AGRICULTURAL CREDIT STRUCTURE AND DETERMINANTS OF CREDIT REPAYMENT IN SOME SELECTED AREAS OF NATORE DISTRICT

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CERTIFICATE

This is to certify that the thesis entitled, "**AGRICULTURAL CREDIT STRUCTURE AND DETERMINANTS OF CREDIT REPAYMENT IN SOME SELECTED AREAS OF NATORE DISTRICT**" Submitted to the Department of Management and Finance, Faculty of Agribusiness Management, Sher-e-Bangla Agricultural University, Dhaka, in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE in MANAGEMENT AND FINANCE,** embodies the result of a piece of *bona fide* research work carried out by **MORIUM AKTER, Registration No. 08-03131** under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

I further certify that such help or source of information, as has been availed of during the course of this investigation has duly been acknowledged.

Dated: 15th October, 2015
Place: Dhaka, Bangladesh

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CONTENTS

CONTENTS (Contd.)

CONTENTS (Contd.)

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ABSTRACT

The present study aims at investigating into the existing agricultural credit market structure and expected changes might occur therein over the years at Baraigram upozila of Natore district. Four villages namely Kaemkola, Ahmedpur , Tirail and Masgram were selected purposively. Descriptive and inferencial techniques were used to analyze the result. Farmers considered respondents in the present study assumed to have taken loan from different sources of credit available close to the study area. Sample farmers belonged to three farm size group. Out of 120 randomly selected respondents 60.00, 26.67 and 13.33 percent were small, medium and large farmers respectively. Large and medium farmers were the major beneficiaries of public and private banks compared to small farmers because of their ability to offer collateral against loan. Member based institutions (GB and other NGOs) however, took care of these people in the study area. The large farmers have received 100 percent of their total loan from different public and private bank and the small farmers have received on an average 53.19 percent of their total credit from different member based institutions. The respondents therefore, need not to be so dependent at present on money lenders and other non-institutional sources of credit. Most of the credit demand of the respondents has been satisfied by the credit institutions available close to the study villages. A lion's share of loaned money obtained has been productively utilized by the sampled respondents implying the borrower's positive attitude towards productive use of credit. Overall loan recovery percentage observed during the study period was found to be 67.21. The percentage repaid constituted respectively 62.00, 69.03 and 75.23 for small, medium and large farmers indicating an unsatisfactory situation in the study villages. Large farmers were found relatively better loan re-payers in the study area. Farm size, education and income of borrowers were observed to influence positively and significantly the repayment performance considering all respondents together. These findings have several implications to those agencies and policy initiatives operating at local and national levels concerned with microcredit structure and repayment related problems those are primarily concerned with sustainable rural development and poverty alleviation agenda.

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

BAU	:	Bangladesh Agricultural University
BBS	:	Bangladesh Bureau of Statistics
BIBM	:	Bangladesh Institute of Bank Management
BKB	:	Bangladesh Krishi Bank
BRDB	:	Bangladesh Rural Development Board
BSBL	:	Bangladesh Samabaya Bank Limited
Dec	:	Decimal
e.g.	:	*Exempli gratia (*for example)
et al.	:	*Et alia* (and others)
etc.	:	*Et cetera* (and others)
FY	:	Financial Year
GB	:	Grameen Bank
GDP	:	Gross Domestic Product
GoB	:	Government of Bangladesh
HYV	:	High Yielding Variety
i.e	:	*Id est* (that is)
IGAs	:	Income Generating Activities
LDCs	:	Least Developed Countries
MBIs	:	Member Based Institutions
MoF	:	Ministry of Finance
MP	:	Muriate of Potash
NCB	:	Nationalized Commercial Bank
NGO	:	Non-Government Organization
No.	:	Number
PCBs	:	Private Commercial Banks
RAKUB	:	Rajshahi Krishi Unnayan Bank
RDRS	:	Rangpur Dinajpur Rural Service
SACP	:	Special agricultural Credit Programme
SCBs	:	State-owned Commercial Banks
Sq.km.	:	Square Kilometer
SSC	:	Secondary School Certificate
Tk.	:	Taka (Bangladeshi Currency)
TSP	:	Triple Super Phosphate
%	:	Percentage
^{0}C	:	Degree Celcius

CHAPTER I

INTRODUCTION

1.1. Background Information

The word agriculture is not only related to the economy of Bangladesh but also plays a major role in the rise of her elementary citizens' development. Since agriculture is the stipulation of food production, place for employment, ways of expanding export, offering more area of improvement and better standard of living for the people of Bangladesh, agricultural growth matter a lot. Agriculture contributes 16.33% of country's total GDP (2013-14 FY). About 47% of country's total labor force is still employed directly or indirectly on agriculture (MoF 2013). This sector not only employ the majority of the active labor force but also supplies food for human being as well as other subsectors and raw materials for industrial production; sustaining the rural economy and tries to balance the environmental ecosystem to a greater extent. Agriculture also plays a vital role in foreign direct investment. Since agriculture act as one of the main drives in economic growth, Government of Bangladesh (GoB) emphasized deeply in the sector to achieve self-sufficiency in food through increase production. For achieving self-sufficiency in food grain production, top most priority has so far been placed in producing cereal crops. But other subsectors involved in agriculture like livestock, poultry, fisheries, forest resources etc. have not received their due potential importance in overall agricultural production during last decade or so. The government of Bangladesh (GoB) has decided to expedite the development of various sub sectors of agriculture along with crop agriculture because crop sub sector of agriculture in Bangladesh according to many relevant experts, could have more or less reached its saturation point leaving minimum scope for further expansion at present technology base. Moreover, to attain food security, nutrients other than carbohydrate are essential which the above mentioned subsectors can be able to adequately provide. In Bangladesh therefore, possible rural poverty reduction can be made and to raise the standard of living through exploring other related sub-sectors in combined with crop agriculture.

Bangladesh is one of the most densely populated countries of the world. It is losing 1% of its total arable land every year whereas the annual increase of population is of 1.5%. Ensuring adequate food as opposed to growing population thus is a great

challenge for Bangladesh. In context of the scenario, the only way that we have to increase agricultural production is to go for intensive agriculture (which involve the introduction of improved technology into agriculture) as adoption of another way (Extensive agriculture that brings more land under cultivation) is no more possible in case of Bangladesh because all cultivable land has already been brought under cultivation.

Adoption of modern agricultural methods includes huge capital investment which the poor and marginal farmers lack. So, it can obviously be said that the provision of farm credit for production purposes is inevitable for agricultural development in the country. Credit is thought to be the crucial element in bringing about desired change in agricultural production that ultimately would contribute to economic development of the country. Throughout the developing countries, credit has been conceived of as an important mechanism for development strategy particularly those associated with increased productivity.

So, sound agricultural credit policies and efficient agricultural credit and banking system are the key elements for agricultural development and to increase food production. In Bangladesh main target is to increase agricultural production for attaining self-sufficiency in food and other sub sector. For attaining this target needs economic solvency of farmers who control production at grass root level.

1.2. Definition of Agricultural Credit

Agricultural Credit is defined as a type of financing used to provide funding for agricultural producers. This may be in the form of letters of credit, loans or banker's acceptance documents. This is generally used to provide investment from outside resources to the farming sector. The funds may be used according to the farmer's planting, harvesting and marketing cycles for purchasing farm machinery, payment of labor wages, or for acquiring more land for agricultural purpose, development of irrigation facilities, etc. It may be short term as well as long term depending upon the purpose of the credit. It may be taken as a personal loan or against farm land as collateral.

1.3. Rationale of Agricultural Credit in Bangladesh

Adequate availability of credit on time is an important requirement for the investors, particularly under conditions of scarcity of resources and uncertainty. Convenient and safes-saving facilities are perhaps even more important to smooth out the peaks and troughs in incomes and expenditures. Lack of savings facilities also force families to rely on inefficient, inconvenient and costly alternatives. Agricultural credit is a solution for this perspective.

The function of credit in modern farming operations are of manifolds. A farmer cannot adopt modern practices unless he gets sufficient credit for purchase of inputs, management of farms, and marketing of produced goods. Hence provision of credit in agricultural farming business facilitates a farmer to acquire physical inputs to be used in the production. Credit is not only important but also required for a farmer to expand and run his business more efficiently and properly which may not otherwise be possible on his save. In other words credit serves as a catalyst, allowing farmers to acquire and utilize modern resources in production to maximize profits, rather than being entirely dependent on their own capital (assets) accumulated out of savings or inheritance (Mian,2001)

The rationale for agriculture credit in Bangladesh can be stated under the following three broad lines:

1. Agriculture sector contributes almost 16.33% to the national GDP of Bangladesh which comprises almost one-fifth of the nation's GDP. To sustain the GDP growth as well as economic development of the country, trend of agricultural production should be maintained. To this end, proper concentration should be devised so that farmer can get accessibility to different sources of agricultural credit that might help them to a smooth continuation to agricultural production. In fact, availability of agricultural credit has a positive impact on agricultural productivity which has already been proved in research works of various researchers.

2. Farmers of Bangladesh are generally resource poor. Small and marginal farmers constitute 80 percent of the farming population in Bangladesh. But only 17% of the small farmers have direct access to institutional credit. 96% Percent of farmer in all size categories reported their need for agricultural credit to meet purchase cost of agro inputs (Sarker 2006). Agricultural credit scenario, especially institutional credit

coverage should be improved so that the poor section of the farmer gets adequate access to agricultural credit in order to ensure on time production.

3. Convenient access to agricultural credit ensures agricultural productivity and therefore growth in the sector continues to rise. In case of Bangladesh, disbursement of agricultural credit to sustain agricultural growth is important also from food security perspective. The people involved with agriculture are mainly poor and subsistence farmer who depend solely on their production for the food supplies throughout the year. If access to agricultural inputs of these farmers is impaired due to capital shortage, production will be hampered and then food security of them as well as the nation will be in a vulnerable situation.

1.4. Genesis of Agricultural Credit in Bangladesh

Formal financing agriculture evolved in Bengal during the British period. The Hindustan bank was established in Calcutta in 1700.The Bengal Bank, established in 1784 is considered to be the first British-patronized modern bank in India to start trading in credit and money. The 14 prominent banks operating in Bengal during the British period were located in Dhaka, Chittagong, Rangpur, Chandpur, Mymensing, Pabna, Dinajpur, Comilla and Narayanganj. In addition to these bank offices,17 loan offices were established which operated throughout the Bangladesh region between 1850-1894.These were at Faridpur (1865), Bogra (1872), Barisal (1873), Mymensing (1873), Nasirabad (1875), jessor (1876), Munsiganj (1876), Dhaka (1878), Sylhet (1881), Pabna (1882), Kishoreganj (1883),Noakhali (1885), Khulna (1887), Madaripur (1887), Tangail (1887), Nilphamari (1894) and Rangpur (1894). These loan offices extending their activities to the rural areas and gave short term, medium and long term credit to then people. The provincial cooperative bank was established in 1912 under the co-operative society act that was passed and enacted in the same year. The Bengal Co-operative society's act 1940 was enacted to allow the formation of co-operative societies. (http://banglapedia.search.com.bd/HT/A_007.htm).

Following the partition in1947, Pakistan inherited a banking and credit structure from the British regime consisting of 631 bank offices belonging to both local and foreign ownership bank. Of these offices, only 159 were in rural areas. The State Bank of Pakistan, the central bank of the country, came into being in 1948 and attempted to

strengthen the country's credit system through setting up new branches of commercial bank and other types of financial institutions in rural areas. In addition to the progress achieved in commercial banking other credit institution had also been established to meet the need for medium and long term credits for rural trade agriculture and housing in the 24 years between 1947 and 1971. Among credit institutions, the Agricultural Development bank of Pakistan had its few branches in rural areas of both the provinces (East and West Pakistan).

After independence in 1971, Bangladesh inherited a week banking system having 1130 branches of 12 banks. Between 1971 and 1976, Bangladesh Krishi Bank (formerly the Agricultural Development Bank) and the co-operatives were the two institutions meeting the need for agricultural credit. To increases the flow of credit in agricultural sectors, the government took initiative to bring inducted the NCBs into the field of agricultural credit in 1976 under a new program called Tk 100 crore Special Agricultural Credit Program popularly known as SACP which was designed to cater all seasonal crop loans. Rural branches of NCBs are now engaged in offering agricultural credit along with the business credit. As against a total disbursement of Tk 860 million by the banking system as a whole in 1976-77, the agricultural loans rose to Tk 3.75 billion in 1980-81, Tk 11.5 billion in 1984-85, and Tk 76.3 billion in 1999-2000. (http://banglapedia.search.com.bd/HT/B_0270.htm). For each financial year the central bank of the country (Bangladesh Bank) formulates and promulgates the agricultural credit policy according to which banks and other financial institutions operates with a view to providing credit to agricultural sector.

The agricultural credit market in the country is relatively vulnerable because still most part of credit deviates towards the big farmers, rural elites and others usually not related to agricultural activities by any means. On the other hand, it is alleged that a large portion of institutional credit might go to the informal market for re-lending purposes where the needy farmers and the rural poor have to borrow at exorbitant interest rates. Also worth mentioning amount of loan is used for consumption and other unproductive purposes.

1.5. Major Area Covered in Agriculture and Rural Credit Program

1. Crops/food grains

2. Fisheries

3. Livestock

4. Agricultural Equipment

5. Irrigation Equipment

6. Food grains storage and marketing (only Storage and marketing of food grains Produced only by the producer himself)

7. Poverty alleviation and income generating activities

8. Others.

1.6. Agricultural and Rural Credit Policy for FY-2015-16 by Bangladesh Bank

- Banks are directed to provide 2 percent of their total credit and advances as farm credit and the newly -launched nine commercial banks will also disburse agricultural credit at least 5 per cent of their net loans and advances according to the conditions of their banking licenses.
- Priority will be given to the major three sectors such as Crop, Fisheries and livestock.
- Necessary information and instruction should be given to farmers to fill up the loan application.
- Credit shall be disbursed in an area approach method i.e. comparative advantages of producing crops in different regions.
- Women entrepreneurs should get priority in agricultural/rural credit disbursement.
- District Agricultural Credit Committee headed by Deputy Commissioner in each district has to be more active.
- High Value Crops shall be given priority in extending credit facility.

- Credit facilities shall be allowed at a concessional interest rate (4%) for cultivation of import substitute products such as pulse, oil seeds, spices and maize.
- Banks are directed to give priority to relatively under developed and neglected areas such as char (shoal), haor and coastal areas in disbursing agricultural credit.
- Besides supplying credit to agriculture and supporting sectors, credit has to be made available for different self-employment or income generating activities on individual or group basis with a view to expediting growth momentum in the rural economy.
- Banks are advised to make flexible of the schedule of credit disbursement and recovery to adapt the adverse effects of climate change and banks are asked to facilitate credit to cultivate salt tolerating crops in salty areas, water tolerating crops in flood affected areas, drought tolerating crops in drought areas.
- Credit should be disbursed for setting solar home system and solar energy driving irrigation pump.
- Banks will be encouraged to use modern Information and Communication Technology (ICT) including mobile phone in agricultural credit disbursement programs.
- As an agriculture supporting sector irrigation, ploughing and harvesting machineries have to be provided with necessary credit.
- To ensure fair prices of agricultural produces at grower level banks and financial institutions are directed to disburse agricultural credit to genuine farmers as well as in favor of local small businessmen in the crop storage and marketing sectors.
- Concerned banks have to ensure effective monitoring system so that only the real farmers get necessary amount of agricultural credit in a timely and hassle-free manner and the targeted amount of agricultural credit is disbursed. Bangladesh Bank is also preparing a comprehensive agricultural credit monitoring Strategy.
- Banks are advised to provide loan to the agro-commodities producing farmers engaged in contract farming as well as the entrepreneur to ensure fair prices of agri product.

- Success in agricultural and rural credit will be awarded by giving permission of new branches, opening foreign exchange dealership license, liquidity support and CAMEL rating.

1.7. Overall Disbursement and Recovery of Agricultural Loan in FY14.

The actual disbursement of Taka 160.4 billion in FY14 was 9.3 percent higher than the actual disbursement of Taka 146.7 billion in FY13. Table 1.1 shows the comparative position of overall disbursement and recovery of agricultural loan and Charts 1.1 and 1.2 show targets and actual disbursement of agricultural loan respectively in FY14. About 74.1 percent of disbursement was short term lending and the rest 25.9 percent was in the form of long-term loans for irrigation equipment, agricultural machinery, livestock etc. The credit for production of crops and poverty alleviation programs constitute 60.0 and 15.7 percent respectively of the total short term loans (Table 1.1). The total outstanding loan in the agricultural sector in FY14 increased by Taka 35.8 billion or 11.5 percent to Taka 346.3 billion from Taka 310.6 billion in FY13 (Table 1.2). Two specialized banks -BKB, RAKUB and four SCBs played key role in the disbursement of agricultural and rural credits. The contribution of private commercial banks was also impressive in this regard. However, the SCBs fell short of targets by 9.1 percent. On the other hand, BKB, FCBs and the PCBs exceeded the disbursement target by 18.0, 37.0 and 13.5 percent respectively in FY14 (Table 1.2). Apart from this, BRDB and BSBL disbursed Taka 6.6 billion from their own fund which raised the total disbursement to Taka 167.0 billion during FY14.

During FY14, the recovery of agricultural credit increased by 18.7 percent to Taka 170.5 billion from the recovery of Taka 143.6 billion made in FY13. Comprehensive support to agricultural production through subsidy on both input and output level, corrective measures introduced for recovery of overdue loans resulted in increase of recovery during FY14. The overdue as percentage of outstanding agricultural loan increased from 16.8 percent to 22.0 percent at the end of June 2014 (Table 1.2). It is important that banks should set up recovery drive during the harvesting time and strengthen incentive measures in order to get further improvement in the recovery position of agricultural loan in the years ahead.

Table1.1. Comparative Statement of Disbursement & Recovery of Agricultural Loan

(billion tk)

Disbursement	FY12*	FY13*	FY14*
i. Disbursement target	**138.00**	**141.30**	**145.95**
a)Crop loan other than tea	62.38	65.38	69.38
b)Purchase & installation of irrigation equipment	4.12	4.34	3.66
c)Livestock	12.84	13.55	15.26
d)Market of agricultural good	3.04	3.32	2.57
e)Fisheries	12.92	12.68	12.68
f)Poverty alleviation	14.22	12.63	11.16
g)Other agricultural activities	28.48	29.40	31.22
ii. Actual disbursement	**131.32**	**146.67**	**160.37**
a) Crop loan other than tea	53.50	64.34	71.31
b)Purchase & installation of irrigation equipment	3.29	2.79	2.39
c)Livestock	12.44	18.03	19.96
d)Market of agricultural good	2.75	2.26	1.67
e)Fisheries	10.26	13.21	13.78
f)Poverty alleviation	16.09	16.58	1864
g)Other agricultural activities	32.99	29.46	32.62
iii. Term structure of loan disbursed			
a)Short term	57.22**	106.12	118.85
b)Long term	25.95**	40.56	41.52
iv. Recovery	**123.59**	**143.62**	**170.70**
v. Total outstanding loan	**259.75**	**310.58**	**346.33**
vi. Overdue	**60.52**	**52.09**	**76.12**
vii. Overdue as percent of outstanding	**23.30**	**16.77**	**21.98**

Source: Agricultural Credit and Financial Inclusion Department, Bangladesh Bank

* Excluding BRDB and BSBL

** Excluding PCBs and Foreign Bank

Table1.2. Agricultural Credit Performance by Lenders-FY14

(billion tk)

Lender	Disbursement Target	Actual Disbursement	Recovery	Overdue	Outstanding	Overdue as % of outstanding
SCBs	27.20	24.92	23.81	25.39	79.07	32.11
BKB	46.00	54.26	65.84	33.12	157.85	20.98
RAKUB	14.50	14.31	16.77	14.83	41.57	35.68
Sub Total	**87.90**	**93.49**	**106.42**	**73.34**	**278.49**	**26.34**
Foreign Banks	4.33	5.93	4.63	0.0004	3.83	0.01
PCBs	53.72	60.95	59.41	2.78	64.01	4.34
Sub Total	**58.05**	**66.88**	**64.04**	**2.78**	**67.84**	**4.01**
Grand Total	**145.95**	**160.37**	**170.46**	**76.12**	**346.33**	**21.98**
Summary						
FY14@	145.95	160.37	170.46	76.12	346.33	21.98
FY13@	141.30	146.67	143.62	52.09	310.58	16.77
FY12@	138.00	131.32	123.59	60.52	259.75	23.30
FY11	126.17	121.84	121.48	60.97	254.92	23.92
FY10	115.12	111.17	101.12	64.04	225.87	28.35

Source: Agricultural Credit and Financial Inclusion Department, Bangladesh Bank

@ excluding BRDB and BSBL

1.8. Sources of Agricultural Credit in Bangladesh

The main sources of finance in agriculture are still the state owned banks. As such the specialized banks- BKB and RAKUB and the state owned commercial banks are the principal players in the area of agricultural credit. BKB had the largest share in the annual disbursement of agricultural loan in FY14, where it alone disbursed 33.8 percent of the total disbursement, followed by PCBs' (38.0 percent) and the SCBs (15.5 percent). The SCB's overdue loan as percentage of their outstanding loan stood at 32.1 percent at the end of FY14, while the overdue of RAKUB and BKB were recorded at 35.7 percent and 21.0 percent respectively of their outstanding loan for the year (Table 1.2). The role of the private sector domestic and foreign banks in agricultural lending is increasing remarkably. They contributed Taka 66.9 billion which was 41.7 percent of the total agricultural loan disbursed in FY14.

1.9. Present Problem of Agricultural Credit in Bangladesh

- The main difficulties faced by farmers in securing agricultural credit from the formal sector banks are the long institutional procedure. A research work conducted by Ruhul Amin Sarkar revealed that, this reason is thought by 90 percent of all size farmers as the prime impediment in securing loans from institutional source. Medium and large farmers who are most successful group among farmers also pointed this as the main difficulties in securing agricultural credit. According to his survey, the group response (Medium and Large Farmer) to the question whether they think long institutional procedure as a problem in securing agricultural credit is 100 percent.
- In our country, Banking deposits mobilizes from rural areas are funneled into institutional credit operations to the country’s major urban centers.
- The bank operation has not extended adequately in the rural areas. This inhibits farmer to get access of cheap formal sector credit.
- NGOs in Bangladesh have much scope to play role in agricultural credit distribution as they have wider range of branches throughout the country. But it is observed that, NGOs mainly disbursed credit in traditional activities. They are seen to disburse loan only to those sector, which generates income quickly and repayment of the loan is possible by the income generated from the sector where the loan is allocated. However, they do not in general address the

problem of finance in agriculture. Therefore, NGOs investment pattern is not directed towards individual needs and they generally disburse loan in non-formal agricultural activities.

- Formal public sector credits are still cheap in terms of the interest. But Formal private sector credit still costly. As per new directive from Bangladesh Bank, PCBs could channel funds through NGOs for agricultural credit purpose. But PCBs lend these funds to NGOs at a higher interest rate. After NGOs add up their mark-up, the interest rate on credit becomes above 20-22% which is well above the market rate of interest for industrial credit.
- Lack of institutional cooperation has identified as another difficulties in accessing bank credit.
- The agricultural loans that are disbursed from institutional source are quite insufficient compared with the credit need of the farmer; especially it seems inadequate for medium and large farmer. Survey results among the farmer also support the argument.
- Difficult credit rules of banking institutions obstruct small and marginal farmers to credit access. Credit rules are very complicatedly formulated and in many cases, these are not clearly apprehended by illiterate and partially educated farmers. The assumption is also supported by the survey conducted by Ruhul Amin Sarkar, where it is seen that 79.2% very small farmer and 82.9% small farmer identified difficult credit rules as the reason for not availing bank credit and 78% of all farmers think so.
- Formal sector wants collateral as security of the credit that they disburse to the farmer. Although agricultural productivity depends on the combination of human labor and capital with the productive powers of land, the access to financial capital through institutional credit depends in Bangladesh ultimately to the possession or non-possession of land. Formal Sector also takes socio-economic status of a credit seeker into consideration when it decides to disburse agricultural credit. These make cheap formal credit accessibility more difficult for the marginal, sub-marginal and small farmer who constitutes almost 80 percent of the agricultural farmer and make them bound to borrow at an exorbitant interest rate from informal sector.

- Lack of timely loan assistance: From farmer side, lengthy loan processing procedure is cited another hindrance to formal sector credit access. The acute problem in accessing timely loan assistance remains among small farmer group (71.4%) as they badly need credit but lack ability of submitting required collateral get sanction of the credit.
- Institutional credit is not allocated according to the relative efficiency of the cultivator but according to the economic and political power of credit recipients.

1.10. Justification of the Study

Credit is an important component for accelerating economic activities particularly of the resource poor people in rural areas of the country. Formerly credit market in Bangladesh had decidedly dual structure. The financial need of the people mainly located in urban and semi urban areas used to be meet by relatively advanced banking system mainly for nonfarm business activities and very scarcely to finance jute marketing ignoring the fund requirement of the farmers engaged in agricultural production and therefore rural people had to depend on informal credit market mostly the money lenders and mahajans as evidenced by many past research studies(DU 1956,Bashar 1969,Islam 1998). The financial market structure however, assumes to have undergone significant transformation over the years with gradual expansion of bank branching network at upazilla and other important production points. Most recently, particularly since seventies, the emergence of Grameen Bank and hundreds of other national, international and local based NGOs are working specially in remote village areas of the country. According to many researchers, there has undergone structural changes in farm credit market resulting almost desired increase in credit availability among farmers. Various studies also reported that because of expanded institutional branching setup in rural areas, undesirable influence of informal credit sources on rural people are gradually declining particularly after independence of Bangladesh. There is however reverse comments also revealing that, continuous expansion of institutional network, non-institutional sources of credit are still likely to play dominant role in distributing credit specially in remote areas as before in the country. Therefore, the present study will attempt to find out the factual information in this regard. In, Bangladesh during the last decade or so, lot of studies have been

carried out on disbursement, utilization and adequacy of credit, impact of credit on the livelihood of the beneficiaries and other issue of credit. But studies undertaken within the premises of structural changes in rural credit market at large are relatively a few in our country. The present study intends to reveal the facts relating to credit structure ,amount of credit received, mode of credit used, and repayment etc. which would help the planners and policy makers to formulate more pragmatic principles and practices consistent with overall agricultural development in the country.

1.11. Objective of the Study

The overall objective of the study is to assess the existing agricultural credit market structure and expected changes occurred therein over the years. The specific objectives of the study are as follows:

- ✓ To assess the socio-economic characteristics of the respondents in the study area;
- ✓ To identify the existing sources of credit in the study area;
- ✓ To examine the credit utilization and repayment behavior of the farmers; and
- ✓ To estimate the determinants of the agricultural credit repayment.

1.12. Outline of the Thesis

The thesis is organized in total 8 chapters. Chapter 1 consists of brief introduction of the study. Chapter 2 provides a review of the related literature so far available. Chapter 3 provides methodological framework of the study. Chapter 4 deals with the description of the study areas. Chapter 5 describes the socio-economic characteristics of the surveyed families. Chapter 6 presents the agricultural credit structure in the study area. Chapter 7 deals with the utilization and repayment of credit by the respondents and finally summary and conclusions are presented in chapter 8.

CHAPTER II

REVIEW OF LITERATURE

The objective of this chapter is to make a brief review of the previous relevant research works done to assess the necessity of doing present study and to find out either lapses of past studies or intends to add some new knowledge to present stock. A good number of research studies have been done on agricultural credit in Bangladesh, most of which were limited to nature, volume as well as information related to distribution, utilization, and repayment of credit. Relevant studies however, which were conducted in the past at home and abroad are highlighted below.

Bashar (1969) with a view to investigating the structure of agricultural credit, conducted a survey in two villages of Mymensing district and found that more than 90 percent of total loan in the village Panghagra and nearly 99 percent in the village Kazirshimla were supplied by the non-institutional sources during the year of study. He also showed that about 45 percent of total borrowing from all sources had been used for meeting family expenditure.

Ahmed (1974) in his study observed that credit distributed by the existing institutional sources has always been inadequate and associated with various cumbersome procedures involving wastage of time and extra unnecessary cost which the farmers of limited means could not satisfy and so, mostly were deprived of institutional credit facilities during the study period.

Roy (1978) examined the utilization pattern of agricultural credit in eight villages of different regions of Bangladesh. He found that 7.11 percent and about 11 percent of surveyed households were found to have spent part or whole amount of loan on fixed or current expenditures, whereas, about 84 percent of the households have utilized the same for consumption purposes. He also found that owner farmers spent 15.44 percent of loan for agricultural production and 76.32 percent for family consumption. On the other hand, tenant farmers spent near about 23 percent on agricultural production practices and 55.34 percent on consumption during the study period.

Bashar *et al.* (1981) in their study on Tk 100 crore Special agricultural Credit Programs (SACP) found sustainable misuse of loan as well as unsatisfactory loan

repayment. The reasons for loan default as stated were lack of timely disbursement of loan, natural disaster of various kinds etc. The authors also pointed that the small farmers had good repayment records than those of medium and large farmers during the study period.

Alam (1982) having sampled borrowers farmers of BKB, BRDB and Central Co-operative Bank spread over six districts of Bangladesh and observed that the financial institutions considered farm size, credit need, financial endowment and education of the borrowers in sanctioning credit. The above four factors could explain 53 percent of the total receipt of credit.

Hassan (1983) found that the farmers of Garo hill area of Jamalpur all together borrowed 37 percent from the institutional sources and 63 percent from the non-institutional sources during the study period. He also found that farm size groups small means received expectedly maximum loan from non-institutional sources while the larger ones had from institutional sources of credit indicating their easy access to the official sources.

Alam *et al* (1984) observed that the institutional sources supplied only 37 percent of total loan demanded by the borrower farms while the no institutional sources supplied more than 63 percent of total loan demanded by the household during the study period.

Bashar and Alam (1985) found in a study that structural change in the field of agricultural credit took place over time. Farmer's dependence on non-institutional source of credit has been reduced to some extent because of emergence of institutional credit network of branches. The institutional loan distribution still deviates towards large farmers as observed in the years 1968 although the small farmers have relatively more access to institutional sources of credit during 1982.

Hossain (1986) tried to show the contribution of different institutional and non-institutional sources of credit and the factors affecting the repayment behavior of the farmers in two villages of sharsha upozilla under jessore district. The natural calamities, nonfarm expenses and lack of ready cash at hand were responsible for repayment of loan. He noted that the borrower farmer received about 84-16 percent of credit respectively from institutional and non-institutional sources.

Islam (1987) in his study showed that the overall loan recovery position of the study group was quite unsatisfactory (18 percent). Small farmers repaid only around 13 percent while the medium farmers made 33 percent during the study period.

Roy (1987) in his study found that the extent of credit supply to smaller farms was inadequate to meet up optimal allocation of limited farm resources. To increase allocative efficiency and to make best use of modern technology, the credit supply to farms should be increased almost twice of present level. Failure to supply adequate institutional loan compelled the smaller farmers to depend on unscrupulous private moneylenders.

Saha (1991) in Netrokona sadar upozela found that the respondent received loan from the BKB to extent of 67 percent applied amount during the study period. The study further revealed that loan receipt increased with the increase farm size indicating the large farmers got more benefits from the institutional sources of credit.

Raquib (1994) took an effort to see the recovery position of farm credit extended by the institutional sources in the country. He analyzed the data for the last five years had from the nationalized commercial banks, BKB, RKUB, BSBL and BRDB and observed that the recovery rate of six commercial banks had been lower in each year than the average recovery rate of BKB, BSBL and BRDB. It also revealed that the recovery rate of each of the institutions had been declining since 1984-1985. The findings also concluded that the specialized agricultural credit institutions were more efficient in loan recovery than the commercial banks.

Das (1996) observed that the large farmer received more amount of credit compared to medium and small farmers. The study also revealed that the medium farmer were the good loan re-payers followed by the large and small ones. The borrowers age, owned land, education level and overall income positively and significantly affected loan repayment performance of the borrowers in the study area.

Sharma and Zeller (1997) studied repayment performance in grouped based credit programs of ASA, BRAC, and RDRS in Bangladesh. The study concluded that if the basic principle of prudential banking were adhering to loan repayment might be better even in poor and remote communities.

Islam(1998) while undertaking a research on rice production and land tenurial arrangements in a selected area of tangail district observed that the owner operators have received credit only from the institutional sources, part operators had both from institutional and non-institutional sources whereas, the tenant farmers had to depend exclusively on non-institutional sources during the investigation.

Parveen (1999) in her study found that 81 percent of applied credit was supplied by the BKB. Analysis showed that credit receipt deviated towards affluent section of the community in case of BKB during the study year. Average amount of loan received maintained a positive relationship with farm size. Large farmers were observed to have loan within short period of time compared to other two groups because of their easy access to the BKB officials.

Jahangir *et al.* (2002) conducted a research on credit utilization for poverty reduction in Pakistan. This paper used econometric model to evaluate the effectiveness of credit in income generation activities of poor farmers. The estimated equation showed that there was a positive and significant relationship between amount of credit and total income. Major constrained faced by the farmers in getting agricultural credit were lack of guidance, difficulty in the preparation of pass book by the revenue department, high interest rate and monetary corruption.

Alam (2003) in his study observed that the large farmers received more amount of credit compared to medium and small farmers. It was revealed by the study that the respondents received 69 percent of total loan from institutional sources and 31 percent received from the non-institutional sources in the study area.

Jahan (2004) in a study observed that large farmers received more amount of credit compared to small and medium farmers. Loan obtained mostly for producing crops. The sampled borrowers were found to have productively utilized a lion share of loan. Capital expenditure seemed to be expectedly minimum.

Alam (2005) undertook a study on rural women under microcredit program of BRAC in Sadar upozilla of Netrokona District. The study reveals that total loan utilization in form of capital and current expenditure on farming and nonfarm activities were almost the same indicating the borrower's positive attitude towards the productive

credit use. Family expenditure seems to be expectedly minimum. Small borrowers were good loan re-payer followed by the medium and large ones.

Miah *et al* (2006) while studying the impact of credit on MV Boro rice cultivation in northern part of Bangladesh observed that the borrower farmers of RKUB and GB used respectively 78 and 72 percent of total credit for Boro rice production .The cost of credit of RKUB and GB was 463 and 20 respectively. The RKUB farmers had to pay tk 252 as entertainment cost. The GB credit user borne 1.13 times higher production cost compared to RKUB users for Boro rice cultivation. The borrower farmer could harvest 1.21 times more rice compared to non-users. Analysis of resource use efficiency revealed that both credit user and non-user could not efficiently use inputs. Small farmers were found to prefer NGO loan to institutional one because of lengthy procedure followed in later case.

Jaffar *et al* (2006) during evaluating the microcredit scheme of Small and Medium Enterprise Development Authority (SMEDA) found that majority of farmers (76.7) met their financial requirement from institutional sources of credit. More than 60% of farmers obtained loan for purchasing fertilizer while 50 percent obtained credit for buying quality seeds whereas approximately 37% did for purchasing pesticides or insecticides.

Hauqe (2008) in his study observed that the absentee land owner and part operator have got more access to institutional sources of credit because of their ability to offer land as security. The tenant farmer on the other hand was found to have no loan at all from the BKB because of their inability to offer collateral against loan. They were found to have access to semi-institutional sources like GB and BRAC. Most of the credit demand of the respondent has been satisfied by the credit institutions available in the study villages.

Rahman (2013) in his study examined the role of agricultural credit on rice production and food security of the rural households at Gazipur Sadar Upazila of Gazipur district in Bangladesh. The major findings of the study were that credit has a positive impact on the rice production. Elasticity of rice production with respect to agricultural credit was 0.85 which indicates that if credit was increased by 10% the

rice production increased by 8.5%. The elasticity of fertilizer and irrigation demand with respect to agricultural credit was 0.889 and 0.815 respectively.

Above reviewed studies covers different aspect of agricultural credit with some of the socio economic variables of the household surveyed. At present some researchers, however, claim that there has been by and large a great structural change in agricultural credit market .As a result the disadvantaged group of the society has been getting gradually more accommodation to formal credit in Bangladesh. Moreover, productive loan use as well as timely loan repayment has to a greater extent improved in the country. The present study attempts to verify this statement. Such studies are possibly a few in the country. Findings of the study all expected to improve rural credit market and thereby to develop agricultural sector at large in home and abroad.

CHAPTER III

METHODOLOGY OF THE STUDY

3.1. Introduction

Methodology is an important and essential constituent for any research study. It needs very careful attention and sincere consideration. The reliability of research work depends on proper methodology to collect rational data to be helpful for achieving the set objectives. Methodology should be such that it would enable the researcher to collect valid and reliable information and to analyze those data to arrive at reliable decision. The method should be preferred considering the limitation of money, time and other facilities. Keeping this in mind the researcher took utmost care for using proper method in all aspects of this investigation. In order to attain the objectives for the present study, methodology adaption includes the following steps.

- Selection of the Study Area
- Selection of sample and sampling technique
- Preparation of the survey schedule
- Period of survey
- Collection of data
- Summarization, Tabulation and Analysis of data
- Limitation of the study

3.2. Selection of the Study Area

Selection of the study area is an important step for the study because it indicates premise from where required data would be collected in accordance with the objective set for the study.

Keeping in view the objectives of the study and considering the limitations of the research with respect to time money and other facilities four villages (Kaemkola, Ahmedpur, Tirail, Masgram) of two unions (Joary and Masgram) of Boraigram Upazila under Natore district were selected purposively as study area. The reasons for selecting Boraigram upazila are given below:

- Credit receivers were available in the study area

- The upozilla is primarily and basically agriculture based. Most of the villagers depend directly and indirectly on agriculture for their income and livelihood.
- The farmers of the upozila have access to the institutional sources of credit.
- The villages of the upozila are easily accessible.
- No study of this type was conducted previously in these areas.
- Keeping in mind the time factor and available resources in hand the area was considered suitable for the study.

3.3. Preliminary work:

The survey design was made on the basis of aim and objective of the study. The rural people in general are mostly illiterate and conservative. They always try to remain aloof from disclosing the facts regarding indebtedness, expenditure and other variety of family related affairs. Before starting the actual data collection, it was felt desirable to contact the farmer to create a friendly and congenial atmosphere for successful continuation of the survey. Prior acquaintance with the people concerned, effort was made to gain their support and confidence so that they could furnish reliable information without fear and confusion to be beneficial for achieving the set objectives.

3.4. Preparation of the Schedule:

Keeping in mind the objective of the study, survey schedule was carefully prepared in such a way that all necessary items be included. In order to prepare final survey schedule a draft schedule was first prepared on the basis of the objectives set as well as through discussion with the supervisor. A number of draft schedule were pre-tested before going for final data collection. In pre- testing, the farmers were interviewed and on the basis of responses received, the schedules were filled in up. Much attention, however, was paid to any relevant new information which was not designed to be asked and incorporated in the draft schedule. If any new information or local term was normally elicited, it was noted down in the blank paper remained attached to the draft schedules. In the light of the experience gathered during the preliminary survey, necessary correction, modification and adjustment were made in the draft schedule. Then the final schedule was developed with logical sequence and used for collecting data for the study.

The interview schedule was designed to collect information that covered broadly the following items:

- Identification of the respondents and family composition
- Education and occupation of the respondents.
- Data related to land holding of the respondents
- Information related to asset
- Yearly income and expenditure of the respondent
- Respondents credit information
- Utilization pattern of credit and their repayment performance.

3.5. Selection of Sample and Sampling Technique

Sample selection is an important part of survey work. It is generally not possible to make census survey covering all the borrowers and it is not worthwhile to include too many borrowers in a survey because of obvious reasons. In this study, the researcher used purposive and random sampling technique after selecting the area, first of all, the researcher visited the credit institutions available close to the selected area, collected the list of loanees by using her cordial approach to the concerned institutions. After those 120 farmers were randomly selected from whom required data were sought during intensive field visits (table 3.1). After final selection of the farmer, the researcher herself moved around the study area to collect data administering the prepared survey schedule.

Table 3.1 Sample Distribution of the Respondents

Name of the village	Number	Percent
Kaemkola	35	29.17
Ahmedpur	40	33.33
Tirail	25	20.83
Masgram	20	16.67
Total	120	100

Source: Field survey, 2015

3.6. Period of Survey:

For present study, data were collected by the researcher herself through personal interview with the selected farmers during the period from March to April, 2015 and multi-visits were made for collecting necessary information during this period.

3.7. Collection of Data:

Data collection is an important step and the result of any study depends on the accuracy and reliability of data. The accuracy and reliability of data mostly depend on the method of collection. The study was mainly based on a set of field level primary data collected from the selected members by using pretested interview schedules. Field level primary data were collected from the selected respondents through direct interview conducted by the researcher herself. After preparing the schedule, each selected respondents was interviewed separately. Before beginning the actual interview, each respondent was given a brief introduction about the nature and purpose of the study. Then the questions were asked sequentially in a simple manner. The responses were recorded directly on the interview schedules. Usually the respondents at grass root level do not keep written record of their different activities, so the researcher had to depend on bare memory of the respondents. During interview, the researcher asked questions systematically and explained whenever necessary. After completion of each interview, the schedule was checked and verified to be sure that the answer had been properly recorded. In order to minimize time and for easy understanding, data were collected in local units. Local units were subsequently converted into standard unit later on. Secondary data sources like the Statistical Year Book of Bangladesh, different journals, research paper will also be used.

3.8. Summarization, Tabulation and Analysis of Data:

Data were carefully analyzed with a view to achieving the objectives of the study. Some descriptive statistics like averages, percentage, ratios etc. and inferential analysis such as multiple regressions attempted to achieve the objectives. The collected raw data were carefully scrutinized, edited and clean to find out the errors, omissions and to avoid irrelevant information.

The specified regression model (Gujarati, 2008) used in the study to assess repayment of loan by the borrowers was as follows:

The model is theoretically specified as follows;

$$Y = f(X_1, X_2, X_3 \ldots\ldots X_n e_i)$$

The model is explicitly specified as follows;

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + e_i$$

Where,

α = intercept

β_1-β_6=Regression coefficient

e_i = Error term designed to capture the effects of unspecified variables in the model

Y = Loan repayment capacity (percentage)

X_1 = farm size of respondent (acres)

X_2 = Family size of the respondent

X_3 = Age of the respondent (years)

X_4 = education of the respondent (years of schooling)

X_5 = income of the respondent (Tk)

X_6 = savings of the respondent (Tk)

The regression analysis was run using "IBM SPSS statistics 20" software to determine the order of importance of the explanatory variables in explaining the variation observed in the dependent variables.

Assumptions:

1. Linear in parameters: Multiple regressions can accurately estimate the relationship between dependent and independent variables when the parameters are linear in nature.
2. Random sampling: This assumption refers to that samples are selected randomly.
3. Zero conditional mean: The error U has an expected value of zero given any values of the independent variables.
4. No perfect collinearity: Collinearity (also called multi collinearity) refers to the assumption that the independent variables are uncorrelated. The researcher is able to interpret regression coefficients as the effects of the independent variables on the dependent variables when collinearity is low. That means there are no exact linear relationships among the independent variables.

5. Normality: Multiple regressions assume that variables have normal distributions. This means that errors are normally distributed.
6. Homoscedasticity: The assumption of homoscedasticity refers to equal variance of errors across all levels of the independent variables. This means that researcher assumes that errors are spread out consistently between the variables.

3.9. Problem Faced in Data Collection:

Collection of field level data in the country like ours is always accompanied with some problems of different nature and the present study is not an exception. The researcher had to face some problems during data collection. These are as follows:

- Most of the respondents were initially hesitated to answer the question because they had no previous idea about such type of interview. They were at first found afraid because they thought that the results of the investigation might have adverse implications on them in future. To overcome this situation, a good deal of time had to spend to gain their confidence.
- Sometimes the respondents were not available at home. In this case, the researcher required to make multi visits to conduct a single interview.
- Illiteracy of the respondent was another problem to the researcher. Sometimes they could not answer the question accurately because of their hazy concepts regarding some of the questions asked in the developing countries like ours.
- The respondents usually did not keep any written records of their household activities. Therefore, collecting information from bare memory of the respondents needed much care on part of the researcher.
- Due to lack of proper knowledge, the respondents were indifferent to the objectives of the study and answered the questions in careless manner. However, repeated attempts were made to collect reliable information as far as possible.
- The respondents were not generally ready to disclose the information regarding actual annual income or expenditure because they consider them as strictly private affairs.

- It was too difficult to convince the respondents about the utility of the study. They did not try to understand or rely upon the researcher that the study was strictly for academic purpose.

3.10. Limitation of Study:

It may be worthwhile to point out some limitation of the study as given below:

- The data for the present study were collected from four villages of three unions of Baraigram upozila under Natore District on sample basis. Since the sample size was not so large (120), the findings may not fairly represent the whole of Bangladesh.
- The information used in the study was based on bare memory of the farmers. So, errors in data collection in some cases might have affected the results.
- The scope of the study could not be made enlarge because of fund as well as time limit. All data and other necessary information were collected with in the short possible time.

In spite of these limitations, the researcher tried a lot to achieve the set objectives and be able to draw some important conclusion expected to serve as guidelines in future research and formulation of pragmatic policy decisions.

CHAPTER IV

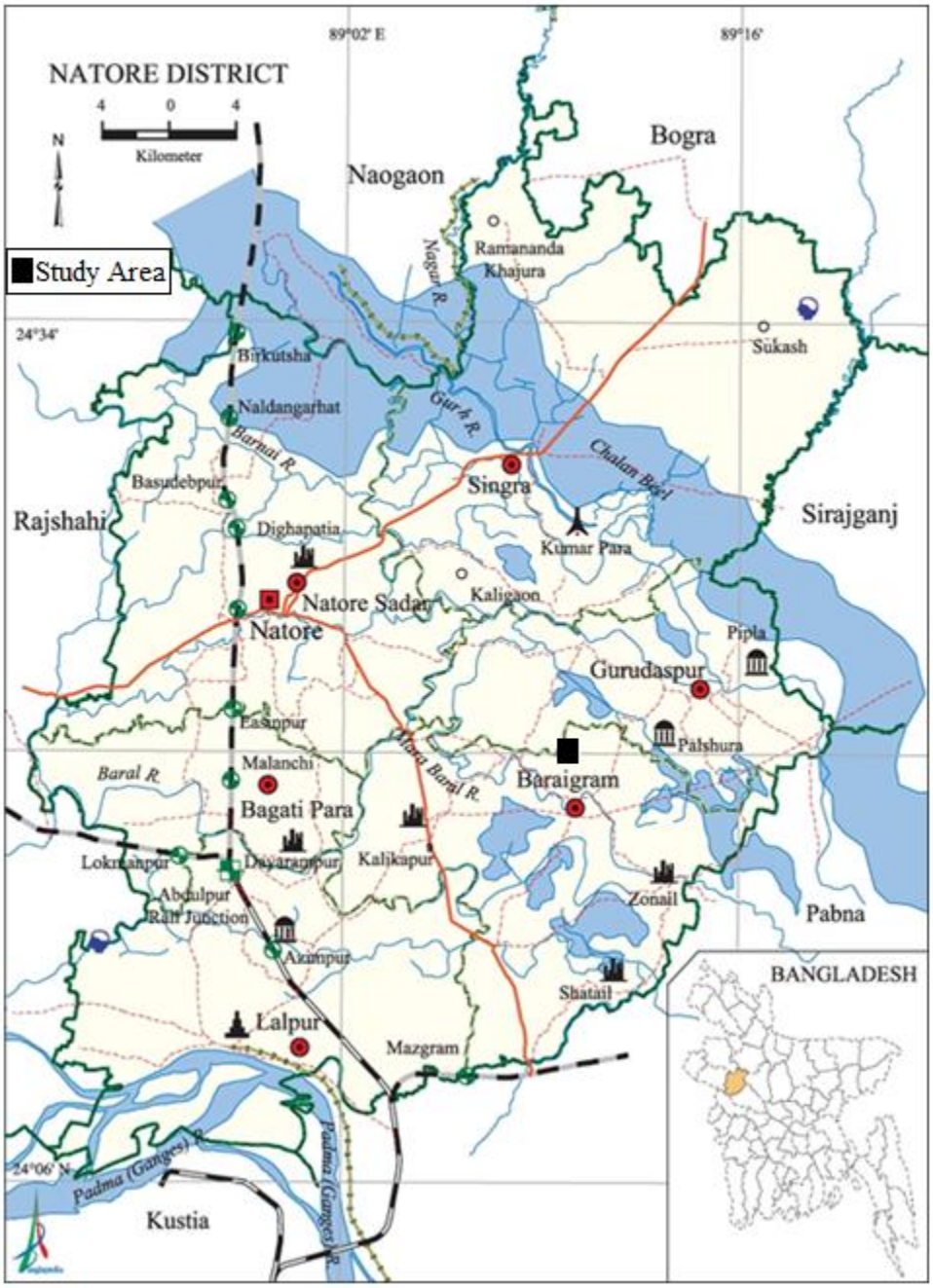
DESCRIPTION OF THE STUDY AREA

Description of the study area is given in this chapter to identify the salient features of the area under study. Knowledge of the study area is essential to have first-hand information about the location, physical features and land topography, soil, climate, temperature, rainfall, cropping pattern, marketing facilities etc. which would help later on. A brief note on some important characteristics of the study area and those of the sample household are presented below.

4.1. Location of the Study Area:

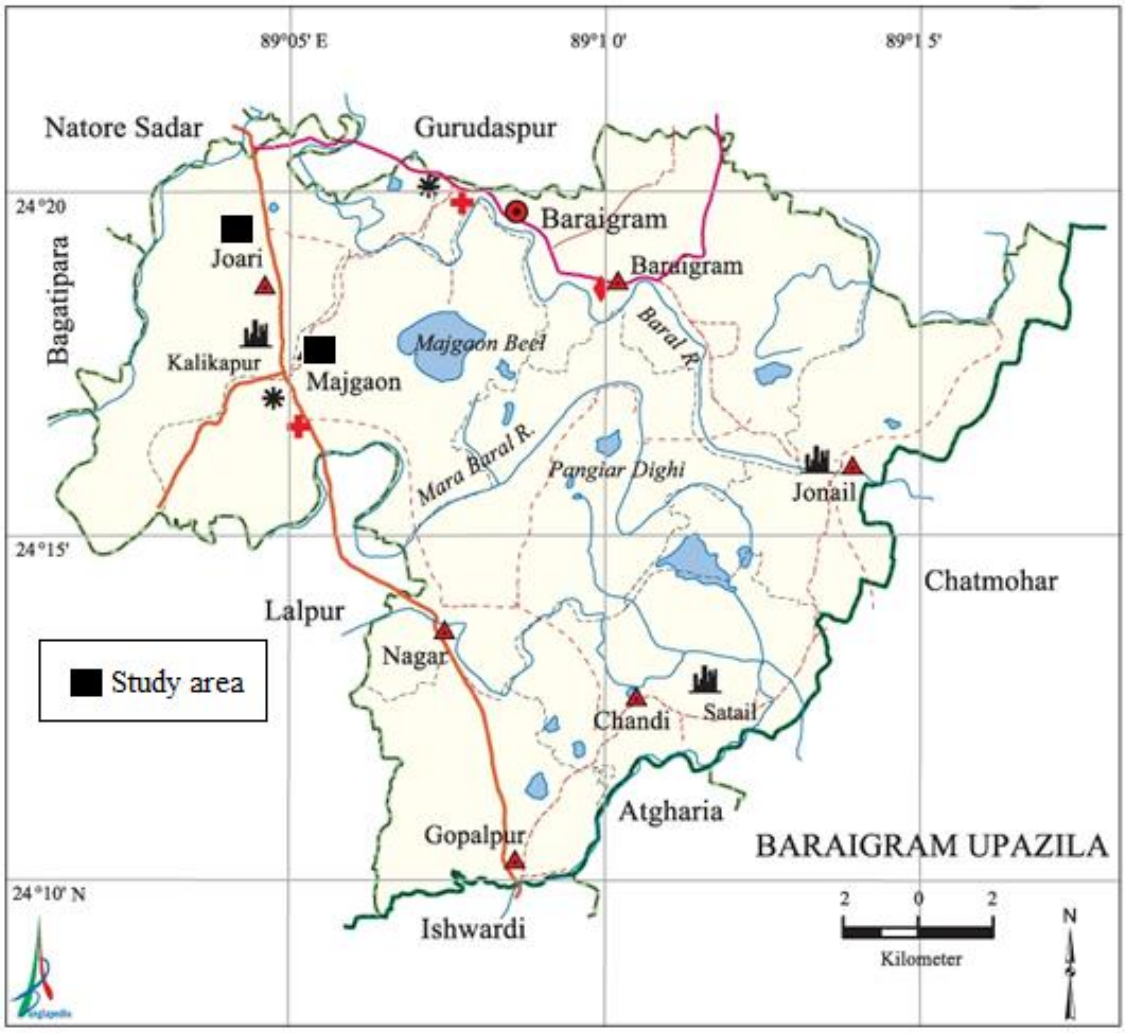
Baraigram is an Upazilla of Natore District in Rajshahi Division, Bangladesh. Administration Baraigram Thana was formed in 1869 and it was turned into an upazila in 1983. Baraigram upazila occupies an area of 299.61 sq.Km. It is located in between 24°10' and 24°21' north latitudes and in between 88°01' and 89°17' east longitudes. It is bounded by gurudaspur and natore sadar upazilas on the north, atgharia and ishwardi upazila of Pabna district on the south, chatmohar upazila of Pabna district on the east, lalpur and bagatipara upazilas on the west (BBS, 2011).

To find out the desired respondents, several dispersed villages were required to be selected. Although the villages were discrete they were under the same upazila (Baraigram). The study area covered four villages spread over two unions- Joary and Masgram of Baraigram upazila. The villages are Kaemkola and Ahmedpur under Joary union council and Tirai and Masgram under Masgram union council. The selected villages are situated around 7 kilometers of Baraigram upazila. The upozila is well connected with Natore district by pacca road. The location of the study area is presented in Map 4.1 and 4.2.



Source: Banglapedia

Figure 4.1: Map of Natore District



Source: Banglapedia

Figure 4.2: Map of the Study Area

4. 2. Physical Features and Soil Topography:

The soil varieties Doash, Bele, Etel and Kankar are found in the study area. General fertility level is medium. The soil is suitable for the production of rice, jute, sugarcane, vegetables and other Rabi crops.

4.3. Climate, Temperature and Rainfall:

The climatic condition of the area is considered not to be different from that of other parts of the district. The climate of the area is moderate. The average temperature of the district varies from maximum 37.8°C to minimum 11.2°C.The annual average rainfall of the district is1862 mm.

4.4. Area and Population:

According to the population census report 2011, the total area of Baraigram upozila is 299.61 sq.km and the population is 244821. The male population was 125399 and the female population was 119422.There were Muslim 228205, Hindu 10296, Buddhist 6290, Christian 13 and others 17. Indigenous communities such as Pahari, Munda, Oraon, Mahato belong to this upazila. Population density was 817 per square Km. The number of households and population of the study area are shown in Table 4.1

Table 4.1 Household and population of the study area

Villages	Households	Population		
		Male	Female	Total
Kaemkola	571	1066	1143	2209
Ahmedpur	491	1204	995	2199
Tirail	936	1838	1888	3726
Masgram	1123	2100	2181	4281

Source: BBS (2011)

4.5. Educational Facilities

The study area is very close to and well communicated with a good number of educational institutions wherein primary level to higher secondary level education facilities is available. There are 18 colleges, 45 secondary school, 81 primary school, 43 madrasa and 4 educational centre of Open University. Noted educational institutions are Baraigram Degree College (1970), Banpara Degree College (1985), Rajapur Degree College (1995), Moukhara Mahila Degree College (1996), Banpara Agricultural and Technical College (2000), Baraigram Pilot High School (1954), Rajapur High School (1954), St. Louis High School (1959), St. Joseph High School (1963), Ahmadpur MH High School (1985), Dasgram Siddikiya Alia Madrasa (1945), Dhanaidha Fazil Madrasa (1957) (Cultural survey report,2007). Female education is generally well advanced since girls high school and colleges are there in the locality.

4.6. Occupation of the villagers:

Agriculture is the biggest area of employment for the people in the study area. Most of the households are farmer and their main source of income is agriculture. A few numbers of people however, are engaged in services in different government and non-government organizations whose secondary occupation is agriculture. The main income sources of landless and small farmers are wage earning, van pulling and running the petty business. There is no special endeavor of employment for destitute women in the village studied. The percentage of household occupation in Baraigram upozilla is shown in Table 4.2

Table 4.2 Percentage of household occupation in Baraigram upozilla

Occupation	Percentage
Agriculture	38.01
Transport	1.8
Commerce	10.09
Handloom	1.02
Service	4.61
Agricultural labor	31.65
Wage labor	2.48
Construction	1.20
Others	9.14

Source: upozila statistical office, BBS

4.7. Agriculture:

The main crops of the district are Paddy(Boro), wheat, sugarcane and betel leaf. The main fruits that grow in the district are mango, jackfruit, banana, coconut and litchi. The farmers of the study area like to produce wheat, jute, sugarcane, potato, mustard seed, onion, garlic, betel leaf, winter vegetable etc. Now-a-days the farmers are more interested to garlic cultivation because they can earn more from it.

4.8. Livestock and Poultry:

The farmers of the study area raise cattle, goat, sheep, chicken and duck usually at subsistence level. Monitoring of information indicated that cattle, goat and chicken population gradually have increased per farm in the villages. This was due to intervention of improved breed management and regular vaccination program which reduced mortality.

4.9. Industry:

There is no big industry in the study area. There are some handloom and cottage industry. Some wooden and cane industry also exist there. In the study area, there are large numbers of rice mills, saw mills, engineering workshop, etc.

4.10. Economic Condition:

The economic condition of the farmers living in the study area is almost similar to that of other parts of Bangladesh. The labor class stands at the lowest economic status and live hand to mouth. But the well-to-do class to some extent shows different scenario. This class includes big landholders or involves in large trading or engaged in different services. Thus unequal distribution of wealth and income between rich and the poor is one of the important features in the study area.

4.11. Religion, Culture and Tradition:

In the study area, most of the people are Muslims and rests are Hindus. Irrespective of religion, people in the villages live in harmonic atmosphere. The villagers by and large, are cooperative to each other in all sorts of social and religious functions. Male members usually work in the field and female ones mostly serve as housewives. The people spend their leisure time through gossiping after fieldwork. Sometimes they spend their idle time by enjoying TV, Drama, songs etc. Some of the people mostly of well-to-do families often go to town to enjoy cinema or to meet friends and relatives living there.

4.12. Transportation, Communication and Marketing Facilities:

Transportation, communication and marketing facilities play an important role in agriculture as well as in economic development of particular region. Without these facilities, it becomes difficult to develop rural areas because the introduction of modern technology would become an impossible task. Pucca, semi-pucca and well-built kutcha roads facilitated communication in the study area. The people in the study area usually travel by van, auto-van, by-cycles, motorcycles, motorcar and also on foot

People in the study area enjoy better marketing facilities than many other areas of the district because a good number of hut and bazaars are setting in the study area which sit twice or thrice a week. Basic necessities of life such as rice, vegetable, fish, meat, eggs, fruits, clothes etc are transacted in these hat and bazaars. Small farmers use to sell their products in the local market and the large farmer take their products even in the district town and also in Dhaka, Chittagong, Sylhet and other large town of the country because of easy communication system.

CHAPTER V

SOCIO-ECONOMIC CHARECTERISTICS OF THE RESPONDENT

Decision making behavior of an individual is determined to a greater extent by his socio-economic characteristics. It is therefore, considered to study some of the socio-economic characteristics because credit needs, its availability, utilization and repayment behavior of the borrowers may be influenced by their various socio-economic characteristics. An attempt has been made here to investigate into some important as well as relevant socio-economic characteristics of the sampled borrowers.

5.1. Distribution of Sample Farmers

Farmers have been categorized into three groups. Farmers owing land less than 2.50 acres have been considered as small farmers. Medium farmers were those who owned land from 2.50 to 5.0 acres while the farmers having land more than 5.00 acres have been considered as large farmers.

Table 5.1 indicates that out of 120 respondents, 60 percent were small farmers, 26.67 percent were medium farmers while the large farmers comprised 13.33 percent. The proportion of small farmers was observed to be very much higher than those of medium and large farmers which is a common scenario in Bangladesh.

Table5.1. Distribution of sample farmers according to farm size:

Farm size (Acres)	**Number of respondent**	**Percentage**
Small (below 2.50)	72	60.00
Medium (2.50 to 5.00)	32	26.67
Large (above 5.00)	16	13.33
All	120	100

Source: Field survey, 2015

5.2. Composition and Size of Farm Family

The size of the family has a direct influence on the economic activities of the farm households. A family in this study has been defined as number of person living together and taking meals from the same kitchen as well as under the administration of the one head of the family. The family includes husband, wife, sons, unmarried daughters, family heads parents etc. If any person of family is employed elsewhere outside of home but takes meals from the same kitchen while at home and share the income and expenditure of the family he/she was considered to be a member of that family.

Person or persons however, who have been employed in a family to act a servant, caretaker etc., were excluded from that family composition. The number of persons belonging to all families surveyed was divided into three age groups:

- Below 15 years considered to be under aged kids
- Family member within 15 to 57 years considered as active age group
- Above 57 years of age considered to be old aged group

The distribution of family member by age and sex in the sample is presented in Table 5.2. It appears from the table that overall family size of the respondent was 4.13 which is less than national average 4.90 (BBS, 2009). The estimates were found 3.74, 4.65, 4.81 for the small medium and large farmers' respectively indicating positive relationship between farm size and that of family size in the study area during the study year. It also shows that the average family size of 4.13 persons constituted 2.81 males and 1.94 females. The dependency ratio for the large farmers is lower than those of small and medium farmers. The dependency ratios for the small, medium and large farmers were 47.80, 43.26 and 26.23 respectively.

Table 5.2 Composition and Family Size of the Respondents

Farm size	Male				Female				Average family size	Depen-dency ratio
	Below 15 years	15 to 57 years	Above 57 years	Sub total	Below 15 years	15 to 57 years	Above 57 years	Sub total		
Small	.42 (30)	1.35 (97)	.13 (9)	1.90 (136)	.54 (39)	1.18 (85)	.13 (9)	1.84 (133)	3.74	47.80
Medium	.53 (17)	1.78 (57)	.25 (8)	2.56 (82)	.46 (15)	1.47 (47)	.16 (5)	2.09 (67)	4.65	43.26
Large	.25 (4)	2.19 (35)	.31 (5)	2.75 (44)	.38 (6)	1.62 (26)	.06 (1)	2.06 (33)	4.81	26.23
All	.43 (51)	1.57 (189)	.18 (22)	2.18 (262)	.50 (60)	1.32 (158)	.13 (15)	1.94 (233)	4.13	42.65

Figures in parenthesis indicate the total number

Source: Field survey, 2015

* Dependency ratio $= \frac{(number\ of\ people\ aged\ below\ 15\ and\ those\ aged\ above\ 57)}{number\ of\ people\ aged\ 15-57} \text{x}100$

5.3. Educational Level of the Respondents

Education is the backbone of a nation. It plays an important role in accelerating the pace of economic as well as agricultural development. Education is of prime importance in all development processes of a country. It makes a man more capable of efficiently managing scarce resource with a view to earning maximum profit. It is considered to be an important yard stick of progressive attitude of the farm households towards adoption of modern input package in order to produce more income, more savings, more investment and ultimately more capital formation.

It is evident from table 5.3 that the small farmers were more illiterate than those of the medium and large farmers in the study area. Percentages of illiterate farmers were 30.56 for small farmers, 15.62 percent for medium farmers and there were no illiterate large farmer in the study area during the study period. Large farmers were found to be more educated than those of small and medium farmers in the study area.

The table also reveals that 22.5 percent of total respondent were illiterate having no formal education, another 37.5 percent were within the level of primary education, 25.83 percent were in the level of SSC and 14.17 percent were within the level of above SSC. It is however, evident that people in the village are more literate (77.50 percent) than that of country's literacy rate 52.50 percent (MoF,2008) The findings however, does not reveal the general situation of rural areas of Bangladesh possibly because of exclusive randomly selection of the farmers in the study area under review.

Table 5.3 Level of Education of the Respondents

(percent)

Farm size	Level of Education				
	Illiterate	Primary	S.S.C	Above S.S.C	Total
Small	30.56 (22)	41.67 (30)	23.61 (17)	4.16 (3)	100 (72)
Medium	15.62 (5)	37.5 (12)	28.13 (9)	18.75 (6)	100 (32)
Large	-	18.75 (3)	31.25 (5)	50 (8)	100 (16)
All	22.5 (27)	37.5 (45)	25.83 (31)	14.17 (17)	100 (120)

Figures in parenthesis indicate the total number

Source: Field survey, 2015

5.4. Occupation of the Respondents

The selected farmers in the study are have been engaged in various type of occupation .Table 5.4 shows the occupation of the farmer. It appears from the table that 46.67 present of the farmers had agriculture as their main occupation .Among other occupation, services and different types of business were found in the study area. Agriculture cum business constituted 25, 37.50 and 31.25 percent of the small medium and large farmers respectively. There were also people having agriculture cum service as their occupation in the study area comprising 8.33, 12.50 and 31.25 percent for the small, medium and large farmers respectively. The percent was highest for the large farmers because of their higher education level attained during the year. Agriculture cum other occupation (wage labor, van pulling e.t.c) constituted 16.67 and 6.25 percent of the small and medium farmers respectively while no large farmers was observed to be engaged in this occupation.

Table 5.4 Occupation of respondents according to farm size

Farm size	Agriculture		Agriculture cum service		Agriculture cum business		Agriculture cum others		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	percent
Small	36	50.00	6	8.33	18	25.00	12	16.67	72	100
Medium	14	43.75	4	12.50	12	37.50	2	6.25	32	100
Large	6	37.50	5	31.25	5	31.25	-	-	16	100
All	56	46.67	15	12.5	35	29.17	14	11.66	120	100

Source: Field survey 2015

5.5. Distribution of the Land Holding

The distribution of farm land according to its different uses is very important in judging the economic as well as social status in rural power structure of the farmers. The importance of land is the basic source of agriculture production and an important indicator to determine the level of income of farm households.

Farm size was computed by the entire land area operative by the farmer. Farm size in (cultivated) the percent study was determined by adding the area of won cultivated land, are rented in and/or mortgaged in form others and subtracting the area given to others (rented as well as mortgaged).Farm size has also been calculated on legal status in the percent study. It was computed by adding up the cultivated owned land, homestead area and other land (fallow, ponds, orchard, etc.) in own possession.

Distribution of land holding was accordingly calculated as shown in Table 5.5 On an average, farm size under effective use was found to be 1.70 acres taking all farm together while average effective farm size for small, medium and large farm were 1.24, 2.14 and 2.92 acres respectively during the study year. Average land holding under legal status was estimated that 2.79 acres comprising all samples together. Average land holding under legal status for small, medium, and large farmers in other hand were 0.95, 4.82 and 7.05 acres respectively during the same period. it is evident from the table that medium and large farmers had land holding in cultivation less than

having land under legal status possibly because of some of their more otherwise engagement than farming during the study period in the area.

Table 5.5 Average size of land holding according to farm size (acre)

Farm size	Cultivated own land	Rented in	Rented out	Mortgaged in	Mortgaged out	Total cultivated land	Homestead	Others (pond, fellow orchard)	Total land under legal status
Small	0.79	0.30	-	0.15	-	1.24	0.09	0.07	0.95
Medium	3.19	-	0.60	0.13	0.57	2.15	0.16	0.30	4.82
Large	6.41	-	0.46	-	3.03	2.92	0.29	0.35	7.05
All	2.17	.18	.22	.12	.56	1.70	.14	.17	2.79

Source: Field survey, 2015

5.6. Assets Position of Farmers According to Farm Size

Attempt has been made to estimate the value of asset of a farm family on the basis of productive asset in relation to other household assets, Assets which have been taken into consideration were live animals, farm implements, dwelling houses, household durables and other assets (gold and silver ornaments, cash in bank, cash in hand etc.). The Average value of assets according to farm size is presented in Table 5.6 There is a clear-cut positive relationship between farm size and average value of assets possessed by all categories. That means average value of assets increased as the farm size increased. Value of dwelling houses constitutes the highest amount (48.20 percent), other assets (17.52 percent), live animals (9.72 percent) and farm implements (4.71 percent) during the year of study.

Table 5.6 Average value of assets according to farm size

Farm Size	No	Live animals	Farm Implement	Dwelling house	Household durables	Other assets	Total
Small	72	9625 (12.85)	2457 (3.28)	35142 (46.94)	18520 (24.74)	9124 (12.19)	74868 (100)
Medium	32	13433 (8.80)	8692 (5.69)	72676 (47.60)	27685 (18.13)	30184 (19.77)	152670 (100)
Large	16	15234 (6.43)	12982 (5.48)	120324 (50.79)	35790 (15.11)	52563 (22.19)	236893 (100)
All	120	11388 (9.72)	5523 (4.71)	56509 (48.20)	23267 (19.71)	20532 (17.52)	117219 (100)

Source: Field survey, 2015

5.7. Annual Income of the Respondents According to Farm Size

Annual income in percent study has been calculated by summing up of all sports of income earned by all active members of the family from all possible income generating activities during the year under investigation. Annul income is grouped into farm income and non-farm income

Farm income represents earning from agriculture by and large and crops, big trees, fruits and vegetables, live animals, fisheries, etc. While non-farm income means income received from the sources beyond agriculture pursuits like service, business, wage for physical labor, rickshaw and van pulling, etc. produced if these were not produced by the farmers themselves, might have to be purchased form the market out of pocket expenses.

Table 5.7 shows the average amount of annual income of a family. It is evident from the table that average income tends to increase with farm size. Average amount of annual income from all sources as estimated were tk 100163, 225021, 385000 for small, medium and large farmers respectively. Overall average income tk 171437 for all farmers during the study year. Average income of medium farmers was found to be 2.25 times higher than those of small farmers and again average income of large

farmers was found to be 1.71 times higher than that of medium farmers and 3.84 Times higher than those of small ones in study area. As a whole, average farm and non-farm incomes were tk 86483 and 84954 for all farmers which represents 50.45 and 49.55 percent of total income respectively. The study also reveals that average income of small and large farmers were mostly from non-farm sources while those of medium farmers from farm activities during the same period

Table 5.7 Average annual income of the borrower's family

Farm size	Farm income		Non-Farm income		Total income	
	Amount	Percent	Amount	Percent	Amount	Percent
Small	45676	45.60	54487	54.40	100163	100
Medium	128946	57.30	96075	42.70	225021	100
Large	185185	48.1	199815	51.90	385000	100
All	86483	50.45	84954	49.55	171437	100

Source: Field survey, 2015

5.8. Annual Expenditure of the Respondents According to Farm Size

Total expenditure of a family was incurred mainly for three purpose, i.e., meeting farm expenses comprising all sorts of expenses relating to production of agriculture commodities as well as products; meeting non-farm expenses comprising all sorts of expenses relating to the business and other productive activities; and other for meeting family expenditures comprising basic consumable goods as well as goods of relative comforts. Regarding family expenditure, only the expenses incurred for buying commodities from the market for exchange of cash ware taken into account in the percent study. Expenditure for social ceremonies, medical treatment, education, expenditure for construction and repairing of houses and furniture and repayment of old debt were also included in family expenditure. The result shown in Table 5.8 It is clear from the table that 33.93 percent of the total annual expenditure was incurred for various items of family expenditure for the study area. Small farmers, however, were observed to have spent more (38.70 percent) for family expenditure than those of the medium and large farmers during the study area. The table also reveals that 36.33 and

29.74 percent of the total annual expenditure were incurred for farm and non-farm expenditure respectively.

Table 5.8 Average Annual Expenditure of borrower's family

Farm Size	Farm Expenditure		Nonfarm Business Expenditure		Family Expenditure		Total Expenditure	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Small	26159	28.5	30106	32.8	35521	38.70	91786	100
Medium	84619	43.93	43860	22.77	64144	33.30	192623	100
Large	116348	37.02	108680	34.58	86114	27.40	314285	100
All	53774	36.33	44117	29.74	50332	33.93	148342	100

Source: Field survey, 2015

5.9. Annual Savings of the Respondents According to Farm Size

Savings of the farmers of different farm size groups are calculated by subtracting the total expenses from corresponding total income of the sampled household. Table 5.9 shows that average savings of the small, medium and large farmers were found to be Tk 8377, 32398 and Tk 70715 respectively indicating positive saving at the end of the year. It is clear from the table that average savings positively related with farm size.

Table 5.9 Average Annual Savings of the Respondents

Farm size	Income	Expenditure	Savings
Small	100163	91786	8377
Medium	225021	192623	32398
Large	385000	314285	70715
All	171437	148342	23094

Source: Field survey, 2015

CHAPTER VI

AGRICULTURAL CREDIT STRUCTURE IN THE STUDY AREA

6.1. Sources of Credit:

Most of the famers in our country are poor. Usually they have either negative or meager savings at the end of the year. So, they are not able to go to big investment due to scarcity of working capital. Most of the farmers in developing countries like Bangladesh are in the category of medium and small scale operations. For improving the economic condition of the farmers in the least developed countries (LDCs) through increasing productivity requires substantial investment in agriculture which is very much lacking among the farmers in general, marginal, small and medium farmers in particular. Hence, flow of external finance for investment during productive activities on the farm is urgently required in LDCs. There is no doubt that farmers in our country are desperately in need of credit. Both institutional and non-institutional sources of credit are trying to fill up the gap between the demand and supply of credit. This study covers only the institutional sources of credit.

6.1.1. Institutional Sources of Credit:

Institutional sources of credit in the study area include public banks, private commercial banks and member based institutions (GB and other NGOs). Credit situation during the last twelve months has revealed pleasing condition of the institutional sources of credit in the study area. Among the institutional sources found available to have supply of credit to surveyed families during the last twelve months are discussed below:

Sonali Bank the largest nationalized commercial bank of Bangladesh established under the Bangladesh bank order 1972 by taking over the branches of National Bank of Pakistan, Bank of Bhowalpur and Premier Bank that were functioning in East Pakistan until 1971. Sonali Bank performs all traditional banking functions including deposit mobilization and lending. The bank provides funding to some income generating and economic development projects namely, Poverty Alleviation Credit Program, Female Credit Program and Agro-based industrial credit program in the rural areas. It has a large credit program which includes crops, livestock, poultry,

fisheries, business, etc. Sonali Bank was found in operation in the study area although the volume of credit advanced was not sufficiently large during the investigation year.

Agrani Bank is a nationalized commercial bank of Bangladesh established on 26 March 1972 under the Bangladesh Bank order 1972 by taking over two abandoned Pakistani banks- Habib Bank and Commerce Bank. In addition to traditional deposit taking in various accounts and providing loans to almost all sectors of the economy, the bank offers many other services through its schemes of school banking, inland travelers' cheques, pension funds, industrial development bond and inland remittance. Having been a commercial bank, it is interested in business sector loan but the government of Bangladesh insisted the bank also to provide loan to agricultural sector. In agricultural sectors it gives loan for crops, livestock, poultry, fisheries etc. It also gives loan for trade and commerce. Agrani Bank was found to have advanced large volume of credit in the study area during the investigation year.

Rajshahi Krishi Unnayan Bank (RAKUB) is a state owned bank in Bangladesh with regional approach. The bank emerged as the government's plan of intensive care to agriculture of Rajshahi and Rangpur administrative divisions providing livelihood to 35 million people of the area. Besides catering to agricultural credit, RAKUB, as it is acronymed, renders deposit banking services through all the 377 branches.

As the largest development partner in agriculture of the northwest region RAKUB aims at overall development of farmers and all the sectors and sub-sectors of agriculture in this region. The bank also performs functions like financing agri-business and agro-based industries and poverty alleviation programme.

Uttara Bank Limited (UBL) was established in 1965 with the head office located at Motijheel in Dhaka. At the time of its establishment, it was named "Eastern Banking Corporation ". After the liberation war of Bangladesh, the bank was nationalized. In 1983, it became the first privatized bank of Bangladesh.

Grameen Bank a specialized bank established in October 1983 as a body corporate under the Grameen Bank Ordinance 1983 for extending credit exclusively to the landless men and women of rural areas of the country. The main function of Grameen Bank is to provide collateral free credit facilities to the landless persons for various types of income-generating and livelihood activities. It invests in government

securities, provides professional counsel to landless people regarding investment in small business and cottage industries, and carried out survey and research.

The bank runs its credit program with the philosophy that credit for self-employment is a fundamental human right. It takes credit to doorsteps of the poor instead of the conventional practice of clients coming to banks. The principle works as a powerful instrument in ensuring access of the poor to credit for providing them a chance to improve their economic condition. Through small loans amounting up to $300 Grameen Bank enables the landless, illiterate rural women to start their own business and gain some independence, self- sufficiency, self –respect and self-empowerment. Credit delivery mechanism and the mode of repayment of loans has become a model in the poverty alleviation efforts in Bangladesh, other developing countries, and in some developed countries such as the USA, Canada, Germany and France.

The broad activities for which Grameen Bank provides credit facilities from its own fund are processing and manufacturing, agriculture and forestry, service sector enterprises, trading, shop keeping etc. There are innumerable types of different activities for which the bank extends credit financing. The bank accumulates savings of its members in the forms of direct deposit in savings accounts as well as through mandatory deduction from the loans sanctioned to create group funds. Members may be given loans from the group fund for their projects as well as for social and household expenditures, health and medical expenses, loan repayment, maintenance, repairing and addition of capital. Grameen Bank has a program of leasing loan services, under which it introduced Grameen Phone to provide easy telecommunication services to the rural poor in Bangladesh. Sources of funds of the bank are share capital, general and reserves, various special funds maintained and managed by the bank itself, deposits and balance of other funds, borrowing from banks and foreign institutions, etc. Grameen Bank was found in operation successfully in the study area during the investigation period.

BRAC (Bangladesh Rural Advancement Committee) is one of the largest NGOs set up in 1972 by its founder Fazle Hasan Abed in Habiganj district. BRAC initially provided relief and rehabilitation assistance to refuges returning from India after the War of Liberation. Later, BRAC turned its focus on the long term issue of poverty alleviation and empowerment of the poor in rural areas of the country. At present,

BRAC promotes income generation for the poor, mostly landless rural people through microcredit and program on healthcare, literacy, education and training. BRAC believes that microcredit is an important tool in breaking the cycle of poverty. But it also gives emphasis to training of its members in livelihoods trades and income generating activities and in facilitating their linkage in consumer markets. BRAC's social development initiatives are designed to increase members' awareness of their rights and responsibilities and to facilitate ways of tackling discrimination in their villages and their region. The credit program of BRAC covers crops, livestock, poultry, nursery, and sericulture, small business, cottage industries, etc. BRAC was found in operation successfully in the study area during the investigation year.

ASA (Association for Social Advancement) formed as an NGO in early 1978 by a few development workers led by Shafiqul Hauqe Chowdhury, the founder managing Director. ASA started as a development NGO through a trial and error method and with close contract with grassroots people and with a relatively radical action agenda. ASA believes that if an organization implements several types of program, the development process slow down and the results are unimpressive. Specialization is the only solution to cover the huge number of poor people within a short time. ASA motivates grass root poor people to establish a decision- making system in their family and society, organizes the poor in groups, conducts awareness developments campaigns and helps the poor to identify various issues relating to the violation of human rights. The present sources of ASA's microcredit finance funding in operation are the institution's own funds, members' savings, loan from PKSF, loans and grants from donors and other contributions. The credit program of ASA includes livestock, poultry, small business, handy-crafts, shop, cottage industries, etc.

6.2. Amount of Credit Obtained From Different Sources

Information regarding the total amount of loan obtained by a farmer during the last one year was collected in some detail. Average amount of loan contracted by small, medium and large farmers from all available sources during last one year was examined and presented in Table 6.1. Table 6.1 shows that average amount of loan contracted by small, medium and large farmers from all sources together was estimated at Tk 15046, 37500, 100000 respectively. The small farmers were observed to have received on an average 53.19 percent of total credit from member based

institutions of which Grameen Bank provide the highest proportion (22.76 percent) and 46.81 percent of total credit from different public and private bank of which Sonali Bank provide the highest proportion (17.67 percent). The small farmers were found to have more access to member based institutions which use to provide collateral free loan to the farmers for income generating activities popularly known as microcredit. Table also reveals that the public and private banks were found to have supplied more money to the medium and large farmers than those of small ones possibly because of the formers ability to offer security against loan. Large farmers were found to have contracted loan only from the banks.

Table6.1. Average Amount of Loan Contracted from Different Sources

Farm Size	Public & private banks				Sub total	Member based institutions			Sub total	Total
	RAKUB	Sonali Bank	Agrani Bank	Uttara Bank		Grameen Bank	ASA	BRAC		
Small	2090	2659	2295	_	7044	3424	2760	1819	8003	15046
	(13.89)	(17.67)	(15.25)		(46.81)	(22.76)	(18.34)	(12.08)	(53.19)	(100)
Medium	7560	8400	10400	4800	31160	820	3400	2120	6340	37500
	(20.16)	(22.40)	(27.73)	(12.80)	(83.09)	(2.18)	(9.07)	(5.65)	(16.91)	(100)
Large	10000	10000	65000	15000	100000	-	-	-	-	100000
	(10.00)	(10.00)	(65.00)	(15.00)	(100)					(100)
All	4603	5169	12817	3280	25869	2273	2563	1656	6492	32361
	(14.22)	(15.97)	(39.62)	(10.14)	(79.95)	(7.02)	(7.92)	(5.11)	(20.05)	(100)

Figures in parenthesis indicate percentages

Source: field survey, 2015

6.3. Amount of Loan in Relation to Family Size

To make the study more informative one, the association of the average amount of loan contracted during last year in relation to family size was also examined. It appears from table 6.2 that the average amount of loan contracted by the families was positively related to family size. It may therefore, be concluded that larger the family size more would have been the requirement of credit from various sources and vice-versa. The table 6.2 also shows that maximum amount of loan has been received by the middle family size group perhaps because of more families belonged to that group during the study year.

Table 6.2 Amount of loan in relation to family size

Size of family (Person)	No. of farmers	Average amount of loan contracted by per family(Tk)	Percentage of total loan contracted
Below 4	33	14121	12.00
4 to 6	71	39927	73.00
Above 6	16	36407	15.00
All	120	32361	100

Source: Field survey, 2009

6.4. Amount of Loan Contracted According to Value of Assets

Value of assets of the respondents might be another criterion of contracting loan from the various sources of credit. Table 6.3 reveals that the farmers having least amount of assets were observed to have contracted least amount of loan on an average constituting only 8.0 percent of total loaned money in the study area. In contrast to households having more assets value contracted maximum amount of loan comprising 27.0 percent of the total loan disbursed during the period under review. From this table it could easily be said that the loan amount received was positively related to the value of assets.

Table6.3. Loan contracted according to value of assets

Value of assets (Tk)	No. of farmers	Average amount of loan contracted by per family (Tk)	Percentage of total loan contracted
Below 50,000	21	14794	8.00
50,001 to 100,000	31	25054	20.00
100,001 to 200,000	48	36406	45.00
Above 200,000	20	52425	27.00
All	120	32361	100

Source: Field survey, 2015

6.5. Amount of Loan Contracted According to Income

It was also felt necessary to the see relationship between credit receipts and farm income of the respondents. Farm income is the main source available to the farmers to repay the loan. Table 6.4 shows the relationship between farm income and average amount of loan received by the farmers in the study area. It appears from the table that the lower income group received on an average least amount of loan (9.00 percent). In contrast, the highest amount of loan contracted by the farmers having income above Tk 100000. It means that receipts of loan relates positively to income of the farmers.

Table 6.4 Loan disbursed according to income of the farmers

Income group (Tk)	No. of farmer	Average amount of loan contracted by per family(Tk)	Percentage of total loan contracted
Below 50000	35	9986	9.00
50001-100,000	53	32239	44.00
Above 100,000	32	57036	47.00
All	120	32361	100

Source: Field survey, 2015

CHAPTER VII

UTILIZATION AND REPAYMENT OF CREDIT BY THE RESPONDENT

Credit play significant role in increasing farm productivity and income if it is utilized properly. So the pattern of credit utilization is very important in farming activities. Since the NGOs and banks are essentially business institutions aiming at earning good profit, an NGO worker or banker would extend money for those purposes which seems to be profitable as well as consistent with economic development of the country. To make profit bank or NGO must ensure that the borrowed funds are used for productive purposes. Proper use of credit promotes increased production and benefits the borrowers involved. Use of credit for unproductive purposes very often results in overdue of loans and weakens the financial viability of concerned financial institutions. The success of credit institutions, therefore, depends mostly on the extent of proper utilization and success repayment by the users. In this section, an investigation has been made to show the pattern of credit utilization and repayment of credit by the respondents in the study villages during the year.

7.1. Utilization of Credit by the Respondent

Information was collected from the respondents of different farm size groups regarding their loan utilization. The purposes for which the loanees were observed to have used loan during the year of investigation have been broadly classified into the following heads:

a) Capital expenditure on farming
b) Current expenditure on farming
c) Non-farm business expenditure
d) Family expenditure

Attempts were further made to detail out the broad heads of expenditure with a view to identifying the actual use of borrowed funds by the farmers so as to do examine whether properly or improperly used the borrowed funds. Detailed out of the credit use was made as follows:

a) Capital expenditure on farming

i. Purchase of livestock
ii. Purchase of land/ mortgage in land
iii. Purchase of agricultural equipment (tubewell, power pump, power tiller, etc.)
iv. Pond leased in/digging

b) **Current expenditure on farming**

i. Purchase of seed/seedling
ii. Purchase of fertilizer
iii. Purchase of insecticide
iv. Charge for human labor
v. Irrigation charge incurred
vi. Charge for powertiller
vii. Seed, feed and medicine charge for live animals

c) Non-farm business expenditure

i. Petty business/SMEs
ii. Grocery shop
iii. Tailoring
iv. Purchase of van/autovan
v. Ricemill/Sawmill
vi. Chatal business

d) Family expenditure

i. Purchase of food
ii. Purchase of cloth
iii. Expenditure on education
iv. Medical treatment
v. Social ceremonies
vi. Construction/ repairing house and household durable

Attempts have been made to examine the utilization pattern of credit by the farmers belonged to different farm size group. The pattern of credit utilization is shown in Table 7.1. It is apparent from the table that average amount of loaned money utilized by the respondents as a whole in meeting capital expenditure on farming was about Tk 8735 and is positively related to farm size category during the study period.

Average amount of loan utilized for capital expenditure on farming was Tk 2940, 11768 and 28743 respectively by small, medium and large farmers. Next to capital expenditure, average amount of loaned money utilized by the respondents in meeting current expenditure on farming was about Tk 6114 and small farmers were found to have expectedly used more money (24.76) while the large farmer did the least (14.85). Table 7.1also shows that maximum of loaned money has been used for non-farm business expenditure irrespective of farm size category being about 35.23, 43.37 and 50.68 percent of total loan for small, medium and large farmers respectively. Family expenditure unlike others in the present study received least priority though the small farmers were found to have used more money for family expenditure (20.47 percent) while the large farmers did same the least (only 5.73 percent). It can therefore, be strongly said that the farmers at present in the study areas are very much conscious about productive use of borrowed funds which is definitely a positive sign towards economic development of the country.

Table7.1. Utilization of credit according to farm size

Heads	Use of credit			
	Small	Medium	Large	All
Capital expenditure on farming	2940 (19.54)	11768 (31.38)	28743 (28.74)	8735 (26.99)
Current expenditure on farming	3725 (24.76)	7123 (18.99)	14850 (14.85)	6114 (18.89)
Non-farm business expenditure	5301 (35.23)	16338 (43.57)	50678 (50.68)	14294 (44.18)
Family expenditure	3080 (20.47)	2271 (6.06)	5729 (5.73)	3218 (9.94)
Total	15046 (100)	37500 (100)	100000 (100)	32361 (100)

Figures in parenthesis indicate percentage

Source: Field survey, 2015

7.2. Repayment of Credit by the Respondents

Repayment capacity is one of the crucial aspects of credit analysis and proper utilization of credit is supposed to have a great influence upon the repayment capacity of the borrowers. If supervision and utilization of loan have been made properly then loan repayment rate is expected to be higher. Otherwise very often it will result in loan defaults and weakens the financial viability of the concerned lending institutions. So, it can be said that satisfactory loan use and level of repayment capacity always attribute a successful credit program. Generally public and private banks collect credit on yearly basis and member based institutions collect credit on installment basis.

Table 7.2 presents the repayment record against loans obtained by the sample farmers that were due before the date of survey. Taking all the respondents together, the average amount due for recovery was found to be Tk 21117.62 of which average amount repaid was Tk 14193.31.Percentage figure repaid so constituted 67.21 of the average amount due. Average amount of loan due was found to be Tk 10289.65, Tk 25223.45 and Tk 61631.84 for the small, medium and large farmers respectively. The percentage repaid constituted respectively 62.00, 69.03 and75.23 for small, medium and large farmers indicating an unsatisfactory situation in the study villages. Large farmers were found relatively better loan re-payers in the study area.

Table7.2. Repayment of credit by the respondents

Farm size	Average amount received	Average amount due			Average amount repaid			Percent of Repaid
		Principal (Tk)	Interest (Tk)	Total (Tk)	Principal (Tk)	Interest (Tk)	Total (Tk)	
Small	15046	9205.65	1084.00	10289.65	5840.35	540.00	6380.35	62.00
Medium	37500	22723.45	2500.00	25223.45	14776.55	911.00	15687.55	69.03
Large	100000	56786.84	4845.00	61631.84	43213.16	3150.00	46363.16	75.23
All	32361	19154.56	1963.06	21117.62	13206.38	986.93	14193.31	67.21

Source: Field survey, 2015

[Note: Interest rate charged by RAKUB- 10%, Sonali Bank- 14%, Agrani Bank- 14%, Grameen Bank-10% to 15%, BRAC- 15%, ASA- 12.5%]

7.3. Factors Contributing Loan Repayment by the Borrowers

An endeavor was made to identify the contributions of factors affecting loan repayment made by the borrowers under study. The results of regression analysis in this regard are summarized in Table 7.3.

Table7.3. Estimated values of coefficient and related statistics of regression analysis

Explanatory variable	coefficient	Standard error	t- value
Constant	861.577	96.406	8.937
X_1,Farm size	16.517*	7.577	2.18
X_2,Family size	2.555	1.371	1.864
X_3,Age	-3.403	11.231	-.303
X_4,Education	8.673**	2.624	3.305
X_5,Income	0.091**	0.014	6.411
X_6,Savings	0.664*	0.325	2.040
R^2	0.65		
Adjusted R^2	0.57		
F value	22.179		

*Significant at 5 percent level

**Significant at 1 percent level

Farm size (X_1): The co-efficient of the variable farm size was 16.517 and significant at 5 percent level of confidence with positive sign. It indicates that keeping other variables constant, 1 acre increase in farm size would lead to an increase in repayment of loan by 16.517 percent.

Family Size (X_2): The estimated regression coefficient for family size of the respondent was 2.555 with positive sign but statistically insignificant.

Age of the respondent (X_3): The estimated regression coefficient for age of the respondent was found to be negative (-3.403) and statistically insignificant. So, further illustration is avoided.

Education (X_4): The coefficient of education of the respondent was 8.673 and statistically significant at 1 percent level of confidence. It implies that keeping other things constant, if educational level increased by 1 year then loan repayment increased by 8.673 percent.

Income (X_5): The estimated regression coefficient for income of the respondent was .091 and statistically significant at 1 percent level. It indicates that keeping other things constant, 1 taka increase in income will lead to an increase the repayment of loan by .091 percent.

Savings (X_6): The coefficient of savings of the respondent was .664 and statistically significant at 5 percent level. It indicates that keeping other things constant 1 taka increase in saving would lead to an increase the repayment of loan by .664 percent.

Value of R^2: Regression analysis shows that the independent variables jointly explained 65 percent (R^2=0.65) of the total variation of the respondents loan repayment performance

F – Value: The F- value of the equation was highly significant and it implies that the included variables are important for explaining the variation in the amount of loan repaid by the farmers.

CHAPTER VIII

SUMMARY AND CONCLUSION

This chapter includes summary of the research work and some conclusions over the findings of the study.

8.1. Summary:

Bangladesh is an agricultural country. Majority of its people live in rural areas and are dependent directly or indirectly on agricultural pursuit. Its share to national GDP is still the highest. In spite of such importance in national economy, performance of this sector is still not up to the expected level. A majority of people engage in agricultural profession consist of small and marginal farmers whose income level is very low signifying almost negative savings.

Majority of the farmers of our country are landless, marginal and small ones. They don't have enough money to run the various production activities related to agricultural production. Moreover, since 1960, seed fertilizer, irrigation technology to a greater extent has enhanced production cost to the farmers. Mechanization in agriculture has added cost to production of crops, livestock and fisheries. To meet up such huge cost of producing agricultural commodities farmers have to borrow from external sources of credit.

However, through the government initiation, the existing credit institutions are supplying funds to the farmers with a view to increasing agricultural production though the sources have always been fell far behind the actual requirement of the farmers.

To make institutional credit effective, in raising production and safe guarding the farmers from the exploitation of non-institutional sources, the government of Bangladesh at present has liberalized its credit policy so as to provide more credit facilities to the farmers particularly the marginal, small and medium ones. Sonali Bank, Agrani Bank, RAKUB, Uttara Bank, Grameen Bank, ASA, BRAC are the existing sources of institutional credit in the study area.

The present study intends to reveal the facts relating to existing credit structure, amount of credit received, mode of credit use and loan repayment etc. which would help the planners and policy makers to formulate more pragmatic principles and practices consistent with overall agricultural development in the country.

The present study was conducted based on the farm survey method. Four villages namely Kaemkola and Ahmedpur under Joyari union and Tirail and Masgram under Masgram union council of Baraigram upozila under Natore district were selected for collecting data with a view to fulfilling the objectives of the study. One hundred and twenty farmers were randomly selected out of the list collected from available credit institutions close to the selected areas where from the borrowers have contracted loan.

A specially designed interview schedule was prepared to collect necessary information. Data used in the present study over the period January – December, 2014 and were collected by the researcher herself during the period from March to April 2015, through personal interviews with the respondents. The whole analysis was done on the basis of three farm size group- small farmers (owing less than 2.50 acres of land), medium farmers (owing land from 2.50 to 5.00 acres) and large farmers (owing land more than 5.00 acres).

The average family size of a respondent was 4.13 which is less than of national average 4.90. The dependency ratio for the large farmers is lower than those of small and medium farmers.

Extent of literacy among the family heads was found to be 77.50 percent in the study area being greater than the national average of 52.50 percent. Small farmers were more illiterate than those of large and medium farmers.

Agriculture was found to be not so dominant occupation being 46.67 percent of all farmers surveyed. Small farmers were mostly (50.00 percent) engaged in agriculture and fewer involved in business and other income earning activities.

It was found that the average size of owned land was 2.79 acres per household where small, medium and large farmers had 0.95, 4.82 and 7.05 acres of land respectively in the study villages. Owned land was much higher in case of large farmers compared to small and medium farmers.

Assets valuation reveals that dwelling houses constituted the highest percentage (48.20 percent) among various asset categories followed by household durables (19.71 percent), live animals (9.72 percent), and farm implement (4.72 percent) during the study year. A positive relationship between the farm size group and average value of asset was found in the study area.

Analysis of annual income reveals a positive relationship between farm size and that of annual income during the study year.

Expenditure pattern of the respondents shows that 33.93 percent of total expenditure was incurred for various items of family expenditure in the study area. Small farmers were observed to have spent more for family expenditure than those of medium and large farmers during the study year. The analysis also reveals that 36.33 percent and 29.74 percent of the total annual expenditure were incurred for farm and non-farm expenditure respectively.

The average amount of savings had been estimated at Tk 23094 during the study year, Average savings related positively with the farm size groups in the study villages.

The proportion of total loan utilized in the form of capital and current expenditure on farming together, non-farm business expenditure and family expenditure accounted for 45.88, 44.18 and 9.94 percent respectively of the total loan during the study period. It clearly indicates that the farmers in our country are now-a-days becoming more and more conscious about productive use of loan and thereby increasing their income as well as contributing to overall economic development of the country. The study also indicates that there was expectedly an inverse relationship between the size of farm and loaned money incurred for family expense where the small farmers had to spend a large amount of their loaned money (20.47 percent) in meeting basic necessities of life.

Overall loan recovery percentage observed during the study period was found to be 67.21. Large farmers were found relatively better loan repayers in the study area. Among the factors, farm size , education, income and saving of the borrowers were appeared to be the significant contributing repayment process considering all respondents together.

8.2. Conclusion:

The conclusions drawn based on the findings achieved in present study are as follows:

(i) Large and medium farmers were the major beneficiaries of public and private banks while the smaller ones has taken care of the available NGOs (both national and local)

(ii) Land ownership on legal status still plays crucial role in receiving loan form public and private banks implying less access of marginal, small and landless farmers to those ones

(iii) Sources of institutional credit in the study area were to be adequate

(iv) Most of the credit need of the respondents was satisfied by the available sources of credit in the area

(v) Most of the loaned money has been utilized for farming and business expenditure signifying the farmers more consciousness towards productive utilization of credit

(vi) It is suggested that more attention should be given for extending more timely institutional credit to the farmers under proper supervision

(vii) The study suggests for conducting more similar studies in other parts of the country in order to better represent the entire country which the present one could not explore adequately because of fund as well as time constraint

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