



# USAID Agricultural Extension Support Activity (AESA)

## Baseline Survey Report

On

Smallholder Access to Micro Finance through A - Card

Dhaka Ahsania Mission

CARE-Bangladesh and mPower

March 2017



## Base line survey Report on Smallholder Access to Micro Finance through A - Card.



Submitted to  
**Dhaka Ahsania Mission**  
House # 7 (2nd & 3rd Floor), Road # 2/1,  
Banani, Dhaka, Bangladesh

Submitted by  
**Md. Al - Masud**  
**Agro Microfinance Adviser/Consultant**  
**USAID AESA Project**

*USAID Disclaimer: This report is made possible through support provided by the United States Agency for International Development (USAID). The content and opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development or the United States Government.*

## Table of Contents

|  |    |
|--|----|
| Executive Summary.....   | 7  |
| 1.Introduction to AESA.....  | 9  |
| 1.1 Project Goal, Objectives and Approach.....                     | 9  |
| 2. Introduction to A-Card .....                                    | 10 |
| 2.1 Background .....   | 11 |
| 2.2 Farmer selection criteria .....                                | 12 |
| 3. Purpose and objective of the baseline study.....                | 13 |
| 4. Methodology.....  | 13 |
| 4.1 Study area and survey population .....                         | 13 |
| 4.2 Study method and data collection tools and techniques .....    | 13 |
| 4.3 Data entry, processing and analysis.....                       | 14 |
| 5. Limitations of the study .....                                  | 14 |
| 6. Survey Findings .....   | 14 |
| 6.1 Households socio-economic and demographic characteristics..... | 14 |
| 6.2 Farming practices of A-card holder farmers .....               | 15 |
| 6.3 Inputs requirement status .....                                | 17 |
| 6.4 Types and purpose of Mobile Phone Usages:.....                 | 17 |
| 6.5 Banking, Savings & Credit Related Information .....            | 18 |
| 7. Conclusion and Recommendations.....                             | 21 |
| Annexure-1: Baseline survey tools.....                             | 21 |
| Annexure –2.....   | 37 |

### List of tables:

|  |    |
|--|----|
| Table 1: Union wise distribution of respondents.....             | 13 |
| Table 2: Socio-demographic characteristics of respondents.....   | 15 |
| Table 3: Input and cost of service .....                         | 16 |
| Table 4: Crop wise average per decimal yield and sales stat..... | 17 |
| Table 5: Types of crops cultivated in the last season .....      | 37 |
| Table 6: Average per decimal production cost (Land) .....        | 37 |
| Table 7: Average per decimal production cost (Gender).....       | 37 |
| Table 8: Average per decimal production cost (Income).....       | 38 |
| Table 9: Mode of transaction (input purchase) .....              | 38 |
| Table 10: Mobile phone Usages.....                               | 38 |
| Table 11: Access to Bank and finances .....                      | 39 |
| Table 12: Status of savings of A-card holder farmers .....       | 39 |
| Table 13: Savings modality.....                                  | 39 |
| Table 14: Sources of credit and loan size.....                   | 40 |
| Table 15: Status of loan utilization .....                       | 40 |

### List of Figures

|   |    |
|---|----|
| Figure 1: Satisfaction level on loan interest with bank.....  | 19 |
| Figure 2: Satisfaction level on loan interest with MFI's..... | 20 |

## Acronyms

A-Card – Agricultural Card

AEMO – Agricultural Extension and Marketing Officer

AESA- Agricultural Extension Support Activity

AFC – Agro Finance Coordinator

DM- District Manager

FF- Field Facilitator

FO- Field Officer

FPG – Farmers Producers Group

FtF – Feed the Future

ICT – Information Communication Technology

ID – Identification

NFC- Near Field Communication

SDC- Society Development Committee

USAID - United States Agency for International Development

## **Acknowledgment**

Firstly, I would like to thank all our respondents who gave us their valuable time & heartily response to us. All the field facilitators and Field officers must be thanked for their sincere effort to collection of data during the survey period. Again, great thanks to the management personnel for their kind cooperation.

I am grateful to Mr. Bidyuth K Mahalder, Honorable Chief of Party, for his kind concern to the study. I would like to give thanks to Mr. Shoeb Ahmed, DCOP for his kind cooperation, and Dr. Shantana Rani Halder for her kind support and feedback to finalize the report. I would like to give thanks Mr. Aklachur Rahman, Agro Micro Finance Coordinator, Mr. Ibrahim Kadir, District Manager, Faridpur, for their endless cooperation & services. I would like to give special thanks to Diptimoy Chakma, Biplob Moholder and Durgapada Sarker for spontaneously communicating with Bank, SDC (The local MFI), farmers, and retailers along with ICT team members. I am also thankful to Mr. Kazi Ashraful Hassan, ED, SDC, Mr. Bozlur Rashid, Mr. Khondoker Hamidul Islam, Mr. Monsor Ali and all branch managers for making A-card operational.

I would like to express my heartiest gratitude to field supervisors' and field facilitators from AESA/DAM and SDC for their dedicated and heartfelt effort to make the study successful. Again, I am grateful to all concerns related to the activity for their kind involvement and support. Finally I would like to thank all other CARE and mPower partner colleagues for their relevant information and the beneficiary farmers to make A-card operational.

## **Executive Summary**

The USAID Agricultural Extension Support Activity with the collaboration of a commercial bank (Bank Asia) and local MFI/NGO has taken a new initiative titled “Smallholders Access to Microfinance through Banks” which is also known as A-card. It is basically a digital card through which transactions are made using mobile apps.

The main objective of the baseline study was to prepare a pre-project / baseline information of the target beneficiaries (A-Card Holder farmers). The baseline survey for the A-card initiative was conducted under 9 unions of Sadar Upazila of the Faridpur district on a small number of selected farmers (100 out of 1000) those who received A-card. The data collection for the baseline study began on 12<sup>th</sup> November 2016 and was completed by 27<sup>th</sup> November 2016. The methods used for data collection were purposive sampling and individual interview method.

The farmer selection criteria for receiving A-card was based on few important categories such as having a stable monthly income of USD 75, owning total productive land area of at least 50 decimals, having a good experience in agriculture, being a permanent resident of his/her locality, being a non-defaulter of any MFI etc.

The survey findings covered individual and household level socio-economic and demographic characteristics, farm and non-farm income and expenditure, inputs and output transactions, types and purpose of mobile phone usages, banking, savings & credit related information and knowledge & perceptions about DFS (Digital Finance Services).

### Household’s socio-economic and demographic characteristics

Number of participants in the survey were 100 those who received A-card, among the participant’s male female ratio was 75% and 25% respectively. Average household size was 5.1 which are very similar considering male and female households. Majority of the respondents (61%) average monthly income was  $\leq$  20, 000Tk and about 50% of the respondents (49) age was above 45 years.

### Farming practices of A-card holder farmers

The survey found in the last cultivation season farmers were cultivated jute, rice, different kinds of pulses and vegetables. Yield rate was found highest in vegetables (34.65kg/decimal) and lowest in pulses (4.77kg/decimal), per decimal sales also highest in vegetables (BDT 589) and lowest in pulses (196 taka). Yield of jute and rice was 11.42kg and 14.91kg respectively. Small farmers ( $\leq$ 247 dec) and low income groups ( $\leq$ 20k) are spending less money and making less profit than big farmers ( $>$ 247dec) and higher income ( $>$ 20k) group. Average production cost for small farmer and lower income group was BDT 245/dec and average sales were BDT439/dec. For big farmers and higher income group, it was BDT 336 and BDT 643/dec respectively. It indicates that there are opportunities to increase production for small farmer and lower income groups. Costs of service were found double than input costs. Female farmers’ average per decimal sales was higher (BDT 615) than male (BDT 459) farmers.

### Types and purpose of Mobile Phone Usages

Among the respondents 98 farmers are using their own mobile phone and only 2 farmers are using phone of their family members. Most of the farmers (88) are using basic type of mobile phone and main purposes of the mobile phone are to making call and receive for all farmers.

### Banking, Savings & Credit Related Information

Interest rate of loans is higher in MFI's compared to bank. 36 farmers have bank account and out of them 16 farmers received loans from bank. 64 farmers' received loans from different sources, out of them 43 farmers received loans from MFI's although the interest rate of loans are higher compared to bank. Among the respondents 94 farmers can save money and majority of the farmers (69) are male. Savings were found higher in number in the case of small farmers (64) whose income is  $\leq$  20k (56). It indicates that these farmers save money to manage loan from different sources. Farmers were found more interested to receive loan from MFI's compared to bank. Small farmer (25 out of 33) and low income (24 out of 33) groups are taking loan (<50k) from MFI's. Big farmer and higher income group were less interested to receive loan. Female farmers feel free to receive loan from MFI's (19) compared to bank.

### **Recommendations**

MFI's are interested to involve more females due to credit realization. Management need to address this issue considering the sustainability of the intervention.

Financial institutions need to be attentive about the month of credit requirements during cultivation season (Rabi=September, Khorif-1= March and Kharif-2= June) by the farmers. Before the mentioned time A-Card should be in farmer's hand. Otherwise there would be a possibility of misunderstanding between MFIs and farmers.

Considering the sustainability of the intervention (A-card) management need to address some issues mentioned below -

- Adjustment and interest on unspent money.
- Farmers are expecting credit card rather debit card and 50% input 50% cash to meet up labor payment for land preparation, weeding, transportation cost etc.



## **Introduction to AESA**

During the past few decades, modern agricultural technologies based on high-yielding seeds, improved fertilizer and water management and improved pest and disease control measures helped to increase crop production an average of two to three times. But central and southwest Bangladesh has not enjoyed the same increased productivity mostly due to increasing soil and water salinity, increased flood, poor agricultural practices and limited access to equitable market systems for smallholder farmers and inadequate agriculture extension services to effectively reach these farmers with the up-to-date information and services required. Therefore, in order to improve food security and increase household incomes for farmers, especially women, in the central and southwest regions of Bangladesh an effective and wide-reaching extension service can play a central role.

To address these challenges a multi-year Agricultural Extension Support Activity (AESA), herein after referred to as the 'Ag Extension Project', is being implemented under USAID Bangladesh's Development Objective 2 (DO2): Food Security Improved. The Feed the Future (FTF) initiative in Bangladesh falls under the Do2.

Dhaka Ahsania Mission (DAM) is implementing AESA under Cooperative Agreement No. AID-388-A-13-00001 in partnership with CARE Bangladesh and mPower and is guided by the USAID Forward reform agenda. The project timeframe is October 2012 to October 2017. The original total project value was USD 23,415,619. This was revised downward to USD 19,102,418 in May 2015 during a process of strategic realignment of project strategy and targets, in consultation with the mission. AESA works in 12 districts in the central and southwest areas of Bangladesh in three divisions: Dhaka, Khulna and Barisal.

The project's aim is to strengthen the existing agriculture extension system in southwest and central Bangladesh to sustainably improve food security and nutrition for smallholder farmers.

### **1.1 Project Goal, Objectives and Approach**

#### **Project Goal**

The project's goal is to "strengthen the existing agriculture extension system in southwest and central Bangladesh to sustainably improve food security and nutrition for smallholder farmers with an emphasis on women".

#### **Project Objective**

The major objective of the project is to enhance access to and utilization of agricultural extension services by smallholder farmers - both men and women. It is working for capacity building and creating support to a farmer demand-driven agricultural extension system, synergized by the use of information communication technology (ICT).

## Project Approach

Project implementation approaches have been incorporated into the overall project implementation strategy that include:

- **Farmer Producer Group (FPG) formation** as an approach to give small holder farmers (men and women) a voice and to enable agricultural extension agents to work with small holder farmer groups;
- **Focus on Public and Private Extension Agents** realizing that many small holder farmers informally use input providers as extension agents, the project will build capacities of input providers and other informal extension agents in addition to Department of Agricultural Extension (DAE) extension agents;
- **Information Communication Technologies (ICT)** is a key focus of the project in expanding and strengthening channels through which farmers and extension agents access technical agricultural information;
- **FtF Collaboration** is an underlying assumption whereby FtF project managers will seek to identify and collaborate on areas of mutual interest and benefits across projects.

## 2. Introduction to A-Card

The 'A-card' model is a completely new invention, which aims to bring the unbanked smallholders farmers' access to financial services using debit card; is an example to date in Bangladesh where a bank and Micro Finance Institutes (MFI's) have partnered to extend agricultural loans to farmers with lower interest rate and six months flexible payback period.

The Agricultural Extension Support Activity (AESA) project started this new initiative titled "**Smallholders Access to Microfinance through Banks**" in 2016. In short it is known as, "**A-card**". The initiative supports agricultural lending to farmers through a formal banking channel so that farmers are able to access the necessary credit to purchase agricultural inputs with minimum costs and flexible payment terms.

The loans will be offered to farmers at an annual interest rate of 10% with payback made at the end of a six-month term, unlike standard MFI loans, which generally have an annual percentage rate of 25-31% and require weekly repayments over a 46-weeks period.

The 'A-card' model began through partnering with a **private commercial bank, MFIs** and another USAID project supporting **agricultural inputs retailers** in the FtF zone. Commercial bank provides agricultural loans to the smallholders at a 10% interest rate and with a six month payback period, which may be paid off in single or multiple installments.

The uniqueness of A- Card are as follows:

- **Lowest possible interest rates:** 10% flat interest will be charged only on the amount that the farmers have used for input purchases resulting into reduction in their interest payment. This rate is substantially lower in comparison to the standard rate charged by MFIs which averages 25% or more.

- **Flexible repayment time based on crop season:** The farmers will have to pay back after six months enabling substantial grace period for repayment which reduces their immediate burden for repayment prevalent under existing MFI's micro-credit scheme.
- **NFC enabled digital card:** Each input retailer is equipped with Near Field Communication (NFC) enabled smart biometric point of sale (PoS) devices, allowing farmers to buy inputs directly from them using A-Card which relieves the hassle of carrying cash. Also the retailers are paid by the bank immediately after purchased by the farmers.
- **Fingerprint verification functionality:** Every purchase will be verified using fingerprint to ensure that only intended farmers have access to purchase rights of the inputs using the card from a verified input retailer under this project.
- **Integrated access to banking system:** The input retailers and the farmers will have accounts at the bank in addition to the farmers maintaining account at the MFIs. This creates a favorable environment for both these stakeholders to be beneficiaries of financial ecosystem and access other type of financial services as necessary over time.

## 2.1 Background

In Bangladesh, about 80% of rural people, especially smallholder farmers (those with land  $\leq$  1.0 hectare), do not have access to formal bank credit and mostly depend on Micro Finance Institutions (MFIs) for traditional loans. In 2014, 693 licensed MFIs in Bangladesh disbursed USD 8.4 billion to their 34 million active borrowers<sup>1</sup>. However, the effectiveness of microfinance to benefit the very poor has been called into question as poorer borrowers can become trapped in a vicious circle of debt.

In 2012, the USAID Agricultural Extension Support Activity (AESA) project began implementation in the southwest region of Bangladesh, which is a Feed the Future (FtF) Zone of Influence (a region afflicted with poverty and with increasing soil and water salinity).

In September 2014, the project conducted a study on access to microfinance and observed that, despite their socio-economic importance, smallholders tend to have little or no access to formal credit, which limits their capacity to invest in technologies and inputs. The respondents also reported that traditional microfinance support faces a number of challenges, including: high interest rates, overlapping loans, insufficient repayment periods and lack of attention to the ultra-poor.

Based on the study findings, in 2016, the AESA project started a new initiative titled "Smallholders' Access to Microfinance through Banks". In short it is known as, "A-card". The initiative supports agricultural lending to farmers through a formal banking channel.

Agent banking networks, mobile phone banking, and credit cards are the main attributes of the A-card model, which together reduce the costs of agricultural lending to smallholder clients. The bank has developed, and continues to maintain, a client database and has planned to issue digital credit cards containing NFC (Near Field Communication) microchips to the smallholders. Retailers were required

---

<sup>1</sup>Bairagi, S. and Shadat, W. B. (2016). Cost Benefit Analysis of Traditional Versus Flexible Microfinance in Bangladesh, Copenhagen Consensus Center, p.8.

to possess a NFC enabled smart phone in order to open a bank account through an MFI-operated agent banking branch.

Agricultural inputs retailers are generally used to selling their products in cash or credit and have very limited knowledge about the use of Information and Communication Technology (ICT) for their businesses. ICT platforms could enable account to account bank transfers using a combination of the customer's NFC card and mobile device. The agricultural inputs retailers operating in the pilot areas have been organized into a group by the USAID Agro Inputs Project (AIP). The project has primarily selected AIP supported inputs retailers to join the alliance.

## **2.2 Farmer selection criteria**

The farmers who are financially insolvent, capable to earn but cannot engage in agricultural activities due to insufficient capital and monthly income more than BDT 5000, therefore it is necessary to bring them to the A card coverage. Before providing the loans, it is very important to identify the appropriate farmers.

The following criteria will be followed to select a farmer eligible for receiving A-Card:

- Farmers owning total productive land area of at least 50 decimal;
- Farmers have 1 acre/below 1 acre of cultivable land in order to get the silver A-card.
- Farmers have above 1 acre of cultivable land in order to get the Golden A-card.
- Farmers having at least one dairy cow or one bull for fattening;
- Farmers who got project provided training on value chains;
- Not a loan defaulter from any MFI;
- Monthly stable income of at least BDT 6,000 (USD 75).
- Requirement of inputs about worth of BDT 10,000 – 20,000 per season ( Within six month)
- Unable to apply modern technology due to shortage of capital
- Agriculture dependent livelihood utilizing own and lease land
- Dependent on MFI's or money lenders during cultivation season
- Experienced farmer but out of Banking loan facilities
- Socially accepted but financially weak
- Borrow money from NGO's/money lenders with high interest for agricultural activity annually.
- Experience in agricultural activity
- Permanent resident of his own locality

### **Techniques to select right farmers:**

- ◆ Her/his attendance in FPG meeting is at least 90% or not.
- ◆ Her/his relation with other's FPG members is good or not.
- ◆ In case of as a VSLA member he/she regularly buys share or not.
- ◆ The crop he is going to cultivate is it profitable or not.
- ◆ If she/he previously taken any loan from MFI than his repayment was regular or not.
- ◆ In farmers household there is more than one loan or not.

- ◆ She/he shows respect to the representative and rules of the MFI or not.
- ◆ She/he has adequate knowledge on the crop which she/he is going to cultivate.
- ◆ Her/his physical health condition is good or not.
- ◆ The loan receiver's husband or any dependent person is involved in anti-social work, takes drug or not.
- ◆ She/he is local person or not.
- ◆ She/he quarrelsome or aggressive or not.

### 3. Purpose and objective of the baseline study

The main objective of this study was to prepare a pre-project / baseline information of the target beneficiaries (A-Card holder farmers). The specific objectives of this assignment were to collect and analyze the baseline information.

### 4. Methodology

#### 4.1 Study area and survey population

The study has been conducted in AESA, DAM implementation areas, which are under 9 unions of Sadar Upazilla of Faridpur District. Total number of groups is 264 and total numbers of beneficiaries are 7,404 of AESA project in Faridpur, among them 1000 farmers will select to distribute A-Card. Currently 100 farmers received A- Card and they are the sample population for this study.

#### 4.2 Study method and data collection tools and techniques

Purposive sampling method was used to select respondent for the study those who received A –card from Bank. The baseline study followed Individual interview method. Data collection started before the end of cultivation season-Khorif- 2. Geographical distribution of respondents in different Unions of Faridpur Sadar Upazilla mentioned in the table below-

Table 1: Union wise distribution of respondents

| Upazilla       | Union         | Number of Respondent |
|----------------|---------------|----------------------|
| Faridpur Sadar | Aliabad       | 9                    |
|                | ChorMadhobdia | 1                    |
|                | Gerda         | 6                    |
|                | IshanGopalpur | 9                    |
|                | Kanaipur      | 22                   |
|                | Kojjuri       | 17                   |
|                | Krishnonogor  | 23                   |
|                | North channel | 1                    |
|                | Ombikapur     | 12                   |
|                | <b>Total</b>  | <b>100</b>           |

#### Data collection tools for the study

Under close supervision of the team leader along with his team developed the study tools (Questionnaire). After discussion with senior management of AESA related with A-Card and having feedback the tools were finalized for pilot testing. The team leader led pilot testing in the field. After

pilot survey, the study team sat together with their findings in the field and made necessary modification of the tools prior to orientation session. Then, the data collection team was oriented on the tools. During the orientation session, the tools were further updated. Initially, the tools were developed in English, and then translated into Bangla.

Data were collected by field officer and field facilitators who are working for AESA, Dhaka Ahsania Mission.

#### **4.3 Data entry, processing and analysis**

Database developed using SPSS to enter collected data into the database. To ensure data quality the consultant reviewed filled up questionnaire to checked completeness and consistency of the collected data.

#### **5. Limitations of the study**

Following limitations were observed during the study-

- At the time of data collection farmers were found busy with land preparation for robi season crops. Sometimes data were collected by seating on farm site and at the end of the day.
- A-card holders are frequently visiting retailers shop to purchase inputs by using digital card and facing IT problem with card and NFC mobile of the retailers
- As farmers do not keep any record for cost of production so calculation made based on farmers provided recall data.
- Total sales of their farm produces were not completed because some of the farmers kept a portion of their produces for better price. Therefore, in case of sales amount of farm produces for the last season was calculated considering existing market price of the crops. It may be higher than the calculation.

#### **6. Survey Findings**

Survey findings covered individual and household level socio-economic and demographic characteristics, farm and non-farm income and expenditure, inputs and output transactions, types and purpose of mobile phone usages, banking, savings & credit related information and knowledge & perceptions about DFS (Digital Finance Service).

##### **6.1 Households socio-economic and demographic characteristics**

Number of participants in the survey those who received A-card was 100, and among the participants male and female ratio was 75% and 25% respectively. Average household size was 5.1 which are very similar considering male and female households. Average earning member was 1.54, for female household it was 1.8 and for male it was 1.5. Average land holding is higher in case of male (202 decimal) than female (136 decimal). Similarly cultivable land was also much higher for male (173dec) than female (104dec). Average homestead area was more or less similar for both male and female households.

72% respondents' education level was numeric to primary level and only 28% respondents' education level was above primary. Female respondents were less educated than male. Only 4% female's education level was above primary.

Majority of the respondents (61%) average monthly income was  $\leq$  20, 000 taka and about 50% of the respondents (49) age was above 45 years.

Table 2: Socio-demographic characteristics of respondents

| Particulars                       | Male | Female | Total |
|-----------------------------------|------|--------|-------|
| Number of respondents             | 75   | 25     | 100   |
| Average HH Size                   | 5.1  | 4.9    | 5.1   |
| # of income earners               | 1.5  | 1.8    | 1.54  |
| Average Landholding (decimal)     | 202  | 136    | 185   |
| Average Homestead land (decimal)  | 29   | 35     | 30    |
| Average Cultivable land (decimal) | 173  | 104    | 157   |
| Education                         |      |        |       |
| Numeric                           | 16   | 9      | 25    |
| Till Primary                      | 35   | 12     | 47    |
| Above primary                     | 24   | 4      | 28    |
| Monthly HH Income category        |      |        |       |
| <=20,000                          | 43   | 18     | 61    |
| >20,000                           | 32   | 7      | 39    |
| Farmer's age category             |      |        |       |
| <=35 years                        | 17   | 7      | 24    |
| 36-45 years                       | 15   | 12     | 27    |
| >45 years                         | 43   | 6      | 49    |

## 6.2 Farming practices of A-card holder farmers

### Types of crop land size and cost of production in the last season:

Major crops cultivated by the respondents were Jute -93, farmers using average 125.66 decimal of land, rice 41- farmers -94.53 decimal, different kinds of pulses (Pulses includes -Spices, Lentil, Mung Bean, Grass pea, Sesame, Cummins etc.) -18 farmers - 55.38 decimal and vegetables -13 farmers average 31.53 decimal of lands.

Jute was found to be the popular crop in the study area and was cultivated more (93 farmers) than rice (41) and other crops (30) were cultivated by the respondents in the last season. Small farmers (<=247 dec.) and low income group (<=20K) are mostly involved with rice, jute and vegetables cultivation. Pulses were cultivated more by the big farmers 11 (out of 17) and higher income group 10 (out of 18).Vegetables was cultivated by all categories of farmers. Among the respondents 41 farmers cultivated 2 crops (jute and rice), 18 farmers cultivated three (3) crops (jute, rice, vegetables, pulses or others).

Among the respondents 78% are small<sup>2</sup> farmers and 28% are big<sup>3</sup>. Considering land size average production costs per decimal for small farmer were 243 taka and for large farmers it was 365 taka and per decimal average production costs was BDT 270. Average per decimal sales for large farmer was

<sup>2</sup> Small farmers those land size is <=247 decimal

<sup>3</sup> Big farmers those land size is >247 decimal

higher (BDT 683) than small farmers (BDT 446). It indicates that small farmers are spending less money and making less profit. Average harvest and sale costs were almost same for small and large farmers.

Average per decimal production costs for male (BDT 254) was less than female (BDT 319), but average per decimal sales for female (BDT 615) was higher than male (BDT 459). On the other hand harvest cost is less in case of female (BDT 22) than male (BDT 28). Sale cost is more or less same both for male and female.

Average per decimal production cost was higher in higher income<sup>4</sup> group (BDT 307) than lower income group (BDT 247). Average per decimal sales was remarkably higher in higher income group (BDT 602) than lower income group (BDT 432). Harvesting and sale costs were same for both higher and lower income group. In the last cultivation season average per decimal production costs were BDT 270 and per decimal sales was BDT 489.

Table 3: Input and cost of service

| Particulars                   | Sex  |        | Land  |      | Income |      |
|-------------------------------|------|--------|-------|------|--------|------|
|                               | Male | Female | Small | Big  | <20K   | >20K |
| Average Input costs (Taka)    | 2313 | 1347   | 1817  | 2468 | 1652   | 2923 |
| Average cost of service(Taka) | 3929 | 3712   | 3242  | 4866 | 2565   | 6534 |

Depending on the nature of expenditure the total production costs categorizes into two groups. Input cost - like seed, fertilizers, pesticides, herbicides etc. that can be paid by A-card and Service charge or kinds of inputs - like renting power tiller for land preparation, labor costs for weeding, transportation cost for harvesting and selling produces etc. need to pay directly in cash to the service providers.

Input costs and service charge usually depends on land size for agricultural production. Female farmers' average per decimal input costs was remarkably less (BDT 1347) than male farmers (BDT 2313). But average per decimal service charge was higher both for male and female compare to input cost.

Average service charge was near to double than input costs. For big farmers cost of service charge was BDT 4866 against the input cost 2468 taka and for higher income group service charge was BDT 6534 but input costs were BDT 2923.

#### **Yield and sales amount of produces for the last cultivation season:**

---

<sup>4</sup> Higher income group >20k  
Lower income group <=20k



Table 4: Crop wise average per decimal yield and sales stat

| Crops     | Average yield per decimal(kg) | Average Price per kg (Taka) | Average per decimal sales (Taka) |
|-----------|-------------------------------|-----------------------------|----------------------------------|
| Jute      | 11.42                         | 42                          | 480                              |
| Rice      | 14.91                         | 20                          | 298                              |
| Pulses    | 4.77                          | 41                          | 196                              |
| Vegetable | 34.65                         | 17                          | 589                              |

Per decimal yield was highest in vegetable 34.65kg and lowest in pulses 4.77. Price of jute was highest BDT 42 per kg and lowest was vegetable BDT 17per kg. Considering per decimal sales it was highest in vegetables 589 taka and lowest in pulses 196 taka. Per decimal yield of rice was 14.91 and price per kg was BDT 20.

Considering all crops in the last cultivation season average per decimal production costs was BDT 245 and average per decimal sales was BDT 487.

#### **Non-farm income of respondents:**

Among the respondents 51 farmers have both agricultural and other sources of income. Last year average non-farm income was BDT 73255. Nonfarm sources of income were small business, seasonal employment, auto van driving and remittance. 49 farmer's income totally depends on agriculture.

#### **6.3 Inputs requirement status**

Input requirement depends on seasonality which includes khorif- 1, khorif- 2 and Robi season. 93% farmers required inputs in March for the season Khorif-1, for khorif-2, majority of the farmers (53%) required inputs in June and for the Robi season 61% farmers required inputs in October.

#### **Mode of transactions input purchase:**

Most of the farmers (78) purchase inputs by cash considering gender, land size and monthly income groups. Average 29 farmers purchased inputs by partial credit. Among them only 7 are female.

All most all farmers are travelling markets 4 times or more than 4 times to manage inputs. Among the respondents only 11 female farmers were travelling markets more than 4 times.

Small farmers and lower income groups are travelling to the market more frequently than big farmers and higher income group and their average per time travel cost was less (BDT19) than big farmers (BDT 27) and higher income group.

#### **6.4 Types and purpose of mobile phone usage:**

Among the respondents 98 farmers are using their own mobile phone and only 2 farmers are using phone of their family members. Most of the farmers (88) are using basic type of mobile phone and main purpose of using the mobile phones are to dial and receive calls.

Smart phones are used mostly by male those education level are above primary and income >20k. Only 3 farmers are using mobile phones for banking purpose and their education level is above primary and income >20k. No one is using internet. On an average 2 mobile phones are using per household and 88 farmers agreed to use mobile phone for financial transaction.

## **6.5 Banking, Savings & Credit Related Information**

Among the respondents only 36 farmers have savings account in bank and the account holders are mostly male (29). The number of bank accounts were large among small farmers (22) and higher income group (20). Out of 36 account holders, 16 farmers opened bank account to manage loan. Loan accounts are mostly opened by the small farmers (10) and lower income group (9). Only 2 farmers have current account and their income >20k.

64 respondents do not feel like opening a bank account and thus they do not own any account. Those who have bank account they do not have ATM card but they have heard about it. 90 farmers mentioned they didn't think of using such card earlier. All the respondents mentioned that transaction by using this type of card is prestigious in the society. Minimum time requirement to visit nearest bank/agent bank/ATM/MFIs was 5 minutes and in average it was 28 minutes. Average each time travel costs was BDT 34.

### **Status of savings of the respondents:**

Among the respondents 94 farmers can save money and majority of the farmers (69) are male. Savings was found higher in number in case of small farmers (64) and those income is <= 20k (56). It indicates that these farmers save money to manage loan from different sources.

Savings in bank is higher in case of small farmer (24 out of 36) and lower income group (24 out of 36) than big farmers and higher income group. Only 6 female farmers (out of 36) save their money in bank. Savings in MFI's is also higher in small farmers (35 out of 51) and lower income group (29) than big farmers and higher income group. Female farmers (20) feel free to save their money in MFI's compared to bank. Male farmers (69) under lower income group saved more money than female (25) and higher income group.

Among the respondents 43 farmers save their money at home. Majority of them are small farmer (24) and lower income group (29) and most of them (33) are male.

Among the respondents 46% (43) farmers save their money at home, at MFI's/NGO's - 54% (51) and at Bank -38% (36).

Average last year savings was highest among the big farmers (BDT 30,446) and lowest in small farmers (9,603 taka). Average savings was also higher (19755 taka) in higher income group than lower income group (BDT 13,482). Average savings was higher in male than female.

### **Savings modality:**

Among the respondents majority of the farmer's (49) savings modality was monthly, weekly for 25 farmers and only 6 farmers savings modality was annual.

Weekly savings modality was higher (14) in lower income group, small farmer 22 and in case of male 14. Monthly saving modality was also higher in lower income group (26), small farmer (39) and in case of male farmers (35).

Satisfaction level on interest rate of savings, (53) farmers out of 81 was unsatisfied, 2 was highly unsatisfied and 2 farmers were highly satisfied.

### **Sources of credit:**

Among the respondents 64 farmers' received loans from different sources, 43 farmers received loans from MFI's, 19 from Bank and 2 farmers from cooperatives.

Mostly male (12 out of 15) and small farmers (10 out of 15) received loan (<50k) from bank. Only 3 female farmers received loan from Bank. Considering income group it was about 50% (<20k – 8 and >20k – 7). Only few farmers (3) farmers received loan >50k from bank and their income was > 20k.

Farmers were found more interested to receive loan from MFI's compare to Bank. Small farmer (25 out of 33) and low income (24 out of 33) groups are taking loan (<50k) from MFI's. Big farmer and higher income group were less interested to receive loan. Female farmers feel free to receive loan from MFI's (19) compared to bank.

**Status of loan utilization:**

Loans are utilized mostly by the small farmers and lower income group and this loan is supporting them (52) to improve farm production. Male farmers are utilizing loan simultaneously more than female. On the other hand small farmers (35) and low income group (25) are utilizing loan simultaneously more than big farmer and higher income group. Only 6 farmers are utilizing more than one loan at a time and most of them are female (5 out of 6). Non-financial service are mostly received by the male farmers (5 out of 6) and higher income group. In case of loan repayment, male farmers are facing problem more than female farmers. Small farmers (15 out of 20) are also facing problem to repay the loan and at the same time higher income group are also facing problem to repay the loan (11 out of 20).

**Happiness with loan interest rate:**

Those who received loans 89% (57 out of 64) farmers are not happy with loan interest rate from different sources.

In case of bank loan interest rate, majority 58% (21 out of 36) of the respondents mentioned indifferent. This means that they have nothing to say as it was decided by the bank.

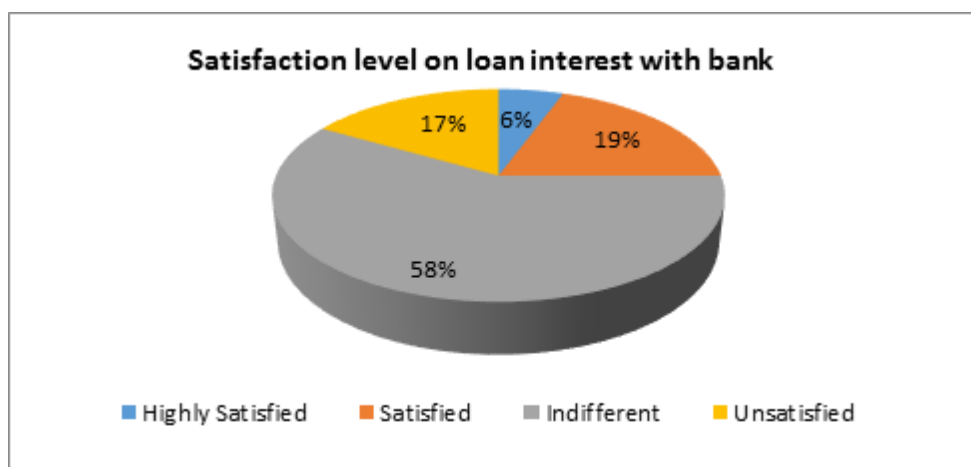


Figure 1: Satisfaction level on loan interest with bank

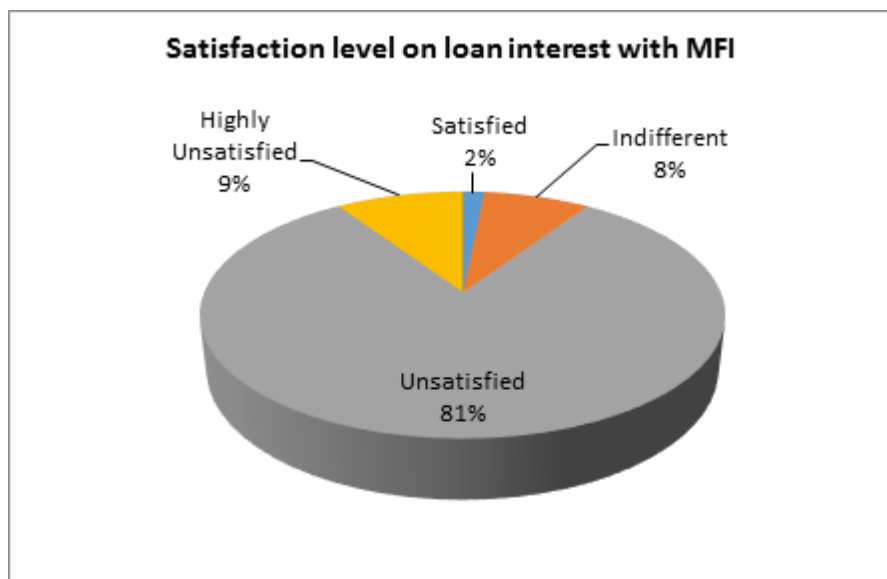


Figure 2: Satisfaction level on loan interest with MFI's

Loan interest rate with MFI's 81% (52 out of 64) respondent were unsatisfied. Considering interest rate of loans farmers are satisfied with bank compared to MFI'S. But there are some advantages and disadvantages both for banks and MFI's mentioned by the respondents are as follows- .

**Advantage and disadvantage of loans from different financial institutions:**

**Banks:**

**Advantages**

- Opportunity of rescheduling
- Less harassment for installment
- No need to deposit weekly/monthly savings

**Disadvantages**

- Mortgage (Original papers of asset)
- Number of certificates from Union Porishad
- Interest rate of loan
- Bank environment (especially private banks) is not farmer's friendly
- Chance of losing assets
- Have to visit bank to pay loan installment

**Micro Finance Institutions (MFIs):**

**Advantages:**

- No mortgage
- Less documents
- No need to visit MFIs to deposit loan installment
- Farmers friendly environment

**Disadvantage:**

- Must be member of savings group

- Loan interest rate is too high.
- Deposit savings weekly/monthly
- Frequent reminder to reimburse loan (social harassment)

#### **Knowledge and ideas on digital financial services:**

All respondents heard about agent banking because they already received A-card. Loan savings account with agent bank and an account with formal commercial bank (Bank Asia) is a prerequisite to receive A-Card. Digital card (A-Card) is for buying agricultural inputs only, though there are other services also (all services of formal commercial bank) available with agent bank.

Mobile SIM registration is the national requirement; therefore all respondents registered their mobile phone SIM using biometric system. Most of the respondents (76%) heard about POS machine.

Majority of the respondents (69%) are interested to use biometric based transaction. The justification they mentioned, 1) no need to remember PIN number and 2) no one can use the card without his fingerprint if it is stolen or missing. On the other hand those who prefer PIN based transaction; they can send someone to the retailers with PIN number in case of emergency or illness.

#### **7. Conclusion and Recommendations**

MFI's are interested to involve more female farmers due to credit realization. The management needs to address this issue considering the sustainability of the intervention.

Farmers who can save  $\leq 10,000$  taka per year, are unable to manage inputs at the time of cultivation season from their own savings. This is why they are lending money from different sources with high interest rate. These farmers might be the potential beneficiary for A-card initiative.

Financial institutions need to be attentive about the month of credit requirements during cultivation season (Rabi=September, Kharif-1= March and Kharif-2= June) by the farmers. Before the mentioned time A-Card should be in farmer's hand. Otherwise scope of misunderstanding will increase between the MFI's and farmers.

Farmers are traveling at least three times to manage inputs from the market and they have to spend half of the day each time and there are cost involvements also. Therefore, it is important to select retailers closer to the producer groups.

Considering the sustainability of the intervention (A-card) management need to address some issues mentioned below -

- Adjustment and interest on unspent money.
- Farmers are expecting credit card rather debit card and 50% input 50% cash to meet up labor payment for land preparation, weeding, transportation cost etc.

#### **Annexure-1: Baseline survey tools**

**USAID Agricultural Extension Support Activity**

**A-Card Holder Farmers Baseline survey Questionnaire**

**Section 1- Demographic Information**

|   |  |  |        |
|---|--|--|--------|
| Data ID   |  | Mobile No.   |        |
| Name  |  | Account No.  |        |
| Father/Husband's Name                             |  |  |        |
| FPG Name  |  |  |        |
| FPG no  |  | FID:   |        |
| Village   |  |  |        |
| Union   |  |  |        |
| Upazila   |  | District   |        |
| Occupation  | <input type="checkbox"/> Farmer<br><input type="checkbox"/> Service<br><input type="checkbox"/> House wife<br><input type="checkbox"/> Agril. business<br><input type="checkbox"/> Fish farming<br><input type="checkbox"/> Fish / Fingerling trader | <input type="checkbox"/> Small non agril. business<br><input type="checkbox"/> Inputs seller<br><input type="checkbox"/> Arotder / Middle man<br><input type="checkbox"/> Nursery operator<br><input type="checkbox"/> Business man<br><input type="checkbox"/> Other..... |        |
| Marital Status                                    | Married <input type="checkbox"/>   | Unmarried <input type="checkbox"/>   |        |
| Age (years)                                       | <input type="checkbox"/> 18-23<br><input type="checkbox"/> 24-29   | <input type="checkbox"/> 30-35<br><input type="checkbox"/> 36-45<br><input type="checkbox"/> 45+   |        |
| Sex   | <input type="checkbox"/> Female  | <input type="checkbox"/> Male  |        |
| Education   | <input type="checkbox"/> Illiterate<br><input type="checkbox"/> Numeric Literate<br><input type="checkbox"/> Till Primary<br><input type="checkbox"/> Vocational/Technical   | <input type="checkbox"/> SSC<br><input type="checkbox"/> HSC<br><input type="checkbox"/> Bachelors<br><input type="checkbox"/> Masters   |        |
| Family members (No.)                              | Total  | Male   | Female |
| Earning Members (No.)                             |  |  |        |
| Monthly Income (Average of last six month income) | <input type="checkbox"/> <=10,000 Tk <input type="checkbox"/> 10,001-20,000 Tk<br><input type="checkbox"/> 20,001-30,000 Tk <input type="checkbox"/> 30,001-40,000 Tk  |  |        |

|   |  |
|---|--|
|   | <input type="checkbox"/> 40,001-50,000 Tk <input type="checkbox"/> > 50,000 Tk |
| Total household land (Decimal):           |  |
| Land category                             | Decimal  |
| Own Land (Homestead area including pond ) |  |
| Own Cultivable land                       |  |
| Land lease inn                            |  |
| Land lease out                            |  |

## Section 2- Occupation details

### 1. What type of farming are you involved in (what did you cultivate last season)? (could be multiple answers)

| Crop Type  | Code |
|--|------|
| Rice   | 1    |
| Jute   | 2    |
| Wheat  | 3    |
| Maize  | 4    |
| Lentil / Mung bean/ Grass Pea/Sesame/Black cumin | 5    |
| Vegetables(names):                               | 6    |
| Fish/Shrimp Farming                              | 7    |
| Livestock (Milking / Beef Fattening)             | 8    |
| Others (Specify)                                 | 9    |

### 2. What types of crop cultivated in last season and land area (Decimal)

| Name of crop | Land area | Own | Lease |
|--------------|-----------|-----|-------|
|              |           |     |       |
|              |           |     |       |
|              |           |     |       |
|              |           |     |       |
|              |           |     |       |

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

**3. What was your total cost of production for the last season?**

| Particulars                              |                      | Amount in BDT        |
|--|----------------------|----------------------|
| Leased land                              |                      |                      |
| land preparation (labor+ machinery rent) |                      |                      |
| Input                                    | Chemical fertilizer: |                      |
|  | Organic fertilizer:  |                      |
|  | Irrigation:          |                      |
|  | Weeding              |                      |
|  | Seed:                |                      |
|  | Pesticide:           |                      |
|  | Others (specify)     |                      |
| <b>Harvesting :</b>                      |                      | <b>Amount in BDT</b> |
| Labor                                    |                      |                      |
| Transport                                |                      |                      |
| Selling                                  | Transport:           |                      |
|  | Arot:                |                      |
|  | Bazar Tole:          |                      |
| Others(Specify):                         |                      |                      |
| <b>Total</b>                             |                      |                      |

**4. What was your total Sales from farming last season in BDT?**



| Crop name    | Total production (Kg) | Own consumption (Kg) | Sale volume (Kg) | Unit Cost (Taka) | Amount in (BDT) |
|--------------|-----------------------|----------------------|------------------|------------------|-----------------|
|              |                       |                      |                  |                  |                 |
|              |                       |                      |                  |                  |                 |
|              |                       |                      |                  |                  |                 |
|              |                       |                      |                  |                  |                 |
|              |                       |                      |                  |                  |                 |
|              |                       |                      |                  |                  |                 |
| <b>Total</b> |                       |                      |                  |                  |                 |

#### 5. Additional Source of income besides farming

| Source              | Income per year in BDT |
|---------------------|------------------------|
| Small Business      |                        |
| Remittance          |                        |
| Seasonal employment |                        |
| Others (Mention)    |                        |

### Section 3- Transaction Patterns

#### Buying

#### 6. Which times of the season do you need to buy inputs?

| Crop Season | Crop Names | Time of input purchase |
|-------------|------------|------------------------|
| Kharif -1   |            |                        |
| Kharif-2    |            |                        |
| Robi        |            |                        |

#### 7. How do you pay for your inputs?

|  |   |
|--|---|
| Full Cash                                  | 1 |
| Partial cash and rest in tranches (credit) | 2 |
| Cheque                                     | 3 |
| Bank Transfer                              | 4 |
| MFS  | 5 |
| Others (mention)                           | 6 |

8. How many times a season do you need to travel to collect/buy inputs?
9. What is the cost of each travel in BDT?
10. How do you sell your produces?

|  |   |
|--|---|
| Full Cash                                  | 1 |
| Partial cash and rest in tranches (credit) | 2 |
| Cheque                                     | 3 |
| Bank Transfer                              | 4 |
| MFS  | 5 |
| Others (mention)                           | 6 |

11. What do you do with the money you receive after selling crops?  
Do you take it home, spend it on the day or deposit in the bank?

#### Section 4- Mobile Phone Usage

12. Whose phone do you use?

|                              |   |
|------------------------------|---|
| Own                          | 1 |
| Member of the same household | 2 |
| Friend                       | 3 |

|                        |   |
|------------------------|---|
| Neighbor               | 4 |
| Rent from retail store | 5 |
| Others (Specify)       | 6 |

13. What type of a mobile phone do you use?

| Category | Code | Mobile set brand |
|----------|------|------------------|
| Basic    | 1    |                  |
| Feature  | 2    |                  |
| Smart    | 3    |                  |

14. How many members in your family have mobile phones? Please tell which family members have phones

15. Why do you use mobile phones for mainly?

Making & receiving calls ..... 1

SMS ..... 2

To access the internet..... 3

To play games ..... 4

For mobile banking ..... 5

Listen to music and Radio ..... 6

To get news of different things..... 7

To take pictures ..... 8

Others (Specify) -----9

16. Will you be willing to use applications which help you to send/receive money remotely?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

**Section 5: Banking, Savings & Credit Related Information**

**Relationships with Banks/Agent banking branches of Banks/MFI**

17. Do you have any type of accounts in a bank?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

18. For those who have Bank account ask the type of account

|                       |   |
|-----------------------|---|
| Saving account        | 1 |
| Current Account       | 2 |
| Fixed Deposit Account | 3 |
| Loan Account          | 4 |
| Others (specify)      | 5 |

19. For those who do not have a bank account, please ask why they haven't opened one

20. With bank accounts, have you a bank card?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

and do you know how to use it?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

21. To those without bank accounts, does anybody in your family have a bank card?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

Have they ever explained how it works with his family?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

22. If you have never used such a card but you have seen or heard of them, what do you know about them?

23. Have you ever thought about using one of these cards?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

If so, why ? If no, why not?

24. Do you think using or possessing or using cards is prestigious?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

Why or why not?

25. How much time you need to go to the nearest bank/agent banking branch/ATM/MFI branch (in minutes)?

26. How far is your nearest bank/agent banking branch/ATM/MFI branch located (in Km)?

27. How much does it **cost** (in BDT) to travel the nearest bank/agent banking branch/MFI branch?

### Savings

28. Can you save money?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

29. Where do you save money?

| Particulars              | Code | Interest on savings | Approx savings amount |
|--------------------------|------|---------------------|-----------------------|
| Somewhere hidden in home | 1    |                     |                       |

| Particulars                         | Code | Interest on savings | Approx savings amount |
|-------------------------------------|------|---------------------|-----------------------|
| With MFI/NGO                        | 2    |                     |                       |
| With Banks                          | 3    |                     |                       |
| Cooperative Society/Village Society | 4    |                     |                       |
| Others (mention)                    | 5    |                     |                       |

**30. Savings modality**

|                  |   |
|------------------|---|
| Weekly           | 1 |
| Monthly          | 2 |
| Annually         | 3 |
| Others (mention) | 4 |

**31. Are you satisfied with the rate of interest on savings?**

|                    |   |
|--------------------|---|
| Highly Satisfied   | 1 |
| Satisfied          | 2 |
| Indifferent        | 3 |
| Unsatisfied        | 4 |
| Highly Unsatisfied | 5 |

**32. How much did you save last year?**

**Credit**

**33. Do you need to take credit to finance your farming or other activities?**

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

**34. Sources of Credit**

| Source                           | Code | Tenor | Int. Rate | Amount taken/outstanding | Time of Loan | Loan processing time | Repayment terms | Reason for taking loan |
|----------------------------------|------|-------|-----------|--------------------------|--------------|----------------------|-----------------|------------------------|
| Banks                            | 1    |       |           |                          |              |                      |                 |                        |
| MFIs                             | 2    |       |           |                          |              |                      |                 |                        |
| Informal money lenders (mohajon) | 3    |       |           |                          |              |                      |                 |                        |
| Cooperative loan                 | 4    |       |           |                          |              |                      |                 |                        |
| Friends and Family               | 5    |       |           |                          |              |                      |                 |                        |
| Others (mention)                 | 6    |       |           |                          |              |                      |                 |                        |
| VSAL                             | 7    |       |           |                          |              |                      |                 |                        |

**35. Have the loans that you have outstanding helped to improve your farming performance?**

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

How so?

**36. Have the loans that you have outstanding helped you to earn greater profit from selling of crops?**

|                    |     |   |                   |
|--------------------|-----|---|-------------------|
| If yes then please | Yes | 1 | elaborate how so? |
|                    | No  | 2 |                   |

37. Do you have loans running simultaneously?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

Do you service multiple loans at the same time?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

38. If you have taken loans from MFI, are there any non-financial benefits?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

such as insurance coverage or training?

39. How do the **creditors** collect money from you? Do they come to your place or you have to go to their office to repay debt? How many times do they call you per month?

40. In case you have to go and repay them. What is the time and money cost of making trips to their office? How many times do you have to make such trips in a month?

41. Are you having any problems repaying the loan timely?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

If so, why are you facing the problem?

42. Are you happy with interest rate (%) of your loan?

|     |   |
|-----|---|
| Yes | 1 |
|-----|---|



|    |   |
|----|---|
| No | 2 |
|----|---|

43. Satisfaction level with the source of credit:

|                    |                    |   |
|--------------------|--------------------|---|
| Banks              | Highly Satisfied   | 1 |
|                    | Satisfied          | 2 |
|                    | Indifferent        | 3 |
|                    | Unsatisfied        | 4 |
|                    | Highly Unsatisfied | 5 |
| MFIs               | Highly Satisfied   | 1 |
|                    | Satisfied          | 2 |
|                    | Indifferent        | 3 |
|                    | Unsatisfied        | 4 |
|                    | Highly Unsatisfied | 5 |
| Informal (Dadon)   | Highly Satisfied   | 1 |
|                    | Satisfied          | 2 |
|                    | Indifferent        | 3 |
|                    | Unsatisfied        | 4 |
|                    | Highly Unsatisfied | 5 |
| Cooperative loan   | Highly Satisfied   | 1 |
|                    | Satisfied          | 2 |
|                    | Indifferent        | 3 |
|                    | Unsatisfied        | 4 |
|                    | Highly Unsatisfied | 5 |
| Friends and family | Highly Satisfied   | 1 |
|                    | Satisfied          | 2 |
|                    | Indifferent        | 3 |
|                    | Unsatisfied        | 4 |

|        |                    |   |
|--------|--------------------|---|
|        | Highly Unsatisfied | 5 |
| Others | Highly Satisfied   | 1 |
|        | Satisfied          | 2 |
|        | Indifferent        | 3 |
|        | Unsatisfied        | 4 |
|        | Highly Unsatisfied | 5 |

Reasons for the responses

44. Are you satisfied with the repayment terms?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

Please elaborate your response

45. What are the pros and cons of taking loans from formal Bank?

46. What are the pros and cons of taking loans from MFI/NGOs?

47. What are the pros and cons of taking loans from informal sources?

**Section 6: Knowledge and Perception about DFS(Digital Finance Service)**

48. Have you heard of Agent Banking?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

49. Do you have an account with agent banking branch?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

50. What kind of service did you take from agent banking branch?

|                       |   |
|-----------------------|---|
| Saving account        | 1 |
| Current Account       | 2 |
| Fixed Deposit Account | 3 |
| Loan Account          | 4 |
| Others (specify)      | 5 |

51. Have you registered your phone SIM through Biometric process?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

If yes, then how was that experience for you?

52. Have you heard of POS machines?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

Have any one of you ever used or seen someone using it?

|     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |

Those who have used it please narrate your experience -----

53. Would you prefer PIN based or biometric based transaction platform for your transaction needs?

Data Collected By:

Name of verifier:

Name:

Designation:

Designation:

Signature:

Signature:

Date:

Date:

## Annexure –2

Table 5: Types of crops cultivated in the last season

| Particulars | Sex  |        | Land               |                  | Income |      |
|-------------|------|--------|--------------------|------------------|--------|------|
|             | Male | Female | Small<br>≤247 dec. | Big >247<br>dec. | <20K   | >20K |
| Rice        | 24   | 17     | 29                 | 11               | 25     | 14   |
| Jute        | 70   | 23     | 61                 | 32               | 57     | 36   |
| Pulses      | 17   | 2      | 6                  | 11               | 8      | 10   |
| Vegetables  | 11   | 0      | 7                  | 3                | 3      | 3    |

Table 6: Average per decimal production cost (Land)

| Land category    |        | Production<br>cost/decimal | Sale/decimal | Production<br>cost share | Harvest cost<br>Share | Sell cost<br>share |
|------------------|--------|----------------------------|--------------|--------------------------|-----------------------|--------------------|
| ≤ 247<br>decimal | Mean   | 243                        | 446          | 68                       | 26                    | 1                  |
|                  | Number | 78                         | 78           | 78                       | 78                    | 78                 |
| >247<br>decimal  | Mean   | 365                        | 683          | 67                       | 27                    | 1                  |
|                  | Number | 22                         | 22           | 22                       | 22                    | 22                 |
| Total            | Mean   | 270                        | 498          | 68                       | 27                    | 1                  |
|                  | Number | 100                        | 100          | 100                      | 100                   | 100                |

Table 7: Average per decimal production cost (Gender)

| Sex of respondent |                      | Production<br>cost /Dec. | Sale/decimal | Production<br>cost share | Harvest cost<br>share | Sell cost<br>share |
|-------------------|----------------------|--------------------------|--------------|--------------------------|-----------------------|--------------------|
| Male              | Mean                 | 254                      | 459          | 68                       | 28                    | 1                  |
|                   | No. of<br>respondent | 75                       | 75           | 75                       | 75                    | 75                 |
| Female            | Mean                 | 319                      | 615          | 67                       | 22                    | 1                  |
|                   | No. of<br>respondent | 25                       | 25           | 25                       | 25                    | 25                 |
| Total             | Mean                 | 270                      | 498          | 68                       | 27                    | 1                  |
|                   | No. of<br>respondent | 100                      | 100          | 100                      | 100                   | 100                |

Table 8: Average per decimal production cost (Income)

| Income category |              | Production cost decimal | Sale/decimal | Production costs hare | Harvest cost share | Sale cost share |
|-----------------|--------------|-------------------------|--------------|-----------------------|--------------------|-----------------|
| <=20,000 taka   | Mean         | 247                     | 432          | 70                    | 27                 | 1               |
|                 | Respondent   | 61                      | 61           | 61                    | 61                 | 61              |
| >20,000 taka    | Mean         | 307                     | 602          | 65                    | 26                 | 2               |
|                 | Respondent   | 39                      | 39           | 39                    | 39                 | 39              |
| Total           | Mean         | 270                     | 498          | 68                    | 27                 | 1               |
|                 | Total number | 100                     | 100          | 100                   | 100                | 100             |

Table 9: Mode of transaction (input purchase)

| Particulars |        | How to purchase inputs |  | Travel time |               | Average per time travel cost (Taka) |
|-------------|--------|------------------------|--|-------------|---------------|-------------------------------------|
|             |        | Full Cash              | Partial cash and rest in tranches (credit) | 4 times     | Above 4 times |                                     |
| sex         | Male   | 60                     | 23   | 36          | 39            | 23                                  |
|             | Female | 18                     | 7  | 14          | 11            | 21                                  |
|             | <20 K  | 47                     | 14   | 26          | 35            | 21                                  |
|             | >20 K  | 31                     | 14   | 25          | 15            | 24                                  |
| Land size   | <=247  | 62                     | 20   | 30          | 37            | 19                                  |
|             | >247   | 16                     | 10   | 20          | 13            | 27                                  |

Table 10: Mobile phone Usages

| Particulars       |                       | Sex |    | Education |              |               | Income |      |
|-------------------|-----------------------|-----|----|-----------|--------------|---------------|--------|------|
|                   |                       | M   | F  | Numeric   | Till primary | Above primary | <20k   | >20k |
| Mobile phone type | Basic                 | 65  | 23 | 24        | 44           | 20            | 55     | 33   |
|                   | Feature phone         | 2   |    | 1         |              | 1             | 2      |      |
|                   | Smart phone           | 8   | 2  |           | 3            | 7             | 4      | 6    |
| Phone ownership   | Own                   | 73  | 25 | 24        | 46           | 28            | 60     | 38   |
|                   | Family members        | 2   |    | 1         | 1            |               | 1      | 1    |
| Main purpose of   | Making call & receive | 75  | 25 | 25        | 47           | 28            | 67     | 33   |

|                   |                |   |   |   |   |   |   |   |
|-------------------|----------------|---|---|---|---|---|---|---|
| mobile phone uses | Mobile banking | 2 | 1 | 0 | 0 | 3 | 0 | 3 |
|                   | Internet use   | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 11: Access to Bank and finances

| Particulars      | Sex  |        | Land  |     | Income |      |
|------------------|------|--------|-------|-----|--------|------|
|                  | Male | Female | Small | Big | <20k   | >20k |
| Have any account | 29   | 7      | 22    | 14  | 16     | 20   |
| Savings account  | 29   | 7      | 22    | 14  | 16     | 20   |
| Loan account     | 12   | 4      | 10    | 6   | 9      | 7    |
| Current account  | 1    | 1      |       | 2   |        | 2    |

Table 12: Status of savings of A-card holder farmers

| Particulars                             | Sex   |        | Land          |             | Income (Taka) |       |
|---|-------|--------|---------------|-------------|---------------|-------|
|   | Male  | Female | Small <247dec | Big >247dec | <=20k         | >20k  |
| Number of respondent can save money     | 69    | 25     | 64            | 30          | 56            | 38    |
| <b>Saving place</b>                     |       |        |               |             |               |       |
| At home                                 | 33    | 10     | 24            | 19          | 29            | 14    |
| Bank's                                  | 30    | 6      | 23            | 13          | 16            | 20    |
| MFI's                                   | 31    | 20     | 35            | 16          | 29            | 22    |
| Cooperative's                           | 6     | 0      | 5             | 1           | 3             | 3     |
| Average last year savings amount (taka) | 16851 | 14292  | 9603          | 30446       | 13482         | 19755 |

Table 13: Savings modality

| Savings modality | Income |      | Sex |    | Land size      |              |
|------------------|--------|------|-----|----|----------------|--------------|
|                  | <=20k  | >20k | M   | F  | Small <247 dec | Big >247 dec |
| Weekly           | 14     | 11   | 16  | 9  | 22             | 3            |
| Monthly          | 26     | 23   | 35  | 14 | 39             | 10           |
| Annually         | 2      | 4    | 5   | 1  | 6              | 0            |
| Total            | 42     | 38   | 56  | 24 | 67             | 13           |

Table 14: Sources of credit and loan size

| Particulars                  |      | Sex  |        | Land              |                | Income |      |
|------------------------------|------|------|--------|-------------------|----------------|--------|------|
|                              |      | Male | Female | Small<br><248 dec | Big<br>>248dec | <=20k  | >20k |
| Credit source<br>bank        | <50k | 12   | 3      | 10                | 5              | 8      | 7    |
|                              | >50k | 3    | 1      | 1                 | 3              | 1      | 3    |
| Credit source<br>MFI         | <50k | 19   | 14     | 25                | 8              | 24     | 9    |
|                              | >50k | 5    | 5      | 8                 | 2              | 4      | 6    |
| Credit source<br>cooperative | <50k | 1    | 1      | 2                 |                | 2      |      |
| Total                        |      | 40   | 24     | 46                | 18             | 39     | 25   |

Table 15: Status of loan utilization

| Particulars                                | Sex  |        | Land  |     | Income |      |
|--|------|--------|-------|-----|--------|------|
|  | Male | Female | Small | Big | <20k   | >20k |
| Loan support to improve<br>farm production | 32   | 20     | 43    | 9   | 33     | 19   |
| Using loan simultaneously                  | 23   | 17     | 35    | 5   | 25     | 15   |
| More than one loan at a<br>time            | 1    | 5      | 5     | 1   | 6      |      |
| Non-financial service                      | 5    | 1      | 4     | 2   | 2      | 4    |
| Any problem to repay loan                  | 17   | 3      | 15    | 5   | 9      | 11   |