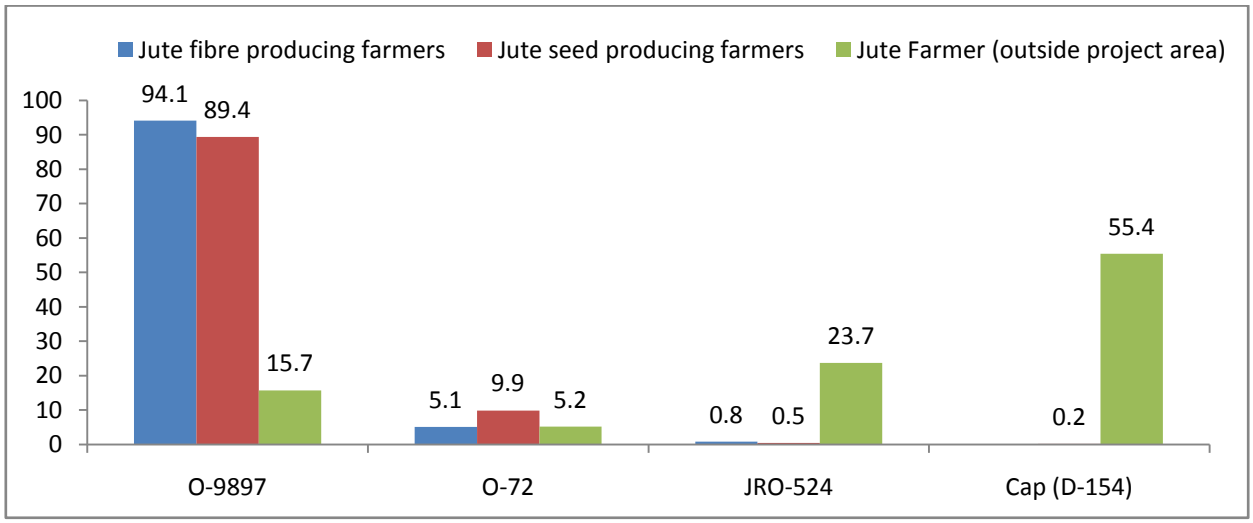


Table-14: Source of Seed, Variety, Sowing, Jute Cutting and Harvest Time of Jute Seed of Jute and Jute Seed Producing Farmers

Subject	Jute producing farmer				Jute seed producing farmer				Jute Farmers (Project Outside Area)			
	Before project (2010-11)		During project (2014-15)		Before project (2010-11)		During project (2014-15)		Before project (2010-11)		During project (2014-15)	
	N	%	N	%	N	%	N	%	N	%	N	%
1. Source of seed												
Own produced	213	12.6	26	1.4	97	29.7	4	.7	31	5.4	45	7.5
Market	1263	74.8	26	1.4	179	54.7	3	.5	483	83.7	510	84.7
project	23	1.4	1742	97.0	8	2.4	570	95.3	11	1.9	19	3.2
BADC	53	3.1	1	.1	24	7.3	21	3.5	5	.9	16	2.7
Neighbor	137	8.1	1	0.1	19	5.8	-	-	47	8.2	12	2
2. Variety												
O-9897	322	19.1	1690	94.1	32	9.8	534	89.4	29	5.1	94	15.7
O-72	102	6.1	92	5.1	30	9.2	59	9.9	30	5.2	31	5.2
JRO-524	504	29.9	14	.8	87	26.7	3	.5	164	28.6	142	23.7
Cap (D-154)	755	44.9	-	-	177	54.3	1	.2	351	61.1	331	55.4
3. Sowing Time												
Jute Production -Chaitra	1250	73.9	1454	80.8	5	1.5	2	.3	438	76.0	459	76.5
- Bhaishak	352	20.9	346	19.3	90	27.5	128	21.4	108	18.7	137	22.8
Jute seed production-Bhadra	-	-	-	-	162	49.5	314	52.5	-	-	2	.3
- Ashin	-	-	-	-	58	17.7	148	24.7	-	-	2	.3
4. Jute cutting time												
- Ashar	312	18.4	210	11.7	32	9.6	60	10	100	17.3	72	12.1
- Sharaban	1048	61.9	1328	73.9	58	17.4	12	2.0	351	60.8	389	65.1
- Bhadra	332	19.6	260	14.5	1	.3	22	3.7	125	21.7	136	22.7
5. Jute seed harvesting time												
- Khartic	-	-	-	-	22	6.6	23	3.8	1	0.2	1	0.2
- Agoahayan	-	-	-	-	58	17.4	134	22.4	-	-	-	-
- Pouse	-	-	-	-	162	48.6	348	58.1	-	-	-	-

Source: Survey, 2016

4.3 Information on Purity, Germination and Vigor of Jute Seeds

4.3.1 Purity of Jute Seeds

According to the farmers' option in the project area, purity of jute seeds sown by the farmers is presented in Table-15. Jute producing farmers (56.5%), jute seed producing farmers (47%) and outside project farmers (60.8%) reported that the purity of seeds was 81-90%. Jute seed producing farmers (44.2%), jute producing farmers (34.8%) and outside project farmers (18.7%) reported that jute seed purity was more than 91%. The purity of jute seeds used in the project was found to be very good.

Table-15: The Information on the Seeds Used In the Project Area for the Year 2014-15

Subject	Purity (%)							
	<70%		71-80		71-90		>91	
	N	%	N	%	N	%	N	%
Jute producing farmer	7	.4	149	8.3	1017	56.5	627	34.8
Jute seed producing farmer	-	-	53	8.8	282	47.0	265	44.2
Jute Farmer(outside project area)	9	1.5	114	19.0	365	60.8	112	18.7

Source: Survey, 2016

4.3.2 Germination of Jute Seed

According to the farmers' option in the project area, germination of jute seeds sown by the farmers is presented in Table-16. Here also 48.8% jute seed producing farmer, 45.2% jute producing farmers and 37.7% outside project farmers reported that germination percentage of jute seed was 81-90%. Highest number of outside project farmers (53.5%) reported that the germination percentage of jute seed was 70-80%. The overall germination percentage of the jute seed comparatively more in case of project farmers compared to outside project farers.

Table-16: The Information on the Seeds used in the Project Area for the Year 2014-15

Subject	Germination (%)							
	<70%		71-80		71-90		>91	
	N	%	N	%	N	%	N	%
Jute producing farmer	34	1.9	768	42.7	814	45.2	184	10.2
Jute seed producing farmer	-	-	206	34.3	293	48.8	101	16.8
Jute Farmer(outside project area)	28	4.7	321	53.5	226	37.7	25	4.2

Source: Survey, 2016

4.3.3 Vigor of the Jute Seed

According to the farmers' opinion in the project area, vigor of the seeds sown by the farmers presented in Table-17. It was observed in the Table that 48% of the project farmers reported vigor of the seed was very good. 52% Jute producing, 52% jute seed producing farmers of the project and 58% outside project farmers reported respectively that vigor of the jute seeds was good. The vigor of jute seeds was not good reported by 2.3% farmers.

Table-17: Information for Vigor in the Project Area for the Year 2014-15

Subject	Vigor					
	Very good		Good		Not good	
	N	%	N	%	N	%
Jute producing farmer	857	47.6	927	51.5	16	0.9
Jute seed producing farmer	290	48.3	310	51.7	-	-
Jute Farmer(outside project area)	240	40.0	346	57.7	14	2.3

Source: Survey, 2016

4.4 Jute and Jute Seed Production

4.4.1 District Wise Area and Production of Jute and Jute Seeds

Districts wise area and production of jute and jute seeds produced by the farmers of the project and outside of the project is shown in Table-18. Substantial difference of jute yield was observed between project and outside project farmers. The yield was more in case of project farmers in all districts. On the other hand the average yield deference was observed in all districts. The jute yield of Manikgonj and Gaibhanda was 7.57 and 8.26 kg/dec respectively which were less compared to other districts. The average yield of jute in project area was 10.8 kg/dec and outside project area was 8.38 kg/dec. That means the yield of jute in project area is distinctly more than that of outside project area.

The average area & jute seed producing farmers was 18.82 dec per farmer and average yield was 1.79 kg/dec. The jute seed yield 0.87 kg/dec was the lowest in Bogra and 2.47kg/dec was the highest meherpur. There is a potentiality of increasing jute seeds production. If we can able to produce economically profitable seeds then the demand of the good quality seeds will be resolved. In that case the project personal must ensured supply of foundation needs, extension of technologies, continuous supervision and processing of collected jute seeds and developed proper storage and marketing system.

Table-18: District wise Area and Production Jute and Jute Seeds (2014-15)

District	2014-15					
	Project area				Jute Farmers (Project Outside Area)	
	Jute producing farmer		Jute seed producing farmer			
	Cropped area (dec/farmer)	Yield (kg/dec)	Cropped area (dec/farmer)	Yield (kg/dec)	Cropped area (dec/farmer)	Yield (kg/dec)
1. Manikgonj	89.14	7.57	20.20	1.65	94.13	6.41
2. Tangail	78.94	10.80	22.00	1.16	57.37	9.37
3. Jamalpur	89.61	10.68	16.60	1.16	77.67	7.02
4. Mymensingh	83.36	10.83	11.50	1.52	58.47	7.40
5. Kishorgonj	72.97	11.70	19.00	1.74	67.97	9.60
6. Faridpur	97.48	11.19	19.27	1.91	97.87	8.86
7. Madaripur	97.54	9.75	18.47	1.53	76.03	8.20
8. Gopalgonj	84.92	11.15	17.39	1.26	71.97	10.31
9. Jessore	74.21	12.21	18.30	2.14	65.20	11.86
10. Jhanaidha	75.92	11.33	20.53	1.98	59.03	9.28
11. Kushtia	82.56	9.97	19.50	2.20	64.77	9.45
12. Meherpur	91.23	11.45	20.00	2.47	80.93	9.58
13. Rajshahi	85.56	9.76	18.83	2.18	74.17	9.54
14. Pabna	97.93	10.65	19.67	1.96	68.53	9.71
15. Natore	99.00	11.01	20.00	2.07	64.20	8.93
16. Bogra	96.00	10.40	20.00	0.87	64.37	9.42
17. Gaibandha	72.34	8.26	19.90	1.93	64.83	5.06
18. Rangpur	79.16	10.31	20.07	1.87	57.63	5.89
19. Nilfamari	64.77	9.56	18.60	2.01	55.40	5.91
20. Dinajpur	68.27	9.40	16.60	2.13	47.33	5.85
Average	**84.05**	**10.40**	**18.82**	**1.79**	**68.39**	**8.38**

Source: Survey, 2016

t-test:In this project area & outside project area, average yield was 10.40 Kg/dec and 8.38 kg/dec and t-test result yield was 7.15 kg/dec, which shows significant diffirance.

4.5 Information on Input, Labor Utilization and Income Expenditure of the Jute and Jute Seed Production

4.5.1 Input Utilization

In project area farmers applied urea 70.75 kg, TSP 23.1 kg, MP 31.85 kg, DAP 2.75 kg & Gypsum 29.16 kg/acre for cultivation of jute (Table-19). In case of jute seed production and outside project farmers applied almost recommended doses of fertilizers. But jute farmers, just seed farmers and outside project farmers applied per acre; 678 kg, 450 kg and 448 kg cow dung or compost respectively. In the same way they applied 2.28 kg, 1.75 kg and 1.68 kg jute seeds per acre respectively. Besides, farmers used insecticides and fungicides.

Besides this jute producing farmers spent Tk. 2366, jute seed producing farmers Tk. 2057 and outside project farmers Tk. 2615 acre for preparation of land. In project area for early sowing of seeds for jute production and jute seed production applied irrigation for land preparation and per acre cost of irrigation for jute seed producing farmers was Tk. 3077 and outside project farmers was Tk. 1952 (Table-19).

4.5.2 Input Cost

Information on cost of cultivation for jute production per acre was obtained from surveyed farmers. The table-19 shows that per acre input cost for jute producing farmers was Tk.12,001, Jute seed producing farmers was Tk. 13,407 and outside project farmers was Tk.10,621. In project area labor cost per acre for jute producing farmers was Tk. 20,461, Jute seed producing farmers was Tk. 15018 and outside project farmers was Tk. 17,210 (Table-20). The cost for labor utilization for jute seed producing farmers was lower due to less number of labors used.

Table-19: Jute and Jute Seed Producing Farmers in the Project Area for 2014-15 Years Input Use and Expenditure per Area

Subject	Unit	2014-15					
		Project area				Jute Farmers (Project Outside Area)	
		Jute producing farmer		Jute seed producing farmer			
		Quantity	Taka	Quantity	Taka	Quantity	Taka
Cost of land preparation	-	-	2366	-	2057	-	2615
Jute seed	Kg	2.48	397	1.75	228	1.68	457
Urea	Kg	70.75	1234	62.87	1146	31.7	558
TSP	Kg	23.61	584	65.17	1792	21.68	553
MP	Kg	31.85	542	42	359	20.78	341
DAP	Kg	2.75	85	2.67	71	2.81	72
Gypsum	Kg	29.16	395	24.88	780	17.56	286
Cow dung/compost	Kg	674.41	2470	850	3018	448.04	1562
Insectisedes	No.	4.8	1211	4.3	704	7.83	2181
Fungicides	No.	0.91	355	1.6	175	0.1	44
Irrigation	No.	2.26	2362	3.37	3077	1.78	1952
Total	**-**	**-**	**12001**	**-**	**13407**	**-**	**10621**

Source: Survey, 2016

4.5.3 Labor Utilization

Labor utilized for activities like land preparation including plowing & laddering was 2.13 man days, seed sowing 0.98 man days, fertilizer application 1.17, irrigation 1.35, weeding 12.16, fungicides and insecticides application 1.22, intercultural operation including roughing 3.81, jute cutting 12.53, leaf dropping and retting 12.12, fibre separation & washing 13.65, jute drying and processing 3.44 and marketing 2.18 man days for jute production (Table-20). Average labor utilized for jute production was 66.74 man days per acre. Average labor utilized for jute seed production was 47.66 man days per acre. It can be mentioned here that the labor utilization for seed production was comparatively lower than others; mainly due to no labor was used for leaf dropping, retting, fibre separation & washing. Average labor utilization for outside project farmers was 57.30 man days per acre. The expenditure for labor utilized by the farmers for jute production, for jute seed production and outside project farmer was Tk. 2046, Tk. 5018 and Tk. 17210 per acre respectively.

Table-20: Per Acre Labor Utilization for Production Jute by Jute Producing and Jute Seed Producing Farmers in Project Area 2014-15 year

Subject	Unit	2014-15					
		Project area				Jute Farmers (Project Outside Area)	
		Jute producing farmer		Jute seed producing farmer			
		Quantity	Taka	Quantity	Taka	Quantity	Taka
Land plowing & ladding	manday	2.13	636	2.88	860	1.99	585
seed sowing	manday	0.98	294	1.55	446	0.78	231
Fertilizer application	manday	1.17	347	1.73	496	1.13	337
Irrigation	manday	1.35	368	1.92	505	0.89	257
Weeding	manday	12.16	3659	11.19	3857	10.54	3134
Fungicides & insecticides	manday	1.22	330	1.88	561	1.39	404
Intercultural operation including roughing	manday	3.81	1135	5.8	1,766	2.66	785
Jute cutting/seed collection	manday	12.53	3868	13.96	4,448	12.37	3717
Leaf dropping & retting	manday	12.12	3773	-	-	8.15	2438
Fibre seperation & washing	manday	13.65	4252	-	-	12.82	3857
Jute drying & storing	manday	3.44	1036	-	-	3.5	1031
Jute seed drying & storing	manday	-	-	5.74	1675	-	-
Marketing	manday	2.18	763	1.01	404	1.08	434
Total	**-**	**66.74**	**20461**	**47.66**	**15018**	**57.30**	**17210**

Source: Survey, 2016

4.5.4 Jute Fibre, Jute Seed and Jute Stick Price

The production of jute, jute seeds & price of jute sticks in project area for 2014-15 year presented in Table-21. In case of jute producing farmers' fibre price was Tk. 48.60 per kg outside project farmers' price was Tk. 43.86 per kg and jute seed price was Tk. 181 per kg. Project farmers received Tk. 5. per kg higher price of fibre due to better quality compared to outside project farmers. Average price of the jute stick was Tk. 6.32- 7.0. per kg.

Table-21: Price of Jute Fibre, Jute Seed and Jute Sticks Produced by the Farmers of Project Area in 2014-15 years

Subject	Tk./kg		
	Project area		Jute Farmers (Project Outside Area)
	Jute producing farmer	Jute seed producing farmer	
Jute fibre	48.60	-	43.86
Jute seed	-	181	-
Jute Stick	7.0	6.98	6.32

Source: Survey, 2016

4.5.5 Farmers Income and Expenditure from Jute Fibre, Jute Seed & Jute Sticks

The income & expenditure for jute cultivation in 2014-15 year of project area presented in Table-22. Jute producing farmers per acre income was Tk. 56036 (jute fibre Tk. 47781 & jute. stick Tk. 8255), jute seed producing farmers income was Tk. 35625 (jute seed Tk. 33466 & jute stick Tk. 2160) and outside project farmers total income was Tk. 43065). Per acre production cost for jute producing farmers was Tk. 32462, jute seed producing farmers was Tk. 28425 and outside project farmers was 27831 Tk. presented in Table-22 and Figure-17.

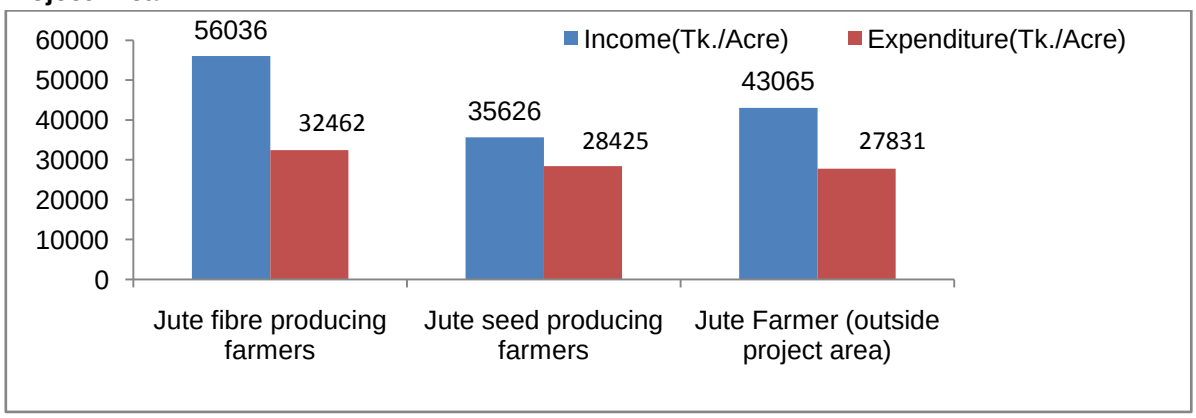
Table-22: Information of Income and Expenditure from Jute Fibre, Jute Seed & Jute Sticks for 2014-15 year in Project Area

Subject	Tk./acre		
	Project area		Jute Farmer(outside project area)
	Jute producing farmer	Jute seed producing farmer	
Income			
Jute Fibre/Seed	47781	33466	36755
Jute Stick	8255	2160	6310
Total Income	56036	35626	43065
Total Expenditure	32462	28425	27831
Gross Margin	23574	7201	15234
Income : Expenditure	1:0.73	1:0.25	1:1.55

Source: Survey, 2016

Congregation analysis of income & expenditure showed that grass margin was Tk. 23,574 for jute projecting farmers was Tk. 7201and outside project farmer was Tk. 15238 per acre. Income expenditure analysis showed that income expenditure ratio for jute producing farmer was 1:0.73, jute seed producing farmers was 1:0.25 and outside project farmers was 1:1.55. The income of the project farmers was disturbingly higher that outside project farmers. The income of the jute seed, producing was also compilation higher than other computation crops.

Figure-17: Income and Expenditure from Jute Fibre, Jute Seed & Jute Sticks for 2014-15 year in Project Area



4.5.6 Grading of Jute Fibre of Project Farmers

Training on jute fibre grading was given to farmers of project. Generally jute trading was hied be discussion between jute traders, jute producers and fixed jute price in the market. Survey result showed that training on jute trading depending of quality & jute fibre was swon to 135 farmers of jute producing farmers (11.1%). Jute seed producing farmers was 168 no. (31.5%) and outside project farmer was only 4 nos (Table-24). Therefore, maximum farmers in the project area did not follow jute grading.

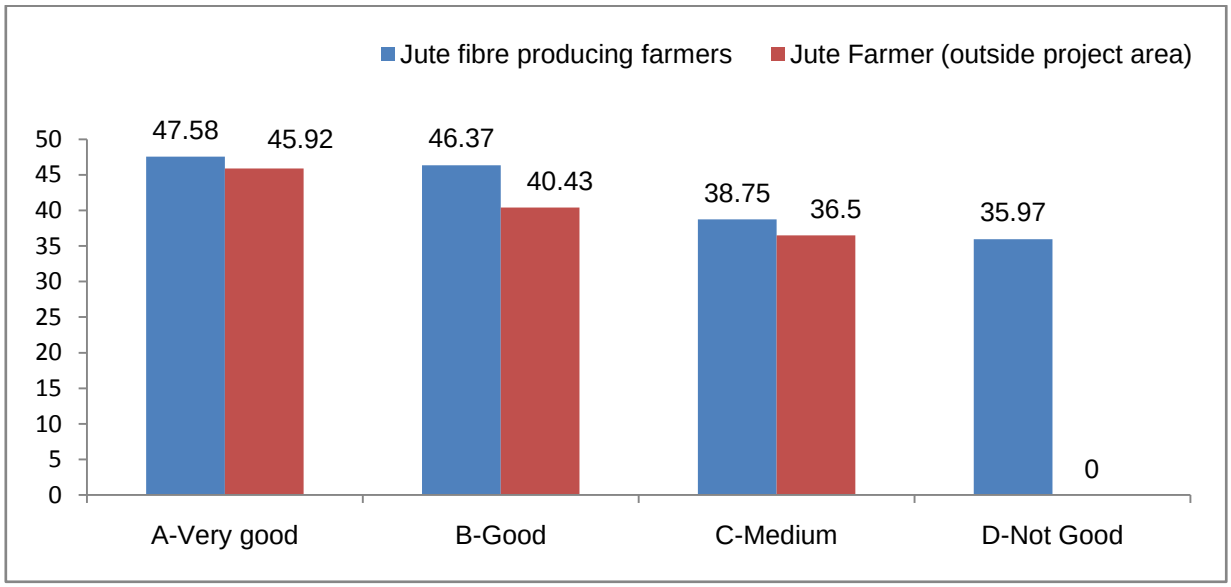
Table-23: Information of Fibre Grading and Marketing Activities of Project Farmers

Subject	Project area		Jute Farmer(outside project area)	
	Jute producing farmer			
	N	%	N	%
Farmers marketed jute fibre after grading	145	9.1	7	1.2
Production according to grading price	Production (kg)	Price (Tk./kg)	Production (kg)	Price (Tk./kg)
A-Very good	572	47.58	430	45.92
B-Good	315	46.37	381	40.43
C-Medium	232	38.75	145	36.50
D-Not Good	110	35.97	-	-
Average	**420**	**45.40**	**369**	**42.10**

Source: Survey, 2016

Among jute producing farmers only 145 farmers (9.1%) and outside project 7 farmers (1.2%) marketed. Jute fibre after jute grading (Table-23). Those farmers marketed jute after grading presented production & price in Table-23 and in figure-18. On analyzing farmer's opinions about jute grading it was observed that the price gradually decreased according to the grade of jute fibre. Farmers will be financially benefitted if they marketed jute fibre after grading.

Figure-18: Price of Jute Fibre according to grading of Project Farmers



4.6 Training

4.6.1 Information on Training

Training program is organized on modern practices of the technologies for jute cultivation to the selected farmers of the project to obtain higher productivity. One day training program includes five training sessions and an open discussion season. Upzilla Agricultural Officers & Deputy Director, Department of Agricultural Extension, Officers of Department of jute, Officers of Bangladesh Agricultural Development Corporation and Officers of Bangladesh Jute Research Institute coordinately act as specialist trainers to operate training programs. Training was imparted on the use of modern technologies for production of jute and jute seeds in the project area. Data were collected from farmers about the effect of the training programs. After analyzing the data, obtained results are presented below:

4.6.2 Information about Training subjects on jute production of trained farmers

Respondents' numbers of jute producing farmers on training related questionnaire were 1217. Which subject was included in the training program; responded by 68% on variety, 82% on land preparation, 73% on fertilizer applications, 68% on seed sowing, 67% on thinning 36% on weed control & pest management, 36% on ribon retting, 23% on use of ribonner, 11% on grading based on fibre quality, 7% on seed collection in time, 11% on seed cleaning & drying, 16% on storage technologies, 5% on late planting jute seed production and 0.7% on seed production by top & branch cuttings were included in the training program respectively (Table-24).

As per opinion of 534 respondents of jute seed producing farmers in respect of training first five subjects were: variety, land preparation, fertilizer application, seed sowing, thinning and weed control & pest management; remembered & applied by 89% to 64% of the trained farmers. About rest subjects in training program only 14-43% respondents remembered & applied. More importance needs to be given on these subjects in organizing future training program.

Regarding stem/top cutting method of seed production, grading of jute fibres & use of ribonners were included in the training program responded lowest number (14-30%) of jute seed producing farmers. Only 4 farmers outside project received training on jute cultivation. All farmers need to be included phase wise in future training program.

Table-24: Information about Subjects Included in the Training Programme of Farmers for Jute Production

Training Subject	Jute producing farmer (N=1800)		Jute seed producing farmer (N=600)		Jute Farmer(outside project area) (N=600)	
	N	%	N	%	N	%
Received training on modern jute production	1217	67.6	534	89.0	4	.7
Variety	993	81.6	469	87.8	3	75.0
Land preparation	996	81.8	431	80.7	4	100.0
Fertilizer application	882	72.5	404	75.7	4	100.0
Seed sowing	832	68.4	410	76.8	4	100.0
Thinning	820	67.4	376	70.4	4	100.0
Seed control & pest management	438	36.0	340	63.7	1	25.0
Jute retting by using ribboner	433	35.6	230	43.1	1	25.0
Use of ribboner	281	23.1	168	31.5	1	25.0
Grading based on quality Jute fibres	135	11.1	168	31.5	4	100.0
Jute seeds collected at proper time	80	6.6	329	61.6		
Harvesting threashing & drying	132	10.8	256	47.9		
Storage techniques	193	15.9	267	50.0		
Jute seed production technology	63	5.2	242	45.3		
Stem and top cutting method of seed processing	9	.7	76	14.2		

Source: Survey, 2016

4.6.3 Information about Training Program for Project Farmers and Outside Project Farmers

Information about training program for project and outside project farmers is presented in Table-25. Jute producing farmers and jute seed producing farmers; 67.6% & 89% respectively received training. But according to the opinion of farmers regarding capacity development, 85% jute seed producing farmers and 80% jute producing farmers responded positively.

In conducting training program 49% jute farmers told that visual aids were used, 83.4% jute producing farmers and 93.4% jute seed producing farmers reported that jute production technologies were practically demonstrated. Almost all farmers positively responded that their knowledge had been assessed through pre and post training test.

Responding farmers were asked about receiving of reminder for applying knowledge earned during training practically from the supervisors; almost all farmers reported positively that they received reminders. Almost all farmers opined that they need further training.

Table-25: Information about Training Programme for Project and Outside Project Farmers

Subject Matters	Results	Project area				Jute Farmer(outside project area)	
		Jute producing farmer		Jute seed producing farmer			
		N	%	N	%	N	%
Training on mordern jute production	Yes	1217	67.6	534	89.0	4	.7
Training fullfilled demand & benefit	Yes	1206	99.1	526	98.5	2	50.0
Capacity of trainer	Good	1103	90.6	502	94.0	1	25.0
	Medium	113	9.3	32	6.0	3	75.0
	Not good	1	.1			1	25.0
Change in works after receiving training	Good	972	79.9	455	85.2	3	75.0
	Medium	243	20.0	79	14.8	1	25.0
	No Charge	2	.2	-	-	3	75.0
Distribution of handout/booklet in training	Yes	1207	99.2	529	99.1	1	25.0
Visual aid inputs used in training	Yes	550	45.2	262	49.1	1	25.0
Practical demonstration of technologies in training	Yes	1015	83.4	459	86.0	1	25.0
Pre and post test evaluation of knowledge in tarining	Yes	1139	93.6	499	93.4	2	50.0
Supervision in practical use of knowledge gained in training	Yes	1201	98.7	533	99.8	1	25.0
Such training program need to be carried out in future training program for others	Yes	1210	99.4	527	98.7	2	50.0

Source: Survey, 2016

4.7 Use of Modern Technologies

4.7.1 Opinion on Modern Technologies Used by Farmers for Last 5 Years in Project Area

Opinion of the project and outside project farmers on quality and adoption of 20 modern technologies or activities for last 5 years were collected and presented in Table-26. It was observed that the opinion of jute producing farmers, seed producing farmers and outside project farmers on seed sowing in lines, jute seed production through method of stem and top cutting, ribon retting and jute fibre sell after grading, technologies adopted and practiced by 3.6%, 1.3%, 17.3% and 24,4% farmers respectively that is lower than other technologies. Besides these, the performance of quality & high yielding seeds, training, use of fertilizers, use of insecticides, seed sowing in time after irrigation, thinning of plants, intensive intercultural operation, roughing, jute seed production in late season sowing, distribution of booklets, right use of agricultural equipments, adoption of sustainable technologies and receiving of appropriate advises, practice of IPM, improving soil fertility through retting of jute leaves at the soil was positive as reported by 99.8%, 70.8%, 88.9%. 64.7%, 52.1%, 95.6%, 87.5%, 70.6%, 68.8%, 57.3%, 88.3%, 62.6%, 94.0% and 91.8% jute producing farmers respectively.

After analyzing the above mentioned technologies it can be concluded that seed sowing in line, stem & top cutting method of jute seed producing, ribon retting & grading jute fibres technologies application were less. To increase the use of these technologies more demonstrations need to be set to show the relative advantages and more field days need to be arranged to explain their importance and benefit to the attending farmers.

In case of jute seed producing & jute fibre producing farmers like above mentioned 5 technologies, rest technologies acceptance & application rate, was lowest in case of early seed sowing through application of irrigation (39.5%) and highest in case of use of high quality improved jute varieties (100%). In this case to increase adoption of technologies same action need to be taken as in case of above mentioned 5 technologies.

Outside project farmers reported that only 4.5% farmers received training on seed sowing in time, and practice only 0.8% farmers, applied insecticides by 29.2% farmers, timely sowed seeds through irrigation by 22.2% farmers, late sowing for jute seed production by 5.7% farmers, grading of jute fibres by 3% farmers. Only 2.8% farmers reported that they received booklets on jute cultivation, use of modern machineries reported be 24.2% farmers. IPM practiced by 33% farmers. Roughing, intercultural operations, thinning, fertilizer application & use of quality & modern varieties of seeds were reported by 42% 83.5%, 96.5% 70.7% and 75.2% farmers respectively.

About stem and top cutting method of jute seed production, ribon retting, advice during cultivation time & sustainability of different technologies are not known to the outside project farmers. To bring desirable changes in socio-economic conditions of the farmers in the country will be difficult and late; keeping the farmers outside the projects' intensive jute cultivation services. Therefore, extension of jute production project needs to be done to bring all jute producing farmers in to the project.

Table-26: Information on Utilization of Modern Technologies for Last 5 years in the Project Area

Modern technologies used in project	Opinion of Modern technologies utilized farmers					
	Jute producing farmer (N=1800)		Jute seed producing farmer (N=600)		Jute Farmer (outside project area) (N=600)	
	N	%	N	%	N	%
Quality & HYV seed	1796	99.8	600	100.0	451	75.2
Training	1274	70.8	567	94.5	27	4.5
Seed sowing in row	64	3.6	6	1.0	5	0.8
Use of fertilizer	1600	88.9	590	98.3	424	70.7
Use of pesticides	1165	64.7	569	94.8	175	29.2
Jute & jute seed preduction in row	64	3.6	6	1.0	5	0.8
Sowing jute seed applying irrigation	938	52.1	237	39.5	133	22.2
Thinning	1721	95.6	564	94.0	579	96.5
Intercultural operation	1575	87.5	533	88.8	501	83.5
Roughing	1271	70.6	540	90.0	252	42.0
Jute production through late sowing	304	16.9	560	93.3	34	5.7
Jute seed production through top & branch cutting	23	1.3	4	0.7		
Ribon retting	311	17.3				
Jute marketing through grading fibre	440	24.4	118	19.7	18	3.0

Modern technologies used in project	Opinion of Modern technologies utilized farmers					
	Jute producing farmer (N=1800)		Jute seed producing farmer (N=600)		Jute Farmer (outside project area) (N=600)	
	N	%	N	%	N	%
Booklet, guidebook, poster, leaflet, books etc.	1238	68.8	563	93.8	17	2.8
Proper utilization of modern mechinaries	1031	57.3	493	82.2	145	24.2
Sustainable technologing and preoper suggstions provided bhy project personnel during field visit	1590	88.3	574	95.7		
Knowledge of IPM	1126	62.6	474	79.0	200	33.3
Produce green fertilizer & increase soil biomass through defoliation leaves	1692	94.0	453	75.5	329	54.8
Suggested use of technologies weather consider sustain	1653	91.8	577	96.2		

Source: Survey, 2016

4.8 Cropping Pattern

4.8.1 Information about Cropping Pattern in Project Area Feb. 2014-15

Among the farmers practicing modern production technologies last 5 year in the project producing green fertilizer & enrich soil fertility through biomass production and defoliating leaves to soil responded by all types of farmers (82-85%) Table-27. Regarding this matter of cropping pattern, information were collection from project and outside project farmers in 2014-15 year. Respondents in the project area reported 15 cropping patterns with jute and 20 cropping patterns without jute. Among these cropping patterns 8 with jute and 4 without jute cropping patterns presented in Table-27. It can be observed from the table that wheat-jute-paddy cropping pattern practiced by 524 farmers, lentil-jute-paddy cropping pattern practiced by 226 farmers and mustard-jute-paddy cropping pattern practical by 166 farmers. Cropping patterns without jute in project area wheat-Aus-Aman paddy practiced by 34 farmers, wheat-mungbean-Aman-Paddy practiced by 60 farmers and Lentil-Aus-Aman paddy practiced by 74 farmers.

The yield of following crops after jute in all cropping patterns in project farmers was higher than the outside project farmers. The yield was higher in case of project farmers mainly dec to farmers received training and continues support of modern technologies & cooperation in respect problem solution. Information were abstained from the cropping patterns practiced with jute & without jute in case of increase soil fertility and any yield difference between crops following in case of cropping pattern with jute and without jute. Almost all farmers agreed and also results obtained confirmed that yield of Aman paddy higher in case of cropping pattern practical with jute compared with cropping patterns practiced without jute and yield was higher 10.22%. The reason for comparing Aman paddy was mainly due to all farmers followed this crop in cropping patterns.

Table-27: Information on Cropping Pattern in Project Area in 2014-15 year

Cropping Pattern	Jute producing farmer		Jute Farmer(outside project area)		Jute producing farmer				Jute Farmer(outside project area)			
	N	%	N	%	land area (dec/farmer)	Yield as per cropping pattern (kg/dec)			land area (dec/farmer)	Yield as per cropping pattern (kg/dec)		
Cropping Pattern with Jute												
Wheat-Jute-Aman paddy	524	29.1	165	27.9	69.08	15.21	10.54	15.01	40.05	12.13	9.23	13.25
Lentil-Jute-Aman paddy	226	12.6	69	11.7	77.47	6.50	11.23	17.07	20.84	5.36	10.28	15.37
Boro-Jute- Aman paddy	100	5.6	34	5.8	85.76	27.09	11.50	15.86	22.32	26.44	9.28	14.47
Mustard- Jute - Aman paddy	166	9.2	52	8.8	80.07	5.73	11.06	16.26	25.53	5.43	8.67	14.98
Onion-Jute -Aman paddy	66	3.7	16	2.7	61.97	38.63	11.50	16.25	18.64	30.19	10.46	14.20
Tobacco- Jute-Aman paddy	65	3.6	11	1.9	41.83	10.36	9.62	15.62	11.63	9.13	8.99	12.39
Potato-Jute-Aman paddy	61	3.4	59	10.0	31.95	51.28	8.85	15.11	22.75	41.42	6.68	14.11
Khesari-Jute Aman paddy	27	1.5	23	3.9	38.63	7.93	11.18	16.11	32.70	6.39	9.10	15.41
Cropping Pattern without Jute												
Wheat-Aus- Aman paddy	34	2.0	7	1.3	34.00	13.29	14.28	14.70	12.26	12.29	13.63	12.71
Wheat-Mungbean-Aman paddy	60	3.5	15	2.8	67.88	13.10	5.82	15.24	19.17	12.07	3.67	14.83
Lentil-Aus-Aman paddy	74	4.3	52	9.7	47.77	5.19	14.75	12.08	32.70	3.58	13.26	11.52
Gartic-Mungbean-Aman paddy	20	1.2	10	1.9	43.65	32.00	6.40	14.75	28.30	30.60	5.80	12.40

Source: Survey, 2016

4.8.2 Farmers Opinion about Different Subjects of Jute Production in Project Area

Cultivation of relay cropping with jute and jute seed cultivation by 22-24% farmers in the project area. High officials visited field during crop cultivation, necessary inputs were supplied in almost in time and utilized as per advice of the officials. Modern production technology practiced by 53% of jute producing farmers and among of jute seed production demonstration reported by 99% of jute seed producing farmers. But very few field days were organized in those places where jute seed production demonstrations conducted and participating farmers shown interest to accept demonstrated technologies. Now about 60% farmers not use soil particles or banana plants on jute retting like before. They used water hyacinth, rice straw & concrete slabs on jute retting. The use of ribbon retting method was very less (only 8.4% farmers used). Only 27% farmers informed that they demonstrated of modern ribbon retting practices. Field days were arranged in demonstration places and 50% participant's attendance field days convince to adopt modern jute retting technologies (Table-28). Project personal need to take action on collection of jute seeds, processing, storage & marketing of jute seeds produced by the project assistance.

Table-28: Farmers Opinion on Different Subjects of Jute Production in Project Area

Subjects Metters	Project area			
	Jute producing farmer		Jute seed producing farmer	
	N	%	N	%
Cultivation of relay crops at the time of seed sowing in fields	281	21.8	140	24.3
Field visit of high offials during cultivation of jute season	1529	84.9	208	97.7
Timely supply of all inputs for cultivation of jute in project area	1405	78.1	553	96.2
Use of inputs & machinaries as per advise of the jute development officers	1665	93.1	444	76.4
Demonatration on modern jute production technologies	950	53.1	592	99.3
Organise field days at demonstration plots area	873	68.1	204	34.1
Farmers participated at field days interested to adopt modern technologies in jute production	1050	72.9	543	92.2
Ensure sufficient water supply during jute retting	1735	96.7	199	34.7
Use of soil particles, banana plants etc on jute retting jaks	694	38.6	586	98.5
Use of water hyacinth, rice straw, concreated slab, bamboo etc on jute retting jacks	1637	90.9		
Use of riboner machin at the time of separating jute fibres	152	8.4		
Demonstration of modern method of ribbon ratting in jute production	733	41.3		
Arranged demonstorations on modern jute retting	487	27.4		
Organining field days	418	67.4		
Participating farmers in field days shown interest on modern jute retting	313	55.8		
Collection of jute seeds, processing storage & marketting arangment of jute in the project	1733	97.1		

Source: Survey, 2016

4.9 Results of Focus Group Discussion (FGD)

Twelve Focus Group Discussion (FGD) was arranged in 12 selected upazilas under 12 regions of the project area. In each focus group discussion on an average 15-16 participants (in total 185 participants) attended in each upazila. Members of the high yield (HYV) jute & jute seed production and jute retting project committee at upazila level specially in some cases Upazila Nirbahyee Officers & Project Director, Upazila Agricultural Officers, Assistant Upazila Agricultural Officers, Upazila Rural Development Officer, Upazila Jute Development Officer, Assistant Jute Development Officers, Union Parishod Chairman, Member & public representation of jute producing & jute seed producing farmers, members of survey team & Consultant and other institute personal participated in focus group discussion meeting. Discussion conducted mostly based on prepared discussion subjects check list (Appendix-B, Interview Schedule-5) and findings presented in Appendix-F.

The age of the respondent farmers ranged between 30-50 year of 63% farmers, rest 37% farmers age was above 60 years, more than two thirds of the Jute farmers were young or mid aged and they were more interested to adopt modern Jute technologies. In case of educational status, two thirds of the farmers were educated and they understand by reading technical booklets or leaflets and helped to understand others. Besides 74% of the Jute farmers financially solvent and they can take risk to adopt modern technologies. It can be mentioned that land area under jute cultivation for jute fibre & seed production gradually increased from 2010 to 2016. Thereby developed socio-economic condition of the jute producing farmers.

4.9.1 Jute Cultivation

- **Seed Source:** Jute farmers used government, own project, private companion's seeds. Among the project farmers, all jute fibre producing farmers & 50% jute seed producing farmers collected seeds from projects and some farmer's purchased seeds from BADC & Local seed dealers. Besides all outside project farmers purchased seeds from dealers. Every year huge quantity of low quality seeds enter into the country through smuggling and created negative attitude of the farmers for jute production. Seeds coming through smuggling need to be stopped.
- **Variety:** 0-9897, 0-72, JRO-524 Varieties are being cultivated. The ratio of jute production of deshi and Tossa is 1:6.
- **Sowing Time & Method:** *For fibre:* Chaitra & Baishak, *for seed:* Bhadra & Ashin; *method:* broadcasting for fibre and seed production.
- **Seed Treatment & Fertilizer use:** Farmers are not following seed treatment for jute production. Because they did not have knowledge on seed treatment. Many farmers used urea, TSP, MP, Gypsum, Zink, boron and cow-dung or compost. But application of balanced fertilizer by every farmer needs to be confirmed.
- **Pest Attack & Control:** Jute hairy caterpillars, jute stem weevil, spiral borer, yellow mite, mealy bug & field crieket are insect pests attacked jute and to control them insecticides are applied. Diazinon, malathion, furadon are applied. Jute farmers lack knowledge about integrated pest management and also lack skill about to practice IPM.
- **Disease Attack & Control:** Farmers have very less knowledge about stem rot, black band, wilting, die-back diseases attack and their control & usually no control

measures were taken if attacked by diseases. Farmers training is needed to keep disease attack at tolerable level. .

- **Thinning of Jute Plants:** When plants are at 1.5-2 ft. high or after 35-45 days of seed sowing thinning needs to be done keeping required numbers of plants
- **Decomposition of Jute Leaves & Biomass:** After cutting jute plants stocked in heap at a place. Jute leaves fall on the ground and make biomass and then manure through decomposition. The following crops need less fertilizer and can give higher production.

4.9.2 Jute Processing

- **Jute Retting:** Traditional method of jute retting was (using soil clots, banana plants, straw etc) practiced before start of the jute project. At present water hyacinth, concrete slabs or rapping mud with polythene sheets were used for digging jute bundles in water. The project farmers learned that direct use of soil or banana plants deteriorate fibre quality. At present in 50% cases no direct use of soil or banana plants, therefore, quality of jute fibre improved.
- **Ribbon Retting:** In some places it was partially used. Due to availability of sufficient water during jute cutting time ribbon retting was not practiced. Besides more number of labors required which incurred higher cost and reduced the use of ribbon retting. Organizing more number of demonstrations, field days & farmers' rallies on the use of ribbon retting will popularize the use of ribbon retting of jute.
- **Jute Fibre Grading:** Generally jute fibre grading was not practiced. Some farmers after washing jute fibres sold at a package price. Rest farmers sold jute fibre of good & bad quality, long & short length together.

4.9.3 Jute Seed Production

- **Late Sowing Jute Seed Production: F**armers producing jute seeds through late sowing, 2/3 farmers in each group producing jute seeds. Farmers selected a plot to produce jute seeds and sow seeds at the end of month Bhadra and same cultural practices followed as in producing jute. Later on when color of the 90% capsules becomes dark brown during the month of Kartik & Aghrahyan jute seeds harvested and after thrashing & drying jute seeds stored.
- **Top & Branch Cutting Method:** Top & branch cutting method of seed production was not practiced.

4.9.4 Jute Cultivation Development, Problems, Progresses & Implementations

- **Development:** Remarkable development observed in jute & jute seed production compared to the period before last five years. Now quality of jute fibres improved and late sowing method of jute seed production practiced and continuously in each year cultivated land area, production & quality are being increased. During this time socio-economic condition of the jute growers improved as compared to previous years.

At present yield and market price of jute much higher compared to previous years. As a result of which farmer's economic return and social status were improved.

- **Implementation Problem:** Jute seeds produced at farmer's level could not be sold; cultivation knowledge & skill need to be increased. For that training, demonstration and field days need to be conducted. Seed supply at right time, necessary human resources and source of fund need to be arranged.

  Collection of feedback information from the farmers needs to be done & farmers need to be persuaded and motivated to use knowledge and skill developed in training. In many cases farmers' attitude need to be changed, like; ribbon retting and top & branch cutting method of seed production. These methods are modern but farmers do not yet adopt due to different reasons. For that large number of demonstration need to be established, courtyard meeting need to be conducted and booklet, leaflet, posters etc need to be prepared and distributed and close supervision will definitely improve farmers' adoption.

- **Project Work & Sustainable Progress:** Timely supply of inputs, conduction of training, establishment & operation of demonstrations and organizing field days, collection of feedback and continuous persuasion on the use of technologies learned in training for application & motivation. In implementing project activities more manpower & facilities need to be increased.

- **Successful Implementation of Project and Suggestion:** Treated HYV seeds need to be distributed among the farmers. Or farmers need to be trained on how to treat seed and motivated to use of treated seeds. Modern machineries & inputs for jute cultivation need to be supplied. Provision of special jute seed production subsidy like agricultural subsidy need to be created and in place. Number of jute seed farmers need to be increased with a view to increase jute fibre and jute seeds production. Arrangement should be made to persuade dealers to stop import of low quality jute seeds from India. Along with seed production easy marketing system and increase of sale price need to be ensured. It is possible to produce, collect, process properly and distribute required quantity of quality seed through the farmers. These matters if included in the project then the seed supply problem will be solved and which will also end the entry of low quality seeds from India.

- Training need to be arranged in separate days for jute production and jute seed production. Training duration need to be for 2 days. More number of demonstrations and field days need to be arranged. During implementation of the project; collection of feedback information from farmers and in solving all farmers cultivation problems practically close cooperation is needed through supervision.

- In selecting project farmers; discussion with field level officers of the Agricultural Extension Department (DAE) need to be done. In implementing project; provision of active involvement of the field level officers of DAE should be created. To achieve jute cultivation target management mechanism need to evolve to work jointly with the ministry of Agriculture, DAE, BJRI, BADC and Jute & Textile Ministry.

4.10 Key Informant Interview (KII)

Information were collected from jute development officers of 40 selected upazilas under 200 upazilas included in the project through key Informant Interview (KII) checklist. Educational qualification of upazila Jute Development Officers, input supply through project & present condition of machineries, meeting of the upazila committee, human resource development, achievement of project objectives & qualification of human resources involved for sustainability, required number of posts, their working environment and knowledge, skill and attitude to perform vested responsibilities; related different thoughtful views and opinions presented below:

4.10.1 Educational Qualification of Upazila and Assistant Jute Development Officers

Education qualification statistic of Jute Development Officers is presented in Table-29. Agriculture diploma, BSc Agriculture & MSc Agriculture degree holder were 17 Nos. BSc/ MSc degree holder Nos. were 9 and BA, MA & MBA degree holder were 12 Nos. working in the project. The minimum qualification of the upazila Jute Development Officers should be Agricultural Diploma degree holder. In this respect 14 officers lack of technical knowledge, long time training must be needed for them. Future officers should be appointed having necessary qualification.

Table-29: Educational Qualification of Upzalia and Assistant Jute Development Officers

Education Qualification	N	%
HSC	2	5.0
BSc/MSc	9	22.5
BA/MA/MBA	12	30.0
Agriculture Diploma	14	35.0
BSc (Ag)/ MSc (Ag)	3	7.5
Total	**40**	**100.0**

4.10.2 Working area

The working area of jute development projects include 200 upazilas of 44 districts covering 2, 00,000 jute producing farmers and 50,000 jute seed producing farmers. Working area of one supervisor of Agricultural Extension Department, Bangladesh covers 1000 farmers, Thailand 1000 farmers, India 500 farmers for difficult to travel areas, whereas 300 Nos. of officers posts were created to cover 2,50,000 farmers in Jute Development Project. In this case working area is very large in the project. It can be mentioned that 1 officer is in charge of at least 2 upazilas and 7 officers are in charge of 4 upazilas; considering distances for each upazila at least 2 posts of officer need to be created and appointed (Table-30).

Table: 30: Under Upazila Working Area

Rigion		No. of upazila					
		1	2	3	4	>4	Total
1.	Gazipur	-	-	-	2	-	2
2.	Mymensingh	2	-	1	1	-	4
3.	Tangail	3	-	-	1	-	4
4.	Faridpur	-	-	-	1	-	2
5.	Madaripur	-	-	-	-	4	4
6.	Jessore	4	-	-	-	-	4
7.	Kushtia	1	1	-	-	2	4

Rigion		No. of upazila					
		1	2	3	4	>4	Total
8.	Rajshahi	1	-	1	-	-	2
9.	Natore	4	-	-	-	-	4
10.	Bogra	3	-	-	1	-	4
11.	Rangpur	4	-	-	-	-	4
12.	Dinajpur	2	-	-	-	-	2
Total		**24**	**1**	**2**	**6**	**7**	**40**

4.10.3 Work Environment

Information about upazila wise enlistment of jute farmers is presented in Table-31. Analysis of collected information showed that lists were prepared in consultation with jute cultivating farmers in 32 surveyed upazilas and rest lists were not possible to prepare in consultation with jute cultivating farmers in 8 upazilas for many reasons. The matter needs in-depth investigation and corrective measures need to be taken.

Table-31: Information on Farmers List of Jute Cultivation in Upazila

Rigion		Farmers List prepared consultation with jute cultivations farmers (no.)	
		Yes	No.
1.	Gazipur	2	-
2.	Mymensingh	2	2
3.	Tangail	4	-
4.	Faridpur	1	1
5.	Madaripur	4	-
6.	Jessore	1	3
7.	Kushtia	2	2
8.	Rajshahi	2	-
9.	Natore	4	-
10.	Bogra	4	-
11.	Rangpur	4	-
12.	Dinajpur	2	-
Total		32	8

4.10.4 Description of Upazila Committee Meeting

Description of upazila committee meeting is presented in Table-32. In 12 surveyed region, number of upazila committee meeting held in 2011-12 year was in total 53 lowest in number; in 2012-13 year 118 highest in number and in 2015-16 year was 68. The number of meeting held continuously started declining from the year 2012-13 to 2015-16 year, which indicates continuous low performance of the integrated project activities. This situation demands detailed In-depth study.

Table-32: Description of Upazila Committee Meeting

Rigion		Number of meeting				
		2011-12	2012-13	2013-14	2014-15	2015-16
1.	Gazipur	2	4	7	5	4
2.	Mymensingh	-	7	9	9	6
3.	Tangail	3	14	10	5	6
4.	Faridpur	4	5	4	4	3
5.	Madaripur	2	11	8	8	7

Rigion	Number of meeting				
	2011-12	2012-13	2013-14	2014-15	2015-16
6. Jessore	5	15	9	8	4
7. Kushtia	6	10	8	5	5
8. Rajshahi	-	8	9	4	4
9. Natore	8	15	18	19	12
10. Bogra	7	10	11	10	9
11. Rangpur	8	13	11	12	4
12. Dinajpur	8	6	7	7	4
Total	53	118	111	96	68
Avarage	**4.42**	**9.83**	**9.25**	**8**	**5.67**

4.10.5 Application of Fertilizer in Jute Seed Cultivation

Information on urea fertilizer application presented in Table-33 and doses of all fertilizers per decimal presented in Table-34. Information published in project document first dose application (100 kg) would be within 45 days (41-50) and rest half 2nd dose (100 kg) later on. But survey result showed that first dose applied at the age of 15-20 days reported by 23 officers and at the age of 21-25 days reported by 14 officers. 2nd dose applied at the age of 31-40 days reported by 16 officers and at the age 41-50 days by 21 officers. It is mentioned that after 1st and 2nd installment, 3rd time urea was also applied reported by 3 officers. As per information received in the study that 1st installment urea was applied in 2 times and 2nd installment Urea also applied in 2 times. Though labor and cost of application is a bit high but the efficiency is certainly also high.

Table-33: Suggestion on Application of 1st & 2nd Dose of Uria after Germination of Seeds in Jute Seed Cultivation

Rigion	No. of dyas urea application after germination of seeds in each dose (no.)					
	1st dose			2nd dose		
	15-20 days age	21-25 days age	26-30 days age	31-40 days age	41-50 days age	51-60 days age
1. Gazipur	1	1	-	-	2	-
2. Mymensingh	2	2	-	-	4	-
3. Tangail	4	-	-	4	-	-
4. Faridpur	2	-	-	2	-	-
5. Madaripur	1	1	2	1	1	2
6. Jessore	1	3	-	1	3	-
7. Kushtia	3	1	-	2	2	-
8. Rajshahi	1	1	-	1	1	-
9. Natore	4	-	-	2	2	-
10. Bogra	1	2	1	1	3	-
11. Rangpur	1	3	-	-	3	1
12. Dinajpur	2	-	-	2	-	-
Total	23	14	3	16	21	3

Quantity of different fertilizer used per hectare is presented in Table-34. Analysis of collected information on quantity of different fertilizer used showed that urea fertilizer was applied in less quantity. On other hand TSP, MP, Gypsum, Boron and Zinc applied in execs quantity. Applied quantity of fertilizer is close to recommend quantity.

Table-34: Fartiliger Name & Amount

Fartiliger Name	Amount approved (Kg/ha)	Kg/ha
Urea	200	131
TSP	50	89
MoP	60	67
Boron	10	49
Gypsum	95	72
Zink oxide	11	35

4.10.6 Insect Attach & Insecticide Use

Information on insect attack & insecticide use is presented in Table-35. Survey result shows that all insects attack jute. Though attack of hairy caterpillar was in 100% fields and semi-looper in 54% fields were found. All insects descendant prevailed in all areas. Their epidemic outbreak or less attack depends completely on favorable agro-climatic environment. Therefore, officers must have knowledge & skill on integrated pest management of all the insects.

Insecticides were used to protect crops from insect attack. But about every insect, their symptoms of attack and to control biological, mechanical, cultural practices, cultivation of resistant varieties and at last the use of chemicals etc the farmers leaders & officers must have knowledge to practice and training to be imparted to them so that they can take protective measured observing the symptoms at an early stage of attack.

Table-35: Information on Insect Attack and Insecticide

Insect Name	Opinion		Insecticide Name	Opinion	
	N	%		N	%
Hairy caterpillar	37	100.0	Diagenon	24	64.9
Field cricket	20	54.1	Ecalux	3	8.1
White mite	4	10.8	Chalthen	10	27.0
Stem weevil	7	18.9	Rovachon	3	8.1
Red mite	1	2.7	Quinalforh	2	5.4
Mealy bug	4	10.8	Helthon	1	2.7
Others	4	10.8			

4.10.7 Information on Diseases and Fungicide

Information about disease and fungicide presented in Table-36. Analyzing presented information found that attacks of 5 diseases were indentified physically. The pathogen of each disease prevailed in every region. The disease can take epidemic form when favorable environment prevail in the area. One it occurs large scale crop damage happened. Therefore, farmers groups & development officers to be trained in such way so that protective measures can be taken before occurrence of disease infestation starts and can be saved from heavy losses of crops.

Table-36: Information on Diseases and Fungicide

Diseases Name	Opinion		Fungicide Name	Opinion	
	N	%		N	%
Seedlings blight	26	76.5	Diathen M45	17	48.6
Foot rot or wilt	11	32.4	Imdfil M45	11	31.4
Stem rot	1	2.9	Hamicrin	26	74.3
Black band	4	11.8	Diamin M45	3	8.6
Leaf mosic	2	5.9	Others	12	34.3

4.10.8 Information on Modern Cultivation of Jute, Jute Seed Production through Late Seed Sowing & Demonstration on Modern Method of Jute Retting and Field Days

Information on modern method of jute cultivation, late sowing jute seed production & demonstration on modern method of jute retting and field days are present in Table-37. Number of demonstration in 12 regions on jute cultivation was 846, jute seed production was 1224, and jute retting was 652 were organized. As provision the results of every demonstration were need to be shown to the neighboring farmers and through organizing field days detailed discussion on the relative advantages of the demonstrated technologies also to be held. But collected information reported that in 12 regions 1 field day in each region and in total 12 field days was organized. The possibility of extension of results of demonstration through field days is very low because scope of dissemination of technologies through demonstration and field day is very insufficient. In future provision of organizing field days for every demonstration need to be created.

Table-37: Information on Modern Cultivation of Jute, Jute Seed Production through Late Seed Sowing & Demonstration on Modern Method of Jute Retting and Field Days.

Region	Demonstration			Field days (Number)
	Jute Production	Seed Production	Jute retting	
1. Gazipur	198	160	200	1
2. Mymensingh	67	58	53	3
3. Tangail	46	152	65	0
4. Faridpur	-	87	29	0
5. Madaripur	27	72	-	0
6. Jessore	75	92	75	0
7. Kushtia	20	117	51	1
8. Rajshahi	-	-	-	1
9. Natore	52	171	44	4
10. Bogra	162	100	44	2
11. Rangpur	139	115	51	0
12. Dinajpur	60	100	40	0
Total	**846**	**1224**	**652**	**12**

4.10.9 Percent Increase in Yield of Tossa Variety (0-9897, 0-72 and JRO-524) Compared to Deshi Variety

Comparative yield performance of Deshi & tossa varieties presented in Table-38. Out of surveyed 40 upazilas 36 upazila Jute Development Officers (100%) agreed that higher yield in case tossa variety compared to Deshi variety. Among the respondents 31 Nos. (86%) told that 16% increase in yield. So, the farmers need to be motivated to cultivate tossa variety.

Table-38: Percent Increase in Yield of Tossa Variety (0-9897, 0-72 and Jro-524) Compared to Dheshi Variety

Percent increas	N	%
1-5%	3	8.3
6-10%	1	2.8
11-15%	1	2.8
>16 %	31	86.1
Total	36	100.0

4.10.10 Cooperation and Opinion on Different Subject of Upazila Level Officers

Information about cooperation at the time of field works of upazila level officers presented in Table-39. Analyzing information presented in Table it was observed that 100% cooperation received at the time field work in application of technologies, publication of learning materials on newly developed technologies, like: booklet, leaflet, poster, folder etc in distribution, arrangement of discussion meeting to solve field problems, advice & cooperation with Agriculture extension officers. Besides feel encouraged to hold discussion with farmers group, take initiative to solve farmer's problems and regular field visit to was performed by officers as reported by 95%, 95% & 82% jute famers, jute seed farmers and outside farmers respectively.

Only 31% officers agreed that the working area for their activities was very large and supported by 97% officers. Another same member of posts needs to be created. Only 21% officers reported that they feel encouraged to work with the facilities provided by the project. Action need to be taken to provide facilities for all. 64% respondents reported that project provided training after assessing training needs of course answer was positive and 40% did not agree that training provided after assessing training needs. It needs further investigation. 36% respondents reported that they were not informed about their quantity and quality of the works they performed. They should be informed and that will create opportunity for development.

Only 31% respondents reported that provision is there for award to good performer and punishment for bad performers. In this case management weakness was found which need to be corrected. In fast changing world in case of technology adoption and practice officers received cooperation of the authority to adjust themselves with the changes, reported by 54% officers. In this regard need attention. Farmers received fertilizers in time reported 73% respondents. In rest cases it should be in time. Only 33% officers agreed that field days were organized in each demonstration. On this matter about 67% officers did not agree upon. At last only 5% officer reported that they provide cooperation for marketing of the jute produced. But rest was not provided any cooperation regarding marketing & jute production.

Table-39: Information on Cooperation and Opinion of Different Activities at Upazila Level Officers

Question	Respendents opinion			
	Yes		N	
	N	%	N	%
Cooperation of higher officials at time of field works	33	100.0		
Advise from higher level officers in case of applying any technology	37	100.0		
Publication of new developed technology like booklist, leaflet, poster, folder etc received regularly	38	100.0		
Regularly organised discussion meetings with jute cultivating farmers to solve problems on jute cultivation	38	100.0		
Feel interest to participate discussion meeting	37	94.9	2	5.1
Taken initiative as self responsibilities about any problem arised in jute cultivation work by jute cultivatiojn farmer	37	94.9	2	5.1
Performed duties facilities provided in the project mostly	8	20.5	31	79.5
Manpower applicated considing work area and workload	12	30.8	27	69.2
Project training sechedul prepared considering training need	25	64.1	14	35.9
Every year they were informed about volume & quality of works as per contract & demand of service completed after verification	14	35.9	25	64.1
To get satisfectory level of quality & volume of work had any provision in the project	21	60.0	14	40.0
Award incase of perform quality work and punishment in case of defeulter had any provision	11	30.6	25	69.4
Whole world is developed very fast, wheather the organisation have provision of cooperation regarding these.	19	54.3	16	45.7
Enough water available for jute retting	29	78.4	8	21.6
Organizing field days for each demonatration	12	33.3	24	66.7
Timely & require quantity of fertilizer received by the jute farmers	29	72.5	11	27.5
Regularly visited jute fields of the listed jute cultivating farmers	32	82.1	7	17.9
Marketing all jute produced in the project with the coopration of the jute project	2	5.3	36	94.7
In every season of jute cultivation met upazila Agricultural Officers of Department of Agricultural Extension	37	100.0		
Received any advise about jute cultivation	37	100.0		
Large project & more posts need to be created	34	97.1	1	2.9

4.10.11 Training Related Information of Upazila Jute Development Officers

Analyzing training related information of Upazila Officers it was found that out of 40 upazilas 7 Upazila Officers did not receive any training during project period rest 33 officers received two day training on office management & modern cultivation of jute, jute seed production & jute retting. As per opinion of experts whole season long training is needed on jute cultivation, jute seed production & storage for all field level officers. Because jute cultivation, jute retting & jute seed production is a yearlong work program. Therefore, training program can be divided into 4 steps for implementation. This four steps training program may be called as sandwich training. Benefits of this program: knowledge earned can be practiced; immediately after receiving training. For this training officers need to keep themselves absent from their office for very short time.

1st Step: Variety selection, seed treatment, land preparation, fertilizer application, irrigation & seed sowing;

2nd Step: Intercultural operating like weeding, thinning, monitoring insect & diseases, control measure depending of attack, irrigation, application of top dressing of urea and if necessary application of plant growth regulator (PGR);

3rd Step: Jute cutting & defoliation of leaves, retting & testing of retting, separation of fibre, drying, grading;

4th Step: Jute seed production- variety selection, seed treatment, land preparation, fertilizes application, weeding, thinning, roughing, cutting jute seed plants, seed collection, drying, storing(preservation). Booklets with colored pictures on training subjects matter areas need to be supplied.

This training program may be organized for 3 days duration and start at the time of jute sowing season. Best place to organize the training program is the jute research institute/regional jute research institute. But some subjects of extension technologies may be conducted by trainers of department agricultural extension.

4.11 Observation on Present Condition of the Machineries and Equipments Supplied from Project

Analysis of collected information showed that 6 items of total 3290 Nos. of different machineries & equipments were supplied in the project areas. Among them maximum items included like; out of 1147 Nos. of riboner, 684 Nos. (60%), out of 384 Nos. of hammer 345 Nos. (90%), out of 310 Nos. of polythene sheets 287 Nos. (93%), out of 1024 Nos. canvas sheet 1004 Nos. (98%), Out of 150 Nos. of signboard 145 Nos. (97%) and out of 275 Nos. of hand sprayer 215 Nos. (78%) are currently in use. On the other hand out of 1147 riboner 185 (40%), out of 384 hammer 39 (10%), out of 310 polythene sheet 23 (7%), 1024 jute canvas 20 (2%), out of 150 signboard 5 (3%) and out of 275 (22%) are not in working order. On an average 86% (2680 Nos) are regularly used & active and 14% (332 Nos.) machineries & equipments are out of order due to lack of repairing (Figure-19). Detail information presented in Table-40.

Table-40: Information on Condition of the Machineries and Equipments in Selected 40 Upazilas

Discription of items	Present (Nos.)	Working		Not Working	
		No.	%	No.	%
		684	60	185	40
Hammer	384	345	90	39	10
Polythene sheets	310	287	93	23	7
Jute canvas sheet	1024	1004	98	20	2
Signboard	150	145	97	5	3
Hand sprayer	275	215	78	60	22
Total	**3290**	**2680**	**86**	**332**	**14**

4.12 Observation on Present Condition of Office Equipments & Furniture Supplied from Project

Analysis of collected information showed that 495 Nos. office equipments & furniture of 15 items were supplied from the project. Out of them maximum items such as; out of 40 Nos. motor cycle 39 Nos. (98), out of 36 Nos. computer 25 Nos. (67%), Out of 216 nos. chairs 212 nos. (98%), out of 30 nos. almirah 28 nos. (93%), are currently in order. On the other hand among all types of office equipments and furniture motor cycle 1 no (3%), computer 12 nos. (33%), Table 15 Nos (25%), almirah 2 nos. (7%), etc. was out of order. On overage found that 88% (451 Nos.) used every day & active and 43% (12 Nos.) office equipment & furniture not working due to non-repairing (Figure-20). Detailed information presented in Table-41.

Table-41: Information on Present Condition of the Office Equipments & Furniture selected 40 Upazilas

Discription of items	Present (Nos.)	Working		Not Working	
		No.	%	No.	%
Motor cycle	40	39	98	1	3
Computer	36	24	67	12	33
Computer table	13	10	77	3	23
UPS	2	2	100	0	0
Printer	10	6	60	4	40
Wooden rack	1	1	100	0	0
Table	60	45	75	15	25
Almarih	30	28	93	2	7
4 rack Almarih	1	1	100		0
Chair	216	212	98	4	2
File cabinet	27	27	100	0	0
Rack	5	5	100	0	0
Desk	2	1	50	1	50
Selling fan	44	43	98	1	2
Telephone	7	7	100	0	0
Total	**494**	**451**	**88**	**43**	**12**

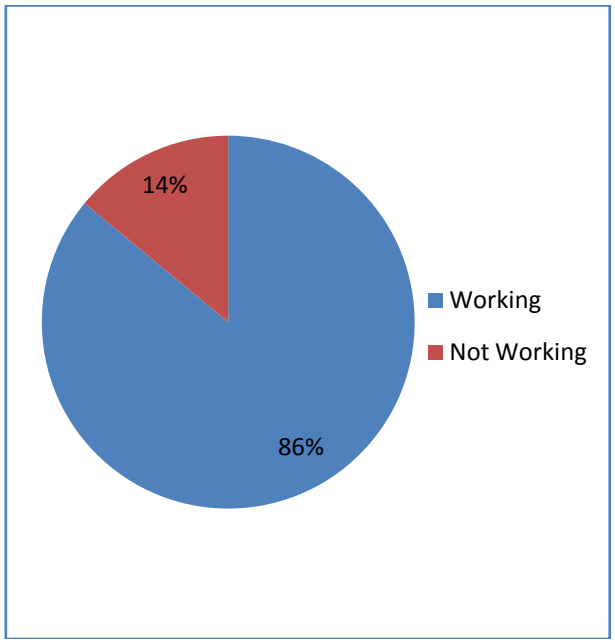


Figure-19: Condition of the Machineries and Equipments

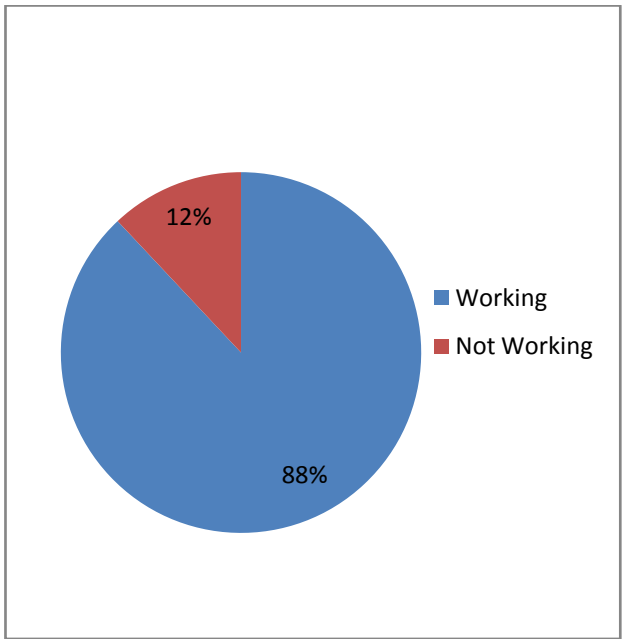


Figure-20: Present Condition of the Office Equipments & Furniture

4.13 National Demand of Jute Seeds for 2012-2013 Year and Supply

Information on demand & supply of jute seeds for 2012-2013 year presented in Table-42. This table showed that out of total demand of jute in the country only 19% supplied by jute department, 18% supplied by BADC, 15% supplied by agriculture extension department (DAE), 7% supplied by private seed supply organizations & NGOs, 19% imported from India and 35% percent by farmers own production. Government should increase capacity of BADC, DAE and Project of the Jute Department so that within next 5 years at least 70% seeds should be supplied.

Table-42: National Demand of Jute Seeds in 2012-2013 Year

Crop	National demad (m.ton)	Supply (m.ton)								
		BADC	DAE	BJRI	Jute Department	BINA	Private & NGO	Import from India	At farmers Lavel	Total
Jute	5930	1094	163	1.95	1150	0.12	335	1112	2074	5930
Total Supply of demand (%)		18	15	.03	19	.01	6	19	35	100

Source: Book published on National demand & supply of seeds, Seed Wing, MoA

4.14 Review of Human Resource Development

Generally we know that components of the human resources developments include planning human resources, training & development, job analysis, recruitment and appraisal, performance appraisal, supervision, remuneration and reward, quality of work life improvement and organizational development. Necessary information related to all components included was not possible to collect within the shortest time. In that case related information was collected and analyzed and opinions are described below in short:

1. Approved number of posts in DPP was 300. Among these posts number of positions for Upazila Jute Development Officers were 50, graduation in general education was specified as their educational qualification, but among them 15 were graduate in agriculture. Numbers of Assistant Jute Development Officers were 200 & their specified qualification was graduation in general education or diploma in agriculture. In this case there were 31 Officers having diploma in agriculture.

    - Jute fibre& seed production is completely a subject of very complicated technical nature, so, all posts were to be filled in by the persons having technical knowledge & skill.

    - Each of 50 Upazila Officers was in charge of 4 upazilas, 200 Assistant Jute Development Officers are responsible to implement all work programs of the upzilas. There is no post for office assistant & peon in upazila office. As a result there is no one available in the office to attend the visitors during the time when officers are on field visit. In that case many farmers come to the office with an urgent piece of work and finding no one in the office they are to go back.

2. Officers working at present received 2 days training in a year which was not enough at any way to update their knowledge & skill. Under this situation, 4 steps year round training program proposed for all officers. In analyzing job description of Jute Development Officers & Assistant Jute Development Officers; it was found that they worked during whole year. Chaitra-Bhaishak seed sowing time for jute fibre production and shraban-Bhadra month for jute fibre separation time, drying & jute grading etc. after that Bhadra-Ashin month is sowing time for seed production followed by month of Poush-Magh for harvesting, thrashing, seed drying & storage etc. All these related activities if can be performed properly that will increase quality of jute fibre and increase seed production to make the country self-sufficient.

- Project management cannot avoid responsibility of failure of achievement of project goal, survey identified those failures, inability, mistakes could be reduced to a certain extent through strengthen proper supervision.

- There should have provision for recognition of good works and punishment for bad works. This area of management is totally administrative as to why it has been avoided in study.

3. No information was available about development of quality of working life. Every service holder expects development of their service life. Therefore, there should have opportunity for receiving higher training in country & abroad.

4. After going through the name of post, number of posts, educational qualification, duties & responsibilities specified for the implementation of the project; be inclined to realize that how the appointed employees would implement the project activities, in his regard their duties and responsibilities were not written properly. As for example the duties & responsibility of Upazila Jute Development Officer described below:

- Confirmation on overall implementation of project at field level;
- Preparation of farmers list with their land area and collection & distribution of inputs;
- Imparting farmers training and coordinate work program with upazila committee;
- Report preparation about progress of project implementation and submit to higher authority;
- Perform any duties given by higher authority.

In continuation of above mentioned duties and responsibilities of the project officers have been written, but it should be as described below:

- Formation of farmers groups, cooperation in conducting group meetings, preparation of list of local problems in the meeting & on priority basis programs developed to solve problems and implement;
- Confirmation of farmers information needs & inputs demand;
- Development of extension work plan for farmers group based on farmers needs;
- Implementation of developed work plan with farmers' participation;

- Diary to be written and maintained on information of every day progress of work, future work plan, farmers needs and solution of problems;
- Development of annual work plan and accordingly fortnightly implementation plan to be developed if necessary to be discussed with upazila committee or authority and agreed.
- Monthly coordination meetings to be held and attended where in progress of work plan to be presented & reviewed and subsequent steps of work to be decided and accordingly action to be taken;
- Monthly report to be prepared & submitted to higher authority

Pro-forma for preparation of fortnightly progress report presented below:

Monthly work plan management

Name	Approval Period	From:	To:
Approval work plan	Signature of Assistant jute development officer	Supervisor Signature	Review
	Assistant Signature	Supervisor Signature	
Description of works (what, when & where)	Indication of implement work (verified results)	Actual results	Opinion

- At last there should be a project/ organizational development plan. Every person wants service security in life. Subject to some conditions there should be system to make the service permanent, ensure promotion;

- During last 5 years due to implementation of the project, farmers of the project and outside project were successful in producing quality jute fibre& seed. To hold the achievement of success & continuously improving the quality and increase quantity project need to be given a permanent shape. So that jute farmers can get continuous service for jute cultivation.

4.15 Workshop at local level

Center for Resource Development Studies Ltd's (CRDS) Consultant group with help of IMED technical support organized & conducted local level workshop on 27th April, 2016 at Saturia Upazila parisad auditorium. Head of IMED, Industry and Power Sector, Project Director, Assistant Director of IMED, beneficiaries of the project like jute & jute seed farmers, members of the upazila committee, local representatives were present in the workshop (Appendix-G). After completion of registration of workshop participants consultant welcomed everybody. Consultant group presented survey target & objectives, its plan & achievement, methodology & project related information with the help of power point presentation for exchange views and opinions with all participants. Exchange of opinion held on project weaknesses and strengths and how project can be continued in future,

Attending project farmers informed with pleasure that they received seeds in time for jute fibre production, they are getting higher yield compared to before project period and financially benefitted. Jute seed producing farmers received seed and fertilizers for 20 decimal lands for seed production and they sold their produced seeds at rate of Tk. 300-400 per kg. They also informed that they did not use soil clots & banana plants like before for jute retting. They know that use of these materials reduce fibre quality. As a result receive lower price in the market. Therefore they used water hyacinth & concrete slab. The farmers jointly told that the project should continue its activities and need to expand in other areas.

Chapter 5

Evaluation of Procurement Process of Goods under the Project

During the monitoring period all Procurements done under the project “HYV Jute & Jute Seed Production and Improve Jute Retting Project” (2nd revised) implemented by the department of jute had been examined. It was known that no services or works under the project had been done. Only 5 items of procurement of goods mentioned below bad been completed under the project. Without development of procurement plan properly it was included to the project documents. In spite of this as per rule at the beginning of every financial year procurement activities did not start because procurement plan was not developed properly and could not obtain approval from the head of procuring entity.

5.1 Procurement of Goods: Information on procurement of Goods of different items presented below:

5.1.1 Procurement of Seed

Analyzing documents about procurement of seed it was found that up to March 2016, 77.518 m.ton of foundation seeds, 1801.965 m.ton certified seeds purchased following direct procurement method (DPM) from BADC. It can be mentioned that procurement following PPR-2008 rules 75 & 76 (SA) in this case. Besides 1982 m.ton JRO-524 variety of obituaries jute seeds imported directly by from India. This procurement completed with the help of government department of India. From 2011-12 to 2015-16 financial years purchased seeds Tk. 4411.06 lakh in 5 packages (Table-43). Important step wise purchase of jute seeds presented in Appendix-H (1-8).

5.1.2 Procurement of Vehicles

Analyzing documents about procurement of vehicles it was found that 1 no. of jeep, 1 no. pickup & 1 no. micro bus purchased following direct procurement method (DPM) under the project. Besides 262 nos. Motorcycles purchased following open tendering method (OTM). An expenditure of amount of Tk. 468.40 lakh was made to procure vehicles in 2 packages (Table-43). Important step wise purchase of vehicles presented in Appendix-H (10).

5.1.3 Procurement of Equipments and Other Accessories

As per project documents equipment & accessories items like 13,363 nos. Riboner, 13,381 nos. hammer, 16,666 nos. polythene sheets, 2000 nos hand sprayers is in total 45,410 nos. of Goods purchase from Bangladesh Machine Tools Factory (BMTF) though direct procurement method (DPM). On this case project followed PPR-2008 articles-5, rules-75 and 76 (SA). An expenditure of an amount of Tk. 466.72 lakh was made to purchase equipments and accessories for the period of 2011-12 to 2015-16 under 4 packages under the project (Table-43). Procurement of Goods from Bangladesh Machine Tools Factory (BMTF) generally they did not manufacture. But this factory manufactures & supplied if they got purchase work orders. Important step wise procurement of equipment and accessories shown in Appendix-H (12-13).

5.1.4 Procurement of Office Equipment

In course of verifying the procurement recorded and its data revealed that 10 types of 214 nos. computer, photocopier 1 no. duplicator, 13 nos. projector, 13 nos. fax-machine, 12 nos. Moisture meter, 12 nos. humidity meter, 3 nos air coolers and 92 telephone sets is in total 364 nos. Office equipments were procured in 2011-12 in following the guidelines of the PPR-2008 as per OTM and QM methods. An expenditure of an amount of Tk. 117.18 lakh was made to procure office equipments & accessories (Table-43). Important stepwise purchase of office equipments presented in Appendix-H (11, 14-18).

5.1.5 Procurement of Office Furniture

In course of verifying procurement records and its data revealed that project purchased 10 types of 213 Nos. of office furniture from Bangladesh Forest industries Development corporation followed the PPR-2008 articles-5, rules-75 and 76 (SA) in 2011-12 & 2012-13 expending an amount of tk 146.83 lakh for office furniture (Table-43). Important stepwise purchase office furniture presented in Appendix-H (9).

Table 43: Procurement Activities under the Project

Financial Year	Package No.	Description of Procurement Package as per DPP	Quantity	Procurement Method	Estimated cost (In lakh Taka)	Actual cost (In lakh Taka)
1	2	3	4	5	6	7
2011-2012	GD-1	Office furniture	213 set	DPM (From Bangladesh Forest Industries Development Corporation (BFIDC)	66.00	65.00
	GD-2	**Vehicle**				
		a) Jeep	1 nos	DPM (From Progoti Industries Ltd)	69.00	69.00
		b) Pick-up	1 nos		23.50	23.50
		c) Microbus	1 nos.		26.00	26.00
	GD-3	Motor cycle	262 nos.	DPM	353.70	348.46
	GD-4	Personal computer with laser printer	100 nos.	OTM	70.00	69.98
	GD-5	a) Foundation jute seed	12.86 mt	DPM (From BADC)	20.00	16.59
		b) Certified jute seed	270 mt		271.41	271.17
2012-2013	GD-6	a) Personal computer with laser printer	114 nos.	OTM	79.80	77.84
		b) Multimedia projector	13 nos.		13.00	6.25
		c) Fax machine	13 nos.		2.60	1.99
	GD-7	a) Riboner and other materials	7500 set	DPM (From Bangladesh Machine Tools Factory Ltd)	75.00	75.00
		b) Hand Spray	1000 nos.		30.00	30.00
	GD-8	a) Foundation jute seed	15.74 mt	DPM (From BADC)	15.85	15.85
		b) Certified jute seed	300 mt		425.79	425.78
		c) Indian HYV Jute Seed JRO-524	1000 mt	DPM (Imported from India)	1283.28	1283.28
2013-2014	GD-9	Riboner and other materials	4998 nos.	DPM (From Bangladesh Machine Tools Factory Ltd)	49.98	49.98

Financial Year	Package No.	Description of Procurement Package as per DPP	Quantity	Procurement Method	Estimated cost (In lakh Taka)	Actual cost (In lakh Taka)
1	2	3	4	5	6	7
	GD-10	Office furniture	183 set	Quotation Method	50.00	48.74
	GD-11	a) Foundation jute seed	15.98 mt	DPM (From BADC)	22.69	22.69
		b) Certified jute seed	422.40 mt		807.78	746.41
		c) Indian JRO-524 jute seed	982.00 mt	DPM (From India & BADC)	1131.13	1131.13
2014-2015	GD-12	a) Riboner and other materials	22,500 set	DPM (From Bangladesh Machine Tools Factory Ltd)	426.10	224.25
		b) Hand Spray	1000 nos.			29.62
	GD-13	Jute sheet for seed drying	34,220 nos.			170.48
	GD-14	a) Foundation jute seed	15.348 mt	DPM (From BADC)	21.91	21.91
		b) Certified jute seed	422.40 mt		599.89	598.32
2015-2016	GD-15	Riboner and other materials	10,000 set	DPM (From Bangladesh Machine Tools Factory Ltd)	137.50	136.65
	GD-16	a) Foundation jute seed	17.50 mt	DPM (From BADC)	24.84	24.84
		b) Certified jute seed	388 mt		597.59	597.59

5.2 Study of Monitoring and Evaluation Records of Procurement of Goods in Reference to PPR-2008

Under the project different Goods had been procured in total 16 packages. Among them, information were collected and analyzed of 10 packages. In case of purchasing there Goods main steps had been examined. In case of following the Procurement process according to schedule-3 (Cha) rule 62 (2), was instructions to be followed in the flow chart of the described schedule-3(Cha) and its international Procurement rule 87 (4) in purchasing jute seed from India. According to those instructions in case of said procurement the matter 'STD' development had been included. But in this case it was not followed. In spite of this, for this procurement no tender evaluation committee had been constituted. In this case it was apparent that PPR-2008 had been violated. The Goods procured from Bangladesh Machine Tools Factory were generally not made by that organization. But subject to if the organization received any supply order, in that case the Goods were manufactured by the organization and supplied.

Chapter 6
Project Objectives and Achievements

6.1 Achievements as per Project Objective

Project Objectives	Achievements
1. To accelerate and assist introduction of new varieties of HYV jute seed improved/developed by BJRI and others organization among the farmers and also extend & transfer of advanced technology for production, preservation and distribution of HYV jute seed at farmers' level to meet the national demand;	1. Only 19% of the national demand of jute seed was met by the Jute Department, 18% was supplied by BADC, 15% supplied by Department of Agricultural Extension (DAE), 6% supplied by Non govt. seed supply organization and NGO, 19% imported from India and 35% supplied by farmer themselves (Table 42). It was possible to produce, store and distribute 5,032 mt HYV jute seed during the last 5 years by the project through the selected farmers using modern technique and methods of jute seed production.
2. To produce 1,500-2,000 mt HYV jute seed by cultivation of average 9,300 acre of land per year by involving 50,000 farmers;	2. Out of total target 8238 mt of the project from 2011-2012 to 2014-2015 5,032 mt jute seed, which is 61% of the target (Table 5) had been produced using 39,084 acre of land.
3. To Produce 60-70 lakh maunds HYV tossa jute per year through cultivation of 2,00,000 acre land by involving 200,000 farmers and to replace low quality jute seed through introduction of HYV jute seed	3. Total target of the project was 426.88 lakh maund of Jute fibre. During the project period (2011-12 to 2015-16) 436.98 lakh maund jute fibre, which is 102% of the target (Table 6) had been produced. . Fulfilling the demand of jute seed of the country by replacing low quality seed by the quality HYV seed gradually. Production of seed of 0-9897 tossa jute variety at farmers' level applying modern technologies to replace the low quality seed. During the last 5 years of the project, 5,032 mt. of improved seed has been used by the jute farmers and jute seed farmers by replacing low quality seeds. The use of HYV variety seed and 0-9897 seed was 94% and 89.4% respectively (Table 13 &14).
4. To prevent the use of interior quality of the jute seed	4. As a result of replacement and use of 5,032 mt of HYV jute seed under the project during last 5 years in the project and adjacent areas; 94% and 89.4% of jute farmers have been using HYV variety 0-9897 seeds respectively (Table 13 &14).

Project Objectives	Achievements
5. To bring about a quantitative as well as qualitative improvements in the overall production of jute in the country through distribution of high yielding variety of jute seed	5. During last 5 years under the project 5,032 mt of jute seed and 436.98 lakh maund of jute fibre had been produced. Foundation seed 77.51 mt and certified seed 1,807.96 mt had been distributed. Jute producing farmers of the project area sold jute fibre at a price of Tk 48.60 /kg, farmers of outside project areas sold at the price of Tk. 43.86/kg. Jute seed was sold at a price of Tk. 181 /kg in the project area. Due to the better fibre quality, project farmers got 5.00 Tk./kg more than the outside project area farmers. (Table 21).
6. To reduce production cost of jute through an increase in per acre yield;	6. The production per acre increased by 20 % over previous year's production by cultivation of 0-9897 of variety of Jute using modern technologies introduced by the project. As a result jute production cost has been reduced and jute farmer are encouraged (Table 12 & 22).
7. To motivate the jute cultivators for using water hyacinth, straw, concrete slab, bamboo stick etc. and to discourage use of banana trees, soil etc. on the piles of jute as a mode of improved jute retting process.	7. To transfer modern jute retting method for improvement of fibre quality jute farmers were trained to use ribon retting method jointly developed BJRI and IJO. Now 8.4% farmers are using ribon method for jute retting (Table 28). Sixty percent farmers now do not use clay and banana tree for retting jute. Now, they have been using water hyacinth, straw, concrete slab. .
8. To impart necessary training to the 1 00,000 farmers on improved method and technique of cultivation of HYV jute and jute seed production and improved jute retting.	8. Modern methods of jute seed production have been expanded in the project areas. Under the project during last 5 year 86,047 farmers have been trained on jute fibre and jute seed production technologies and jute retting technique (Table 4). As a result of this training on quality jute and jute seed production technologies, knowledge and skill of the farmer have increased. . During fifth year (2015-16) compared to first year of the project (2011-2012) land under jute seed cultivation increased by 13.8% (16.7 to 19.00 dec.), yield increased by 11.1% (1.717 to 1.90 kg/dec.) and jute seed price increased by 39.0% (117.1 to 162.8 Tk/kg) (Table 12).

Chapter 7

Observations in the Light of Achieved Results Obtained from the In-depth Monitoring

1. The allocation of business among the different Ministries and Division (Schedule 1 of the Rules of Business, 1996) published by Cabinet Division of the People's Republic of the Bangladesh, has been seen analyzed. It is found that Textile and Jute Ministry has been given responsibility of collection of statistical information on jute production, jute marketing and export etc and also on processing and publication. According to work distribution, Textile and Jute Ministry has to develop policy, prepare plan, ensure commercial use of jute and flourish jute industries.

2. Till 1971 jute was the major cash crop to earn foreign exchange. Therefore, jute was called golden fibre of Bangladesh. To increase income from jute in 1974 parallel to Department of Agricultural Extension; a Department was created almost with equal numbers of manpower. But in the outside world many cheap products started coming in the market as alternatives to jute; as a consequence of which jute started losing the market. In consequence of reduction of importance of Jute in export earning six Agriculture Departments, Divisions and Boards including Jute Production Department were merged together to form Department Agriculture Extension (DAE) in September 1982. At present DAE has a project for rice, wheat and jute seed Production. Through that project yearly 14-15 mt. jute seed is produced and distributed. The personnel of the defunct Agriculture Department (jute production) are now working in DAE. As DAE has the experienced, qualified and skilled manpower in jute seed and fibre production with proper retting. The DAE may be persuaded to take up a project for implementation.

3. Department of Agricultural Extension under the Ministry of Agriculture became relaxed gradually in performing activities related to jute production. At present, except Department of Jute under Textile and Jute Ministry no other department or organization involved in performing jute and seed production and retting activities. BADC could not produce and supply jute seed on an average more than 1000-1100 mt yearly, to meet the requirement of the project. So, on urgent basis project imported and distributed a total 1,982 mt. jute seed from India in last 2012-2013 and 2013-2014 year.

4. Department Agricultural Extension and BADC under the Ministry of Agriculture are the only appropriate departments in production of any agricultural crops specially jute and jute seed according to the Rules of Business of Peoples Republic of Bangladesh Government 1996. Under the aforesaid departments at present there is no mentionable project on jute and jute seed production under implementation. Until DAE and BADC take any project and start implementation on jute and jute seed production under the Ministry of Agriculture in fulfilling the national demand, Textile and Jute Ministry should be allowed to continue its activities in this regard.

5. Approved manpower of the project is 300. At present 282 are on the job and 18 positions are vacant. The project has been implemented and is being implemented with less manpower. As a result, the implementation of the project is being hampered. Besides, all Upzilla Jute Development Officers (JDO) are not technically qualified for which progress is being hampered in many ways. It is mentioned that the number of JDO and AJDO in total is 242, among them only 15 are graduates in agriculture and 31

are diploma holders and rest 196 are graduates in general education. If all AJDOs had at least diploma in Agriculture, then progress could be better. In the project 200 Upzillas are included but only 46 JDOs are on the job. In maximum cases one JDO is in-charge of 4 Upzillas as a result of which expected progress is not being achieved. On the other hand number of AJDOs is 196. As there is no position for Office Assistant when the AJDO goes on field visit there is be no one to attend to visitors in the office, for which many farmers visiting office with urgent piece of work are compelled to go back unattended.

6. Project authorities select suitable areas for jute seed production and make list of farmers. The cross-pollination rate of jute flower is very high. So, jute seed production should be in a isolated block so that there should not be any chances of cross-pollination. If foundation seed is supplied to the farmers and proper supervision is provided and seed production is done with intimation to the Seed Certification Agency (SCA), then SCA will inspect the fields and provide the certification tag. Project authority in that case can collect produced seed and after processing and packaging can arrange to sell or distribute the seed. It is necessary to mention that seed produced in late season (August/September to February/March) does not need storing of seed, because seed collection, cleaning, drying, processing will be completed in February/March and just after processing distribution has to be started. In any case if SCA does not provide certification tag then project authority can declare the seed as truthfully labeled (TLS). There is no problem to sell TLS seed in the market.

7. Every year HYV jute fibre and seed production program has been hindered .as to BADC could not supply required quantity of foundation and certified seed. In some years seed production program has been hindered by flood, high level drought and adverse climatic condition.

8. Since onset of the project till 2016, 13% of the RDPP allotted money could not be spend. Annual raised allocation of money also could not be possible to spend due to absence of genuine plan. It could be possible to utilize the total money, if there would be a reality based work plan.

9. There was a pre-condition that farmers should have at least one acre suitable land for jute production to be eligible for inclusion in the farmer list of the project. But maximum poor farmers do not have one acre of land. As a result, poor farmers are deprived of inputs, agricultural equipment free of cost and training provided by the project.

10. Though farmers were trained and motivated on grading of jute fibre but very few of them are willing to follow the practice.

11. In the upazila level all project activities were performed through the Upzila Committee. But it was very problematic to coordinate members in holding meeting. In many cases it was not possible to distribute inputs to the farmers in time because even urgent meeting could not be arranged, when required.

12. There was a complain that jute seed did not germinate in 361.7 acres of land of 673 farmers in 18 Upzilas of 7 districts and compensation of Tk 19,12 505/- was claimed by the farmers. The issue still remains unsolved. In future at time of receiving the seed from BADC it is suggested to check the germination, so that such occurrence cannot repeat itself. Information received from project authority that early flowering occurred in jute plants in 13,011 acre of land of 50 Upzilas of 38 districts. Discussion has been done with specialist to know the reasons for early flowering and from discussion it has been

known that if sowing of tossa jute seed is done before 15th Chaitra/ 29th March and during sowing if there is no moisture in the soil or dry weather prevailed for long time is causes of early flowering. Complain of early flowering was also received from 2 Upzillas of the study area, discussion has been held with farmers of the affected upzillas, the farmers said that after taking proper care of the crop they got good production.

13. Germination failure and early flowering are the central cause for huge correspondence among the project authority, Jute Department and BADC but still the issue remained unsolved. Without further delay, with aim to resolve the problem and to establish understanding necessary steps of action need to be taken and strong coordination method need to be evolved to strengthen project implementation.

14. Though the seed produced through the project is of high standard but there is no certification tag fixed on the seed bag, farmers have to suffer in selling seeds and deprived from fair price. As a result farmers are losing their interest in producing jute seed.

On the basis of the information collected from the survey the following strengths, weaknesses, opportunities and threats of the project are identified and presented below in Matrix:

Strength	Weakness
1. Under the project farmers received required quality seed, fertilizers and training and acquired knowledge on the use of agriculture inputs. It helped them to produce high quality jute fibre and seed. 2. To ensure proper implementation of the project work plan, vehicles have been supplied from the project. As a result it was possible for officers to supervise and monitor field activities. 3. The yield of quality jute fibre and seed increased with the use of technical services provided by the project with aim to facilitating production of quality jute fibre and seed through the farmers. 4. Farmers have been benefited by increased yield of jute fibre and seed using modern cultivation method received through training. 5. Jute farmers' experience has been increased in jute production and marketing related activities. Many other inputs have been distributed to the farmers free of cost in time through the project. As a result jute fibre and seed production have been increased. 6. Active and close communication has been established among the farmers associations, private marketing organizations and government and ther agencies. 7. Demand of jute fibre increased due to declaration made by the government to ensure multi-use of jute fibre.	1. Lack of technical and inadequate personnel at field level. 2. Project does not play any role in marketing both jute fibre and seed. 3. In every upzila out of 1250 farmers; training was imparted to only 100 farmers in one batch and for one day. 4. The cross-pollination rate in jute flower is very high so incase of jute seed production after every 3 years; seed need to be replaced by foundation seed. In this case yet no plan has been taken and no step has also been taken to implement to replace seed. 5. Only one demonstration and one field day in each upzaila were conducted which is not at all sufficient. 6. Precondition for inclusion of a farmer n the list of project one farmer must have at least one acre suitable land for jute cultivation. **7.** In case of selection of project farmers through the local Government representative is difficult and preparation of farmers list is delayed and sometimes hampered

Opportunity	Threats
1. Jute made products are environment friendly. A law was passed in 2010 to enforce compulsory use of jute made bags and packets in most products for which demand of jute fibre in home and abroad is being increased extensively. 2. Farmers of the country are willing to adopt modern jute cultivation technologies. 3. Jute fibre price is high so jute farmers are being benefited as compared to other crops. 4. Through project technical facilities are being provided to the farmers as a result skilled farmers are being created. 5. As i is easy to produce seed in late season, so it is possible to produce seed locally through the project to meet the national demand. 6. Multi-purpose compulsory use of jute fibre created 25% increased demand. It is possible to meet the demand by increasing production of jute fibre and jute seed through the project. 7. Applications of different clauses of jute law and mobile court for implementing the policy formulated in 2013 to increase multi-purpose use of jute are in operation.	1. The jute fibre and jute seed production, processing, storage and distribution and retting related activities are not included in the Rules of Business of Textile and Jute Ministry. 2. If supply of jute fibre is not commensurate with demand, then world market could be lost. 3. Along with jute seed production there should be arrangement for selling of seeds; otherwise jute seed production may be stopped. 4. Farmers will lose their interest to produce jute fibre and seed if the price will not be increased considering the cost of production. 5. Dependence on India for seed and entering low quality seed from India through black marketers need to be stopped. 6. Farmers will be deprived of fair price if supervision of JDOs and AJDOs are not satisfactory to protect farmers from middleman in selling jute and jute products and to enforce the Jute law regarding duration of storage. 7. It will be uncertain to be in the world market if continuous quality fibre production and increase of quantity are not maintained.

Chapter 8
Recommendations

The following recommendations have been made based on the achieved results obtained through the study, which may be considered.

1. Jute products are environment friendly. Proper implementation of the law of compulsory use of jute bag for all product, 2010; leads to creating demand of jute home and abroad. So, project has to expand its HYV jute production activities up to the doorstep of every jute farmer to increase production.
2. Distribution of inputs especially seed, fertilizer and pesticides was done through the project; So, supply in time and in required quality and quantity has to be maintained.
3. To resolve the jute seed crisis in the country, jute seed produced by the farmer need to be procured through the project at fair price with required packing and certificate tag. An arrangement is to be made to sell the seed at a reasonable price that will make farmers more willing to produce seed.
4. One acre suitable land holding for jute production is the requirement of the farmers to be selected for inclusion in the project. This land ceiling needs to be relaxed to include the small farmers.
5. It is recommended to make 2 day training instead one day for the jute farmers.
6. It is recommended that farmers be trained and motivated on jute grading, so that jute production becomes profitable for them.
7. An arrangement has to be made to train the project officers and others employees on improved jute fibre and jute seed production technologies. To make the training effective and efficient, it is suggested that the recommended 4 steps (sandwich) training method be followed.
8. To ensure continuous improvement of quality and increased production of jute a year wise activity plan needs to be adopted.
9. For the successful implementation of the project and quick effective expansion of project activities publicity, motivation and monitoring have to be strengthened.
10. Though the project activities are decided to be closed on June 2016, yet an allotment of Tk.19 crore has been made for the project to continue up to 2016-2017. For the required quantity of jute seed production through the project in next year's it is necessary to supply seed, fertilizer and other inputs along with imparting training.
11. Research should generate technologies and an attention be devoted to apply generated technologies at field level to ensure multi-use of jute. Close coordination need to be established among the Department of Jute, Department of Agricultural Extension (DAE) and Bangladesh Jute Research Institute.
12. It is necessary to take sustainable work plan and methodology to ensure production of jute fibre and use of produced fibre continuously.

13. It is also necessary to increase technological services for the farmers through appointing qualified and trained man power and keeping the project activities on.

14. It is recommended to take sustainable work plan to increase jute seed production, proper storing and distribution of the jute seed of the recommended varieties be evolved in the country instead of depending on import.

15. According to Rules of Business 1996 and its allocation of Business, commercial use of jute and expansion of jute industries related activities are included in the charter of the Textile and Jute Ministry. Project activities did not expand up to each jute farmer level due to inadequate man power. Most of the activities of the project are relevant to the activities of Agriculture Ministry. In case of taking any project of this type in future Rules of Business and Allocation of Business need to be followed.

Appendix

Data Collection Instruments (Bangla)

প্রশ্নপত্রের ক্রমিক নং	

সাক্ষাৎকার অনুসূচি-১: প্রকল্পের পাট উৎপাদনকারী কৃষক

"উচ্চ ফলনশীল (উফশী) পাট ও পাটবীজ উৎপাদন এবং উন্নত পাট পচন প্রকল্প (২য় সংশোধন)"

শীর্ষক প্রকল্পের নিবিড় পরিবীক্ষণ, আইএমইডি, পরিকল্পনা মন্ত্রণালয়, ঢাকা।

প্রশ্ন	প্রশ্নমালা	উত্তর		প্রশ্ন	প্রশ্নমালা	উত্তর	
1.	কৃষকের নাম			মোবাইল নাম্বার			
2.	গ্রাম			**7.**	লিঙ্গঃ (পুরুষ=1, মহিলা=2)		
3.	ইউনিয়ন			**8.**	শিক্ষাগত যোগ্যতাঃ কখনো স্কুলে যায় নি=1, প্রথম-পঞ্চম শ্রেণী=2, ষষ্ঠ-অষ্টম শ্রেণী=3, এসএসসি=4, এইচএসসি=5, এইচএসসি'র উর্দ্ধে=6		
4.	উপজেলা			**9.**	আবাদকৃত জমির পরিমাণ (শতাংশ)		
5.	জেলা			**10.**	পরিবারে কত জন সদস্য সক্রিয়ভাবে কৃষিতে জড়িত আছেন?	পুরুষ	মহিলা
6.	কৃষকের বয়স						

11. আর্থিক অবস্থা

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
11.1	আর্থিক অবস্থা (বার্ষিক)ঃ নগদ উদ্বৃত্ত		হ্যাঁ=1, না=2, দুটির কোনটিই না=3 →Q 12
11.2	যদি হ্যাঁ হয়, বার্ষিক উদ্বৃত্তের পরিমাণ কত ?		টাকা
11.3	যদি না হয়, বার্ষিক ঘাটতির পরিমাণ ?		টাকা
12.	আপনি কত বছর ধরে প্রকল্পের পাট উৎপাদন করেন ?		বছর

13. পাট উৎপাদক হিসেবে বছরওয়ারী পাট উৎপাদনে নিয়োজিত জমির পরিমাণ ও ফলন

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়					প্রকল্পের পূর্বে
		২০১৫-১৬	২০১৪-১৫	২০১৩-১৪	২০১২-১৩	২০১১-১২	২০১০-১১
আবাদকৃত পাটের জমির পরিমাণ (শতক)	1						
মোট উৎপাদন -আশঁ (কেজি)	2						
আঁশের -দাম (টাকা/কেজি)	3						
মোট উৎপাদন- পাট বীজ (কেজি)	4						
বীজের-দাম (টাকা/কেজি)	5						
প্রকল্পের আওতায় আবাদকৃত পাটের জমির পরিমাণ (শতক)	6						
জাত (জাত কোড: ও-৯৮৯৭=1, ও-৭২=2, জেআরও-৫২৪ =3, অন্যান্য=4)	7						
প্রকল্পের আওতায় মোট উৎপাদন -আশঁ (কেজি)	8						
প্রকল্পের আঁশের-দাম (টাকা/কেজি)	9						

14. পাট উৎপাদনকারী কৃষকের জমির পরিমাণ, ফলন, উপকরণ ব্যবহার ও উৎপাদন খরচ

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়	প্রকল্পের পূর্বে
		২০১৪-১৫	২০১০-১১
প্রকল্পের আওতায় আবাদকৃত পাটের জমির পরিমাণ (শতক)	1		
বীজের উৎস (উৎস কোড: নিজস্ব উৎপাদন=1, বাজার=2, প্রকল্প=3, বিএডিসি=4, প্রতিবেশী/আত্নীয় স্বজন=5, অন্যান্য=6)	2		
জাত (জাত কোড: ও-৯৮৯৭=1, ও-৭২=2, জেআরও-৫২৪	3		

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়		প্রকল্পের পূর্বে	
		২০১৪-১৫		২০১০-১১	
=3, অন্যান্য=4)					
বোনার সময়কাল: (মাস কোড: বৈশাখ=1,জ্যৈষ্ঠ=2,আষাঢ়=3, শ্রাবণ=4,ভাদ্র=5,আশ্বিন=6,কার্তিক=7,অগ্রহায়ণ=8,পৌষ=9,মাঘ=10,ফাল্গুন=11,চৈত্র=12)	4				
পাট ফসল কাটার সময়কাল: (মাস কোড: বৈশাখ=1,জ্যৈষ্ঠ=2, আষাঢ়=3,শ্রাবণ=4,ভাদ্র=5,আশ্বিন=6,কার্তিক=7,অগ্রহায়ণ=8, পৌষ=9, মাঘ=10,ফাল্গুন=11,চৈত্র=12)	5				
উৎপাদন খরচ (প্রকল্পের আওতায় আবাদকৃত পাটের জমির পরিমাণ (শতক)					
জমি তৈরির খরচ (টাকা)	6				
উপকরণ ব্যবহার বাবদ		পরিমাণ (কেজি)	দাম (টাকা/কেজি)	পরিমাণ (কেজি)	দাম (টাকা/কেজি)
পাটের বীজ	7				
সার, কীটনাশক ও সেচ					
ইউরিয়া	8				
টিএসপি	9				
এমপি	10				
ডিএপি	11				
জিংক	12				
জিপসাম	13				
গোবর/কম্পোষ্ট	14				
কীটনাশক (বার)	15				
রোগনাশক (বার)	16				
সেচ (বার)	17				
শ্রমের ব্যবহার		(শ্রম-দিন)	(টাকা/ শ্রম-দিন)	(শ্রম-দিন)	(টাকা/ শ্রম-দিন)
জমি কর্ষণ ও মই দেয়া	18				
বীজ বপন	19				
সার প্রয়োগ	20				
সেচ	21				
আগাছা পরিস্কার	22				
রোগনাশক ও কীটনাশক	23				
আন্তঃপরিচর্যা রোগিং সহ	24				
পাট কাটা	25				
পাতা ঝরানো ও জাগ দেওয়া	26				
আশঁ ছাড়ানো ও ধোওয়া	27				
পাট শুকনো ও গুদাম জাতকরণ	28				
বিপণন	29				
অন্যান্য	30				
উৎপাদন		পরিমাণ (কেজি)	দাম (টাকা/কেজি)	পরিমাণ (কেজি)	দাম (টাকা/কেজি)
মোট উৎপাদন- আঁশ	31				
মোট উৎপাদন- বীজ	32				
উৎপাদিত বীজের ব্যবহার ক) নিজস্ব ব্যবহার=1, খ) বিক্রয়=2, গ) নিজস্ব ব্যবহার ও বিক্রয়=3	33				
উৎপাদিত আঁশ কোথায় বিক্রয় করে থাকেন: ক) বাজার=1, খ) বাড়ীতে=2, সরকারী ক্রয় কেন্দ্র=3, অন্যান্য=4	34				
মোট উৎপাদন- পাট খড়ি (কেজি)	35				
পাট খড়ির ব্যবহার (কেজি)					

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়		প্রকল্পের পূর্বে	
		২০১৪-১৫		২০১০-১১	
ক) নিজস্ব	36				
খ) বিক্রয়	37				

15. প্রযুক্তির ব্যবহার

প্রকল্পে ব্যবহারিত প্রযুক্তির নাম	কোড	প্রাপ্ত প্রযুক্তিগুলি কি পাট উৎপাদনে ব্যবহার করেছেন? (হ্যাঁ=1, না=2)	ব্যবহার পর আপনার মতামত দিন ? (ভাল=1, মোটামুটি=2, খারাপ=3)
মানসম্পন্ন ও উচ্চ ফলনশীল বীজ	1		
প্রশিক্ষণ	2		
সারিতে বীজ বপন	3		
সার ব্যবস্থাপনা	4		
কীটনাশক ব্যবস্থাপনা	5		
সারিতে পাট ও পাট বীজ উৎপাদন	6		
সেচ প্রয়োগের মাধ্যমে আগাম বীজ বপন	7		
পাতলাকরণ	8		
নিবিড় আন্তঃপরিচর্যা	9		
বিজাত বাছাই	10		
নাবী পদ্ধতিতে পাট বীজ উৎপাদন	11		
ডগা ও কান্ড কাটিং পদ্ধতিতে পাট বীজ উৎপাদন	12		
রিবন রেটিং পদ্ধতিতে পাট পচানো	13		
গ্রেডিং এর মাধ্যমে পাট বিক্রয়	14		
হ্যান্ড বই, গাইড বই, পোষ্টার, লিফলেট, ইত্যাদি	15		
আধুনিক কৃষি যন্ত্রপাতির সঠিক ব্যবহার	16		
মাঠ পরিদর্শনকালীন সময়ে কর্মসূচীর কর্মকর্তা কর্তৃক টেকসই প্রযুক্তি ও সঠিক পরামর্শ প্রদান	17		
আইপিএম সম্পর্কে ধারণা প্রদান	18		
পাট পাতা পচানোর মাধ্যমে উৎপন্ন সবুজ সার ও বায়োমাস দ্বারা মাটির উর্ব্বরতা বৃদ্ধি।	19		
প্রকল্পের সুপারিশকৃত প্রযুক্তির ব্যবহার টেকসই হয়েছে কিনা ?	20		

16. শস্যক্রম (২০১৪-২০১৫)ঃ

প্লট নং	জমির পরিমান (শতাংশ)	রবি		খরিফ-১		খরিফ-২	
		ফসল	ফলন কেজি/ শতাংশ	ফসল	ফলন কেজি/ শতাংশ	ফসল	ফলন কেজি/ শতাংশ
পাটসহ							
পাটছাড়া							

17. প্রাপ্ত পাট বীজের গুণগতমান ২০১৪-২০১৫ সালে কী রকম ছিল?

বিশুদ্ধতা (%)	অংকুরোদগম (%)	তেজ (খুব ভাল=1, ভাল=2, ভাল নয়=3)

প্রশ্ন নং	প্রশ্ন	উত্তর			উত্তরের কোড
18.	আপনি কি বীজ বপনের আগে বীজ পরিশোধন করেন ?				হ্যাঁ=1, না=2→Q 20
19.	যদি হ্যাঁ হয়, তাহলে আপনি বীজ পরিশোধনের জন্য কী ব্যবহার করেন ?				ডায়াথিনM-45=1, বেভিসটিন =2, ভিটাভেক্স =3, রিপকর্ড=4, ব্লিচিং পাউডার=5, রোভরাল=6, সকল=7, অন্যান্য=8

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
20.	আপনি উন্নত পাট উৎপাদন বিষয়ে প্রশিক্ষণ পেয়েছে কিনা ?		হ্যাঁ=1, না=2→Q 21
20.1	উত্তর হ্যাঁ হলে নিম্নে বর্ণিত আধুনিক চাষাবাদ সম্পর্কিত কোন কোন বিষয়বস্তু অন্তর্ভূক্ত ছিল ?		জাত=1, জমি তৈরি=2,সার প্রয়োগ=3, বীজ বপন=4, চারা পাতলাকরণ=5, আগাছা দমন ও বালাই ব্যবস্থাপনা=6, রিবন রেটিং পদ্ধতিতে পাট পচন=7 , রিবনারের ব্যবহার=8, পাট আঁশের গুনাগুনের ভিত্তিতে শ্রেণী বিন্যাস=9, সঠিক সময়ে পাট বীজ সংগ্রহ=10, মাড়াই-ঝাড়াই, শুকানো=11, সংরক্ষণ কলাকৌশল=12 নাবী পাট বীজ উৎপাদন পদ্ধতি=13, কান্ড ও ডগা রোপন পদ্ধতি=14
20.2	উক্ত প্রশিক্ষণ আপনার চাহিদা পূরণ ও উপকার করতে সক্ষম হয়েছে কিনা ?		হ্যাঁ=1, না=2
20.3	প্রশিক্ষকগণের দক্ষতা কেমন ছিল ?		ভাল=1, মোটামুটি=2, খারাপ=3
20.4	প্রশিক্ষণের পর আপনার কাজের দক্ষতা কেমন পরিবর্তন হয়েছে ?		ভালই বেড়েছে=1, মোটামুটি বেড়েছে=2, কোন পরিবর্তন হয় নাই=3
20.5	প্রশিক্ষনের হ্যান্ড আউট/পুস্তিকা দেয়া হয়েছে কি ?		হ্যাঁ=1, না=2
20.6	প্রশিক্ষণের দর্শন সহায়ক (Visual Aid) উপকরণের ব্যবহার করা হয়েছে কি?		হ্যাঁ=1, না=2
20.7	প্রশিক্ষণে হাতে কলমে প্রয়োজনীয় ক্ষেত্রে প্রযুক্তির ব্যবহার দেখিয়ে দেয়া হয়েছে কি?		হ্যাঁ=1, না=2
20.8	প্রশিক্ষণের আগে ও পরে আপনার জ্ঞান ও দক্ষতা যাচাই করা হয়েছে কি?		হ্যাঁ=1, না=2
20.9	আপনি প্রশিক্ষণে যা শিখেছেন তা প্রয়োগের ক্ষেত্রে কোন তাগিদ পেয়েছেন কি?		হ্যাঁ=1, না=2
20.10	অদূর ভবিষ্যতে এ ধরণের প্রশিক্ষণ অন্যদের জন্য কি প্রদান করা উচিৎ ?		হ্যাঁ=1, না=2
20.11	পাট ক্ষেতে বীজ বপনের সময় সাথি ফসল হিসেবে কোন ফসল চাষ করেছেন কি?		হ্যাঁ=1, না=2
20.11.1	যদি হ্যাঁ হয়, তাহলে কি কি ফসল চাষ করেছেন?		ফসল কোড: ডাটা শাকঁ=1, লাল শাকঁ=2,অন্যান্য=3
21.	পাট চাষের মৌসুমে কোন উর্দ্ধতন কর্মকর্তা আপনার পাট উৎপাদনের জমি পরিদর্শন করেছিলেন কি ?		হ্যাঁ=1, না=2
22.	প্রকল্পাধীন পাট উৎপাদনের জন্য সব উপকরণ সময়মত পেয়েছেন কি?		হ্যাঁ=1, না=2
23.	যদি হ্যাঁ হয়, তাহলে কি কি উপকরণ পেয়েছেন?		বীজ=1, সার=2, কীটনাশক=3, রিবনার=4, কাঠের হাতরী=5, পলিথিন সিট=6, স্প্রে মেশিন=7, সাইন বোর্ড=8, অন্যান্য=9

24. প্রাপ্ত কৃষি যন্ত্রের নাম, সংখ্যা ইত্যাদির তথ্য নিচে ছকে প্রদান করুনঃ

নাম	সংখ্যা	বর্তমান অবস্থা (সংখ্যা)		যদি চালু থাকে তবে কি কাজে ব্যবহৃত হচ্ছে	ব্যবহারের ধরণ (প্রতিনিয়ত=১, মাঝে মধ্যে=২,কখনই নয়=৩)	ব্যবহারের ফলে কি কি সুবিধা হয়েছে
		চালু	অকেজো			

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
25.	উপকরণ ও যন্ত্রপাতি পাট উন্নয়ন কর্মকর্তার পরামর্শমতে ব্যবহার করেছেন কি ?		হ্যাঁ=1, না=2
26.	আধুনিক পদ্ধতিতে পাট উৎপাদন প্রদর্শন হয়েছে কি ?		হ্যাঁ=1, না=2
27.	উত্তর হ্যাঁ হলে, প্রদর্শনী পাটের পাশে মাঠ দিবস পালন করা হয়েছে কিনা ?		হ্যাঁ=1, না=2
28.	মাঠ দিবসে অংশগ্রহণকারী কৃষকের পাট চাষের আধুনিক প্রযুক্তি গ্রহণে আগ্রহী হয়েছে কিনা ?		হ্যাঁ=1, না=2
29.	আধুনিক পদ্ধতিতে পাট উৎপাদন প্রদর্শনী হয়েছে কি?		হ্যাঁ=1, না=2
29.1	উত্তর হ্যাঁ হলে প্রদর্শনী প্লটের পাশে মাঠদিবস পরিচালনা করা হয়েছে কি?		হ্যাঁ=1, না=2
29.2	মাঠ দিবসে অংশগ্রহণকারী কৃষকেরা পাট চাষের আধুনিক প্রযুক্তি গ্রহণে আগ্রহী হয়েছে কি?		হ্যাঁ=1, না=2
30.	পাট জাগ দেওযার সময় পরিমানমত পানি পেয়েছেন কি ?		হ্যাঁ=1, না=2
31.	পাট জাগ দেওযার সময় মাটি, কলাগাছ ইত্যাদি ক্ষতিকর বস্তু ব্যবহার করেন কি ?		হ্যাঁ=1, না=2
32.	পাট জাগ দেওযার সময় কচুরীপানা, খড়, কংক্রিট স্লাব, বাঁশ ইত্যাদির ব্যবহার করেন কি ?		হ্যাঁ=1, না=2
33.	পাট আশঁ ছাড়ানোর জন্য রিবন রেটিং মেশিন ব্যবহার করেন কি?		হ্যাঁ=1, না=2
34.	উন্নত পদ্ধতিতে (রিবন রেটিং) পাট জাগ দেওয়ার নিয়ম আপনাকে বুঝিয়ে দেওয়া হয়েছিল কি ?		হ্যাঁ=1, না=2
34.1	আধুনিক পদ্ধতিতে পাট পচানো প্রদর্শনী করা হয়েছে কি?		হ্যাঁ=1, না=2
34.2	উত্তর হ্যাঁ হলে মাঠ দিবস অনুষ্ঠিত হয়েছে কি?		হ্যাঁ=1, না=2
34.3	উত্তর হ্যাঁ হলে মাঠ দিবসে অংশগ্রহণকারী কৃষকেরা আধুনিক পদ্ধতিতে পাট পঁচাতে আগ্রহী হয়েছে কি?		হ্যাঁ=1, না=2
34.4	উত্তর হ্যাঁ হলে কতজন আধুনিক পদ্ধতিতে পাট পঁচিয়েছেন?		হ্যাঁ=1, না=2
35.	আপনি ও-৯৮৯৭/ও-৭২/জেআরও-৫২৪ জাতের পাট চাষে সার্বিকভাবে কি কোন সমস্যার সম্মুখীন হযেছেন ? সংক্ষেপে বলুন ঃ		
36.	পাটের আঁশের শ্রেণীবিন্যাস করেন কি ?		হ্যাঁ=1, না=2

36.1 উত্তর হ্যাঁ হলে, কোন গ্রেডে কী পরিমাণ আঁশ পেয়েছেন ও কি দামে বিক্রয় করেছেন ?

গ্রেড	উৎপাদন (কেজি)	বাজার দর (টাকা/কেজি)
১. এ (খুব ভাল)		
২. বি (ভাল)		
৩. সি (মধ্যম)		
৪. ডি (খারাপ)		

37. প্রকল্পের অধীনে পাট বীজ সংগ্রহ, প্রক্রিয়াজাতকরণ, সংরক্ষণ ও বিক্রয় ব্যবস্থা করা উচিত কিনা? (হ্যাঁ=1, না=2) ☐

38. অন্য কোন মতামত থাকলে উল্লেখ করুন ঃ ----------

সাক্ষাতকার গ্রহনকারীর স্বাক্ষর **তারিখঃ**.....

প্রশ্নপত্রের ক্রমিক নং	

সাক্ষাৎকার অনুসূচি-২: প্রকল্পের পাট বীজ উৎপাদনকারী কৃষক

"উচ্চ ফলনশীল (উফশী) পাট ও পাটবীজ উৎপাদন এবং উন্নত পাট পচন প্রকল্প (২য় সংশোধন)"

শীর্ষক প্রকল্পের নিবিড় পরিবীক্ষণ, আইএমইডি, পরিকল্পনা মন্ত্রণালয়, ঢাকা।

প্রশ্ন	প্রশ্নমালা	উত্তর		প্রশ্ন	প্রশ্নমালা	উত্তর	
1.	কৃষকের নামঃ			মোবাইল নাম্বারঃ			
2.	গ্রামঃ			**7.**	লিঙ্গঃ (পুরুষ=1, মহিলা=2)		
3.	ইউনিয়নঃ			**8.**	শিক্ষাগত যোগ্যতাঃ কখনো স্কুলে যায় নি=1, প্রথম-পঞ্চম শ্রেণী=2, ষষ্ঠ-অষ্টম শ্রেণী=3, এসএসসি=4, এইচএসসি=5, এইচএসসি'র উর্দ্ধে=6		
4.	উপজেলাঃ			**9.**	আবাদকৃত জমির পরিমাণঃ (শতাংশ)		
5.	জেলাঃ			**10.**	পরিবারে কত জন সদস্য সক্রিয়ভাবে কৃষিতে জড়িত আছেনঃ	পুরুষ	মহিলা
6.	কৃষকের বয়সঃ						

11. আর্থিক অবস্থাঃ

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
11.1	আর্থিক অবস্থা (বার্ষিক)ঃ নগদ উদ্বৃত্ত		হ্যাঁ=1, না=2, দুটির কোনটিই না=3
11.2	যদি হ্যাঁ হয়, বার্ষিক উদ্বৃত্তের পরিমাণ কত ?		টাকা
11.3	যদি না হয়, বার্ষিক ঘাটতির পরিমাণ?		টাকা
12.	আপনি কত বছর ধরে প্রকল্পের পাট বীজ উৎপাদন করেন ?		বছর

13. প্রকল্পের বীজ উৎপাদক হিসাবে বছরওয়ারী পাট উৎপাদনে নিয়োজিত জমির পরিমাণ ও ফলনঃ

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়					প্রকল্পের পূর্বে
		২০১৫-১৬	২০১৪-১৫	২০১৩-১৪	২০১২-১৩	২০১১-১২	২০১০-১১
আবাদকৃত পাটের জমির পরিমাণ (শতক)	1						
আবাদকৃত পাটের বীজের উৎপাদন (কেজি)	2						
বীজের-দাম (টাকা/কেজি)	3						
মোট উৎপাদন- আঁশ (কেজি)	4						
আঁশের -দাম (টাকা/কেজি)	5						
প্রকল্পের আওতায় আবাদকৃত পাট বীজের জমির পরিমাণ (শতক)	6						
জাত (জাত কোড: ও-৯৮৯৭=1,ও-৭২=2, জেআরও-৫২৪ =3, অন্যান্য=4)	7						
প্রকল্পের আওতায় আবাদকৃত পাটের বীজ উৎপাদন (কেজি)	8						
প্রকল্পের বীজের -দাম (টাকা/কেজি)	9						

14. প্রকল্পের পাটবীজ উৎপাদনকারী কৃষকের জমির পরিমাণ, ফলন, উপকরণ ব্যবহার ও উৎপাদন খরচঃ

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়	প্রকল্পের পূর্বে
		২০১৪-১৫	২০১০-১১
প্রকল্পের আওতায় আবাদকৃত পাট বীজের জমির পরিমাণ (শতক)	1		
বীজের উৎস (উৎস কোড: নিজস্ব উৎপাদন=1, বাজার=2, প্রকল্প=3, বিএডিসি=4, প্রতিবেশী/আত্নীয় স্বজন=5, অন্যান্য=6)	2		
জাত (জাত কোড: ও-৯৮৯৭=1, ও-৭২=2, জেআরও-৫২৪ =3, অন্যান্য=4)	3		

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়		প্রকল্পের পূর্বে	
		২০১৪-১৫		২০১০-১১	
বোনার সময়কাল: (মাস কোড: বৈশাখ=1,জ্যৈষ্ঠ=2,আষাঢ়=3, শ্রাবণ=4,ভাদ্র=5,আশ্বিন=6,কার্তিক=7,অগ্রহায়ণ=8,পৌষ=9,মাঘ=10,ফাল্গুন=11,চৈত্র=12)	4				
পাট বীজ ফসল কাটার সময়কাল: (মাস কোডঃ বৈশাখ=1,জ্যৈষ্ঠ=2,আষাঢ়=3,শ্রাবণ=4,ভাদ্র=5,আশ্বিন=6, কার্তিক=7,অগ্রহায়ণ=8,পৌষ=9, মাঘ=10,ফাল্গুন=11,চৈত্র=12)	5				
উৎপাদন খরচ (প্রকল্পের আওতায় আবাদকৃত পাটের জমির পরিমাণ (শতক)					
জমি তৈরির খরচ (টাকা)	6				
উপকরণ ব্যবহার বাবদ		পরিমাণ (কেজি)	দাম (টাকা/কেজি)	পরিমাণ (কেজি)	দাম (টাকা/কেজি)
পাটের বীজ	7				
সার, কীটনাশক ও সেচ					
ইউরিয়া	8				
টিএসপি	9				
এমপি	10				
ডিএপি	11				
জিংক	12				
জিপসাম	13				
গোবর/কম্পোষ্ট	14				
কীটনাশক (বার)	15				
রোগনাশক (বার)	16				
সেচ (বার)	17				
শ্রমের ব্যবহার		(শ্রম-দিন)	(টাকা/শ্রম-দিন)	(শ্রম-দিন)	(টাকা/ শ্রম-দিন)
জমি কর্ষণ ও মই দেয়া	18				
বীজ বপন	19				
সার প্রয়োগ	20				
সেচ	21				
আগাছা পরিস্কার	22				
রোগনাশক ও কীটনাশক	23				
আন্তঃপরিচর্যা রোগিং সহ	24				
পাট কাটা	25				
পাতা ঝরানো ও জাগ দেওয়া	26				
আশঁ ছাড়ানো ও ধোওয়া	27				
পাট বীজ শুকনো ও গুদাম জাতকরণ	28				
বিপণন	29				
অন্যান্য	30				
উৎপাদন		পরিমাণ (কেজি)	দাম (টাকা/কেজি)	পরিমাণ (কেজি)	দাম (টাকা/কেজি)
মোট উৎপাদন- বীজ	31				
উৎপাদিত বীজের ব্যবহার ক) নিজস্ব ব্যবহার=1, খ) বিক্রয়=2, গ) নিজস্ব ব্যবহার ও বিক্রয়=3	32				
উৎপাদিত বীজ কোথায় বিক্রয় করে থাকেন ক) বাজার=1, খ) প্রতিবেশী ও আত্নীয় স্বজন=2, বিএডিসি=3, প্রকল্প=4, উভয়ই=5	33				
মোট উৎপাদন- পাট খড়ি (কেজি)	34				
পাট খড়ির ব্যবহার (কেজি)					
ক) নিজস্ব	35				

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়		প্রকল্পের পূর্বে	
		২০১৪-১৫		২০১০-১১	
খ) বিক্রয়	36				

15. প্রযুক্তির ব্যবহারঃ

প্রকল্পে ব্যবহারিত প্রযুক্তির নাম	কোড	প্রাপ্ত প্রযুক্তিগুলি কি পাট উৎপাদনে ব্যবহার করেছেন? (হ্যাঁ=1, না=2)	ব্যবহার পর আপনার মতামত দিন ? (ভাল=1, মোটামুটি=2, খারাপ=3)
মানসম্পন্ন ও উচ্চ ফলনশীল বীজ	1.		
প্রশিক্ষণ	2.		
সারিতে বীজ বপন	3.		
সার ব্যবস্থাপনা	4.		
কীটনাশক ব্যবস্থাপনা	5.		
সারিতে পাট ও পাট বীজ উৎপাদন	6.		
সেচ প্রয়োগের মাধ্যমে আগাম বীজ বপন	7.		
পাতলাকরণ	8.		
নিবিড় আন্তঃপরিচর্যা	9.		
বিজাত বাছাই	10.		
নাবী পদ্ধতিতে পাট বীজ উৎপাদন	11.		
ডগা ও কান্ড কাটিং পদ্ধতিতে পাট বীজ উৎপাদন	12.		
রিবন রেটিং পদ্ধতিতে পাট পচানো	13.		
গ্রেডিং এর মাধ্যমে পাট বিক্রয়	14.		
হ্যান্ড বই, গাইড বই, পোষ্টার, লিফলেট, ইত্যাদি	15.		
আধুনিক কৃষি যন্ত্রপাতির সঠিক ব্যবহার	16.		
মাঠ পরিদর্শনকালীন সময়ে কর্মসূচীর কর্মকর্তা কর্তৃক টেকসই প্রযুক্তি ও সঠিক পরামর্শ প্রদান	17.		
আইপিএম সম্পর্কে ধারণা প্রদান	18.		
পাট পাতা পচানোর মাধ্যমে উৎপন্ন সবুজ সার ও বায়োমাস দ্বারা মাটির উর্ব্বরতা বৃদ্ধি।	19.		
প্রকল্পের সুপারিশকৃত প্রযুক্তির ব্যবহার টেকসই হয়েছে কিনা ?	20.		

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
16.	**পাট বীজ উৎপাদন পদ্ধতিঃ**		
16.1	আপনি কোন পদ্ধতিতে পাট বীজ উৎপাদনর করেছেন ?		নাবী পাট বীজ বপন পদ্ধতি=1, কান্ড ও ডগা রোপন পদ্ধতি=2, পাট ক্ষেতের এক অংশে বীজের জন্য রেখে দেওয়া=3
	নাবী পাট বীজ বপন পদ্ধতিঃ		
16.2	নাবী বীজ বপনের উপযুক্ত সময় কখন ?		আষাঢ়=1, শ্রাবণ-১৫ইভাদ্র=2, ১৫ ভাদ্র-আশ্বিন=3
16.3	শতাংশ প্রতি নাবী পদ্ধতিতে বপনের জন্য তোষা বীজের হার কত?		সারিতে: ১৬ গ্রাম=1, ২০ গ্রাম=2, ৩০ গ্রাম=3 ছিটিয়ে: ২০ গ্রাম=4, ২৫ গ্রাম=5, ৩০ গ্রাম=6
16.4	কোন কোন সার প্রয়োগের জন্য অনুমোদন করা হয়?		ইউরিয়া, টিএসপি, এমপি=1, ইউরিয়া, টিএসপি, এমপি, বোরন=2, ইউরিয়া, টিএসপি, এমপি, জিপসাম ও জিংক অক্সাইড=3
16.5	চারা গজানোর কত দিন পর প্রথম ও ২য় কিস্তিতে সার প্রয়োগ করতে হয়?		১ম কিস্তি ১৫-২০ দিন বয়সে=1, ২০-২৫ দিন বয়সে=2, ২৫-৩০ দিন বয়সে=3 ২য় কিস্তি: ৩০-৪০ দিন বয়সে=4, ৪০-৫০ দিন বয়সে=5, ৫০-৬০ দিন বয়সে=6
16.6	কান্ড ও গোড়া পচা রোগ দেখা দিলে কোন রোগনাশক দুইদিন পরপর ২বার প্রয়োগ করতে হবে ?		ডাইথ্যান এম৪৫=1, ম্যালাথিয়ন=2, ডায়াজিনন=3, অন্যান্য=4
16.7	কত ভাগ ফল বাদামি রং ধারণ করলে সংগ্রহ করতে হয় ?		৭০-৮০%=1, ৬০-৭০%=2, ৮০-৯০%=3

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
16.8	নাবী পাটবীজ বপন পদ্ধতিতে বীজ উৎপাদন প্রদর্শনী করেছেন কি?		হ্যাঁ=1, না=2
16.8.1	উত্তর না হলে আপনি কি মাঠ দিবসে উপস্থিত ছিলেন?		হ্যাঁ=1, না=2
16.8.2	উত্তর হ্যাঁ হলে আপনি কি নাবী পদ্ধতিতে বীজ উৎপাদন করেছেন?		হ্যাঁ=1, না=2
17.	**কান্ড ও ডগা রোপণ পদ্ধতিতে বীজ উৎপাদন**		
17.1	কত দিন বয়সের পাট গাছের কান্ড ও ডগা কাটা যায় ?		৮০-৯০ দিন=1, ১০০-১২০ দিন=2, ১২০-১৩০ দিন=3
17.2	প্রতি খন্ডে কয়টি চোখ থাকতেহবে ?		১-২ টি=1, ২-৩ টি=2, ৫-৬ টি=3
17.3	কোন ধরনের মাটি কান্ড ও ডগা রোপন পদ্ধতিতে বীজ উৎপাদনের জন্য উপযুক্ত ?		নিচু ও এটেলমাটি=1, উঁচু দো-আঁশ মাটি=2, উঁচু বেলে মাটি=3
17.4	কোন কোন সার প্রয়োগের জন্য অনুমোদন করা হয় ?		ইউরিয়া, টিএসপি, এমপি=1, ইউরিয়া, টিএসপি, এমপি, বোরন=2, ইউরিয়া, টিএসপি, এমপি, জিপসাম ও জিংকঅক্সাইড=3
17.5	চারার বয়স কত দিন হলে প্রথম ইউরিয়া সার উপরি প্রয়োগকরতে হবে ?		১৫-২০ দিন=1, ২০-২৫ দিন=2, ২৫-৩০ দিন=3
17.6	কান্ড ও গোড়া পচা রোগ দেখা দিলে কোন রোগনাশক দুই দিন পরপর ২বার প্রয়োগ করতে হবে ?		ডাইথ্যান এম৪৫=1, ম্যালাথিয়ন=2, ডায়াজিনন=3
17.7	কত ভাগ ফল বাদামি রং ধারণ করলে সংগ্রহ করতে হয় ?		৭০-৮০%=1, ৬০-৭০%=2, ৮০-৯০%=3
17.8	প্রতি শতাংশে কত ফলন পেয়েছেন		কেজি
17.9	কান্ড ও ডগা রোপণ পদ্ধতিতে বীজ উৎপাদন প্রদর্শনী করেছেন কি?		হ্যাঁ=1, না=2
17.9.1	উত্তর না হলে আপনি কি মাঠ দিবসে উপস্থিত ছিলেন?		হ্যাঁ=1, না=2
17.9.2	উত্তর হ্যাঁ হলে আপনি কি কান্ড ও ডগা রোপণ পদ্ধতিতে বীজ উৎপাদন করেছেন?		হ্যাঁ=1, না=2

18. প্রাপ্ত পাট বীজের গুণগতমান ২০১৫ সালে কী রকম ছিল?

বিশুদ্ধতা (%)	অংকুরোদগম (%)	তেজ (Vigor) (খুব ভাল=1, ভাল=2, ভাল নয়=3)

প্রশ্ন নং	প্রশ্ন	উত্তর			উত্তরের কোড
19.	আপনি কি বীজ বপনের আগে বীজ পরিশোধন করেন ?				হ্যাঁ=1, না=2
20.	যদি হ্যাঁ হয়, তাহলে আপনি বীজ পরিশোধনের জন্য কী ব্যবহার করেন ?				ডায়াথিনM-45=1, বেভিসটিন =2, ভিটাভেক্স =3, রিপকর্ড=4, ব্লিচিং পাউডার=5, রোভরাল=6, সকল=7, অন্যান্য=8

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
21.	আপনি উন্নত পাট উৎপাদন বিষয়ে প্রশিক্ষণ পেয়েছেন কিনা ?		হ্যাঁ=1, না=2
21.1	উত্তর হ্যাঁ হলে নিম্নে বর্ণিত আধুনিক চাষাবাদ সম্পর্কিত কোন কোন বিষয়বস্তু অন্তর্ভূক্ত ছিল		জাত=1, জমি তৈরি=2,সার প্রয়োগ=৩, বীজ বপন=4, চারা পাতলাকরণ=5, আগাছা দমন ও বালাই ব্যবস্থাপনা=6, রিবন রেটিং পদ্ধতিতে পাট পচন=7 , রিবনারের ব্যবহার=8, পাট আঁশের গুনাগুনের ভিত্তিতে শ্রেণী বিন্যাস=9, সঠিক সময়ে পাট বীজ সংগ্রহ=10, মাড়াই-ঝাড়াই, শুকানো=11, সংরক্ষণ কলাকৌশল=12 নাবী পাট বীজ উৎপাদন পদ্ধতি=13, কান্ড ও ডগা রোপন পদ্ধতি=14

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
21.2	উক্ত প্রশিক্ষণ আপনার চাহিদা পূরণ ও উপকার করতে সক্ষম হয়েছে কিনা ?		হ্যাঁ=1, না=2
21.3	প্রশিক্ষকগণের দক্ষতা কেমন ছিল ?		ভাল=1, মোটামুটি=2, খারাপ=3
21.4	প্রশিক্ষণের পর আপনার কাজের দক্ষতা কেমন পরিবর্তন হয়েছে ?		ভালই বেড়েছে=1, মোটামুটি বেড়েছে=2, কোন পরিবর্তন হয় নাই=3
21.5	প্রশিক্ষনের হ্যান্ড আউট দেয়া হয়েছে কি ?		হ্যাঁ=1, না=2
21.6	প্রশিক্ষণের দর্শন সহায়ক (Visual Aid) উপকরণের ব্যবহার করা হয়েছে কি?		হ্যাঁ=1, না=2
21.7	প্রশিক্ষণে হাতে কলমে প্রয়োজনীয় ক্ষেত্রে প্রযুক্তির ব্যবহার দেখিয়ে দেয়া হয়েছে কি?		হ্যাঁ=1, না=2
21.8	প্রশিক্ষণের আগে ও পরে আপনার জ্ঞান ও দক্ষতা যাচাই করা হয়েছে কি?		হ্যাঁ=1, না=2
21.9	আপনি প্রশিক্ষণে যা শিখেছেন তা প্রয়োরগের ক্ষেত্রে কোন তাগিদ পেয়েছেন কি?		হ্যাঁ=1, না=2
21.10	অদূর ভবিষ্যতে এ ধরণের প্রশিক্ষণ অন্যদের জন্য কি প্রদান করা উচিৎ ?		হ্যাঁ=1, না=2
22.	শীতকালীন শাক-সবজি সাথে আপনি কি পাট বীজ উৎপাদন করেন?		হ্যাঁ=1, না=2
23.	যদি হ্যাঁ হলে, আপনি কি মনে করেন এ পদ্ধতিতে বীজউৎপাদন লাভজনক হবে?		হ্যাঁ=1, না=2
24.	পাট চাষের মৌসুমে কোন উর্দ্ধতন কর্মকর্তা আপনার পাট বীজ উৎপাদনের জমি পরিদর্শন করেছিলেন কি ?		হ্যাঁ=1, না=2
25.	প্রকল্পাধীন পাট বীজ উৎপাদনের চাষের জন্য সব উপকরণ সময়মত পেয়েছেন কি?		হ্যাঁ=1, না=2
26.	যদি হ্যা হয়, থাহলে কি কি উপকরণ পেয়েছেন কি?		বীজ=1, সার=2, কীটনাশক=3, রিবনার=4, কাঠের হাতরী=5, পলিথিন সিট=6, স্প্রে মেশিন=7, সাইন বোর্ড=8 অন্যান্য=9

27. প্রাপ্ত কৃষি যন্ত্রের নাম, সংখ্যা ইত্যাদির তথ্য নিচে ছকে প্রদান করুন

নাম	সংখ্যা	বর্তমান অবস্থা (সংখ্যা)		যদি চালু থাকে তবে কি কাজে ব্যবহৃত হচ্ছে	ব্যবহারের ধরণ (প্রতিনিয়ত=1, মাঝে মধ্যে=2,কখনই নয়=3)	ব্যবহারের ফলে কি কি সুবিধা হয়েছে
		চালু	অকেজো			

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
28.	উপকরণ ও যন্ত্রপাতি পাট উন্নয়ন কর্মকর্তার পরামর্শমতে ব্যবহার করেছেন কি ?		হ্যাঁ=1, না=2
29.	আপনি কোন পদ্ধতিতে পাট জাগ দেন ?		মাটি, কলাগাছ=1, কচুরীপানা, খড়, কংক্রিট স্লাব, বাঁশ=2, রিবন রেটিং=3
30.	প্রকল্পাধীন উৎপাদিত পাট বীজ বিক্রয়ে প্রকল্পের সাহায্য পেয়েছেন কি ?		হ্যাঁ=1, না=2

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
31.	প্রশিক্ষণ মোতাবেক পাট বীজ প্রক্রিয়াজাতকরণ/সংরক্ষণ করেছেন কি ?		হ্যাঁ=1, না=2
32.	পাট বীজ উৎপাদন ও সংরক্ষণে কি অসুবিধার সম্মুখীন হয়ে থাকেন ?		হ্যাঁ=1, না=2
33.	প্রকল্পের অধীনে পাট বীজ সংগ্রহ, প্রক্রিয়াজাতকরণ, সংরক্ষণ ও বিক্রয় ব্যবস্থা করা উচিত কিনা?		হ্যাঁ=1, না=2
34.	অন্য কোন মতামত থাকলে উল্লেখ করুন ঃ		

সাক্ষাতকার গ্রহনকারীর স্বাক্ষর **তারিখঃ.....**

প্রশ্নপত্রের ক্রমিক নং	

সাক্ষাৎকার অনুসূচি-৩: প্রকল্প বর্হিভূত পাট উৎপাদনকারী কৃষক

"উচ্চ ফলনশীল (উফশী) পাট ও পাটবীজ উৎপাদন এবং উন্নত পাট পচন প্রকল্প (২য় সংশোধন)"
শীর্ষক প্রকল্পের নিবিড় পরিবীক্ষণ, আইএমইডি, পরিকল্পনা মন্ত্রণালয়, ঢাকা।

প্রশ্ন কোড	প্রশ্নমালা	উত্তর		প্রশ্ন কোড	প্রশ্নমালা	উত্তর	
1.	কৃষকের নামঃ			মোবাইল নাম্বারঃ			
2.	গ্রামঃ			7.	লিঙ্গঃ (পুরুষ=1, মহিলা=2)		
3.	ইউনিয়নঃ			8.	শিক্ষাগত যোগ্যতাঃ কখনো স্কুলে যায় নি=1, প্রথম-পঞ্চম শ্রেণী=2, ষষ্ঠ-অষ্টম শ্রেণী=3, এসএসসি=4, এইচএসসি=5, এইচএসসি'র উর্দ্ধে=6		
4.	উপজেলাঃ			9.	আবাদকৃত জমির পরিমাণঃ (শতাংশ)		
5.	জেলাঃ			10.	পরিবারে কত জন সদস্য সক্রিয়ভাবে কৃষিতে জড়িত আছেনঃ	পুরুষ	মহিলা
6.	কৃষকের বয়সঃ						

11. আর্থিক অবস্থাঃ

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
11.1	আর্থিক অবস্থা (বার্ষিক)ঃ নগদ উদ্বৃত্ত		হ্যাঁ=1, না=2, দুটির কোনটিই না=3 →Q 12
11.2	যদি হ্যাঁ হয়, বার্ষিক উদ্বৃত্তের পরিমাণ কত ?		টাকা
11.3	যদি না হয়, বার্ষিক ঘাটতির পরিমাণ ?		টাকা
12.	আপনি কত বছর ধরে পাট উৎপাদন করেন ?		বছর

13. পাট উৎপাদক হিসেবে বছরওয়ারী পাট উৎপাদনে নিয়োজিত জমির পরিমাণ ও ফলনঃ

বিবেচ্য বিষয়	কোড	২০১৫-১৬	২০১৪-১৫	২০১৩-১৪	২০১২-১৩	২০১১-১২	২০১০-১১
আবাদকৃত পাটের জমির পরিমাণ (শতক)	1						
মোট উৎপাদন -আশঁ (কেজি)	2						
আঁশের -দাম (টাকা/কেজি)	3						
মোট উৎপাদন- পাট বীজ (কেজি)	4						
বীজের-দাম (টাকা/কেজি)	5						

14. পাট উৎপাদনকারী কৃষকের জমির পরিমাণ, ফলন, উপকরণ ব্যবহার ও উৎপাদন খরচঃ

বিবেচ্য বিষয়	কোড	প্রকল্পকালীন সময়	প্রকল্পের পূর্বে
		২০১৪-১৫	২০১০-১১
আবাদকৃত পাটের জমির পরিমাণ (শতক)	1		
বীজের উৎস (উৎস কোড: নিজস্ব উৎপাদন=1, বাজার=2, প্রকল্প=3, বিএডিসি=4, প্রতিবেশী/আত্নীয় স্বজন=5, অন্যান্য=6)	2		
জাত (জাত কোড: ও-৯৮৯৭=1, ও-৭২=2, জেআরও-৫২৪ =3, অন্যান্য=4)	3		
বোনার সময়কাল: (মাস কোড: বৈশাখ=1, জ্যৈষ্ঠ=2,	4		

আষাঢ়=3, শ্রাবণ=4, ভাদ্র=5, আশ্বিন=6, কার্তিক=7, অগ্রহায়ণ=8, পৌষ=9, মাঘ=10, ফাল্গুন=11, চৈত্র=12)					
পাট ফসল কাটার সময়কাল: (মাস কোড: বৈশাখ=1, জ্যৈষ্ঠ=2, আষাঢ়=3, শ্রাবণ=4, ভাদ্র=5, আশ্বিন=6, কার্তিক=7, অগ্রহায়ণ=8, পৌষ=9, মাঘ=10, ফাল্গুন=11, চৈত্র=12)	5				
উৎপাদন খরচ (আবাদকৃত পাটের জমির পরিমাণ (শতক)					
জমি তৈরির খরচ (টাকা)	6				
উপকরণ ব্যবহার বাবদ		পরিমাণ (কেজি)	দাম (টাকা/কেজি)	পরিমাণ (কেজি)	দাম (টাকা/কেজি)
পাটের বীজ	7				
সার, কীটনাশক ও সেচ					
ইউরিয়া	8				
টিএসপি	9				
এমপি	10				
ডিএপি	11				
জিংক	12				
জিপসাম	13				
গোবর/কম্পোষ্ট	14				
কীটনাশক (বার)	15				
রোগনাশক (বার)	16				
সেচ (বার)	17				
শ্রমের ব্যবহার		(শ্রম-দিন)	(টাকা/ শ্রম-দিন)	(শ্রম-দিন)	(টাকা/ শ্রম-দিন)
জমি কর্ষণ ও মই দেয়া	18				
বীজ বপন	19				
সার প্রয়োগ	20				
সেচ	21				
আগাছা পরিস্কার	22				
রোগনাশক ও কীটনাশক	23				
আন্তঃপরিচর্যা রোগিং সহ	24				
পাট কাটা	25				
পাতা ঝরানো ও জাগ দেওয়া	26				
আশঁ ছাড়ানো ও ধোওয়া	27				
পাট শুকনো ও গুদাম জাতকরণ	28				
বিপণন	29				
অ্যান্যান	30				
উৎপাদন		পরিমাণ (কেজি)	দাম (টাকা/কেজি)	পরিমাণ (কেজি)	দাম (টাকা/কেজি)
মোট উৎপাদন- আঁশ	31				
মোট উৎপাদন- বীজ	32				
উৎপাদিত বীজের ব্যবহার ক) নিজস্ব ব্যবহার=1, খ) বিক্রয়=2, গ) নিজস্ব ব্যবহার ও বিক্রয়=3	33				

উৎপাদিত আঁশ কোথায় বিক্রয় করে থাকেন: ক) বাজার=1, খ) বাড়ীতে=2, সরকারী ক্রয় কেন্দ্র=3অন্যান্য=4	34				
মোট উৎপাদন- পাট খড়ি (কেজি)	35				
পাট খড়ির ব্যবহার (কেজি)					
ক) নিজস্ব	36				
খ) বিক্রয়	37				

15. প্রযুক্তির ব্যবহারঃ

ব্যবহারিত প্রযুক্তির নাম	কোড	প্রাপ্ত প্রযুক্তিগুলি কি পাট উৎপাদনে ব্যবহার করেছেন? (হ্যাঁ=1, না=2)	ব্যবহার পর আপনার মতামত দিন ? (ভাল=1, মোটামুটি=2, খারাপ=3)
মানসম্পন্ন ও উচ্চ ফলনশীল বীজ	1		
প্রশিক্ষণ	2		
সারিতে বীজ বপন	3		
সার ব্যবস্থাপনা	4		
কীটনাশক ব্যবস্থাপনা	5		
সারিতে পাট ও পাট বীজ উৎপাদন	6		
সেচ প্রয়োগের মাধ্যমে আগাম বীজ বপন	7		
পাতলাকরণ	8		
নিবিড় আন্তঃপরিচর্যা	9		
বিজাত বাছাই	10		
নাবী পদ্ধতিতে পাট বীজ উৎপাদন	11		
ডগা ও কান্ড কাটিং পদ্ধতিতে পাট বীজ উৎপাদন	12		
রিবন রেটিং পদ্ধতিতে পাট পচানো	13		
গ্রেডিং এর মাধ্যমে পাট বিক্রয়	14		
হ্যান্ড বই, গাইড বই, পোষ্টার, লিফলেট, ইত্যাদি	15		
আধুনিক কৃষি যন্ত্রপাতির সঠিক ব্যবহার	16		
মাঠ পরিদর্শনকালীন সময়ে কর্মসূচীর কর্মকর্তা কর্তৃক টেকসই প্রযুক্তি ও সঠিক পরামর্শ প্রদান	17		
আইপিএম সম্পর্কে ধারণা প্রদান	18		
পাট পাতা পচানোর মাধ্যমে উৎপন্ন সবুজ সার ও বায়োমাস দ্বারা মাটির উর্ব্বরতা বৃদ্ধি।	19		

16. শস্যক্রম (২০১৪-২০১৫)ঃ

প্লট নং	জমির পরিমান (শতাংশ)	রবি		খরিফ-১		খরিফ-২	
		ফসল	ফলন (কোজ/ শতাংশ)	ফসল	ফলন (কোজ/ শতাংশ	ফসল	ফলন (কোজ/ শতাংশ
পাটসহ							
পাটছাড়া							

17. প্রাপ্ত পাট বীজের গুণগতমান ২০১৫ সালে কী রকম ছিল?

বিশুদ্ধতা (%)	অংকুরোদগম (%)	তেজ (খুব ভাল=1, ভাল=2, ভাল নয়=3)

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
	জ্ঞানভিত্তিকঃ		
18.	আপনি কি বীজ বপনের আগে বীজ পরিশোধন করেন ?		হ্যাঁ=1, না=2
19.	যদি হ্যাঁ হয়, তাহলে আপনি বীজ পরিশোধনের জন্য কী ব্যবহার করেন ?		ডায়াথিনM-45=1, বেভিসটিন =2, ভিটাভেক্স =3, রিপকর্ড=4, ব্লিচিং পাউডার=5, রোভরাল=6, সকল=7, অন্যান্য=8

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
20.	আপনি উন্নত পাট উৎপাদন বিষয়ে প্রশিক্ষণ পেয়েছে কিনা ?		হ্যাঁ=1, না=2→Q 21
20.1	উত্তর হ্যাঁ হলে আপনি কোন উৎস হতে প্রশিক্ষণ পেয়েছে?		ডিএই=1, বিএডিসি=2, অন্যান্য=3
20.2	উত্তর হ্যাঁ হলে নিম্নে বর্ণিত আধুনিক চাষাবাদ সম্পর্কিত কোন কোন বিষয়বস্তু অন্তর্ভূক্ত ছিল ?		জাত=1, জমি তৈরি=2,সার প্রয়োগ=3, বীজ বপন=4, চারা পাতলাকরণ=5, আগাছা দমন ও বালাই ব্যবস্থাপনা=6, রিবন রেটিং পদ্ধতিতে পাট পচন=7 , রিবনারের ব্যবহার=8, পাট আঁশের গুনাগুনের ভিত্তিতে শ্রেণী বিন্যাস=9, সঠিক সময়ে পাট বীজ সংগ্রহ=10, মাড়াই-ঝাড়াই, শুকানো=11, সংরক্ষণ কলাকৌশল=12 নাবী পাট বীজ উৎপাদন পদ্ধতি=13, কান্ড ও ডগা রোপন পদ্ধতি=14
20.3	উক্ত প্রশিক্ষণ আপনার চাহিদা পূরণ ও উপকার করতে সক্ষম হয়েছে কিনা ?		হ্যাঁ=1, না=2
20.4	প্রশিক্ষকগণের দক্ষতা কেমন ছিল ?		ভাল=1, মোটামুটি=2, খারাপ=3
20.5	প্রশিক্ষণের পর আপনার কাজের দক্ষতা কেমন পরিবর্তন হয়েছে ?		ভালই বেড়েছে=1, মোটামুটি বেড়েছে=2, কোন পরিবর্তন হয় নাই=3
20.6	প্রশিক্ষনের হ্যান্ড আউট দেয়া হয়েছে কি ?		হ্যাঁ=1, না=2
20.7	প্রশিক্ষণের দর্শন সহায়ক (Visual Aid) উপকরণের ব্যবহার করা হয়েছে কি?		হ্যাঁ=1, না=2
20.8	প্রশিক্ষণে হাতে কলমে প্রয়োজনীয় ক্ষেত্রে প্রযুক্তির ব্যবহার দেখিয়ে দেয়া হয়েছে কি?		হ্যাঁ=1, না=2
20.9	প্রশিক্ষণের আগে ও পরে আপনার জ্ঞান ও দক্ষতা যাচাই করা হয়েছে কি?		হ্যাঁ=1, না=2
20.10	আপনি প্রশিক্ষণে যা শিখেছেন তা প্রয়োগের ক্ষেত্রে কোন তাগিদ পেয়েছেন কি?		হ্যাঁ=1, না=2
20.11	অদূর ভবিষ্যতে এ ধরণের প্রশিক্ষণ অন্যদের জন্য কি প্রদান করা উচিৎ ?		হ্যাঁ=1, না=2
21.	পাট ক্ষেতে বীজ বপনের সময় সাথি ফসল হিসেবে কোন ফসল চাষ করেছেন কি?		হ্যাঁ=1, না=2→Q 22
21.1	যদি হ্যাঁ হয়, তাহলে কি কি ফসল চাষ করেছেন?		ফসল কোড: ডাটা শাকঁ=1, লাল শাকঁ=2,অন্যান্য=3
21.2	পাট চাষের মৌসুমে কৃষি কর্মকর্তা আপনার পাট উৎপাদনের জমি পরিদর্শন করেছিলেন কি ?		হ্যাঁ=1, না=2
22.	পাট জাগ দেওযার সময় পরিমানমত পানি পেয়েছেন কি ?		হ্যাঁ=1, না=2
23.	পাট জাগ দেওযার সময় মাটি, কলাগাছ ইত্যাদি ক্ষতিকর বস্তু ব্যবহার করেন কি ?		হ্যাঁ=1, না=2
24.	পাট জাগ দেওযার সময় কচুরীপানা, খড়, কংক্রিট স্লাব, বাঁশ ইত্যাদির ব্যবহার করেন কি ?		হ্যাঁ=1, না=2
25.	পাট আশঁ ছাড়ানোর জন্য রিবন রেটিং মেশিন ব্যবহার করেন কি?		হ্যাঁ=1, না=2
26.	উন্নত পদ্ধতিতে (রিবন রেটিং) পাট জাগ দেওয়ার নিয়ম আপনাকে বুঝিয়ে দেওয়া হয়েছিল কি ?		হ্যাঁ=1, না=2

প্রশ্ন নং	প্রশ্ন	উত্তর	উত্তরের কোড
27.	আপনি ও-৯৮৯৭/ও-৭২/জেআরও-৫২৪ জাতের পাট চাষে সার্বিকভাবে কি কোন সমস্যার সম্মুখীন হযেছেন ? সংক্ষেপে বলুন ঃ		
28.	পাটের আঁশের শ্রেণীবিন্যাস করেন কি ?		হ্যাঁ=1, না=2

28.1 উত্তর হ্যাঁ হলে, কোন গ্রেডে কী পরিমাণ আঁশ পেয়েছেন ও কি দামে বিক্রয় করেছেন ?

গ্রেড	উৎপাদন (কেজি)	বাজার দর (টাকা/কেজি)
১. এ (খুব ভাল)		
২. বি (ভাল)		
৩. সি (মধ্যম)		
৪. ডি (খারাপ)		

29. অন্য কোন মতামত থাকলে উল্লেখ করুন ঃ ----------

সাক্ষাতকার গ্রহনকারীর স্বাক্ষর **তারিখঃ.....**

সাক্ষাৎকার অনুসূচি-৪: কি ইনফরমেন্ট ইন্টারফিউ(KII)চেকলিষ্ট

"উচ্চ ফলনশীল (উফশী) পাট ও পাটবীজ উৎপাদন এবং উন্নত পাট পচন প্রকল্প (২য় সংশোধন)" শীর্ষক প্রকল্পের নিবিড় পরিবীক্ষণ
আইএমইডি, পরিকল্পনা মন্ত্রণালয়, ঢাকা।

১. কর্মকর্তার নাম:----------

২. পদবী ও ঠিকানা: ----------

৩. শিক্ষাগত যোগ্যতা: .....

৪. মনোনীত পাট চাষীর সংখ্যা:

৪.১ জেলা .....

৪.২ উপজেলা .....

৪.৩ সংখ্যা .....

৫. উপজেলার পাট চাষের আওতাধীন মোট জমির পরিমান (হেক্টর): .....

৬. প্রকল্পের আওতাধীন পাট চাষের মোট জমির পরিমান (হেক্টর):.....

৭. উপজেলা চাষযোগ্য মোট জমির পরিমান (হেক্টর): .....

৮. পাট বীজ উৎপাদনের মোট জমির পরিমান (হেক্টর):

ক) ও-৯৮৯৭ .....
খ) ও-৭২=২----------
গ) জেআরও-৫২৪ ----------
ঘ) অন্যান্য .....

৯. পাট চাষীদের সঙ্গে পরামর্শ করে তাদেরকে তালিকাভূক্ত করা হইয়াছিল কি না? (হ্যাঁ=১, না=২).....

১০. প্রকল্প কর্তৃক সরবরাহকৃত উপকরণ ও যন্ত্র

উপকরণ	পরিমাণ				
	২০১৫-১৬	২০১৪-১৫	২০১৩-১৪	২০১২-১৩	২০১১-১২
১. বীজ (কেজি)					
২. সার (কেজি)					
ইউরিয়া					
টিএসপি					
এমপি					
৩. কীটনাশক (টাকা)					
৪. রিবন যন্ত্র (সংখ্যা)					
৫. কাঠের তৈরি হাতুড়ি (সংখ্যা)					
৬. পলিথিন সিট(সংখ্যা)					
৭. স্প্রে মেশিন(সংখ্যা)					
৮. সাইন বোর্ড (সংখ্যা)					
৯. আর্থিক ঋণ (টাকা)					
১০. প্রশিক্ষণ (সংখ্যা)					
ক)					
খ)					
গ)					

১১. প্রকল্পের আওতাধীন পাট বীজ উৎপাদনের পরিমাণঃ

জাত	উৎপাদন (টন)									
	২০১৫-১৬		২০১৪-১৫		২০১৩-১৪		২০১২-১৩		২০১১-১২	
	জমি (হেঃ)	বীজ উৎপাদন (মে.টন)	জমি (হেঃ)	বীজ উৎপাদন (মে.টন)	জমি (হেঃ)	বীজ উৎপাদন (মে.টন)	জমি (হেঃ)	বীজ উৎপাদন (মে.টন)	জমি (হেঃ)	বীজ উৎপাদন (মে.টন)
ও-৯৮৯৭										
ও-৭২										
জআরও-৫২৪										
অন্যান্য=৪										

১২. প্রকল্পের আওতাধীন পাট বীজ উৎপাদনের লক্ষমাত্রা এবং অর্জনঃ

জাত	উৎপাদন (টন/হেক্টর)									
	২০১৫-১৬		২০১৪-১৫		২০১৩-১৪		২০১২-১৩		২০১১-১২	
	লক্ষ্যমাত্রা (মে.টন)	অর্জন (মে.টন)	লক্ষ্যমাত্রা (মে.টন)	অর্জন (মে.টন)	লক্ষ্যমাত্রা (মে.টন)	অর্জন (মে.টন)	লক্ষ্যমাত্রা (মে.টন)	অর্জন (মে.টন)	লক্ষ্যমাত্রা (মে.টন)	অর্জন (মে.টন)
ও-৯৮৯৭										
ও-৭২										
জেআরও-৫২৪										
অন্যান্য										

১৩. প্রকল্পের আওতাধীন সরবরাহকৃত যন্ত্রপাতি ও বর্তমান অবস্থা ঃ

নাম	সংখ্যা	স্পেসিফিকেশন অনুযায়ী ক্রয় করা হয়েছে কি না ? (হ্যাঁ=১, না=২)	বর্তমান অবস্থা (সংখ্যা)		যদি চালু থাকে তবে কি কাজে ব্যবহৃত হচ্ছে	ব্যবহারের ধরণ (প্রতিনিয়ত=১, মাঝে মধ্যে=২,কখনই নয়=৩)	ব্যবহারের ফলে কি কি সুবিধা হয়েছে
			চালু	অকেজো			
যানবাহন							
মেশিনারি							
ইকুইপমেন্ট							
অফিস ইকুপমেন্টের							
আসবাবপত্র							

১৪. উপজেলা কমিটির সভার বিবরণঃ

জেলা	উপজেলা	সভার সংখ্যা				
		২০১৫-১৬	২০১৪-১৫	২০১৩-১৪	২০১২-১৩	২০১১-১২

১৫. মানব সম্পদ উন্নয়ন

প্রশিক্ষণ গ্রহণকারীর নাম	প্রশিক্ষণকালীন কর্মকর্তার পদবী	কোর্সের নাম	প্রশিক্ষণের মেয়াদ (দিন)	প্রশিক্ষণের স্থান	সিডিউল অনুযায়ী সম্পাদিত হয়েছে কিনা ? (হ্যাঁ=১, না=২)	হ্যান্ডআউট দেওয়া হয়েছে কিনা ? (হ্যাঁ=১, না=২)	বর্তমান কার্যালয়	প্রশিক্ষণ লব্দ জ্ঞান আপনার কোন কার্যক্রমে ব্যবহার করেছেন

১৬. পাট বীজ চাষে ১ম ও দ্বিতীয় কিস্তির ইউরিয়া সার বীজ গজানোর কতদিন পর প্রয়োগ করতে পরামর্শ দিয়েছেন ?

১ম কিস্তি ..... দিন — ১ম কিস্তি ১৫-২০ দিন বয়সে=১, ২০-২৫ দিন বয়সে=২, ২৫-৩০ দিন বয়সে=৩

২য় কিস্তি ..... দিন — ২য় কিস্তি: ৩০-৪০ দিন বয়সে=১,৪০-৫০ দিন বয়সে=২, ৫০-৬০ দিন বয়সে=৩

১৭. সরবরাহকৃত পাট বীজের গুণগতমান ২০১৫ সালে কেমন ছিল?

বিশুদ্ধতা (%)	অংকুরোদগম (%)	তেজ (Vigor) (খুব ভাল=১, ভাল=২, ভাল নয়=৩)

১৮. পাট বীজ বপনের পূর্বে জমি ঠিক মত চাষ করা হয়েছিল কি ?..... (হ্যাঁ=১, না=২)

১৯. প্রকল্পাধীন সব পাটের জমিতে আপনার পরামর্শমত সার ব্যবহার করা হয়েছিল কি?.....(হ্যাঁ=১, না=২)

২০. কী কী সার ব্যবহার করা হয়েছিল ? সারগুলির নাম ও পরিমাণ লিখুন।

ক) সারের নামঃ .....শতাংশ প্রতি পরিমাণঃ.....

খ) সারের নামঃ .....শতাংশ প্রতি পরিমাণঃ.....

গ) সারের নামঃ .....শতাংশ প্রতি পরিমাণঃ.....

ঘ) সারের নামঃ .....শতাংশ প্রতি পরিমাণঃ.....

ঙ) সারের নামঃ .....শতাংশ প্রতি পরিমাণঃ.....

সার কোড: ইউরিয়া=১, টিএসপি=২, এমপি=৩, বোরন=৪, জিপসাম=৫, জিংক অক্সাইড=৬, অন্যান্য=৭

২১. পোকা দমনের জন্য কী কী কীটনাশক ব্যবহার করা হয়েছিল ? পোকার নাম ও কীটনাশকগুলির নাম লিখুন।

ক) পোকার নাম .....কীটনাশকের নাম.....

খ) পোকার নাম .....কীটনাশকের নাম.....

গ) পোকার নাম.....কীটনাশকের নাম.....

ঘ) পোকার নাম.....কীটনাশকের নাম.....

ঙ) পোকার নাম.....কীটনাশকের নাম.....

পোকার কোড: বিছাপোকা=১, ঘোড়াপোকা=২, সাদামাকড়=৩, চেলেপোকা=৪, লালমাকড়=৫, ছাতরাপোকা=৬, অন্যান্য=৭
কীটনাশক কোড: ডায়াজেনন=১, ইকালাক্স=২, ক্যালথেন=৩, রোভাক্রন=৪, কুইনাল ফস=৫, অন্যান্য=৭

২২. রোগ দমনের কী কী রোগনাশক ব্যবহার করা হয়েছিল ? রোগের ও রোগনাশক গুলির নাম লিখুন।

ক) রোগের নাম..... রোগনাশকের নাম.....

খ) রোগের নাম..... রোগনাশকের নাম.....

গ) রোগের নাম..... রোগনাশকের নাম.....

ঘ) রোগের নাম..... রোগনাশকের নাম.....

ঙ) রোগের নাম..... রোগনাশকের নাম.....

রোগের কোড: চারারমড়ক=১, ঢলেপড়া=২, কান্ডপচা=৩, কালপট্টি=৪, মোজাইক=৫, অন্যান্য=৬
রোগনাশক কোড: ডাইথেন-এম ৪৫=১, ইনডোফিল-এম ৪৫=২, হেমিক্রিন=৩, অন্যান্য=৪

২৩. উর্ধ্বতন কর্মকর্তাগন আপনাকে সরেজমিনে কাজের সময় সহায়তা করেছিলেন কি ? (হ্যাঁ=১, না=২) .....

২৩.১ উর্ধ্বতন কর্মকর্তাগণ সহায়তা করে থাকলে তারা কী কী পরামর্শ দিয়েছিলেন ?

ক)----------

খ)----------

গ)----------

২৪. আপনি কাজের মাধ্যমে কোন প্রযুক্তি প্রয়োগের ক্ষেত্রে আপনার উর্ধ্বতন কর্মকর্তার নিকট হতে পরামর্শ পেয়েছেন কি?

(হ্যাঁ=১, না=২) .....

২৫. পাট চাষাবাদ সম্পর্কিত সদ্য উদ্ভাবিত প্রযুক্তির ওপর প্রকাশিত বুকলেট, লিফলেট, পোস্টার, ফোল্ডার ইথ্যাদি শিখণ সামগ্রী নিয়মিত পেয়েছেন কি? (হ্যাঁ=১, না=২) .....

২৬. আপনি কি কৃষকদের সাথে পাট চাষ সম্পর্কিত সমস্যাবলীর ওপর নিয়মিত আলোচনার আয়োজন করেছেন কি?

(হ্যাঁ=১, না=২) .....

২৬.১ হ্যাঁ হলে আলোচনার বিষয়বস্তু কী ছিল?

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২৭. কৃষক সংগঠনের সদস্যদের সাথে পাট চাষ সম্পর্কিত আলোচনায় অংশগ্রহণ করতে আপনি কি উৎসাহিত বোধ করেন?

(হ্যাঁ=১, না=২) .....

২৮. পাট চাষীদের পাট চাষ সম্পর্কিত সমস্যা দেখা দিলে আপনি নিজ দায়িত্বে সমাধানের উদ্দ্যোগ গ্রহণ করেন কি?

(হ্যাঁ=১, না=২) .....

২৯. আপনার উপর অর্পিত দায়িত্ব পালনের ক্ষেত্রে প্রকল্প হতে যে সুযোগ-সুবিধাদি দেওয়া হয় তাতে কি আপনি আনন্দের সাথে কাজ করতে পারেন? (হ্যাঁ=১, না=২) .....

২৯.১ যদি না হয়, তবে আপনি কি ধরণের সুযোগ-সুবিধা আশা করেন?

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৩০. কর্মএলাকা ও কর্মপরিধি বিশ্লেষণ করে জনবল নিয়োগ করা হয়েছে কি? (হ্যাঁ=১, না=২) .....

৩১. প্রশিক্ষণ চাহিদা নিরূপণ করে প্রশিক্ষণ কর্মসূচি প্রনয়ণ করা হয়েছে কি? (হ্যাঁ=১, না=২) .....

৩২. আপনার সম্পাদিত কাজের মান ও পরিমাণ চাকুরীর শর্ত ও চাহিদানুযায়ী হয়েছে কিনা তা প্রতি বছর যাচাই করে আপনাকে জানানো হয় কি? (হ্যাঁ=১, না=২) .....

৩৩. প্রমিত মাত্রায় সম্পাদিত কাজের মান ও পরিমাণ পাওয়ার জন্য আপনার প্রতিষ্ঠানের কোন পরিকল্পনা আছে কি? (হ্যাঁ=১, না=২)

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৩৪. ভাল কাজের জন্য পুরস্কার ও খারাপ কাজের জন্য শাস্তির ব্যবস্থা আছে কি? (হ্যাঁ=১, না=২) .....

৩৫. পৃথিবীতে প্রতিটি ক্ষেত্রে দ্রুত পরিবর্তন হচ্ছে, পরিবর্তিত অবস্থার সাথে খাপ খাওয়ানোর লক্ষ্যে আপনাকে সহযোগিতা করার জন্য আপনার প্রতিষ্ঠানে কোন পরিকল্পনা আছে কি? (হ্যাঁ=১, না=২) .....

৩৬. পাট জাগ দেওয়ার জন্য যথেষ্ট পরিমাণে পানি পাওয়া গিয়েছিল কি ? (হ্যাঁ=১, না=২) .....

৩৬.১ যথেষ্ট পরিমানে পানি পাওয়া না গেলে চাষীরা কিভাবে পাট জাগ দিয়েছিলেন ?.....

৩৭. পাটের জাগ ডুবিয়ে রাখার জন্য কী কী দ্রব্য ব্যবহার করার জন্য পরামর্শ দিয়েছেন?

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৩৮. প্রকল্পাধীন শতকরা কতভাগ কৃষক "রিবন" পদ্ধতিতে পাট পচিয়েছিলেন ? .....

৩৯. আধুনিক পদ্ধতিতে পাটচাষ, নাবী পদ্ধতিতে বীজ উৎপাদন ও আধুনিক পদ্ধতিতে পাট পচানোর ওপর কতটি প্রদর্শনী করেছেন?

পাট চাষ.....বীজ উৎপাদন..... পাট পচানো.....

২৯.১ প্রতিটি প্রদর্শনীর জন্য মাঠ দিবসের ব্যবস্থা হয়েছে কি? (হ্যাঁ=১, না=২) .....

৪০. সময় ও প্রয়োজনমত পাট চাষীগণ রাসায়নিক সার পেয়েছিলেন কি ?..... (হ্যাঁ=১, না=২)

৪০.১ পেয়ে থাকলে কী কী সার পেয়েছেন ?

.....

.....

.....

৪১. আপনি পাটবীজ বপনের সময় থেকে পাট কাটা পর্যন্ত কতবার/কতদিন পাট চাষীর ক্ষেত পরিদর্শন করেছেন ?----------দিন

৪২. আপনি তালিকাভূক্ত প্রত্যেক পাট চাষীর জমি নিয়মিত ভাবে পরিদর্শন করেছেন কি ? (হ্যাঁ=১, না=২) .....

৪৩. ও-৯৮৯৭/ও-৭২/জেআরও-৫২৪ জাতের পাট চাষে চাষীদের আগ্রহ কিরুপ ছিল ?.....

ক) সন্তোষজনক=১, খ) মোটামুটি=২, গ) অসন্তোষজনক=৩

৪৪. ও-৯৮৯৭/ও-৭২/জেআরও-৫২৪ জাতের পাটের ফলন দেশী পাটের চেয়ে শতকরা কতভাগ বেশী ছিল ?.....

৪৫. প্রকল্পাধীনে উৎপাদিত সব পাট প্রকল্প সহায়তায় বিক্রয় হয়েছে কি ? (হ্যাঁ=১, না=২) .....

৪৬. প্রকল্প বাস্তবায়নের সময় কী কী সমস্যার সম্মুখীন হয়েছলেন ?

ক) ----------

খ) ----------

গ) ----------

ঘ) ----------

৪৭. আপনি কি কৃষি সম্প্রসারণ অধিদপ্তরের উপজেলা কৃষি কর্মকর্তার সাথে পাট চাষ মৌসুমে দেখা করেছেন? (হ্যাঁ=১, না=২) ....

৪৭.১ উত্তর হ্যাঁ হলে তার কাছ থেকে পাট চাষ বিষয়ে কোন পরামর্শ পেয়েছেন কি? (হ্যাঁ=১, না=২) .....

৪৭.২ কৃষি সম্প্রসারণ অধিদপ্তরের মাঠ পর্যায়ের সম্প্রসারণ কর্মীদের সহযোগিতা পেতে আপনার মতে কি করা উচিত?

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৪৮. প্রকল্পের সফল বাস্তবায়নের জন্য কোন পরামর্শ থাকলে উল্লেখ করুন।

ক)----------

খ)----------

গ)----------

ঘ)----------

৪৯. পাট উৎপাদনে একর প্রতি খরচ কত ?

(ক) ও-৯৮৯৭ .....

(খ) দেশী .....

৫০. কী কী করলে প্রকল্পের কাজ ও অগ্রগতি সুষ্ঠু হবে বলে আপনি মনে করেন।

ক)----------

খ)----------

৫১. আপনার কর্ম এলাকা কতটি উপজেলায় বিস্তৃত? .....

৫২. আপনি কী মনে করেন আপনার কর্মক্ষেত্র অনেক বড়। এখানে আরও পদ সৃষ্টি করা দরকার। (হ্যাঁ=১, না=২) .....

তথ্য প্রদানকারীর নামসহ সীল ও স্বাক্ষরঃ **তারিখঃ**

সাক্ষাৎকার অনুসূচি-৫: ফোকাস গ্রুপ আলোচনা (FGD)

"উচ্চ ফলনশীল (উফশী) পাট ও পাটবীজ উৎপাদন এবং উন্নত পাট পচন প্রকল্প (২য় সংশোধন)" শীর্ষক প্রকল্পের নিবিড় পরিবীক্ষণ
আইএমইডি, পরিকল্পনা মন্ত্রণালয়, ঢাকা।

ফোকাস গ্রুপ আলোচনার বিষয়:

১. বীজের উৎস

২. জাত

৩. বোনার সময়, পদ্বতি সারিতে/ছিটিয়ে

৪. কি কি সার ব্যবহার করা হয়েছে

৫. বীজ শোধন

৬. কোন কোন পোকার আক্রমণ হয়েছে ও দমন ব্যবস্থা

৭. কোন কোন রোগের আক্রমণ হয়েছে ও দমন ব্যবস্থা

৮. পাটের গাছ পাতলা করণ

৯. পাটের পাতা পচানো ও বায়োমাস

১০. পাটের জাগ দেয়া

১১. রিবন রেটিং

১২. পাটের আশেরঁ শ্রেণিবিণ্যাস

১৩. নাবী পদ্ধতিতে পাট বীজ উৎপাদন

১৪. কান্ড ও ডগা কাটিং পদ্ধতিতে পাটবীজ উৎপাদন

১৫. পাচঁ (৫) বছর আগের তুলনায় পাটের আশ ও বীজ উৎপাদনে শতকরা কতভাগ উন্নয়ন হয়েছে

১৬. পাচঁ (৫) বছর আগের তুলনায় পাট চাষদির আর্থ-সামাজিক অবস্থা কেমন উন্নতি হয়েছে

১৭. প্রকল্প বাস্তবায়নের সময় কি কি সমস্যার সম্মুখীন হয়েছলেন ?

১৮. কী কী করলে প্রকল্পের কাজ ও অগ্রগতি সুষ্ঠু হবে বলে আপনি মনে করেন।

১৯. প্রকল্পের সফল বাস্তবায়নের জন্য কোন পরামর্শ থাকিলে উল্লেখ করুন।

২০. প্রকল্পে চাষী নির্বাচনের ক্ষেত্রে কৃষি সম্প্রসারণ অধিদপ্তরের মাঠ পর্যায়ের কর্মকর্তাদের সাথে আলোচনা হয়েছিল কি না?

২১. প্রকল্পের বিশ্লেষণ?

২১.১ শক্তিশালী দিক:.....

২১.২ দুর্বল দিক: .....

২১.৩ সুযোগ: .....

২১.৪ হুমকি: .....

২২. আধুনিক পদ্ধতিতে পাট চাষ, বীজ উৎপাদন ও পাট পচানোর ওপর প্রদর্শনী পরিচালনা ও মাঠ দিবস অনুষ্ঠানের ফলাফল পর্যালোচনা

সাক্ষাৎকার অনুসূচি-৬: ক্রয় পদ্ধতি পর্যালোচনার প্রশ্নমালা/চেকলিষ্ট

"উচ্চ ফলনশীল (উফশী) পাট ও পাটবীজ উৎপাদন এবং উন্নত পাট পচন প্রকল্প (২য় সংশোধন)" শীর্ষক প্রকল্পের নিবিড় পরিবীক্ষণ
আইএমইডি, পরিকল্পনা মন্ত্রণালয়, ঢাকা।

প্যাকেজের নামঃ

ক্রমিক	বিবরণ	নির্ধারিত সময়	প্রকৃত	বিলম্ব	কারণ
(ক) দরপত্র আহ্বান সংক্রান্ত					
১.	প্যাকেজ/দরপত্র নংঃ				
২.	কাজের ধরণ: মালামাল/কার্য/সেবাঃ				
৩.	দরপত্র অনুয়াযী প্যাকেজের নামঃ				
৪.	প্রতিটি প্যাকেজে কতটি করে লট আছেঃ				
৫.	ক্রয় পদ্বতিঃ				
৬.	দরপত্র পত্রিকায় প্রকাশ করা হয়েছে কিনা। প্রকাশের তারিখ ও পত্রিকার নাম।				
৭.	দরপত্র (১ কোটি টাকার উর্ধ্বে) সিপিটিউ এর ওয়েব সাইটে প্রকাশ করা হয়েছে কিনা।				
(খ) দরপত্র দাখিল সংক্রান্ত					
৮.	দরপত্র দাখিলের তারিখ কত ছিল?				
৯.	কতগুলো দরপত্র বিক্রয় করা হয়েছে?				
১০.	কতগুলো দরপত্র জমা পড়েছে?				
১১.	পূনঃদরপত্র আহ্বান করা হয়েছিল কিনা?				
(গ) দরপত্র উম্মুক্তকরণ ও মুল্যায়ন সংক্রান্ত					
১২.	"দরপত্র উম্মুক্ত কমিটি" এর কত জন সদস্য সমন্বয়ে গঠিত হয়েছিল?				
১৩.	"দরপত্র উম্মুক্ত কমিটি"এর কতজন সদস্য দরপত্র উম্মুক্তকরনের সময় উপস্থিত ছিলেন?				
১৪.	দরপত্র মূল্যায়নে কমিটি হতে ০১ (এক) জন সদস্য "দরপত্র উম্মুক্ত কমিটি"-তে অর্ন্তভুক্ত করা হয়েছিল কিনা?				
১৫.	দরপত্র মূল্যায়ন কমিটিতে অত্র দপ্তরের বাইরের দপ্তর হতে ০২ (দুই) জন সদস্য অর্ন্তভুক্ত ছিলেন কিনা?				
১৬.	কত তারিখে দরপত্র মূল্যায়ন শেষ করা হয়েছে।				
১৭.	উপযুক্ত (Responsive) দরদাতার সংখ্যা কত?				
১৮.	দরপত্র মূল্যায়ন রিপোর্ট কত তারিখে যথাযথ কর্তৃপক্ষের নিকটজমা দেয়া হয়েছিল?				
১৯.	কত তারিখে দরপত্র চুড়ান্ত ভাবে অনুমোদিত হয়েছে?				
২০.	দরপত্র Delegation of Financial Powerঅনুযায়ী যথাযথ কর্তৃপক্ষ কর্তৃক অনুমোদিত হয়েছে কিনা?				
(ঙ) কার্যাদেশ প্রদান সংক্রান্ত					
২১.	কত তারিখে Notification of Award জারী করা হয়েছে?				
২২.	Initial Tender Validity Period এর মধ্যে Contract Award করা হয়েছে কিনা?				
২৩.	Contract Award CPTU-এর Web site-এ প্রকাশ করা হয়েছিল কিনা?				

ক্রমিক	বিবরণ	নির্ধারিত সময়	প্রকৃত	বিলম্ব	কারণ
২৪.	প্রাক্কলিত মূল্য (টাকা)				
২৫.	উদ্ধৃত দর (টাকা)				
২৬.	চুক্তি মূল্য (টাকা)				
২৭.	চুক্তি অনুযায়ী কাজ শেষ করার তারিখ কত ছিল?				
২৮.	বাস্তবে কাজ সমাপ্তির তারিখ উল্লেখ করুন।				
২৯.	কাজ সমাপ্তিতে বিলম্ব হয়ে থাকলে Liquidated Damageআরোপ করা হয়েছে কিনা?				
৩০.	কাজটি মুল ঠিকাদার (প্রথম কার্যাদেশ প্রাপ্ত ঠিকাদার) কর্তৃক সমাপ্ত হয়েছিল কিনা?				
(চ) বিল প্রদান সংক্রান্ত					
৩১.	প্রকল্পের দায়িত্বপ্রাপ্ত কর্মকর্তা কর্তৃক কাজটি সম্পূর্ণভাবে সমাপ্ত মর্মে প্রত্যায়নের তারিখ কত?				
৩২.	ঠিকাদারের চুড়ান্ত বিলের পরিমাণ ও দাখিলের তারিখ কত?				
৩৩.	কর্তনকৃত আয়কর+ভ্যাট এর পরিমাণ (টাকা)				
৩৪.	বিলম্বে কোন বিল পরিশোধ করা হয়েছে কিনা?				
৩৫.	বিলম্বে বিল পরিশোধের জন্য Interest পরিশোধ করা হয়েছে কিনা?				
(ছ) দরপত্রের গ্রহণ যোগ্যতা ও স্বচ্ছতা সংক্রান্ত					
৩৬.	দরপত্র প্রক্রিয়াকরণের কোন পর্যায়ে কোন ধরনের অনিয়ম হয়েছে-এ বিষয়ে আপনি কিছু জানেন কিনা?				
৩৭.	কোন অনিয়ম হয়ে থাকলে তা কোন পর্যায়ে এবং কি ধরনের অনিয়ম হয়েছে সে বিষয়ে কিছু জানেন কিনা?				
৩৮.	দরপত্র প্রক্রিয়া করণ/কার্যাদেশ প্রদান বিষয়ে কোন ধরনের অভিযোগ ছিল কিনা।				
৩৯.	অভিযোগের কারণে কোন দরপত্রের Award modificationকরতে হয়েছে কিনা?				
৪০.	কোন অভিযোগ থাকলে উহা নিস্পত্তি হয়েছে কিনা?				

তথ্য প্রদানকারীর নামসহ সীল ও স্বাক্ষরঃ

তারিখঃ

ক্রয় সংক্রান্ত পরিবীক্ষণ ছক

প্যাকেজ নং / বিবরণ	১	২	৩	৪	৫	৬	৭	৮	৯	১০
কাজের নাম										
প্রক্কলিত মূল্য (লক্ষ টাকা)										
চুক্তি মূল্য (লক্ষ টাকা)										
দরপত্র আহ্বানের তারিখ										
দরপত্র পত্রিকায় প্রকাশের তারিখ										
দরপত্র (১ কোটি টাকার উর্ধ্বে) সিপিটিউ এর ওয়েব সাইটে প্রকাশের তারিখে?										
দরপত্র দাখিলের শেষ তারিখ										
দরপত্র মূল্যায়নের শেষ তারিখ										
দরপত্র মূল্যায়ন রিপোর্ট কর্তৃপক্ষের নিকট জমা দেয়ার তারিখ										
দরপত্র চুড়ান্তভাবে অনুমোদনের তারিখ										
NoA জারির তারিখ										
Contract Award CPTU-এর ডবনংরঃব-এ প্রকাশ করার তারিখ										
চুক্তি স্বাক্ষরের তারিখ										
চুক্তি অনুযায়ী কাজ সমাপ্তের তারিখ										
বাস্তবে কাজ সমাপ্তির তারিখ										
খউ আরোপ করা হয়েছে কি										
প্রকল্পের দায়িত্বপ্রাপ্ত কর্মকর্তা কর্তৃক কাজটি সম্পূর্ণভাবে সমাপ্ত মর্মে প্রত্যয়নের তারিখ										
ঠিকাদারের চুড়ান্ত বিল দাখিলের তারিখ										
বিল পরিশোধের তারিখ										
বিলম্বে বিল পরিশোধের জন্য Interest পরিশোধ করা হয়েছে কি?										

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