

## Assessment of Financial Market for Agriculture in Bangladesh

*Mashrufah Khatun<sup>1</sup>, Muhammad Shahrukh Rahman<sup>2</sup>, Md. Rais Uddin Mian<sup>3</sup>, Subarna Kundu<sup>4</sup>, and Farzana Akter<sup>5</sup>*

<sup>1</sup>Lecturer, Bangladesh Agricultural University,  
Mymensingh, Bangladesh

<sup>2</sup>Scientific Officer, Bangladesh Agricultural Research Institute,  
Gazipur, Bangladesh

<sup>3</sup>Associate Professor, Bangladesh Agricultural University,  
Mymensingh, Bangladesh

<sup>4</sup>Scientific Officer, Bangladesh Agricultural Research Institute,  
Gazipur, Bangladesh

<sup>5</sup>Scientific Officer, Bangladesh Agricultural Research Institute,  
Gazipur, Bangladesh

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**ABSTRACT:** The present study aims at investigating into the existing financial market for agriculture in some selected areas of Bangladesh. The sample was comprised of 27 Public and Private Sector Institutions (PPSIs), 21 Member Based Institutions (MBIs) and a set of 50 Informal Financial Intermediaries (IFIs) comprising 10 intermediaries each from moneylenders, well-to-do people, shopkeepers, businessmen, and friends and relatives. The sample was selected through purposive sampling technique. The specific objectives of this study are to examine the structure of financial market for agriculture including lending policies, loan transactions, interest rate, recovery, efficiency, linkages among the lending institutions. Both descriptive and tabular analysis was employed to achieve the objectives of the study. The study reveals that several components constituted the structure of financial market in the study area. Considerable differences existed in lending policies between PPSIs and MBIs. The average annual credit disbursement of all PPSIs was Tk 332.63 lac while it was Tk 4036.20 lac for MBIs. IFIs' average annual disbursement was Tk 16.466 lac. Share of PPSIs to the lending was 92 percent. The PPSIs interest rate varied between 8 to 11.50 per cent and those of MBIs between 14 to 20 percent. IFIs' interest rate varied from 10 to 100 per cent. MBIs have highest recovery (98 percent). PPSIs could recover only 60 per cent of their loan. MBIs are more efficient than other financial intermediaries. Linkages among the different financial intermediaries are noticeable.

**KEYWORDS:** Financial Market, credit, interest rate, collaboration, efficiency, linkages.

### 1 INTRODUCTION

In Bangladesh, the shortage of capital and lack of capital formation is one of the main problems for the farmers to adopt modern production activities. The agricultural credit has been considered as one of the crucial factors toward sustainable development of agriculture sector. Timely and easy access to credit enables farmers to purchase the required inputs and machinery for increasing agricultural production. To get more income as well as savings from agriculture pursuit efficient financial market is essential.

The Government of Bangladesh (GoB) has allocated a considerable portion of agricultural credit and also encourages other organizations (NGO-MFIs, PCBs, FCBs, etc.) to extend their lending facilities to this field. For example, in 2009/10, GoB

allocated Tk 74047.1 million to the Ministry of Agriculture for the purpose of increasing agricultural production, ensuring food security and reducing poverty (MoF, 2011). Apart from reducing customer duty on commodities in the budget of financial year 2010-11, an allocation of Tk 4,000 crore has been proposed as subsidy to the agricultural sector. In addition, the GoB takes the effort to provide necessary input supports (such as seed, irrigation, fertilizer, etc.) to the farmers. For instance, in 2009/10, about Tk 49,220 million was released as subsidy on fertilizer and for other agricultural inputs (MoF, 2011).

The financial system in Bangladesh includes Bangladesh Bank (the central bank), scheduled banks, non-bank financial institutions, microfinance institutions (MFIs), insurance companies, credit rating agencies and stock exchange. Out of 6562 scheduled bank branches operating in the country, up to end of December 2006 the nationalized commercial banks (NCBs) operate 3384 branches, of which 2146 are in rural areas and 1238 are in urban areas; Specialized Banks have 1354 branches of which 1200 are in rural areas and 154 are in urban areas; Private commercial banks (PCBs) have 1776 branches of which 488 are in rural areas and 1288 are in urban areas; and foreign commercial banks (FCBs) have 48 branches exclusively in urban areas. Out of 30 PCBs 6 have been operating as Islamic banks. After the year 2006 that total numbers of branches are increasing rapidly up to 2009.

The structure of financial market for agriculture in Bangladesh can be categorized into four categories: a) Public Sector Institutions (PSIs), b) Private Banks (PBs), c) Member Based Institutions (MBIs) and d) Informal Financial Intermediaries (IFIs). Prior to the independence of Bangladesh, the financial market comprised two components- institutional and non institutional sources. After independence many NGOs emerged which are serving the poor in many ways including credit delivery. The number of these NGOs increased many folds over the year.

All these components bear noble objective to help resource poor farmers of the country. Their help becomes of immense importance especially for the risk prone areas of northern Bangladesh. As a northern district, farmers of Rangpur need favorable financial market to enhance their production and livelihood. But studies on the financial market for agriculture emphasizing risk prone agriculture of Rangpur district are scant. With these ends in view, the present study has been undertaken to investigate financial market for agriculture in Rangpur municipal under Rangpur district of Bangladesh.

## **2 MATERIALS AND METHODS**

### **2.1 SURVEY AREA, SAMPLING AND DATA COLLECTION**

Considering the objectives of the present study Rangpur municipal under Rangpur district of Bangladesh was selected purposively as the study area. The selection of the study area was based on:

- Availability of required information;
- Easy accessibility and good transportation system;
- High expected Cooperation from the respondents with reliable information;

With a view to fulfilling the purpose of the study a pretesting survey was conducted in the Rangpur Municipal Corporation. Rangpur Municipal Corporation is a market of large number of financial intermediaries. The PSIs and PBs available in this area are Rajshahi Krishi Unnayan Bank (RAKUB), Sonali Bank, Pubali Bank, Janata Bank and Rupali Bank. Grameen Bank, Association for Social Advancement (ASA), Bangladesh Rural Advancement Committee (BRAC) and PROSHIKA are available as MBIs. In the study area, 3 branches of RAKUB, 3 branches of Pubali Bank, 4 branches of Janata Bank, 7 branches of Rupali Bank, 10 branches of Sonali Bank, 5 branches of Grameen Bank, 7 branches of BRAC, 4 branches of PROSHIKA and 5 branches of ASA exist, all of which were investigated. So, all of the PPSIs and MBIs were included in the sample. A small sample of 50 informal intermediaries comprising 10 intermediaries each from money lenders, well-to-do rural people, shopkeepers, businessmen and friends and relatives were selected for the study. Purposive sampling technique was followed for selecting required sample. Data used for the present study covered the period January-December, 2012. Data were collected during the period from March to June, 2013.

### **2.2 ANALYTICAL TECHNIQUE**

Data were presented mostly in tabular form. Some statistical measure like average, percentage graphs and tables were also used to interpret the findings. In order to judge the efficiency of different financial intermediaries functioning in the financial market, some efficiency criteria were determined making deep and effective consultation with both borrowers and lenders in the study area. These criteria are mentioned below in table 1.

**Table 1: Criteria for Judging Efficiency**

Sl. No.	Efficiency criteria	Definition
1	Formalities	An established form, especially one followed merely for the sake of procedure.
2	Security	A thing deposited or pledged as a guarantee of the fulfillment of an undertaking or the repayment of a loan, to be forfeited in case of default.
3	Time Lag	A period of time between applying for loan and getting it.
4	Adequacy	Adequacy refers to the sufficiency of credit to meet the borrowers demand.
5	Cost	An amount that has to be paid or given up in order to get credit. Cost consists of interest and other charge (both explicit and implicit) borne by the borrowers at the time of taking loan.
6	Supervision	Supervision means the action where or for what purposes loaned money is used.
7	Repayment	The act of paying back money previously borrowed from a lender. Repayment usually takes the form of periodic payments that normally include part principal plus interest in each payment.

Above table shows that efficiency criteria include both quantitative and qualitative variables. All the variables were converted numerically which are as follows:

**Table 2: Scoring of the Efficiency Criteria**

Sl. No.	Variable	Score
1.	Strict	A weight of 1 to the strict one, 2 to the next and so on up to 3 against the last was given in case of formalities.
2.	Easy	
3.	Minimum	
4.	Compulsory	A value of 1 for compulsory, 2 for minimum and 3 for the last one to measure security.
5.	None	
6.	Minimum	
7.	Weak	Strict supervision was given a score of 3, 2 to the next and 1 against the last.
8.	Strict	
9.	Absent	
10.	Satisfactory	In case of repayment, a weight of 3 was given to the satisfactory variable. Thus mediocre and unsatisfactory were weighted by 2 and 1 respectively.
11.	Mediocre	
12.	Unsatisfactory	
13.	Time Lag	3 for within 7 days, 2 for 8-14 days and 3 for 15 days and above.
14.	Range of percentage	85-90, 70-75, 60-65 per cent were given 3, 2 and 1 scores respectively in case of adequacy. In the case of cost, 25, up to 26-45, 46 and above per cent were given 3, 2 and 1 score respectively.

Efficiency was determined as

$$E_i = \frac{\sum RS_i}{\sum TS_i} \times 100$$

Where,

- E = efficiency;
- RS = realized score;
- TS = total score;
- Σ = summation; and
- i = financial intermediaries, i.e. PPSIs, MBIs and IFIs.

It was considered that an intermediary having more  $E_i$  value was more efficient compared to other financial intermediaries in the study area.

### 3 RESULTS AND DISCUSSION

#### 3.1 STRUCTURE OF FINANCIAL MARKET

Structure of financial market for agriculture is shown in Figure 1. Borrowers within the radius of municipal area got the highest opportunity of loan program.

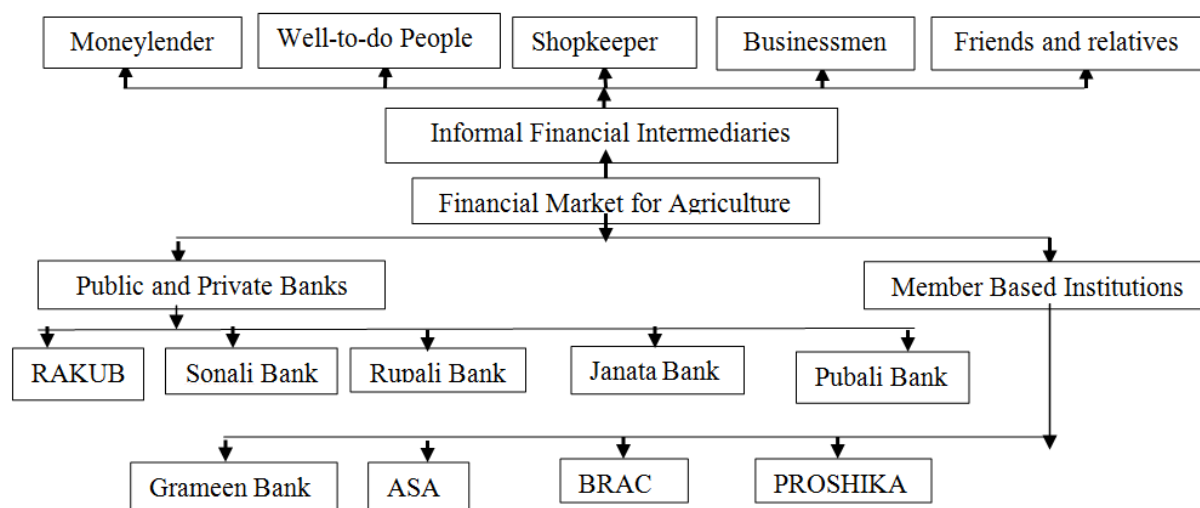


Fig 1. Structure of Financial Market for Agriculture in Study Area

Major credit programs of PSIs and PBs are presented in Table 3. The table reveals that the numbers of total borrowers from RAKUB, Sonali Bank, Rupali Bank, Pubali Bank and Janata Bank are 2711, 6000, 1250, 945 and 1282 respectively. Among the PPSIs, the highest number of borrowers were with Sonali Bank (6000 persons) and the lowest were with Pubali Bank (945 persons). Table 3 reveals areas of credit operations in Rangpur municipal by different PPSIs where RAKUB covered wide areas than any other PPSIs.

Table 3: PPSIs and their areas of credit operations in Rangpur municipal

Name of PPSIs	Coverage (borrowers)	Major credit programs
RAKUB	2711	Crops, livestock, fisheries, agricultural equipment, nursery, rural transportation, income generating activities, cash credit, consumer credit, microcredit, and rural credit.
Sonali Bank	6000	Crops, livestock, fisheries, poultry, and business.
Rupali Bank	1250	Commercial and industries
Pubali Bank	945	Business
Janata Bank	1282	Crops, livestock, fisheries, business, SME, cash credit, consumer credit, and supervises credit.

Source: Field Survey, 2013

Among the MBIs, the highest number of borrowers were from Grameen Bank (18834 persons) and the lowest were from PROSHIKA (9611 persons). All NGOs operated their credit programs in agricultural sector. Major credit programs of NGO were related to agriculture like crops, livestock and fisheries (Table 4).

**Table 4: MBIs and their areas of credit operations in Rangpur municipal**

Name of MBIs	Coverage (Borrowers)	Major Credit Programs
Grameen Bank	18834	Crops, livestock, fisheries and poultry.
ASA	12207	Crops, livestock, fisheries, poultry, small business and nursery.
BRAC	12987	Crops, livestock, fisheries, poultry and SME.
PROSHIKA	9611	Crops, livestock, fisheries, poultry and handy crafts.

Source: Field Survey, 2013

Financing by IFIs started from time immemorial. IFIs coverage of lending is whole study area. The numbers of total borrowers from the moneylenders, well-to-people, shopkeepers, businessman and friends and relatives were 500, 300, 525, 350 and 270 persons respectively. Moneylenders, well-to-people and friends and relatives disbursed credit both in cash or kind in different activities like agriculture (for rice, wheat, etc.) and non-agriculture (for small business, consumption, health and sanitation). Shopkeepers and businessmen lending are in the form of selling product on credit (Table 5).

**Table 5: IFIs and their loaning activities**

Name of IFIs	Coverage (borrowers)	Loan disbursement activities
Moneylenders	500	Aman rice, Boro rice, Wheat, small business, consumption, health and sanitation, education, and nursery.
Well-to-do people	300	Aman rice, Boro rice, Wheat, education, and consumption.
Shopkeepers	525	Non-agricultural products
Businessmen	350	Aman rice, Boro rice, Wheat, small business, and consumption.
Friends & Relatives	270	Aman rice, Boro rice, Wheat, education, and consumption.

Source: Field Survey, 2013

### 3.2 LENDING POLICIES OF FINANCIAL INTERMEDIARIES

Loan services of Public sector institutions (PSIs) and Private Banks (PBs) in the study area have been classified under the following heads a) Short Term Loan (STL): loan period is 1 year; b) Medium Term Loan (MTL): loan period is above 1 to 5 years; c) Long Term Loan (LTL): loan period is more than 5 years. Purpose and duration of loan of different terms of loan are presented in Table 6.

**Table 6: Purpose and duration of loan of STLs, MTLs and LTLs**

Terms of loan	Duration of loan	Purpose of loan
STLs	Not exceeding 18 months	Crops production, animal husbandry, poultry, farming, fishery, livestock dairy, horticulture, forestry, purchasing machinery for irrigation and agriculture goods and inputs trade, storage of agriculture goods, establishment of processing and marketing oriented industry and agro based industry
MTLs	Exceeding 18 months but within 5 years.	Horticulture/orchards, poultry farming, dairy farming, fisheries, sericulture, shallow tube-wells, power pumps including engines, agricultural equipment, income generation activities like nursery, leveling of land and jungle clearance, excavation/embankments, draft animal, bullock carts, indigenous implements, country boats, rural transportation, business, consumer credit and micro credit
LTLs	exceeding 5 years	Deep tube well, tractors and attachments, power tillers and attachments, power pumps including engine, warehouses, cold storage, land development and rural transportation.

### 3.3 LOAN SECURITY OF THE PPSIS

MBIs do not require any conventional security (capital asset) that is must for PPSIs. The member must have savings money in his/her account for being eligible to have loans from MBIs. For example, in the case of ASA and PROSHIKA a member has to save Tk. 10 for a loan of Tk. 100. That means, for any size of loan the saving in the account has to be 10 per cent (Table 7).

In case of BRAC, first time a member has to have Tk. 2 as savings for a loan of Tk. 100. That means, for any size of loan the saving in the account of the member of BRAC has to be 2 per cent. Second time, a member has to have Tk. 2.5 as savings for a loan of Tk. 100 that means the percentage of saving in the account has to be 2.5. For the third time, this respective percentage for a member has to save 3 in his/her saving account (Table 7).

*Table 7: Security Requirement of MBIs*

Name of MBIs	Security
Grameen Bank	5 members of group, one is secured to another.
ASA	Borrowers have to save 10% of the loan.
PROSHIKA	Borrowers have to save 10% of the loan.
BRAC	Has to save 2% first time, 2.5% second time and 3% third time.

Source: Field Survey, 2013

### 3.4 SECURITY FOR LOAN OF IFIS

Moneylenders keep security for their loans. Land worth Tk. 5 lac is to be kept under the disposal of the moneylenders for a loan of Tk. 1 lac. They loaned Tk. 20,000 against mortgage of 1 acre of land. Well-to-do people disbursed credit against shop or land documents. Businessmen disbursed loan against land or agricultural products. Shopkeepers do not require any specific security for the commodities they sell to the customer. But they charged relatively higher price for the product sold in kind in addition to the 60 per cent rate of interest charged. Friends and relatives do not require any specific security for the agricultural commodities. They charged relatively lower interest compared to other intermediaries.

### 3.5 INSTALLMENT OF PPSIS, MBIS AND IFIS

Crop loans as provisioned by RAKUB and Sonali Bank were to be repaid at a time along with interest. Term loans (principal plus interest) were required to be repaid in 4 equal installments for 4 years, and long-term loans were repaid in half yearly installment for six years, i.e. loan for livestock, one installment in first year and rest of the year it was repaid in half yearly installment. Agricultural equipment, i.e., tractor, power tiller loans were repaid in half yearly installments for RAKUB. Sonali Bank's agricultural loan was repaid in 33 equal monthly installments for 3 years.

*Table 8: Repayment Schedules of a Medium Term Loan Made by PPSIs (Per 25000 Tk.)*

Name of the PPSIs	Amount of loan (Tk)	Amount repaid (Tk)			Installment (no.)
		Principal	Interest	Total	
RAKUB	25,000	758	100	858	33
Sonali Bank	25,000	758	114	872	33
Rupali Bank	25,000	758	114	872	33
Pubali Bank	25,000	758	91	849	33
Janata Bank	25,000	695	111	806	36

Source: Field Survey, 2013

Table 8 shows that a medium term loan of 3 years duration must be repaid in 33 installments by all PSBs and PSs except Janata Bank which collects in 36 installments disbursed over 3 years.

Table 9: Repayment Schedule of Loans (thousand Tk.) made by MBIs

Name of MBIs	Amount of loan (Tk)	Amount repaid (Tk.)			Installment (no.)
		Principal	Interest	Total	
Grameen Bank	1,000	20	2	22	50
ASA	1,000	22	3	25	46
BRAC	1,000	22	3	25	46
PROSHIKA	1,000	22	3	25	46

Source: Field Survey, 201

Grameen Bank loans were repaid in 50 equal weekly installments on a declining basis. Loans were repaid in 46 equal weekly installments in BRAC, ASA, and PROSHIKA on a declining balance method at flat rate of 14%. Table 9 shows that average repayment per week of a borrower is Tk 22 for Grameen Bank and Tk 25 for each of all other MBIs. Total installment for repaying Tk 1,000 is 50 for Grameen Bank and 46 for each of other MBIs. All of the loans of the MBIs are required to be repaid in 46 equal weekly installments of the year except Grameen Bank.

Borrowers of moneylenders, businessmen and shopkeepers repaid their credit on monthly basis. On the other hand, borrowers of well-to-do people and friends and relatives repaid their installments with flexible terms and condition.

3.6 MAGNITUDE OF TRANSACTION, INTEREST RATE, RECOVERY AND EFFICIENCY OF FINANCIAL MARKET

Table 10 reveals loan operations of the different PPSIs. It implied that the total average shares of three PSBs were Tk 332.63 lac, while RAKUB shared alone Tk 181.502 lac (54.56 per cent) over the five years for three PSBs (Figure 2).

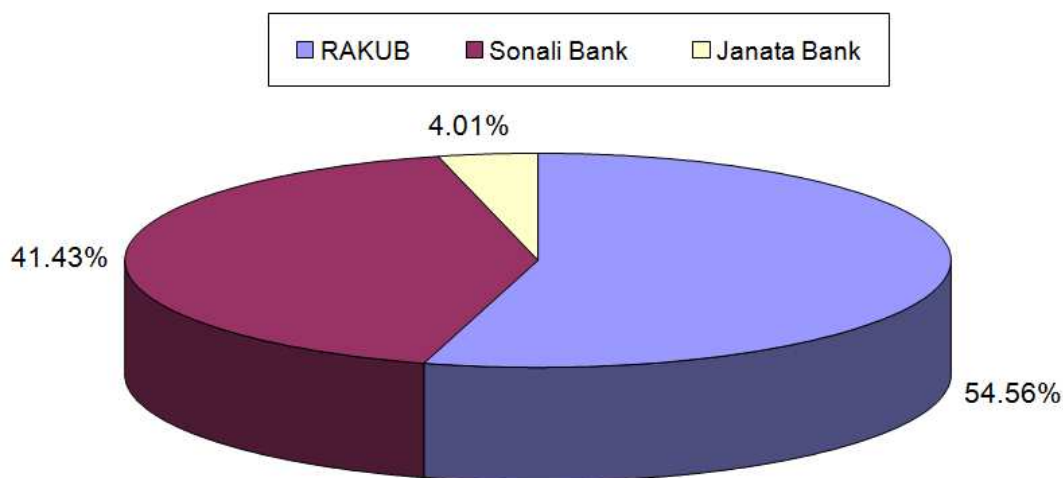


Fig. 2: Shares of Different Participants in Total PPSIs Disbursement

**Table 10: Annual Credit Disbursements for Agriculture by PPSIs during 2008-2012**

(Tk in lac)

Name of PPSIs	2008	2009	2010	2011	2012	Total	Average
RAKUB	157.11 (17.31)	158.17 (17.43)	159.33 (17.56)	186.77 (20.58)	246.13 (27.12)	907.51 (100)	181.502 (54.56)
Sonali Bank	136.00 (19.74)	137.00 (19.88)	138.00 (20.03)	138.00 (20.03)	140.00 (20.32)	689.00 (100)	137.800 (41.43)
Janata Bank	10.61 (15.92)	11.23 (16.85)	13.26 (19.90)	14.74 (22.12)	16.80 (25.21)	66.64 (100)	13.328 (4.01)
Rupali Bank	-	-	-	-	-	-	-
Pubali Bank	-	-	-	-	-	-	-
All PPSIs	303.72 (18.26)	306.4 (18.42)	310.59 (18.67)	339.51 (20.41)	402.93 (24.23)	1663.15 (100)	332.63 (100)

Source: Field Survey, 2013

‘-’ indicates nil and 1 lac = Tk 100000

Figures within the parentheses indicate percentage

**3.7 DISBURSEMENT OF MEMBER BASED INSTITUTIONS (MBIs)**

Information on the annual disbursement over the years made by the MBIs is presented in Table 11. Grameen Bank disbursed Tk 1378 lac (17.05 per cent) in 2008 which increased to Tk 1772 lac (21.93 per cent) in 2012. During the period of 2008-2012, the disbursement was higher by 23.20 per cent in the year 2012 in case of BRAC (Figure 3).

**Table 11: Annual Credit Disbursements for Agriculture by MBIs during 2008- 2012**

(Tk in lac)

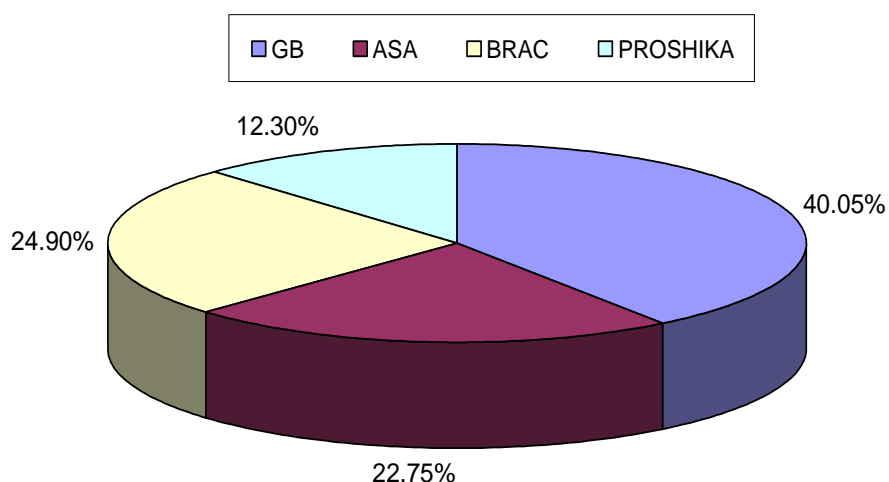
Name of MBIs	2008	2009	2010	2011	2012	Average	Total
Grameen Bank	1378 (17.05)	1522 (18.83)	1645 (20.35)	1765 (21.84)	1772 (21.93)	1616.40 (40.05)	8082 (100)
ASA	764 (16.64)	823 (17.92)	975 (21.23)	1000 (21.78)	1030 (22.43)	918.40 (22.75)	4592 (100)
BRAC	921 (18.32)	1014 (20.17)	944 (18.78)	982 (19.53)	1166 (23.20)	1005.40 (24.90)	5027 (100)
PROSHIKA	410 (16.53)	430 (17.34)	460 (18.55)	530 (21.37)	650 (26.21)	496.00 (12.30)	2480 (100)
All MBIs	3473 (17.21)	3789 (18.77)	4024 (19.94)	4277 (21.20)	4618 (22.88)	4036.20 (100)	20181 (100)

Source: Field Survey, 2013

Figures within the parentheses indicate percentages

(1 lac = Tk 100000)





**Fig. 3: Shares of Different Participants in Total MBIs Disbursement**

### 3.8 DISBURSEMENT OF INFORMAL FINANCIAL INTERMEDIARIES (IFIs)

Over the year basis the average amount of disbursement of credit made by moneylenders was Tk 5.568 lac (Table 12). It shared 33.81 per cent of total IFI credit (Fig 4). The average amount of this disbursement was Tk 3.49 lac, which shared 21.20 per cent of total informal credit.

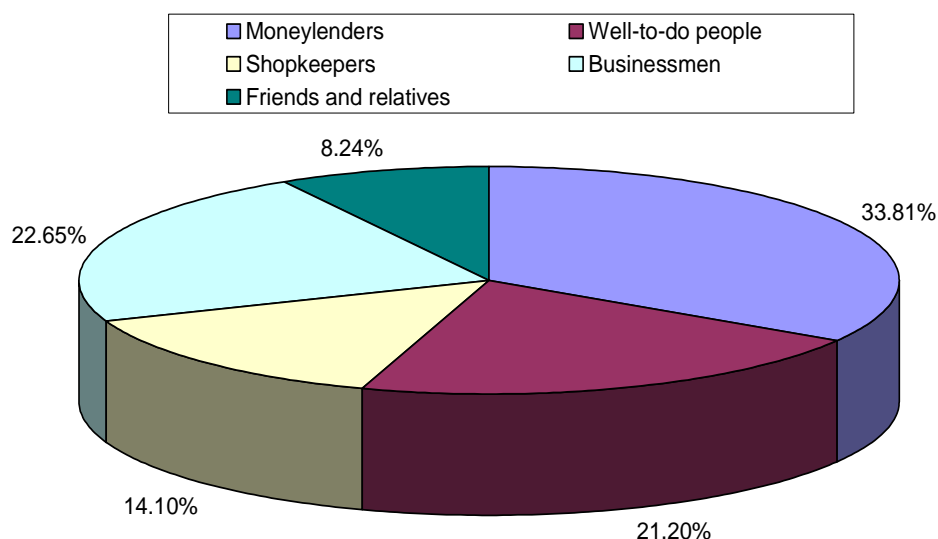
**Table 12: Annual Credit Disbursements for Agriculture by IFIs during 2008-2012**

(Tk in lac)

Name of IFIs	2008	2009	2010	2011	2012	Average	Total
Moneylenders	3.25 (11.67)	4.68 (16.81)	5.72 (20.54)	6.85 (24.60)	7.34 (26.36)	5.568 (33.81)	27.84 (100)
Well-to-do people	3.18 (18.22)	3.27 (18.74)	3.50 (20.06)	3.70 (21.20)	3.8 (21.78)	3.49 (21.20)	17.45 (100)
Shopkeepers	2.13 (18.35)	2.25 (19.38)	2.37 (20.41)	2.40 (20.67)	2.46 (21.19)	2.322 (14.10)	11.61 (100)
Businessmen	3.50 (18.77)	3.65 (19.57)	3.70 (19.84)	3.80 (20.37)	4.00 (21.45)	3.73 (22.65)	18.65 (100)
Friends & Relatives	1.00 (14.75)	1.12 (16.52)	1.31 (19.32)	1.45 (21.39)	1.90 (28.20)	1.356 (8.24)	6.78 (100)
All IFTs	13.06 (15.86)	14.97 (18.18)	16.60 (20.16)	18.20 (22.11)	19.50 (23.69)	16.466 (100)	82.33 (100)

Source: Field Survey, 2013

Figures within the parentheses indicate percentages  
(1 lac = 100000 Tk)



**Fig. 4: Shares of Different Participants in Total IFIs Disbursement**

### 3.9 FINANCE CHARGE

The finance charge on loan is payable irrespective of the financial circumstances of the borrowers, because lenders need risk premium for covering default risk and market risk. The interest is usually considered to include payment for three things: a) payment for the use of money; b) risk of losing the money loaned; and c) management and associated costs in making and servicing the loan. The micro-credit organization can make a surplus from two ways (i) disburse big size of loan with low rate of service charge and (ii) charging high rate of service charge for sensitive loan recovery. Table 13 reveals the rate of interest during the period of 2008-2012 by different PPSIs.

**Table 13: Rate of Interest during 2008-2012 of different PPSIs (per annum)**

Name of PPSIs	Rate of interest (%)									
	2008		2009		2010		2011		2012	
	Ag.	Non-ag.	Ag	Non-ag.	Ag.	Non-ag.	Ag.	Non - ag.	Ag.	Non-ag.
Sonali Bank	8	13	8	14	10	16	10	16	10	17
Janata Bank	11.5	16	10	16	10	16	10	16	10	16
Rupali Bank	-	16	-	16	-	16	-	16	-	16
Pubali Bank	-	16	-	16	-	16	-	16	-	16.5

Source: Field Survey, 2013

'-' indicates nil; no agricultural credit sanctioned this period.

RAKUB provided credit with a uniform interest rate. In the study area, RAKUB charged interest at the rate of 11 per cent for short term production loan. Interest rates for medium and long term loan ranged from 10 per cent to 15 per cent. Interest rates for agricultural loans ranged from 8 to 10 per cent for Sonali Bank and 11.5 per cent for Janata Bank during the period of 2008-2012. Table 14 shows that GB charged interest at the rate of 20 per cent for all loans except housing and sanitary activities. For agricultural loan BRAC charged interest at the rate of 18 percent.

**Table 14: Rate of Interest of MBIs (Per annum)**

Name of MBIs	Rate of Interest (%)	
	Agriculture	Non- agriculture
GB	20	8 per cent for housing loan, 5 percent for student loan.
ASA	15	-
BRAC	18	Housing loan 10%
PROSHIKA	14	-

Source: Field Survey, 2013

Table 15 shows the average rate of interest charged by different IFIs. Rates charged by the informal lenders varied across time as well as locations. Moneylenders were found to have charged higher interest rates in the study area. Table 15 shows that moneylenders charged at the range of 100-200 per cent per annum from its borrowers. Most of the times, the friends and relatives did not charge any direct interest.

**Table 15: Rate of Interest of IFIs (Per annum)**

Name of IFIs	Rate of Interest (%)
Moneylenders	100-200
Well-to-do people	80
shopkeepers	60
Businessmen	70
Friends and relatives	10

Source: Field Survey, 2013

### 3.10 RECOVERY OF LOAN

The recoverable amount of PPSIs included only a part of the amount to be collected presently and a part of previous due amount. Table 16 represents recovery of the loans disbursed by PPSIs for the period of 2008-2012. Percentage recovery figures of the RAKUB during the period, ranged from a minimum of 68 to a maximum of 83 per cent with and averages of 74.63 per cent. The average recovery was 65.19 61.52 62.34 and 40.79 per cent respectively for Sonali Bank, Janata Bank, Pubali Bank and Rupali Bank (Figure 5).

Table 17 indicates recovery situation of the member based financial intermediaries. GB's and ASA had recovery percentages of 98.328 and 98.592 per cent respectively. The overall recovery of the MBIs appeared to be 98.272 per cent. As far as the MBIs are concerned, the recovery position is much better compared to those of the PPSIs (Figure 6).

Loan recovery positions of the informal financial intermediaries are presented in Table 18. Percentage of recoverable money recovered by the IFIs were 86.14 per cent for moneylenders, 84.65 per cent for well-to-do people, 85.78 per cent for shopkeepers, 82.80 per cent for businessmen and 82.28 per cent for friends and relatives (Figure 7).

Table 16: Status of Loan Recovery by PPSIs during 2008-2012

(Tk in lac)

Name of the PPSIs	2008			2009			2010			2011			2012			Average		
	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery
RAKUB	178.40	133.80	75.00	140.54	101.38	72.00	278.20	190.50	68.00	263.00	191.98	73.00	298.40	246.93	83.00	231.708	172.918	74.63
Sonali Bank	180.00	140.00	77.78	200.00	130.00	65.00	200.00	132.00	66.00	245.00	140.00	57.14	215.00	136.00	63.25	208.00	135.60	65.19
Janata Bank	148.68	89.21	60.00	162.24	98.97	61.00	180.62	110.18	61.00	196.80	122.02	62.00	209.45	131.96	63.00	179.558	110.468	61.52
Rupali Bank	194.81	79.87	41.00	202.55	81.02	40.00	227.3	93.19	41.00	233.60	98.11	42.00	262.00	104.80	40.00	224.052	91.398	40.79
Pubali Bank	48.68	29.21	60.00	57.21	35.47	62.00	58.13	35.46	61.00	60.08	37.85	63.00	64.22	41.75	65.00	57.664	35.948	62.34
All PSIs	750.57	472.09	62.89	762.54	446.84	58.59	944.25	551.33	59.45	998.48	589.96	59.08	1049.07	661.44	63.05	900.982	544.332	60.41

Source: Field Survey, 2013

Table 17: Status of Loan Recovery by MBIs during 2008-2012

(Tk in lac)

Name of the MBIS	2008			2009			2010			2011			2012			Average		
	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery
GB	1565.80	1516.40	96.84	1638.30	1595.20	97.37	1719.70	1700.40	98.88	1789.80	1770.90	98.94	1802.10	1790.42	99.35	1703.14	1674.664	98.328
ASA	1289.60	1276.70	99.00	1398.70	1384.71	99.00	1433.30	1404.63	98.00	1450.64	1421.63	98.00	1495.20	1480.25	99.00	1413.49	1393.584	98.592
BRAC	1020.27	992.80	97.31	1137.30	1120.10	98.49	1227.40	1210.50	98.62	1286.8	1270.40	98.72	1298.70	1288.30	99.20	1194.094	1176.42	98.520
PROSHIKA	650.00	630.00	96.92	678.72	658.36	97.00	690.00	669.30	97.00	698.65	680.12	97.34	763.46	740.85	97.04	696.166	675.726	97.064
All MBIs	4525.67	4415.90	97.57	4853.02	4758.37	98.05	5070.40	4984.83	98.31	5225.89	5143.05	98.41	5359.46	5299.82	98.89	5006.89	4920.394	98.272

Source: Field Survey, 2013

Table 18: Status of Loan Recovery by IFIs during 2008-2012

(Tk in lac)

Name of the IFIs	2008			2009			2010			2011			2012			Average		
	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery	Total recoverable loan	Total loans recovered	Percentage of recovery
Moneylenders	5.14	4.29	83	5.51	4.62	84	5.75	4.90	85	6.92	5.93	86	8.50	7.67	90	6.364	5.482	86.14
Well-to-do People	4.25	3.50	82	4.55	3.76	83	4.68	3.93	84	4.72	4.00	85	5.00	4.45	89	4.640	3.928	84.65
Shopkeeper	3.34	2.75	82	3.45	2.90	84	3.65	3.10	85	3.85	3.34	87	4.00	3.60	90	3.658	3.138	85.78
Businessmen	3.60	3.00	83	3.75	3.10	83	4.25	3.43	81	4.65	3.75	81	4.80	4.15	86	4.21	3.486	82.80
Friends and relatives	2.00	1.60	80	2.20	1.80	82	2.25	1.85	82	2.55	2.10	82	2.85	2.40	84	2.37	1.95	82.28
All IFIs	18.33	15.14	82.60	19.46	16.18	83.14	20.58	17.21	83.62	22.69	19.12	84.27	25.15	22.27	88.55	21.242	17.984	84.66

Source: Field Survey, 2013

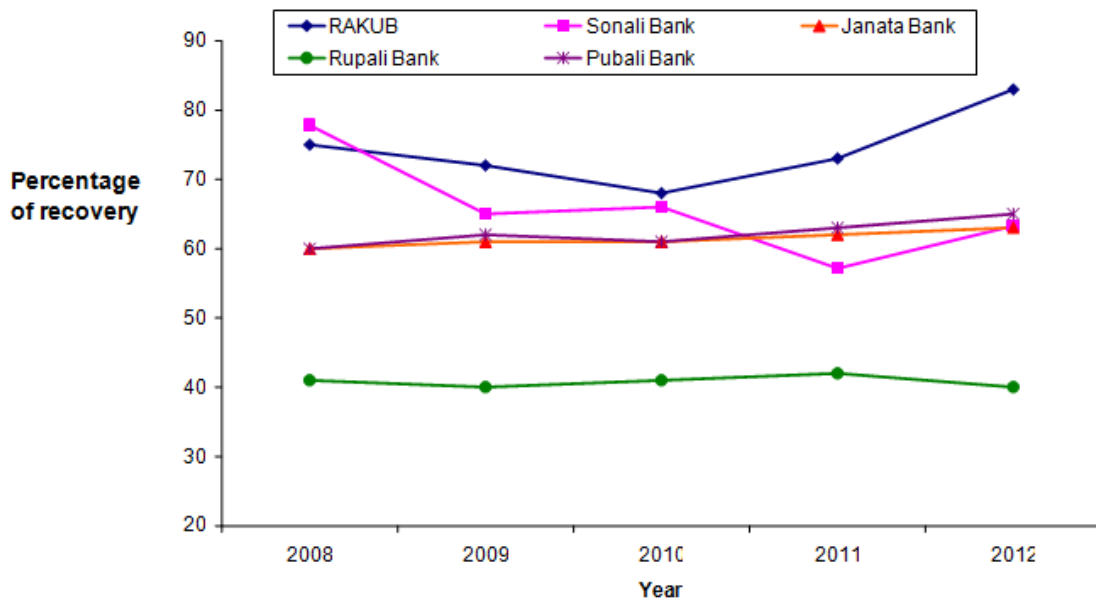


Fig. 5: Status of Loan Recovery by PPSIs during 2008-2012

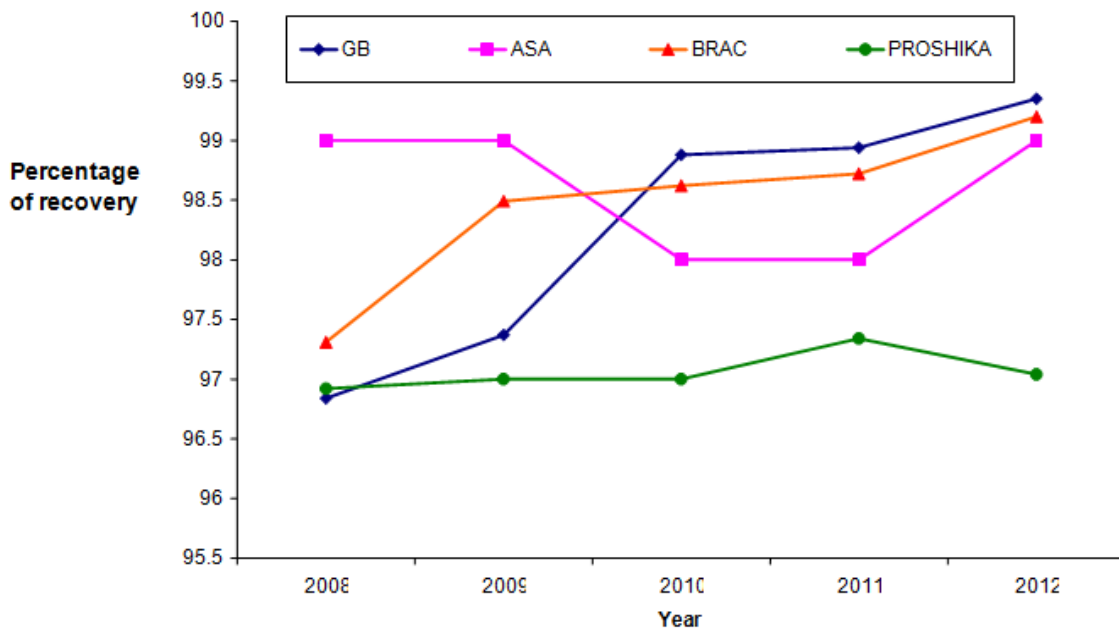


Fig. 6: Status of Loan Recovery by MBIs during 2008-2012

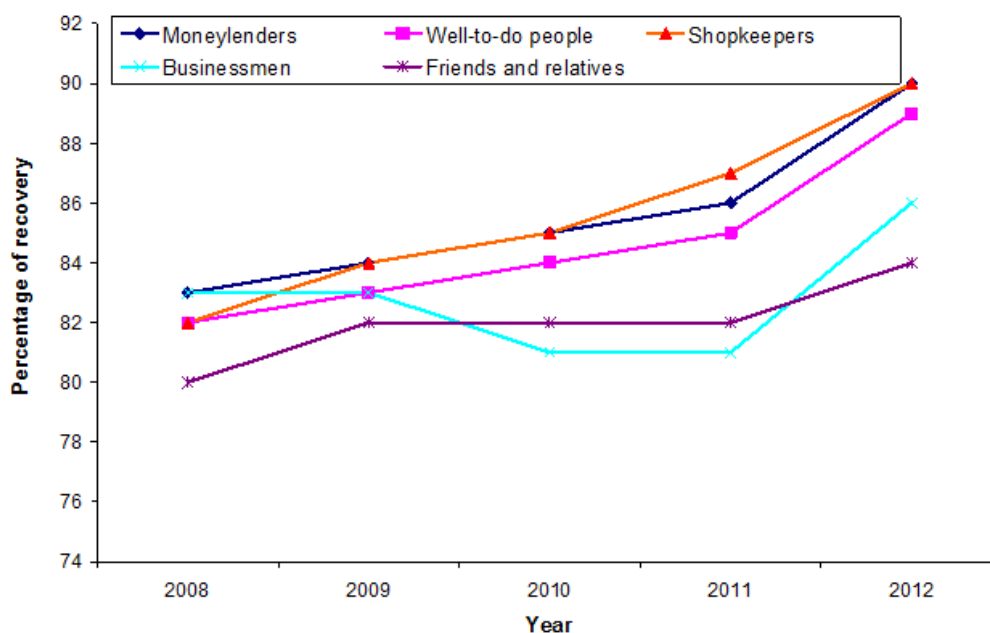


Fig. 7: Status of Loan Recovery by IFIs during 2008-2012

### 3.11 EFFICIENCY OF FINANCIAL MARKET FOR AGRICULTURE

The criteria considered for measuring efficiency of financial market for agriculture and their performance were shown in Table 19. Then efficiency of different financial intermediaries was presented in Table 20.

Table 19: Performance of Different Financial Intermediaries

Sl. No.	Criteria	PPSIs	MBIs	IFIs
1	Formalities	Strict	Easy	Minimum
2	Security	Compulsory	None	Minimum
3	Time Lag (days)	15-30	7-10	0-3
4	Adequacy (%)	60-65	85-90	70-75
5	Cost (%)	45	25	75
6	Supervision	Weak	Strict	Absent
7	Repayment	Unsatisfactory	Satisfactory	Mediocre

Source: Field Survey, 2013

Table 20: Efficiency of Different Financial Intermediaries

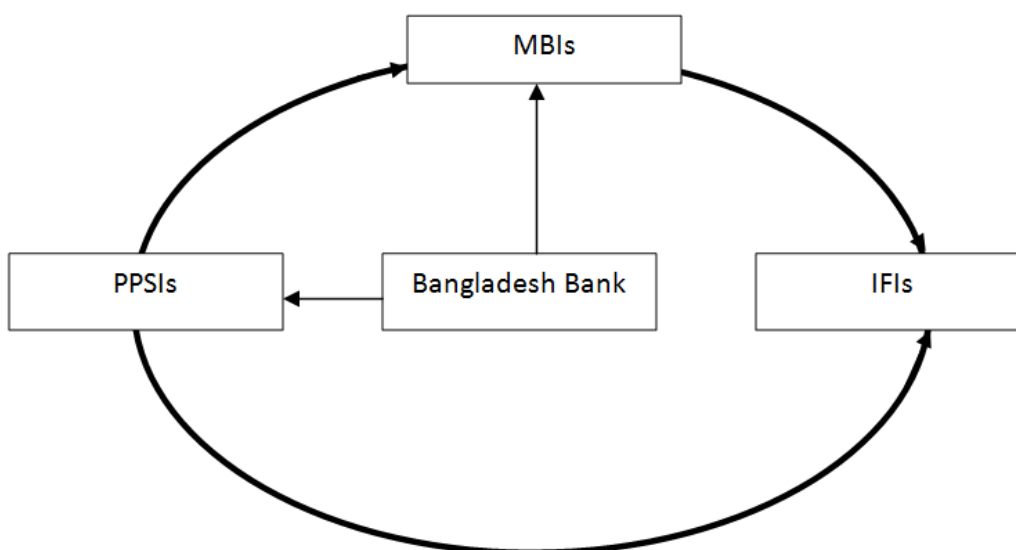
Sl. No.	Criteria	PPSIs	MBIs	IFIs
1	Formalities	1	2	3
2	Security	1	3	2
3	Time Lag	1	2	3
4	Adequacy	1	3	2
5	Cost	2	3	1
6	Supervision	2	3	1
7	Repayment	1	3	2
	Realized Score ( $\sum RSi$ )	9	19	14
	Efficiency, $E_i = \frac{\sum RSi}{\sum TSi} \times 100$	43	90	67
	Overall efficiency	66.67		

Note:  $\sum TSi = 7 \times 3 = 21$

With a view to drawing conclusion as to the efficiency of different financial intermediaries, different weights were given to each of the factors mentioned earlier. On giving weights to each of the different factors in Table 20, the scores obtained ( $\Sigma RS_i$ ) by PPSIs, MBIs and IFIs were 9, 19 and 14 respectively. So, their respective efficiency ( $E_i$ ) was 43, 90 and 67 per cent respectively by PPSIs, MBIs and IFIs. It appears from the table that the MBIs secured the highest position. It implies that MBIs has performed the best in dealing with various aspects of agricultural credit. This might have been the result of good and sound credit policy and supervision. So, MBIs is more efficient than other financial intermediaries. Moreover, overall efficiency of the financial market for agriculture (FMA) in the study area is stood at 66.67 per cent. It indicates that the FMA in the study area is not efficient in an all rounding basis.

### 3.12 LINKAGES AMONG DIFFERENT FINANCIAL INTERMEDIARIES

Linkages among the different financial intermediaries significantly inspired each other in developing a lending framework of financial market. This massive linkage outfit is well organized, pragmatic, experience-based and more practical. Fig. 8 shows that financial links existed in the study area.



*Fig. 8: Linkages among Different Financial Intermediaries*

In the study area, linkage between PPSIs and MBIs existed in many forms. The linkage between PPSIs and MBIs is taken place in the form of financing and delivering services to semi-formal institutions. PPSI act as a source of funds and financial operation is conducted by an NGO after promoting the target groups through its own network of offices and staff in the study area. PPSIs received fund from the Bangladesh Bank at concessional rate for lending to clients in the study area. The funds are directly handled by the PPSIs through direct links between clients and bankers. But some of these funds are also handled by the MBIs through PKSF, which receives fund from the PPSIs. There are financial links between the NGOs also.



Table 21: Problems and Constraints for Non-recovery of Loan by PPSIs and MBIs

Name of the financial market participants	Fund insufficiency (%)	Supervision		Non-recovery of loan					Inadequate facilities	
		Shortage of employees (%)	Dislike by borrowers (%)	Natural calamity (%)	Theft of crops, livestock and fishes (%)	Illness (%)	Expenditure for son and daughter's marriage (%)	Political pressure (%)	Low salary (%)	Lack of modern facilities (%)
Public and Private Sector Institutions (PPSIs)										
RAKUB	S	5	12	80	4	4	1	-	15	10
Sonali Bank	S	15	30	70	7	10	2	5	5	5
Pubali Bank	10	3	20	50	5	5	2	11	4	12
Rupali Bank	S	5	15	70	6	4	2	9	6	13
Janata Bank	20	8	25	50	10	7	2	7	10	2
Member based institutions (MBIs)										
GB	S	3	5	15	4	5	10	8	15	3
ASA	15	5	7	20	6	10	15	6	12	4
BRAC	S	2	6	18	9	15	3	4	8	2
PROSHIKA	30	10	5	25	15	13	13	10	18	5

Source: Field Survey, 2013

'S' indicates sufficient

Table 21: Problems and Constraints for Non-recovery of Loan by IFIs

Factors	Money-lenders (%)	Well-to-do people (%)	Shopkeepers (%)	Businessmen (%)	Friends and relatives (%)
Crop damage due to the natural calamities	50	40	15	25	10
Emergency food purchase	5	15	12	10	8
Health and sanitation	13	6	8	9	4
Education	10	5	7	8	6
Low price of rice and other crops	9	7	5	10	7
Theft and death of animal	5	10	6	8	10
Expenditure for son and daughter's marriage	7	6	5	9	8

Source: Field Survey, 2013

#### 4 CONCLUSION

Credit can play an important role by providing the needed liquidity to farmers who do not have sufficient investable funds to exploit the opportunity. Due to the prevalence of monopoly position of the creditors inherent to non-institutional credit market, institutional credit is of prime importance for enhancing production and removing inequalities. Adequate and timely provision of credit ensures that farmers to invest more in the form of modern inputs and use inputs efficiently. These increase overall agricultural productivity and food availability at the national level which is a core component of food security. In this way, the country could meet its existing food crisis. Banks providing agricultural loans are RAKUB, Sonali Bank and Janata Bank. Rupali Bank and Pubali Bank concentrate on nonagricultural lending. MBIs and IFIs also provided loans for agricultural purposes. PPSIs provided all the short, medium and long term loans. IFIs also deal with different terms of loan.

The lending procedure of PPSIs is lengthy and collateral based. The MBIs have very flexible lending policies requiring no physical collateral. The security requirement for the PPSIs loans are very hard, secured value of the assets being 1.33 to 10 times higher than the value of loan. For IFIs, the security is hard too. The linkages among the PPSIs, MBIs and IFIs exist in the study area. For measuring efficiency of financial market for agriculture some criteria were considered. Giving weights to each of the factors, PPSIs, MBIs and IFIs efficiency ( $E_i$ ) was 43, 90 and 67 per cent respectively. It reveals that the MBIs secured the highest position.

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#### **REFERENCES**

- [1] MoF (2011): Bangladesh Economic Review (2011), Ministry of Finance, Government of the Peoples Republic of Bangladesh, Dhaka.