

**IMPACT OF GRAMEEN BANK MICRO CREDIT PROGRAM
ON POVERTY ALLEVIATION OF RURAL WOMEN**

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IN

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**IMPACT OF GRAMEEN BANK MICRO CREDIT PROGRAM ON
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A Thesis
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Sher-e-Bangla Agricultural University, Dhaka,
in partial fulfillment of the requirements
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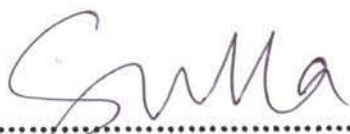
MASTER OF SCIENCE

IN


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June 2007

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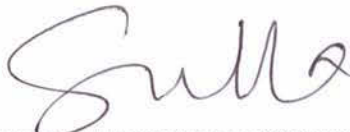
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CERTIFICATE

This is to certify that thesis entitled, "**IMPACT OF GRAMEEN BANK MICRO CREDIT PROGRAM ON POVERTY ALLEVIATION OF RURAL WOMEN**" submitted to the Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka, in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE in AGRICULTURAL EXTENSION AND INFORMATION SYSTEMS**, embodies the result of a piece of research work carried out by **MOHAMMD SOLAIMAN**, Registration No. **00737** 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 been duly acknowledged by him.

Dated:
Place: Dhaka, Bangladesh


.....
(Professor Md. Shadat Ulla)
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DEDICATED TO
MY BELOVED **P**ARENTS

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ABBREVIATIONS and GLOSSARY

ADB	= Asian Development Bank
ASA	= Association for Social Advancement
BBS	= Bangladesh Bureau of Statistics
BKB	= Bangladesh Krishi Bank
BRAC	= Bangladesh Rural Advancement Committee
BRDB	= Bangladesh Rural Development Board
CDF	= Credit and Development Forum
DCI	= Direct Calorie Intake
<i>et al.</i>	= All others
FAO	= Food and Agriculture Organization
GB	= Grameen Bank
G Bank	= Grameen Bank
GOB	= Government of Bangladesh
IDB	= Islamic Development Bank
IFAD	= International Fund for Agriculture Development
k. cal.	= kilo calorie
MFI	= Micro Finance Institute
NCB	= Nationalized Commercial Banks
NGO	= Non Government Organization
PCB	= Private Commercial Bank
PDBF	= Palli Daridra Bimochan Foundation
PKSF	= Palli Karma Sahayak Foundation
RAKUB	= Rajshahi Krishi Unnayan Bank
RDRS	= Rangpur Dinajpur Rural Service
TMSS	= Thengamara Mohila Sabuj Shanga
UNO	= United Nations Organization

ABSTRACT

The main objective of this study was to determine and describe the impact of Grameen Bank micro credit program on poverty alleviation of rural women and to explore the relationship between the selected characteristics and impact of micro credit of Grameen Bank. Poverty alleviation was measured by computing the different dimensions of change, such as change in income, change in food consumption and change in housing environment of the credit receivers after their involvement in Grameen Bank micro credit program. The average annual income, per capita daily caloric intake, housing environment score of the respondents increased at 2.348 thousand taka, 191.883 kilo calories and 6.02 respectively after involvement with Grameen Bank micro credit program. Before involvement 89 per cent of the respondents had Katcha Ghar with tin roof, after involvement the percentage was 93. Thirty eight per cent of the respondents used half sanitary toilet before involvement where after involvement this percentage turned into 55 per cent. Before involvement with Grameen Bank micro-credit program 9 per cent of the respondents' families had own tube well but after program this percentage was 19.

The farm size, annual savings, cosmopolitaness, credit received and duration of involvement with Grameen Bank micro credit program had significant relationship with the impact of micro-credit. However, age, education, family size of the respondents and attitude towards Grameen Bank micro credit program did not show any significant relationship with the impact of Grameen Bank micro credit. The inadequate supply of credit facilities against their demand identified as respondents' main problem.

CHAPTER 1

INTRODUCTION

1.1 General Background

Bangladesh like most of the developing countries has been engaged in economic and social development programs, so as to pull the masses of people out of the circle of poverty and ignorance. In the development process, particularly of the less developed countries, rural sector plays a vital role because most of the people in these countries live in rural areas.

Bangladesh is a densely populated country having about 145.9 millions of people in its 147570 sq. km of area (BBS. 2006). As women constitute almost half of the total population with the proportion male and female are 106 and 100 (BBS. 2006) of Bangladesh, the overall development of the country cannot take place without massive participation of women in development efforts. Women are the most important segment of human resources who need attention for their development.

Bangladesh faces with the problem of poverty, which manifests itself in landlessness, unemployment, illiteracy, malnutrition and vulnerability to frequent natural disasters. Poverty alleviation is therefore one of the cardinal goals of all economic development activities pursued by the Government of Bangladesh, in collaboration with non-government organizations (NGOs). NGOs have taken different programs to poverty alleviation as well as women development.

The NGOs of Bangladesh are playing a very significant role in development especially for rural women with the credit program. Credit is important in the

lives of the rural poor especially rural women in a developing economy. As the distribution of land in the countryside remains skewed, the majority of the rural population is left with an inadequate resource base for production. Faced with a weak social security system to fall back upon, this section of landless or near-land-less rural population is forced to depend upon credit for its livelihood. It was understood that the various developing countries have credit, which is integral part of their poverty alleviation programs.

Micro credit and micro finance is the vital instrument for comprehensive and social program. Bangladesh is the birthplace of micro credit. The model of micro credit is highly appreciated and accepted by the UNO. Micro credit is a major tool of women's self-employment generation as well as mainstreaming in development process. The organization Palli Karma Sahayak Foundation (PKSF) is an autonomous body created by government of Bangladesh that provides all sorts of support to the potential NGOs in the field of micro credit with financial assistance of World Bank, ADB and other dignified financiers.

The Non-Government Organizations of Bangladesh are working for poverty alleviation. In fact the NGO first gave loan to the helpless and distressed community without any mortgage. Many distressed women by now have become industrialists or entrepreneurs. Besides the Government and NGO effort various public institutions disburse micro credit for poverty alleviation. This micro credit has helped the women and resource poor people to earn their livelihood through it.

Against this background, Grameen Bank along with other NGOs such as BRAC, PROSHIKA, ASA, World Vision, KARITAS, RDRS etc. and other development agencies have realized that true development cannot be achieved unless and until the women are made part of the development process.

Prof. Dr. Mohammad Yunus conducted an experiment in 1976 distributing small loans in Zobra village of Chittagong. It was expanded into a project entitled Grameen Bank Prakalpa with the financial aid of Bangladesh Bank. After the success of project, the government declared Grameen Bank Ordinance 1983. Dr. Mohammad Yunus transformed the micro credit practice into a systematic, institutionalized, rationalized and innovative activity, which is known to the whole world as Grameen Model (Khan *et al.* 2003).

Besides these, different approaches of micro credit have been developed by BRAC, ASA, PROSHIKA and other NGOs. Today Bangladesh is called the Laboratory of Micro credit and lord of Micro credit Revolution. In this regard G.B. has given a new dimension of micro credit.

Grameen Bank has reversed conventional banking practice by removing the need for collateral and created a banking system based on mutual trust, accountability, participation and creativity. Grameen Bank provides credit to the poorest of the poor in rural Bangladesh without any collateral. At Grameen Bank, credit is a cost-effective weapon to fight poverty and it serves as a catalyst in the overall development of socio-economic conditions of the poor who have been kept outside the banking orbit on the ground that they are poor and hence not bankable. Therefore, the researcher became interested to evaluate the impact of micro credit program of Grameen Bank on its clients.

1.2 Statement of the Problem

Grameen Bank is an NGO that mostly deals with landless people, the disadvantaged class of the society who are forced to live in and exploited condition in the rural society, are the target group of Grameen Bank. Many activities like micro credit, poultry, livestock, fisheries, the Grameen Bank for

poverty alleviation is conducting social forestry, vegetable cultivation, sericulture, carpentry etc.. Women need credit to buy input (seeds, vaccines for example), better equipment (rice husker, fodder chopper, mechanical paddy mills, fruit drying tents, and sewing machines) and improved household technology (more efficient stoves and handpumps, for example). International Fund for Agriculture Development (IFAD) recognizes that poor women have limited access to credit not only because of being poor, but also because several of the constraints are gender-specific (Mohiuddin, 1991).

But credit is rarely available to the poor at reasonable rates of interest. Commercial banks fail to cater to the credit needs of the poor for three main reasons. First, these banks require collateral, which the poor find difficult to provide. Second, their procedures for filling in application forms and completing other formalities for obtaining loans are too cumbersome for the illiterate poor, and third, they prefer handling large loans rather than the petty loans that the poor need (Hossain, 1988), But Grameen Bank provides loan to these poor without any collateral.

The purpose of the present study was to evaluate the impact of micro credit towards poverty alleviation of Grameen Bank rural women borrowers. The study aims to find out the answer to the following questions:

- i. How rural women influenced to the credit program of Grameen Bank?
- ii. How women participate in the Grameen Bank micro credit program?
- iii. What contributions are made by the Grameen Bank to the target groups in poverty alleviation in relation to:
 - increase income
 - - improve food consumption
 - - increase housing environment

- iv. What is the relationship between the selected characteristics of the women borrowers and their extent of poverty alleviation as a result of contribution made by activity of micro credit program?
- v. What are the problems faced by the women in receiving and utilizing the micro credit from Grameen Bank?

In view of the fore-going discussion, the researcher undertook a piece of study entitled **IMPACT OF GRAMEEN BANK MICRO CREDIT ON POVERTY ALLEVIATION OF RURAL WOMEN IN A SELECTED AREA.**

1.3 Objectives of the Study

The main focus of the study was to evaluate the impact of micro credit in alleviating poverty of rural women in upgrading their economic and social status. The following objectives were formulated in order to give proper direction to the study:

1. To assess the impact of Grameen Bank micro credit program on the poverty alleviation of rural women in the following dimensions:
 - i. Change in income
 - ii. Change in food consumption
 - iii. Change in housing environment
 - Change in housing unit
 - Change in toilet condition
 - Change in drinking water source
 - Change in family assets
2. To determine the dimension of women participation.

3. To explore the relationship between the selected characteristics of the Grameen Bank women borrowers and the impact of micro credit on them. The characteristics were:

- i. Age
- ii. Education
- iii. Family size
- iv. Farm size
- v. Annual savings
- vi. Cosmopolitaness
- vii. Credit received
- viii. Duration of involvement with Grameen Bank
- ix. Attitude towards Grameen Bank

1.4 Justification of the Study

Increased productivity, income, consumption and participation of the beneficiaries in socio-economic development activities are some of the major prerequisites for the overall economic development of Bangladesh. Most of the NGOs are believed to be working to meet-up the prerequisites for socioeconomic development since the independence of Bangladesh. The NGOs were welcomed in Bangladesh to improve the socio-economic conditions of the poorest section of the population. As they do not have sufficient employment opportunities and income sources to maintain their livelihood, they are the vulnerable class of the society and through the involvement with NGO activities, it is expected that this personal, social and economic enlistment would be possible.

In order to improve this position, a large number of NGOs like Grameen Bank, BRAC, RDRS, PROSHIKA, ASA have been working now in the country. Grameen Bank works at the grass root level for socio-economic development and employment generation.

Upto May, 2007, Grameen Bank has 7.21 million borrowers, 97 percent of whom are women. Grameen Bank has been covering with its 2431 branches, 78,659 villages, which is more than 94 percent of the total villages in Bangladesh (Grameen Bank. 2007).

Access to credit is an important for the poor people both men and women to improve socio-economic condition and their standards of living. Most of the NGOs are working to improve the socio-economic condition. Grameen Bank works at the grass root level for socio-economic development and employment generation. But there is a very little study on the impact of its activities.

So, there is a need to conduct study to see and realize the performance of poverty alleviation programs arranged by Grameen Bank. The researcher intended to take an attempt to know how the respondents develop their socio-economic condition due to the involvement with Grameen Bank micro credit program. To know why and how different changes in varied aspects like change in income, change in food consumption, changes in housing environment etc. are taken place. This might be an aspect of the rationality of this study. The findings of this study also might be expected to be useful to the researchers, planners and policy makers, extension workers and debtors of Grameen Bank and similar NGOs and to other organizations and personnel.

1.5 Assumptions and Limitations of the study

1.5.1 Assumptions of the study

An assumption is the supposition that an apparent fact or principal is true in the light of the available evidence (Carter, 1945). The researcher cherished the following assumptions in mind while undertaking the study:

- i. The respondents were capable of furnishing proper responses to the questions contained in the interview schedule.
- ii. The responses provided by the respondents were valid and reliable.
- iii. Information furnished by the beneficiaries included in the sample was the representative of the whole population of the study area.
- iv. The researcher who personally collected data well adjusted himself to the social environment of the study area.
- v. The data collected from the respondents were free from interviewer bias.
- vi. The selected characteristics of the respondents and the impact of Grameen Bank micro credit program of this study were normally and independently distributed with their respective means and standard deviation.

1.5.2 Limitations of the study

Considering the time, money and other resources available to the researcher, the following limitations were taken into consideration

- i. The study was confined to only one union namely Idilpur under Goshairhat Upazila of Shariatpur District.
- ii. Characteristics of the rural women were many and varied, but only nine characteristics were selected for investigation in the study.

- iii. In a peasant-dependent economy like Bangladesh where women are mostly illiterate, it is very difficult to get accurate information with respect to their activities on production, income and the like.
- iv. There were many landless rural women in the study area, but only the rural women involved with Grameen Bank micro credit program were considered for this study.
- v. The women always remain very busy with household works and often they were not encouraged to provide household information without consulting their husbands or guardians. So, efforts were made to incorporate that information which was within their easy reach.
- vi. For information about the study, the researcher had to depend on data as furnished by the selected rural women beneficiaries during data collection.
- vii. The researcher was a male and the respondents were females. Some initial difficulties were faced in interviewing the female respondents due to cultural barriers. However, this gender problem was subsequently overcome by creating proper rapport with the beneficiaries in association with Grameen Bank staff.

Findings of the study will be particularly applicable to the Grameen Bank women beneficiaries of one union namely Idilpur union. However, the findings may also have relevance to other areas of same physical, socio-economic and cultural conditions in Bangladesh where similar activities are going on. Thus, the findings are expected to be useful to the researchers, planners and policy makers, extension workers and beneficiaries of Grameen Bank and similar NGOs and other organizations and personnel.

1.6 Definition of Terms

For clarity of understanding, certain terms frequently used throughout the study are defined and interpreted as below:

Impact: 'Impact' is a term, which refers to sustained structural changes by influencing.

Impact of micro credit: The term referred to sustained desirable changes due to Grameen Bank micro credit programs as perceived by the involving credit borrowers themselves. As the study was concerned with borrowers' involvement in selected activities, the impact was conceptualized as the differences between before and after effect of those selected activities in terms of extent of desirable changes occurred in six dimensions.

Micro credit: Professor Dr. M. Yunus of the Grameen Bank has created a system that delivery the credit to the poor without collateral, it's popularly known as micro credit. Moreover, micro credit is a system that provides small credit without collateral in group-based approach to the poor for creating self-employment with a view to alleviating poverty is called Micro credit.

Change: It refers to the improvement or deterioration of the respondents in various aspects of Grameen Bank credit borrowers.

Problem: Problem means any difficult situation which requires some action to minimize the gap between "what ought to be" and "what is".

Housing environment: Housing environment includes housing unit, toilet condition, and sources of drinking water and ownership of some selected not land assets, which are essential tools in a village life.

Poverty: The condition of having insufficient resources or income. Poverty is a lack of basic human needs including adequate and nutritious food, clothing, housing, clean water, and health services. Poverty prevents people from realizing many of their desires.

Poverty line:

Poverty line I: It is defined as daily intake upto 2162 k.cal. per person.

Poverty line II: It is defined as daily intake upto 1845 k.cal. per person.

Poverty lines I & II are used by BBS.

Absolute and Hard core poverty: Absolute and Hard core poverty lines were defined as the income level below to maintain minimum standards of nutrition. Used DCI (Day Calorie Intake) method in 1998 absolute and hard-core poverty was estimated based on per capita per day calorie intake of 2112 kcal and 1805 kcal respectively.

Cosmopolitaness: The orientation of an individual external to her own social environment.

Poverty alleviation: The term refers to bring about such changes on an increasing trend in different aspects of economic and social development starting from a level below which minimum standard of living like food, cloth shelter and personal amenities can not be maintained.

Problem confrontation: It refers to the different problems faced by the rural women at the time of operating different activities related to agricultural practices.

Respondent: Respondent refers to the women beneficiaries who are participants in the Grameen Bank micro credit development activities and are included in the sample.

NGO: An organization developed and managed by private initiatives being foreign and financed is a Non-Government Organization (NGO). It works independently with and are mandated to collaborate with others unless there are any felt need. (Halim and Ahmed, 1999).

Credit received: It refers to the amount of money received by her as credit from Grameen Bank and other sources during the previous year.

Attitude towards Grameen Bank micro credit program: An attitude may be defined as pre-disposition to act towards an object in a certain manner. It is an enduring psychological system consisting of three interacting components that may be classified as:

Cognitive component - the beliefs about the objects

The feeling component – the affect connected with the objects

The pre-disposition of action tendency component – the pre-disposition to take action with respect to the object.

Here attitude towards Grameen Bank micro credit program means the beliefs or feelings of the respondents towards the activities of Grameen Bank.

CHAPTER 2

REVIEW OF LITERATURE

This section deals with a brief review of previous research studies relating to the concept of poverty, causes of poverty, loan disbursement condition, ways of reducing poverty related to socio-economic development and impact of micro credit towards poverty alleviation.

The researcher has tried his best to collect needful information related to concepts of poverty, poverty alleviation and impact of micro credit towards poverty alleviation through searching relevant studies.

A few of the recent studies, which are relevant to this research, are briefly discussed in this chapter. However, the reviews are arranged under the following sections.

2.1 Concept Related to Poverty

2.1.1 Concept of Poverty

Encarta (2006) defined Poverty, condition of having insufficient resources or income. In its most extreme form, poverty is a lack of basic human needs, such as adequate and nutritious food, clothing, housing, clean water, and health services.

Begum (2005) Reported that Poverty is the chronic and complex problem for Bangladesh and women are severely affected by it due to lack of access to resources, income generating activities, decision-making process, and political

participation. In Bangladesh women are not allowed for social and cultural development. Government and non-government organizations take multiple means for empowering women by enhancing their political participation and access to property.

World Bank (2003) defines 'extreme poverty' as living on less than US \$1 per day, and 'moderate poverty' as less than \$2 a day. It has been estimated that in 2001, 1.1 billion people had consumption levels below \$1 a day and 2.7 billion lived on less than \$2 a day. The proportion of the developing world's population living in extreme economic poverty has fallen from 28 per cent in 1990 to 21 percent in 2001. It is estimated that about 8 million people die each year because they are too poor to survive.

World Bank (2003) estimates that 33 per cent of the third world population is 'poor' and 18 per cent is 'extremely poor'

Palli Daridra Bimochan Foundation (PDBF) has given a definition of 'poor' person. PDBF is an autonomous organization under the Ministry of Local Government, Rural development and Co-operatives. According to PDBF (2001), the person whose family income is lower than Tk.3000 per month, whose family farm size is not more than 0.50 acre and whose main source of income is physical labor, is termed as 'poor'.

Chambers (1983) termed poverty as an interlinked and integrated concept, which involves cluster of disadvantages. According to him poor people are perceived to suffer many forms of deprivation, which lead to lack of income and wealth but also social inferiority, physical weakness, disability and sickness, vulnerability, physical and social isolation powerlessness and humiliation. He termed all these as a deprivation trap (Figure 2.1).

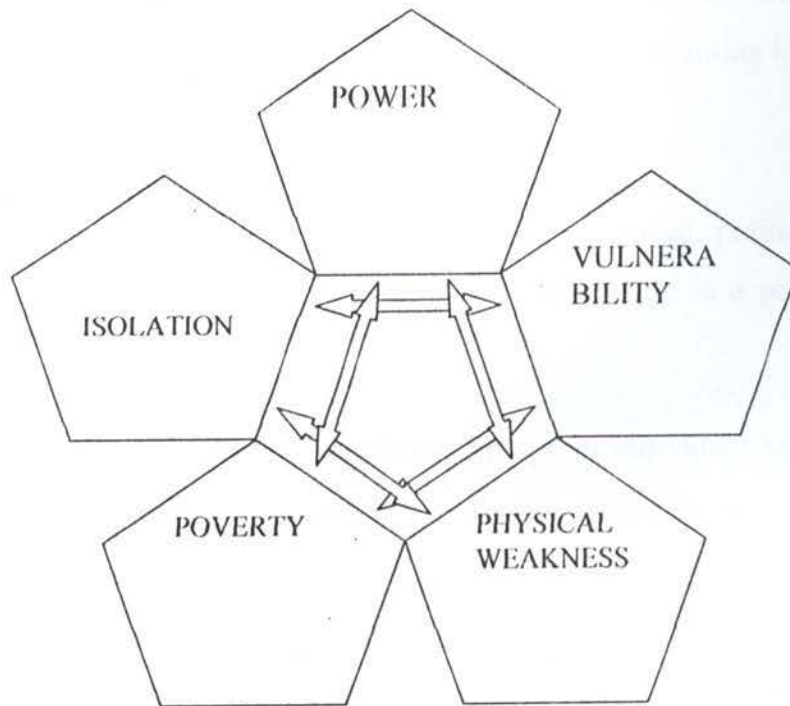


Fig. 2.1 The deprivation trap (Chambers, 1983)

2.1.2 Concept of Relative and Absolute Poverty

Nawaz (2000) said that absolute poverty is a situation in which a person's fails to consume the minimum daily requirements necessary for the normal functioning of a body. He also says that the subsistence concept of poverty has some limitations and include the fact that when a household survey is used per capita calorie consumption is calculated by averaging intra-household consumption that does not take into account intra-household variations in real intakes. That is to say, various members of a family have different energy needs depending on age and occupation.

Sinha *et al* (1998): On the basis of levels or types of poverty, poverty were identified as: absolute poverty and relative poverty

Absolute poverty is defined as the cost of the minimum necessities needed to sustain human life. The World Bank currently regards people earning less than US\$ 1 a day to be absolutely poor.

Relative poverty is defined as the minimum economic, social, political and cultural goods needed to maintain an acceptable way of life in a particular society.

Chossudovsky (1997) argues that population groups in individual countries with per capita incomes in excess of US\$1 a day are arbitrarily identified as 'non poor'. He further argues that income and social inequalities between and within nations have been increasing, whereas the World Bank through the manipulation of income statistics shows that the poor are a minority group in developing countries.

Alam (1993) said relative poverty is considered as a relative deprivation of income from unequal distribution of resources. Relative poverty is the condition of having fewer resources or less income than others within a society or country, or compared to worldwide averages. In developed countries, relative poverty often is measured as having a family income less than one-half of average income for that country.

Measure of relative poverty is almost the same as measuring inequality: if a society gets a more equal income distribution, relative poverty will fall. Following this, some argued that the term 'Relative Poverty' is itself misleading and that inequality should be used instead. They point out that if society changed in a way that hurt high earners more than low ones, then "relative poverty" would decrease but every citizen of the society would be worse off.

2.2 Studies Related to Causes of Poverty

Halder (2001) said that the causes for becoming extreme poor includes river erosion, land redistribution and family break up, flood, bad habit of household heads and inherited poverty.

Muzzaffar (2001) said that why there is still so much poverty in the world when we have both the knowledge and the techniques to eliminate poverty forever from the face of the earth, it is not difficult. The misallocation of resources based on priority is undoubtedly one of the major causes of absolute poverty.

Nawaz (2000) said that the main causes of poverty in Bangladesh are scarcity of land, lack of skill, malnutrition, lack of access to the means of production and resources, with a resultant lack of scope for economic activity and employment, vulnerability to repeated natural disasters and unequal distribution of productive assets, especially land.

Khandker (1998) found some causes of poverty. The causes and effects of poverty interact, so that what makes people poor also creates conditions that keep them poor. Primary factors that may lead to poverty include:

- ❖ Overpopulation
- ❖ The unequal distribution of resources in the world economy
- ❖ Inability to meet high standards of living and costs of living
- ❖ Inadequate education and employment opportunities
- ❖ Environmental degradation
- ❖ Certain economic and demographic trends
- ❖ Welfare incentives.

BBS (2006) among the landless in rural areas, 61.8 per cent were very poor and 83 per cent were poor. Among the marginal landless (owning less than 0.50 acre) 27.23 per cent were very poor and 34 per cent were poor. In rural areas, land ownership remains the key element of living standards because land is the most important income-earning asset.

2.3 Loan disbursement condition and poverty alleviation efforts

NGOs started credit program in mid eighties and their activities increased noticeably higher after 1990 (CDF, 2001). With the increasing number of collateral free micro credit disbursement by MFIs, some Nationalized Commercial Banks (NCBs), and Specialized Banks like BKB and RAKUB have been encouraged to provide a considerable amount of their rural credit to the poor without security. Today, some of the Private Commercial Banks (PCBs) have also started direct and linkage programs with NGOs. Total loan disbursement (cumulative) by these four kinds of institutions till December 2001 was taka 434.55 billion; of which disbursement under Government program was taka 37.77 billion (8.69%), Grameen Bank disbursed taka 154.11 billion (35.46%), other Banks and MF-NGOs disbursed taka 78.41 billion (18%) and taka 164.26 billion (37.80%) respectively (Figure. 2.2).

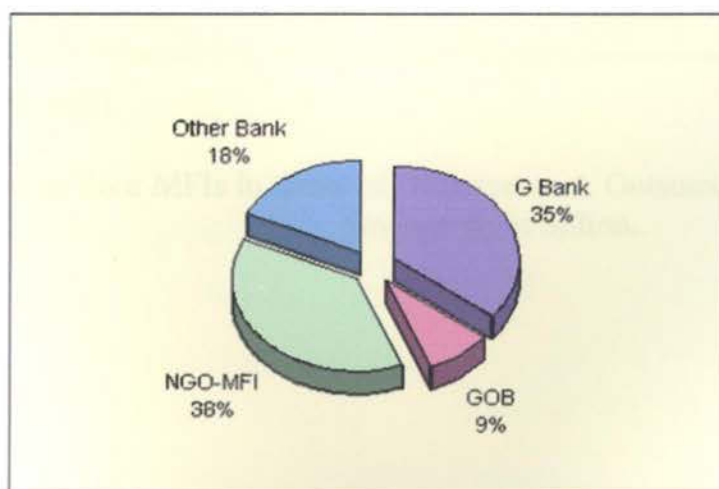
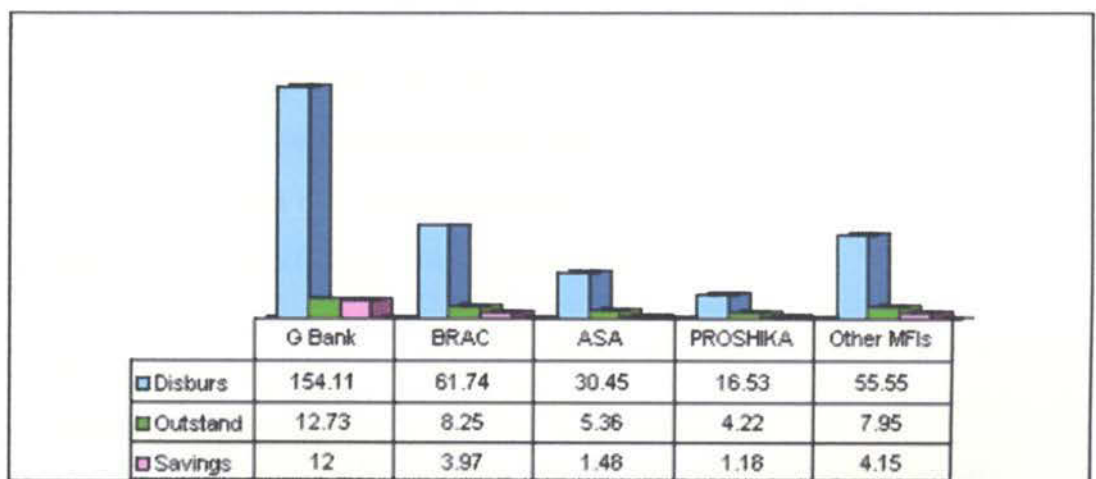


Fig: 2.2: Institution-wise Cumulative Loan Disbursement

All the non-government organizations are involved in micro-finance activity but they are not under the same regulatory authority / monitoring agency. Credit and Development Forum (CDF) an NGO who collects information of MF-NGOs. CDF, 2001 showed that the MF-NGOs disbursed taka 318.38 billion with outstanding loan amount of taka 38.51 billion. These disbursed taka Grameen Bank contribute 154.11 billion taka. The outstanding amount of micro-finance extended under government program is taka 7.46 billion, the outstanding balance of Grameen Bank is taka 12.73 billion and that of other banks is taka 7.55 billion. Grameen Bank, BRAC, ASA and Proshika are top four MFIs in terms of loan disbursement, outstanding loan and saving mobilization (Fig. 2.3).



Source: CDF, 2001

Fig. 2.3: Top Four MFIs in terms of Disbursement, Outstanding loan and Savings tk. in billion.

2.4 How to Reduce Poverty: Review Relating to Socio-economic Development and Impact of Micro credit

Pallavi-chavan *et al.* (2002) stated that non-governmental organization (NGO) led micro credit is an effective and financially viable alternative to the existing methods of addressing rural poverty through the provision of credit for reduce poverty. Also revealed that micro credit programs have been able to bring about a marginal improvement in the beneficiaries income.

Ali (2001) stated that available evidence is also suggestive of the synergies that exist among different growth projects (road, electricity new technology for instance), between growth and social sector projects (the idea of combining physical infrastructure and human development from this), and between growth and micro credit. One of the latter topic, we may only add that further expansion of credit for the poor should be seen in the broader context of infrastructure development. Such a packaging (along with rural and human development) will not only enhance the return to micro credit schemes and; contribute to its viability but also accelerate the rate of poverty reduction.

Khan (2001) points out that the credit and saving is a very effective tool of poverty alleviation. The essence of credit program in Bangladesh is the sole contribution of NGOs like Grameen Bank, BRAC, ASA, Proshika, Caritas etc. By the mid-nineties the credit program turned as a pragmatic way. An increasing trend of credit program by mainstream NGOs had almost abandoned all other program except credit. Khan also says special credit activities of Govt. agencies are yet to reach the majority of the rural poor. By taking the advantage of rural infrastructure few big NGOs disbursed the 91 per cent of that credit in the country. He also argues that another very important input in the poverty alleviations is micro credit.

Murshed *et al.* (1999) conducted a research on the Bangladesh Rural Advancement Committee (BRAC), to see how far it has been able to implement poverty alleviation and empowerment of the poor, particularly the rural women. They observed that through its multi-faceted programs, enterprise development, health care, non-formal education for girl children and human rights and legal education, BRAC has been able to bring significant improvement to the lives of the poor and the disadvantaged women of rural Bangladesh.

Hossain (1998) found that 91% of Grameen Bank members improved their economic conditions after joining Grameen Bank.

Mayoux *et al.* (1998) described that micro-finance program for women are currently promoted not only as a strategy for poverty alleviator but also for women's empowerment.

Khandker and Chowdury (1996) examined the impact of Grameen Bank. They find a greater number of loans mean a lower incidence of poverty for all program participants. In the Grameen Bank villages, for instance, 76% of participants who have taken no loans or only one loan are below the poverty line, compared to only 57% of those who have taken five or more loans.

Khandker *et al.* (1995), suggest that the Grameen Bank has a significant positive effect on the wages of men and children in the programme villages. The average men's wage in Grameen Bank villages (Tk 29.8 per day) was higher than in the villages without a Grameen Bank programme (Tk 24.2), implying that the Grameen Bank's services increased the wage rate by about 4%.

2.5 Relationship between Poverty Alleviation and Selected Characteristics of Rural Women

The selected characteristics of the respondents of Grameen Bank were selected as independent variables of this study. The available literatures regarding relationship between the selected characteristics of the respondents and their poverty alleviation of the rural women are presented below.

2.5.1 Age and poverty alleviation

Khan (2006) in his study found that age of the respondents had significant relationship with the impact of Grameen Bank micro credit program.

Sharmin (2005) observed that age of the respondents did not show any significant relationship with their perception of benefit.

Samad (2004) reported that age of the rural women had no significant relationship with their poverty alleviation.

Islam (2002) reported that the age of the rural women had no significant relationship with their poverty alleviation activities.

Akter (2000) in his study found significant positive relationship between age of the women in RDRS clientele group and their participation in decision-making role in the family with regard to development activities.

Naher (2000) in her study found that there was no relationship between age and participation in homestead vegetable cultivation, post harvest practices, poultry raising and goat rearing, while the activities in vegetable cultivation are mostly participated by the younger houses wives.

Akanda (1994) revealed in his study that age of the rural women had a significant positive relationship with their participation in the cultivation of homestead vegetables and fruit trees.

2.5.2 Education and poverty alleviation

Akter (2000) in his study on "Participation of women Clientele in Development Activities of the PDBF Project" revealed that education of the women had a significant positive relationship with their participation in decision making role in the family with regard to development activities.

Begum (1998) in her study entitled "Poverty Alleviation of the Rural Women Organization by Association for Social Advancement" observed that education of the rural women had a positively significant relationship with their poverty alleviation owing to participation TMSS activities.

Das (1997) reported that education of the rural women under vegetable cultivation program of TMSS had a significant negative relationship with their extent of adoption of vegetable crops.

2.5.3 Family size and poverty alleviation

Samad (2004) observed that family size of the rural women had no significant relationship with their poverty alleviation activities.

Islm (2002) reported that the number of family members of the respondents had positive significant relationship with their poverty alleviation.

Naher (2000) reported that there was no relationship between family size and participation of women in homesteads vegetable cultivation, poultry rising and goat rearing but she found a significant positive relationship between family size and participation in post-harvest practices.

2.5.4 Farm size and poverty alleviation

Khan (2006) in his study indicates that the respondents having large farm size were more likely to have impact of micro credit towards uplifting their socio-economic condition. He also concluded that earning ability of rural women is to be increased those who have large farm size.

Rahman (2005) commented that the respondents earning ability is dependent on their farm size, which increase the family income and social development.

Samad (2004) reported that the farm size of the respondents had positively significant relationship with their poverty alleviation.

Sarkar (2002) also observed a positive significant relationship between farm size of the RDRS beneficiaries and their chance in food consumption in Integrated Aquaculture Development Project, RDRS.

Akter (2000) found that there was a significant positive relation between home-cum-farm sizes of the women development activities.

2.5.5 Credit received and poverty alleviation

Khan (2006) in his study indicates that credit received has a great influence for socio-economic development of the beneficiaries. As there was an existence of small to medium credit received was the higher proportion of the respondents there is a scope to increase income.

Ali (2003) in his study found that about three-fourth (73.17%) of the respondents had small credit recipient. He also indicated that credit is the vital factors for increasing income, if respondents get medium amount of loan then they can increase their income.

2.5.6 Annual savings and poverty alleviation

Rahman (2005) in his study found that majority (91.6%) of the respondents had small savings. Annual savings of the respondents showed positively significant relationship with their poverty alleviation. It may be concluded that annual savings of the respondent had great influence on the acceleration of TMSS activities and their poverty alleviation program.

Ali (2003) in his study found that majority (98.02%) of the respondents had small savings. He suggested that reduce poverty by increase more savings.

2.5.7 Duration and poverty alleviation

Khan (2006) in his study indicate that involvement with Grameen Bank micro credit program has a great influence for socio-economic development of the respondents, 60 percent of the respondents had involvement of not more than 4 years. It is likely that impact of women will be highlighted in the course of time.

BBS (2002) found that after forming the groups of Grameen Bank, the income of the members increased by 70 per cent within 2 to 3 years. On an average, the income increased from Tk 5806 to Tk.9166, which was 55 per cent higher than it was before. After forming the groups, only 5 per cent of the members took loan from non-institutional sources.

Khandker and Chowdury (1996) point out that this rate of poverty reduction appears to decline with duration of membership. For households who have been a member for more than five years moderate poverty fell by 9% and ultra-poverty by 18%. These figures are considerably lower than for households who had been members three years or less.

2.6 Relationship between Poverty Alleviation and Other Characteristics

2.6.1 Food consumption and poverty alleviation

Petrovici *et al.* (2001) stated that this study is concerned with the food consumption and poverty in Romania. The main determinants of regional variations in the incidence of poverty are explored. The implications of the growth of poverty in Romania with regard to food demand and the development of coping strategies are discussed. The study concluded with a discussion of potential policies to alleviate poverty and improve the nutritional status of the poor.

Kapunda *et al.* (2000) stated that this paper examined the economic and socio-cultural gender differences with poverty and food insecurity. It also draws policy implications and recommendations relevant to poverty alleviation, food security promotion and socio-economic development in Tanzania and in Africa

Morduch (1998) points out that food consumption variability from season to season indicates a reduction of 47% for eligible Grameen Bank households and of 54% for eligible BRAC households, compared to the control group.

Rozario, (2001) found that inequity in food distribution persisted regardless of family size, income or food expenditure, implying that availability for the family would be a necessary but not a sufficient condition for eliminating the discrimination in food intake of female members of the family.

2.6.2 Income and poverty alleviation

Hashemi *et al* (1996) indicate that the contributions to family income are often small. While 72% of the Grameen Bank members and 40% of the BRAC members were classified as 'contributing to family support', only 26% of the

former and 12% of the latter declared to be responsible for more than half of the family budget.

2.6.3 Problem confrontation and poverty alleviation

Basak (1997) stated that problem awareness of the rural women and their impact of participation in TMSS rural development activities were significantly and positively related.

Karim *et al.* (1997) found that the majority (64 percent) of the respondents had high problem confrontation, while 32 percent had very high and only 4 percent had medium problem confrontation. Four selected characteristics such as education, agricultural knowledge, annual income and organizational participation of the kakrol growers were negatively related with their problem confrontation. There, it may be assumed that may have some impact on poverty alleviation.

2.7 Conceptual framework of the study

In scientific research, selection and measurement of variables constitute an important task. The hypothesis of a research while constructed properly contains at least two important elements *i.e.* a dependent variable and an independent variable.

This study concerned with dependent variable intervention on poverty alleviation of an NGO and the selected characteristics as independent variables, *i.e.* age, education, family size, farm size, annual savings, cosmopolitanness, credit received, duration of involvement with Grameen Bank and attitude towards Grameen Bank micro credit program. The conceptual framework for the study is shown below:

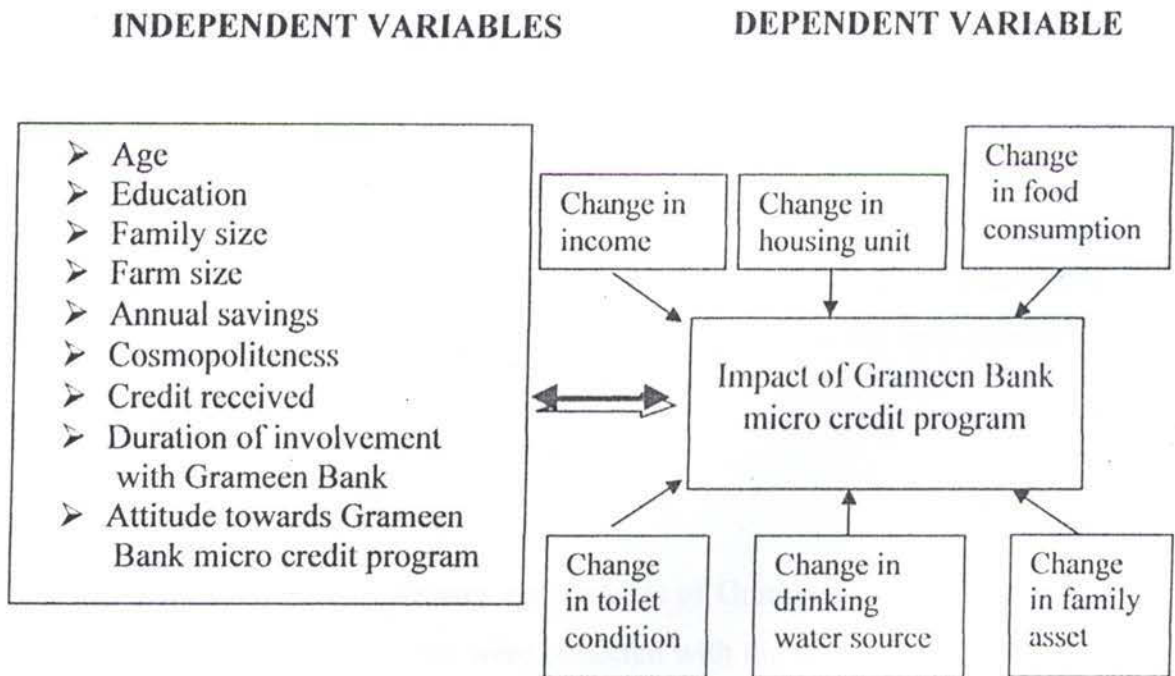


Fig. 2.4: The conceptual framework of the study

CHAPTER 3

METHODOLOGY

In any scientific research methodology plays an important role .To performs a research work systematically, careful consideration of appropriate methodology is a must. It should be such that it would enable the researcher to collect valid and reliable information to arrive at correct decisions. The methods and procedures followed in conducting this study have been described in this chapter.

3.1 Locales and Population

This study conducted at the area of Goshairhat, Shariatpur where Grameen Bank micro credit program have been operating. This covered one union namely Idilpur under Goshairhat upazila of Shariatpur district. Idilpur union was selected because Grameen Bank activities were more concentrated in this union in comparison with the other unions of the Goshairhat upazila. There were 545 credit borrowers of Grameen Bank in this union. For clear of understanding, one map of Shariatpur district showing Goshairhat upazila and another map of Goshairhat upazila showing the study area has been presented in Fig. 3.1 and Fig. 3.2 respectively.

3.2 Sampling procedure

An updated list of all the women respondents of Grameen Bank micro credit program of the selected unions were collected with the help of local Grameen Bank officials. The total number of union under Goshairhat upazila was 6 and the researcher selected one union purposely. Data for this study were collected from a sample rather than the whole population. Out of 545

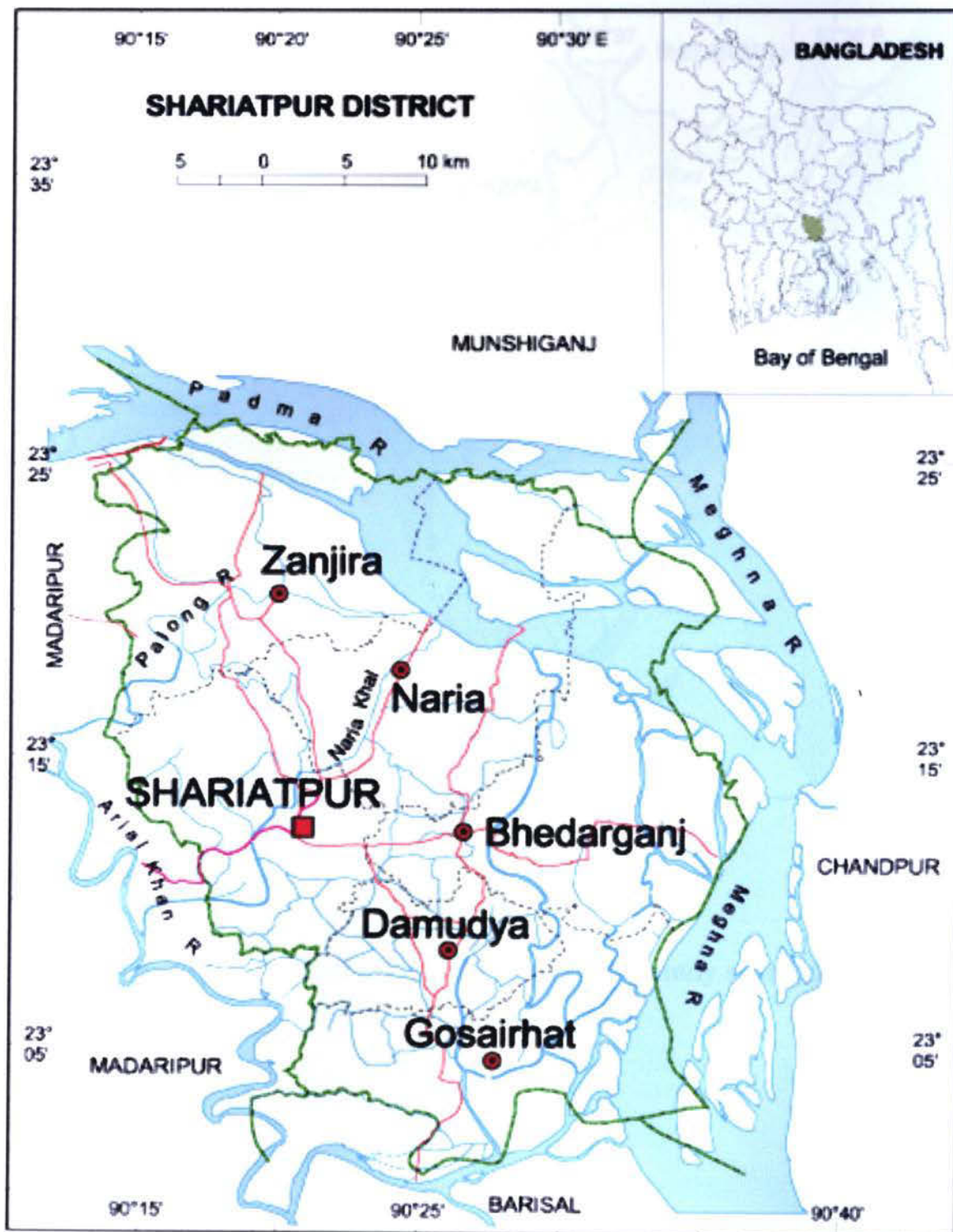
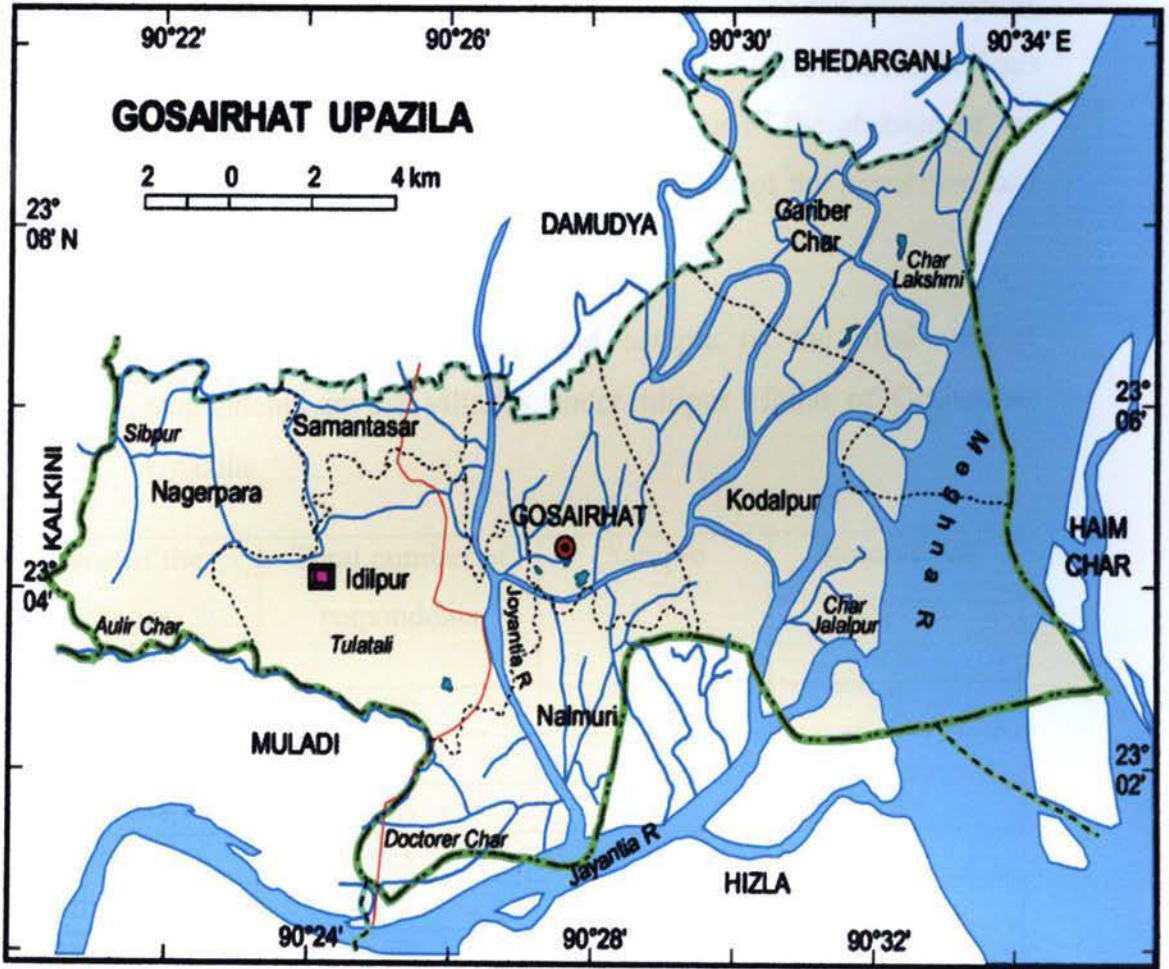


Fig. 3.1 A map of Shariatpur district showing Goshairhat upazila



■ Study area

Fig. 3.2 A map of Gosairhat upazila showing the study area (Idilpur union)

respondents a sample of 100 were selected by systematic random sampling technique using a table of random numbers. A reserve list of 10 respondents was also prepared for covering the positions in case of the absence of the selected respondents during interview. The distribution of the population and the sample size are presented in table 3.1

Table 3.1 Distribution of population and sample of the rural women respondents in the villages under Idilpur Union of Goshairhat Upazila

Name of the villages	Total number of respondents	Sample	Reserve list
Dasherjanganl	90	16	2
Binotia	55	10	1
Bashudevchap	95	18	2
Masuakhali	65	12	1
Tulatuli	60	11	1
Mohessor potti	50	9	1
Ikra kandi	55	10	1
West Masuakhali	75	14	1
Total	545	100	10

3.3 Instrument for Collection of Data

In order to collect valid and reliable information from the Grameen Bank credit receivers, an interview schedule was carefully designed keeping the objectives of the study in mind. Simple and direct questions and different scales were used to obtain information. Direct questions were included to collect information like age, education, family, size etc. Scales were used to measure the cosmopolitaness, and attitude of Grameen Bank micro credit program.

3.4 Data collection

The researcher himself collected essential data through personal interview with the individual respondent. An introductory visit to the respondents' house was made with the help of Grameen Bank field workers. During the visit the aims and objectives of the study were explained to most of the respondents. This helped the researcher to have a friendly orientation to the group members. Before going to the respondents for interview, advanced information was taken with the help of branch manager and Grameen Bank field supervisors. Brief information regarding the nature and purpose of the study was given to the respondents before actual interview. The researcher also established desired friendly rapport with the respondents. Questions were asked systematically and explanations were made whenever it was necessary. The information was duly checked in order to minimize errors. Some data were recorded in local unit. These were subsequently converted to appropriate standard units. The respondents were interviewed at their leisure time so that they could give accurate information in a cool mind. The investigator faced no serious problems. The data collection took near about 17 days from 8th June to 25th June 2007.

3.5 The variables and their Measurement

3.5.1 Measurement of independent variables

Nine selected characteristics of the Grameen Bank women debtors are considered as independent variables.

3.5.1.1 Age

Age of a respondent was measured on the basis of time from her birth to the time of interview. One was assigned for each year of her age.

3.5.1.2 Education

A respondent in educational institutions measured the education on the basis of completed years of schooling. One was assigned for each completed year of schooling. If a respondent does not know reading and writing her score was zero (0). A score of 0.5 was assign to a respondent who only could sign her name.

3.5.1.3 Family size

Family size of a respondent was measured on the basis of the actual of member of member in her family. The family members included herself, husband, children and other dependent members who jointly lived and ate together up to the time of interview. The actual number of members was considered as the family size score of a respondent. For example, if a respondent had five members in her family, her family size score was given as 5.

3.5.1.4 Farm size

The farm size of a respondent was measured on the basis of the total area of land on which her family carried out farming operations. The farm size of a respondent was calculated by using the following formula and was expressed in terms hectares.

$$FS = A_1 + A_2 + A_3 + \frac{1}{2}(A_4 + A_5)$$

Where,

FS = Farm size

A_1 = Homestead area

A_2 = Cultivated area owned by a respondent

A_3 = Others

A_4 = Land taken from others on borga

A_5 = Land given to others on borga

3.5.1.5 Annual savings

It was measured by taking the total savings of a respondent and members of her family from different sources during a year. A score of 1 was assigned for each one thousand taka.

3.5.1.6 Cosmopolitanism

The term cosmopolitanism was used to refer to the orientation of an individual external to her own social system. The cosmopolitanism score was computed for each respondent to determine the degree of her cosmopolitanism on the basis of her different outstanding. The following score will be used for computing cosmopolitanism: '3 for regular', '2 for occasional', '1 for suddenly' and '0 for not even once'.

3.5.1.7 Credit received

It refers to the amount of money received by a respondent as loan from any institutional source. It was expressed in Taka. The total credits were calculated by adding all the split credit together. The total credit in Taka was converted into credit-received score. A score of 1 was assigned for each thousand Taka.

3.5.1.8 Duration of involvement with Grameen Bank micro credit program

It was measured considering the period of involvement of the respondents with Grameen Bank micro credit program to the time of interview. It was calculated in terms of years on the basis of the respondent's response and as verified from office.

3.5.1.9. Attitude towards Grameen Bank micro credit program

Attitude of a respondent was used to refer her feeling, belief and action tendency towards Grameen Bank micro credit program. For measuring the

attitude of respondents towards Grameen Bank micro credit program, a number of eight items analysis was done to check the validity and reliability for all attitude statements. These items are called statements. The positive and negative statements were arranged randomly in the interview schedule so that the respondents' real attitude could be reflected. A respondent was asked to indicate her opinion about each of the statements on with a 5-point Likert scale: "strongly agree", "agree", "no opinion", "disagree" and "strongly disagree" scores was assigned to five scales are 4, 3, 2, 1 and 0 respectively for positive statements and a reverse score was give for negative statements. The attitude score of a respondent was computed by adding her scores for response to all the statements.

Thus, the possible score may be ranged from 0-32 when 0 indicate highly unfavorable attitude and 32 indicate highly favorable attitude towards Grameen Bank micro credit program.

3.5.2 Measurement of dependent variables

The dependent variable is "the impact of Grameen Bank micro credit program on poverty alleviation of rural women's participation". Impact of micro credit was measured on the basis of the extent of change occurred in four selected dimensions of livelihood of the respondents as a result of their involvement with Grameen Bank micro credit program. The measurements of selected dimensions are as follows:

3.5.2.1 Change in income

A respondent's family income was measured in Taka on the basis of her and other family members total annual earning from agriculture and other sources like fisheries, livestock, poultry, business, labor, cottage industry etc. The method of ascertaining income from agriculture involves two phases. Firstly, the yields of many things could be noted down. Secondly, all the yields could

convert into cash income. Price of each agricultural item was determined based on average of maximum and minimum price quoted by one businessman of agricultural commodities and other five respondents of the study area. Income from other sources (e.g. wage, service, business) by other family members was also estimated. The total income in Taka was converted into family income score. A score of one was assigned for each one thousand Taka. The change in income was determined by the following formula:

$$C.I. = IA_i - IB_i$$

Where,

C.I= Change in Income

IA_i = Income after involvement

IB_i = Income before involvement

3.5.2.2 Change in food consumption

It refers to the improvement of a respondent in respect of her amount of food consumption after involvement. In this study eight items were considered to determine the food consumption behavior. The method of determining food consumption involved three phases. Firstly, consumption of rice, wheat, vegetables, pulses, fruits, fish, milk and egg were determined by the amount of food consumed per day, per week and per month respectively by a respondent. Secondly, the daily consumption of food items per person was calculated and was expressed in gram. Finally, the amount of items (gram) was converted into energy (kilo calorie) on the basis of their energy content value shown in the following table 3.2. The change in food consumption was determined by the following formula:

$$C.F. = FA_i - FB_i$$

Where,

C.F= Change in Food consumption

FA_i = Food consumption after involvement

FB_i = Food consumption before involvement

Table 3.2 Energy contents of some selected food items

Food items (100 gm)	Energy (K.cal.)
Rice	364
Wheat	341
Vegetables	53.75
Pulse	338
Fish	89
Meat	127
Milk	61
Egg	158

Source: FAO, 2004

On the basis of intake kilo calories (K.cal.), the poverty level of the respondents classified into three categories as shown below by following the Household Income and Expenditures Survey, 2000:

Below poverty line II (Hard core poverty)	→ Less than 1850 K.cal./day.
Below poverty line I (Absolute poverty)	→ Less than 2122 K.cal./day.
Upper poverty line	→ More than 2122 K.cal./day.

Source: Household Income and Expenditure Survey, 2000

It refers to the condition of different dimensions of the respondents both 'before' and 'after' involvement with Grameen Bank micro credit program.

There were four selected dimensions, which as follows:

3.5.2.3 Change in housing environment

3.5.2.3.1 Change in housing unit

There are four types of housing in the study area e.g. no house at all; katcha Ghar with straw roof; katcha Ghar with plastic roof; katcha Ghar with tin roof

and Paka Ghar. For determining the type of housing unit of the respondents by the following formula:

$$C.H. = HA_i - HB_i$$

Where,

C.H = Change in Housing unit

HA_i = Housing unit after involvement

HB_i = Housing unit before involvement

Respondents said that she used which type of house before involvement and after involvement with Grameen Bank against those five responses. The change of housing unit was converted into score. All score was added and finally percentage change was measured against each of those four responses.

Score was assigned as follows:

Table 3.3 The scoring of housing unit

Types of house	Score assign
No house at all	0
Katcha Ghar with straw or plastic roof	1
Katcha Ghar with tin roof	2
Paka Ghar	3

3.5.2.3.2 Change in toilet condition

There are four types of toilet facilities, such as open place or bush, katcha toilet, half-sanitary toilet and sanitary toilet. For determining the type of toilet facilities, the respondent was asked to indicate nature of toilet facilities. The change of toilet condition facilities was converted into score. All score was calculated by the following formula:

$$C.T. = TA_i - TB_i$$

Where,

C.T = Change in Toilet condition

TA_i = Toilet condition after involvement

TB_i = Toilet condition before involvement

Table 3.4 The scoring of toilet condition

Types of toilet condition	Score assign
Open place or bush	0
Katcha toilet	1
Half-sanitary toilet	2
Sanitary toilet	3

3.5.2.3.3 Change in drinking water source

For determining the drinking water source of the respondents, there are three types of drinking water source namely pond or river water, others tube well and own tube well. Each respondent was asked to indicate type of drinking water source. The change of drinking water source was converted into score.

The score was determined by the following formula:

$$C.D.= DA_i - DB_i$$

Where,

C.D = Change in Drinking water source

DA_i = Drinking water source after involvement

DB_i = Drinking water source before involvement

Table 3.5 The scoring of drinking water source

Types of drinking water source	Score assign
Pond or River water	0
Others tube well	1
Own tube well	2

3.5.2.3.4 Change in family asset

In this study 25 items were included to determine the asset possession of the respondents' household. Each item was assigned weight on the basis of its price value. All the specific items of asset under possession were converted into family asset score of the respondents. The change in family asset was measured by the following formula:

$$C.F. = FA_i - FB_i$$

Where, ss

C.F = Change in Family asset

FA_i = Family asset after involvement

FB_i = Family asset before involvement

The items were as follows:

Sl. No.	Item of assets	Unit score
1	hurricane	1
2	Fishing net	1
3	Bench	1
4	Chowki	1
5	Chair	1
6	Wooden almirah	1
7	Hen	1
8	Duck	1
9	Goat	2
10	Cow	2
11	Rickshaw	2
12	Van	2
13	Torch light	1
14	Radio	2
15	Two-in-one	2
16	Wrist watch	2
17	Wall clock	2
18	Bi-cycle	3
19	Khat	3
20	Show case	3
21	Electric fan	3
22	Sewing machine	3
23	Black and White TV	4
24	Color TV	4
25	Motor cycle	5
Total		53

3.6 Problem confrontation in poverty alleviation

It refers to the extent to which a respondent faces difficulties in performing various activities after the involvement with Grameen Bank micro credit program. I thought that they faced in ten problems. Each respondent was asked to indicate the extent to which she considered each of the selected

problems as problematic on a five-point scale: 'strongly agree', 'agree', 'no opinion', 'disagree' and 'strongly disagree' scores assign to five scales are 4, 3, 2, 1 and 0 respectively. The possible problem confrontation score of the respondent may range from 0 to 40. Where 0 indicates no problem confrontation at all and 40 indicates problem confrontation to the high possible extent.

3.7 Measurement of score of 'impact of Grameen Bank micro credit program on poverty alleviation of rural women

After finding the change in six dimensions, all the unit changes were categorized into low difference, medium difference and high difference, and score 1, 2, 3 were given for low, medium and high difference respectively. The categorization and scores were shown in table 3.6. The categorized score was then added together to get the impact score of Grameen Bank micro credit program on poverty alleviation of rural women. The following formula was used for the measurement of impact of Grameen Bank micro credit program:

$$Y = Y_1 + Y_2 + Y_3 + Y_4 + Y_5 + Y_6$$

Where,

Y = Impact score of Grameen Bank micro credit program

Y₁ = Income difference score

Y₂ = Food difference score

Y₃ = Housing unit change score

Y₄ = Toilet condition change score

Y₅ = Drinking water source change score

Y₆ = Family asset change score

Table 3.6 Categorization of dimension

Dimension of impact of micro credit	Categories	Score assigned
Change in income (thousand taka)	Low difference (upto 3)	1
	Medium difference (3.001 to 5)	2
	High difference (above 5)	3

3.8 Data processing and statistical analysis

All the collected data were checked and crosschecked. The data were coded, compiled, tabulated, and analyzed to accomplish the specific objectives of the study. Qualitative data were converted into quantitative form by means of suitable scoring technique whenever applicable. Impacts of Grameen Bank micro credit program towards the poverty alleviation of the rural women respondents were examined by drawing 'before' and 'after' comparison. Data were presented mostly in the tabular form. Various statistical measures like number, percentage distribution, range, mean, standard deviation, correlation coefficient etc were calculated for describing the selected characteristics of the respondents and the impact of Grameen Bank micro credit program. To find out the relationships between the selected characteristics of the respondents and the impact of Grameen Bank micro credit program, correlation coefficient was used. 1% and 5% level of probability were used as the basis for rejection of any null hypothesis. Paired t-test was used to identify the significance of difference between two situations namely 'before' and 'after' involvement with Grameen Bank micro credit program.

3.9 Hypothesis of the study

The following research hypotheses were put forward to test the relationships between different characteristics considered. Each of nine selected characteristics (age, education, family size, farm size, annual savings, cosmopolitanness, credit received, duration of involvement with Grameen Bank micro credit program, attitude towards Grameen Bank micro credit program) of the respondents was related to impact of Grameen Bank micro credit program 'after' involvement.

However, for statistical advantage, each of the above research hypothesis was change into 'null hypothesis' which states that 'there is no relationship' between the selected nine characteristics of respondents and impact of micro credit.

CHAPTER 4

FINDINGS AND DISCUSSION

The purpose of this Chapter is to describe the findings of the present study and some discussion on the significant findings. The study investigated the poverty alleviation of the rural women, through participation with Grameen Bank micro credit. In accordance with the objectives of the study, this Chapter has been made in five sections. In the first section, nine selected characteristics of the Grameen Bank women credit receivers have been discussed. In the second section, the extent of change in income, food consumption and housing environment of the respondents and contribution towards poverty alleviation presented. The third section, dealt with the relationships between the poverty alleviation of their selected characteristics. In the fourth section has dealt with paired *t*-test in relation to income, food consumption and housing environment between 'before' and 'after' involvement with Grameen Bank activities. Finally, the fifth section contained the problems faced by the rural women in poverty alleviation.

4.1 Selected Characteristics of the Grameen Bank women respondents

This section describes the findings of the nine selected characteristics in nine subsections. A brief summary of the measuring unit, categories and distribution, with basic statistics has been presented in Table 4.1(p.46).

4.1.1 Age

Age of the respondents ranged from 19 to 48 years with an average of 32.35 years and a standard deviation of 6.705. On the basis of their age, the rural women were classified into three categories as shown in Table 4.1. The

Table 4.1 A summary statement showing categories and salient features of the selected characteristics of the Grameen Bank women respondents (N=100)

Characteristics	Ranges (Observed scores)	Categories	Respondents		Mean	Standard deviation
			No.	Per cent		
Age (Year)	19-48	Young (upto 30)	43	43	32.35	6.705
		Middle aged (31-40)	46	46		
		Old aged (above 40)	11	11		
Education (Year of schooling)	0-11	No education (0)	5	5	3.595	2.852
		Can sign only (0.5)	23	23		
		Primary (1-5)	48	48		
		Secondary (6-10)	22	22		
		Higher (above 10)	2	2		
Family size (Number)	3-8	Small (upto 4)	35	35	5.1	1.1934
		Medium (5-6)	54	54		
		Large (above 6)	11	11		
Farm size (Hectare)	0.07-0.92	Very small (upto 0.32)	71	71	0.2747	0.1589
		Small (0.33-0.64)	23	23		
		Medium (above 0.64)	6	6		
Annual Saving (Thousand taka)	-4.3 to 2.3	No savings (upto 0)	14	14	0.279	1.2287
		Small savings (0.001-1)	70	70		
		Medium savings (above 1)	16	16		
Cosmopolitaness (Scale score)	3-8	Very low (upto 4)	30	20	5.17	1.0546
		Low (5-6)	58	58		
		Medium (above 6)	12	12		
Credit received (Thousand taka)	4-19	Small (upto 6)	42	42	7.79	3.2823
		Medium (7-13)	52	52		
		High (above 13)	6	6		
Duration of involvement with GB (Year)	1-7	Very short duration (upto 2)	29	29	3.23	1.2621
		Short duration (3-4)	56	56		
		Medium duration (above 4)	15	15		
Attitude towards GB (Scale score)	10-17	Less favorable (upto 11)	21	21	12.58	1.3347
		Moderately favorable (12-15)	70	70		
		Favorable (above 14)	9	9		

highest proportion (46 per cent) of the rural women were young compared to 43 per cent of the being middle aged and 11 per cent of the old aged.

The maximum portion of the respondents was young to middle aged. These young and middle-aged respondents have potential and energy to develop their life. If they were trained, motivated and guided properly they would be able to fight against poverty.

4.1.2 Education

The level of education of the respondents ranged from 0 to 11 years of schooling having an average of 3.595 and a standard deviation of 2.852. Based on their educational qualification scores, the respondents were classified into five categories as shown in table 4.1. Here 5 per cent of the respondents were illiterate so the literate percentage was 95 where the National educational average percentage is 62.

The highest proportion (48 per cent) of the respondents had primary level of education, while 23 per cent could sign their names only; 22 per cent had secondary level; 5 per cent had no education and 2 per cent of the respondents were higher level. So education level will increase to get the credit and there need the recipient sign. The situation might appear to be quite normal in a usual rural background of Bangladesh.

4.1.3 Family size

The number of family members of the respondents ranged from 3 to 8 with an average 5.1 and a standard deviation of 1.1934. Based on the family size, the respondents were classified into three categories as shown in Table 4.1. Data were presented in the table showed that the highest proportion (54 per cent) of the respondents had medium size family category compared to 35 per cent

having small size family and 11 percent with large size family. Thus, more than 89 per cent of the respondents had either small or medium size family.

So, the finding is quite logical in a rural setting like the study area because of NGOs like Grameen Bank always works for discouraging the large family size.

4.1.4 Farm size

Farm size of the respondents ranged from 0.07 to 0.92 hectare and with an average being 0.2747 and standard deviation of 0.1589. Following the DAE 1999, the farm size of the respondents was classified into three categories as shown in Table 4.1.

Data presented in Table 4.1 revealed that the highest proportion (71 per cent) of the respondents had marginal farm size, while small farm size and medium were 23 per cent and 6 per cent respectively. Thus respondents might face resource constrains in managing their farms compared to other categories. It shows that the study group was highly heterogeneous in term of farm size.

4.1.5 Annual savings

Annual savings scores of the respondents ranged from -4.3 to 2.3. An average annual savings score of the respondents were 0.279 with standard deviation of 1.2287. On the basis of annual savings scores, the respondents were classified into three categories as shown in the Table 4.1.

Data presented in Table 4.1 showed that 70 per cent of the respondents have small savings; 16 per cent have medium savings and 14 per cent have no savings. So it was found that savings tendency was increasing among the Grameen Bank women borrowers even among the landless community.

4.1.6 Cosmopolitaness

The observed cosmopolitaness scores of the respondents ranged from 3 to 8. The average cosmopolitaness score of the respondents was 5.17 with standard deviation of 1.0546. On the basis of the cosmopolitaness scores, the respondents were classified into three categories as shown in the Table 4.1.

Data presented in Table 4.1 showed that 58 per cent of the respondents have low cosmopolitaness; 30 per cent have very low and 12 per cent have medium cosmopolitaness. These indicate that the study group was highly heterogeneous in terms of cosmopolitaness. It may be due to various social and economic hardships of the respondents discouraged them from going outside to their own localities.

4.1.7 Credit received

Credit received scores of the respondents ranged from 4 to 19. An average credit received scores of the respondents was 7.79 with standard deviation of 3.2823. On the basis of credit-received scores, the respondents were classified into three categories as shown in the Table 4.1

The largest proportions (52 per cent) of the respondents were medium credit recipient, while 42 per cent of the respondents were small and 6 per cent of the respondents were large credit recipients. It shows that the study group was highly heterogeneous in term of credit received. It also found that most of the respondents used credit in their self-employment purpose. They also demand for more credit received.

4.1.8 Duration of involvement with Grameen Bank micro credit program

Duration of involvement with Grameen Bank is a major way of gathering knowledge, information and experience, which are components of poverty

alleviation. Their involvement with Grameen Bank ranged from 2 to 7 years. With an average 3.23 and standard deviation of 1.2621. On the basis of Grameen Bank involvement, the respondents were classified into three categories as shown in Table 4.1.

Data presented in Table 4.1 showed that 56 per cent of the respondents had short duration of involvement with Grameen Bank, while 29 per cent had very short duration of the involvement and 15 per cent had medium duration of involvement with Grameen Bank. Most of the respondents had primary level of education, so their expectation was not high and stickle maintain rules and regulation in repayment of loan by GB's authority so, they were not interested to long time involved with Grameen Bank micro credit program.

4.1.9 Attitude towards Grameen Bank micro credit program

Attitude of the respondents ranged from 0.5 to 21.8. An average attitude score of the respondents was 12.58 with standard deviation of 1.3347. On the basis of their attitude towards Grameen Bank micro credit program, the respondents were classified into three categories as shown in the Table 4.1.

Data presented in Table 4.1 showed that 70 per cent of the respondents had moderately favorable attitude towards Grameen Bank micro credit program, while 21 per cent had low favorable and 9 per cent had favorable attitude towards Grameen Bank micro credit program.

Existence of favorable attitude among larger proportion of the Grameen Bank women credit receivers indicates positive impact of Grameen Bank micro credit program on poverty alleviation. The respondents expressed satisfaction with the credit of Grameen Bank because they were benefited from this program.

4.2 The extent of change in income, food consumption and housing environment of the respondents and contribution towards poverty alleviation

Respondents' participation in micro credit program of Grameen Bank has played vital role in changing their socio-economic condition and can reducing poverty. For measuring the poverty alleviation, the socio-economic condition of the respondent's prior joining to Grameen Bank micro credit program compared with the present conditions. After being involved with Grameen Bank micro credit program, the socio-economic conditions of the respondents have changed positively.

The socio-economic condition of the respondents was assessed by comparing information about 'before' and 'after' condition on change in income, food consumption and housing environment of the respondents.

4.2.1 Change in income

Distribution of respondents according to their income differences has been presented in Table 4.2. The distribution of income difference of the respondents ranged from -0.8 thousand taka to 6.9 thousand taka with a mean difference of Tk 2.348 thousand and a standard deviation 1.4004. Based on their income difference, the respondents were classified into four categories as shown in Table 4.2. The table showed that the highest proportion (49 per cent) of the respondents had very low income difference compared to 40 per cent low income difference; 8 per cent of the respondents' medium income difference and 3 per cent of the respondents' had no difference. This indicates that the study group was heterogeneous in term of income difference.

Table 4.2 Salient features of the different dimensions on the impact of micro credit program

Dimensions on the impact of micro credit	Ranges (observed scores)	Categories	Response		Mean	Standard deviation
			No.	Per cent		
Change in income (Thousand tk.)	-0.8 to 6.9	No income difference (upto 0)	3	3	2.348	1.4004
		Very low income difference (0.01 to 2)	49	49		
		Low income difference (2.01 to 4)	40	40		
		Medium income difference (above 4)	8	8		
Change in food consumption (k.cal.)	-114.4 to 548.9	No calorie intake difference (upto 0)	9	9	191.8	149.51
		Very low calorie intake difference (0.01 to 100)	21	21		
		Low calorie intake difference (100.01 to 300)	48	48		
		Medium calorie intake difference (above 300)	22	22		
Change in housing environment (score)	0 to 13	No change (0)	4	4	6.02	2.8529
		Low change (1 to 4)	28	28		
		Medium change (5 to 8)	48	48		
		High change (above 8)	20	20		

4.2.2 Change in food consumption

Distribution of respondents according to their calorie intake differences has been presented in Table 4.2. The calorie intake difference of the respondents ranged from -114.4 kilo calories to 548.9 kilo calories with a mean difference of 191.8 kilo calories and a standard deviation 149.51. Based on calorie intake difference, the respondents were classified into four categories as shown in Table 4.2. The table showed that the highest proportion (48 per cent) of the respondents had low calorie intake difference compared to 22 per cent medium calorie intake difference; 21 per cent very low calorie intake

difference and 9 per cent of the respondents no calorie intake difference. This indicates that the study group was heterogeneous in term of income difference.

There are various dimension of poverty alleviation; the food consumption is one of them. The food consumption was measured by the k.cal uptake. Efforts have been made to measure the k.cal intake by the respondents before and after involvement with Grameen Bank. Table 4.2.2 shows the k.cal intake by the respondents before and after involvement.

Table 4.2.2 Distribution of the respondents according to their calorie intake

Categories	Before		After		Before Average (k.cal.)	After Average (k.cal.)
	Respondents		Respondents			
	No.	Per cent	No.	Per cent		
Below poverty line II (up to 1805 k.cal)	28	28	22	22	2117.59	2309.47
Below poverty line I (up to 2122 k.cal)	47	47	43	43		
Upper poverty line (over 2122 k.cal)	25	25	35	35		

The average energy intakes by the respondents were 2017.59 and 2209.47 kilo calories before and after involvement with Grameen Bank respectively. The above data indicate that on an average the respondents were upper poverty line both before and after the involvement with GB. According to BBS (2002), national average per capita per day k.cal intake of rural people is 2263 k.cal while urban people is 2150 k.cal. The average k.cal intake of the respondents was higher than that of the national level after their involvement with Grameen Bank.

4.2.3 Change in housing environment

The housing environment score difference of the respondents due to involvement as member was also measured by computing all the housing as

set items. Distribution of respondents according to their housing environment score differences have been presented in Table 4.2. The housing environment score difference of the respondent households ranged from 0 to 13 with an average of 4.47 and standard deviation 2.8529. On the basis of the housing environment score difference, the respondents were classified into three categories as shown in Table 4.2.

Table 4.2 revealed that the highest proportion (48 per cent) of the respondents had medium housing environment score difference compared to 28 per cent low housing environment score difference. 20 per cent of the respondents had high housing environment score difference and only 4 per cent respondents had no change. The findings indicate that about 68 per cent of the respondents had medium to high housing environment score difference. Still 32 per cent of the respondents did not have housing environment score difference.

4.2.3.1 Change in housing unit

The findings of different types of housing unit of the respondents before and after involved with Grameen Bank micro credit program has been shown in Table 4.2.3

The information of Table 4.2.3 reveals that before involvement 89 per cent respondents had Katcha Ghar with tin roof; 8 per cent respondents had Katcha Ghar with straw or plastic roof and 3 per cent respondents had Paka Ghar. After involvement with micro credit program 93 per cent respondents have Katcha Ghar with tin roof 3 per cent respondents have Katcha Ghar with straw or plastic roof and 4 per cent respondents have Paka Ghar.

Table 4.2.3 A summary statement showing categories and salient features of dimension of housing environment

Dimensions of housing environment	Categories	Number		Percentage	
		Before	After	Before	After
Type of housing unit					
Change in housing unit	No house at all	0	0	0	0
	Katcha Ghar with straw or plastic roof	8	3	8	3
	Katcha Ghar with tin roof	89	93	89	93
	Paka Ghar	3	4	3	4
Type of toilet					
Change in toilet condition	Open place or bush	9	3	9	3
	Katcha toilet	46	32	46	32
	Half-sanitary toilet	38	55	38	55
	Sanitary toilet	7	10	7	10
Type of water source					
Change in drinking water source	Pond or River water	7	1	7	1
	Others tube well	84	80	84	80
	Own tube well	9	19	9	19
Change in family asset					
Change in family asset	Low asset possession	47	39	47	39
	Medium asset possession	52	58	52	58
	High asset possession	1	3	1	3

4.2.3.2 Change in toilet condition

The findings of toilet facilities of the respondents before and after involvement with Grameen Bank micro credit program have been shown in Table 4.2.3. Before involvement with Grameen Bank micro credit program 9 per cent respondents family members had gone to bushes or open places; 46

per cent families did use Katcha toilet; 38 per cent families did use half sanitary toilet and 7 per cent families did use sanitary toilet. After involvement still 3 per cent respondents' families are now using bushes or open places, 32 per cent families use Katcha toilet; 55 per cent respondents' families are using half sanitary toilet and 10 per cent families use sanitary toilet. This indicates that the respondents' toilet condition was developed.

4.2.3.3 Change in source of drinking water

The findings of source of drinking water of the respondents before and after involvement with Grameen Bank micro credit program has been shown in Table 4.2.3.

Table 4.2.3 reveals that 84 per cent of the respondents' families depend on others tubewell for drinking water source before involvement with Grameen Bank micro- credit program; on the other hand, after involvement with Grameen Bank micro- credit program 80 per cent respondent families depend on others tube-well for drinking water source. Before involvement 9 per cent of the respondent families used own tube-well for drinking water source while after involvement 19 per cent respondent families used own tube-well for drinking water source. Before involvement 7 per cent of the respondent families collect water from river or pond while after involvement 1 per cent respondent families collect water from river or pond for drinking water. This indicates that sources of drinking water changed due to contribution of micro credit.

4.2.3.4 Change in family asset

The findings of family asset score of the respondents before and after involvement with Grameen Bank micro credit program has been shown in Table 4.2.3. Table 4.2.3 reveals that before involvement with Grameen Bank

micro credit program 47 per cent respondents' families had low asset possession and this number has decreased to 39 after involvement. Fifty two per cent families had medium asset possession before involvement and after involvement it changed to 58 per cent and only 1 per cent families have high asset possession before involvement while 3 per cent after involvement with Grameen Bank micro credit program. This indicates that family asset possession increased due to the contribution of micro credit.

4.3 Relationship between the respondents' selected characteristics and the impact of Grameen Bank micro credit on poverty alleviation-

This section deals with the relationships of the nine selected characteristics of the respondents with the impact of Grameen Bank micro credit on poverty alleviation. The nine characteristics of the respondents were: age, education, farm size, family size, annual savings, cosmopolitaness, credit received, duration of involvement with Grameen Bank and attitude towards Grameen Bank micro credit program. Pearson's product moment Co-efficient of Correlation (r) was used to explore the relationship between nine characteristics of the respondents with the impact of Grameen Bank micro credit on poverty alleviation. One per cent (0.01) or Five per cent (0.05) level of significant was used as the basis for acceptance or rejection of a hypothesis.

The computed values of Correlation Co-efficient (r) were compared with the relevant tabulated values in order to determine if the relationships between the respondents' selected characteristics and the impact of micro credit on poverty alleviation were significant.

The summery of the results of correction analysis have been presented in Table 4.3

Table 4.3 Co-efficient of Correlation (r) showing relationship between the respondents' selected characteristics and the impact of micro credit on poverty alleviation

Respondents' selected characteristics (Independent variables)	Dependent variable	Co-efficient of Correlation (r)
Age	Impact of Grameen Bank micro credit program	0.184 ^{NS}
Education		0.186 ^{NS}
Family size		0.186 ^{NS}
Farm size		0.482**
Annual savings		0.405**
Cosmopolitaness		0.408**
Credit received		0.678**
Duration of involvement with Grameen Bank micro credit program		0.259**
Attitude towards Grameen Bank micro credit program		0.074 ^{NS}

^{NS} = Not significant

** = Significant at the 0.01 level

* = Significant at the 0.05 level

1% level with 98 df is 0.256

5% level with 98 df is 0.196

4.3.1 Relationship between age of the respondents and their poverty alleviation

The correlation co-efficient between age of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis "there is no relationship between age and the impact of Grameen Bank micro credit program". The calculated value of Correlation Co-efficient (r) between these two variables was 0.184 as shown in table 4.3. On the basis of the observed "r" values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of 'r' was found to be less ($r = 0.184$) than the tabulated value with 99 degrees of freedom at 0.05 level of probability. Thus, statistically the relationship was not significant.
- ❖ So, the null hypothesis was accepted and there had no relationship between these two variables.

On the basis of above findings, it could be concluded that age of the rural women had no relation with the impact of Grameen Bank micro-credit program on poverty alleviation.

4.3.2 Relationship between education of the respondents and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis "there is no relationship between education and the impact of Grameen Bank micro credit program". The calculated value of Correlation Co-efficient (r) between these two variables was 0.186 as shown in table 4.3. On the basis of the observed " r " values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of 'r' was found to be less ($r = 0.186$) than the tabulated value with 99 degrees of freedom at 0.05 level of probability. Thus, statistically the relationship was not significant.
- ❖ So, the null hypothesis was accepted and there had no relationship between these two variables.

On the basis of above findings, it could be concluded that education of the rural women had no relation with the impact of Grameen Bank micro credit program on poverty alleviation.

4.3.3 Relationship between the family size of the respondents and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis “there is no relationship between the family size and the impact of Grameen Bank micro credit program”. The calculated value of Correlation Co-efficient (r) between these two variables was 0.186 as shown in table 4.3. On the basis of the observed “ r ” values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of ‘ r ’ was found to be less ($r = 0.186$) than the tabulated value with 99 degrees of freedom at 0.05 level of probability. Thus, statistically the relationship was not significant.
- ❖ So, the null hypothesis was accepted and there had no relationship between these two variables.

On the basis of above findings, it could be concluded that the family size of the rural women had no relation with the impact of Grameen Bank micro credit program on poverty alleviation.

4.3.4 Relationship between farm size of the respondents and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis "there is no relationship between farm size and the impact of Grameen Bank micro credit program". The calculated value of Correlation Co-efficient (r) between these two variables was 0.482 as shown in table 4.3. On the basis of the observed " r " values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of ' r ' was found to be greater ($r = 0.482$) than the tabulated value with 99 degrees of freedom at 0.01 level of probability. Thus, statistically the relationship was a positive significant at 0.01.
- ❖ So, the null hypothesis was rejected and there had a positive relationship between these two variables.

On the basis of above findings, the research concluded that farm size of the rural women had a significant positive relationship with the impact of Grameen Bank micro credit program on poverty alleviation.

4.3.5 Relationship between annual savings of the respondents and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis "there is no relationship between annual savings and the impact of Grameen Bank micro credit

program". The calculated value of Correlation Co-efficient (r) between these two variables was 0.405 as shown in table 4.3. On the basis of the observed "r" values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of 'r' was found to be greater ($r = 0.405$) than the tabulated value with 99 degrees of freedom at 0.01 level of probability. Thus, statistically the relationship was a positive significant at 0.01.
- ❖ So, the null hypothesis was rejected and there had a positive relationship between these two variables.

On the basis of above findings, it could be concluded that annual savings of the rural women had a significant positive relationship with the impact of Grameen Bank micro credit program on poverty alleviation.

4.3.6 Relationship between Cosmopolitanism of the respondents and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis "there is no relationship between cosmopolitanism and the impact of Grameen Bank micro credit program". The calculated value of Correlation Co-efficient (r) between these two variables was 0.408 as shown in table 4.3. On the basis of the observed "r" values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of 'r' was found to be greater ($r = 0.408$) than the tabulated value with 99 degrees of freedom at 0.01 level of probability

and significantly. Thus, statistically the relationship was a positive significant at 0.01.

- ❖ So, the null hypothesis was rejected and there had a positive relationship between these two variables.

On the basis of above findings, it could be concluded that cosmopolitaness of the rural women had a significant positive relationship with the impact of Grameen Bank micro credit program on poverty alleviation.

4.3.7 Relationship between Credits received of the respondents and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis “there is no relationship between Credit received and the impact of Grameen Bank micro credit program”. The calculated value of Correlation Co-efficient (r) between these two variables was 0.678 as shown in table 4.3. On the basis of the observed “ r ” values, following inferences was made regarding relationship between these variables:

- ❖ The computed value of ‘ r ’ was found to be greater (r 0.678) than the tabulated value with 99 degrees of freedom at 0.01 level of probability and high significantly. Thus, statistically the relationship was a positive significant at 0.01.
- ❖ So, the null hypothesis was rejected and there had a positive relationship between these two variables.

On the basis of above findings, it could be concluded that credit received of the rural women had a significant positive relationship with the impact of Grameen Bank micro credit program on poverty alleviation.

4.3.8 Relationship between the Duration of involvement with Grameen Bank micro credit program and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis “ there is no relationship between the duration of involvement with Grameen Bank micro credit program and the impact of Grameen Bank micro credit program”. The calculated value of Correlation Coefficient (r) between these two variables was 0.259 as shown in table 4.3. On the basis of the observed “r” values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of ‘r’ was found to be greater ($r = 0.259$) than the tabulated value with 99 degrees of freedom at 0.01 level of probability and significantly. Thus, statistically the relationship was a positive significant at 0.01.
- ❖ So, the null hypothesis was rejected and there had a positive relationship between these two variables.

On the basis of above findings, it could be concluded that the duration of involvement with Grameen Bank micro credit program had a significant positive relationship with the impact of Grameen Bank micro credit program on poverty alleviation.

4.3.9 Relationship between the attitude towards Grameen Bank micro credit program and their poverty alleviation

The correlation co-efficient between education of the respondents and the impact of Grameen Bank micro credit program on poverty alleviation of rural women was measured by testing the null hypothesis “there is no relationship between the attitude towards Grameen Bank micro credit program and the impact of Grameen Bank micro credit program”. The calculated value of Correlation Co-efficient (r) between these two variables was 0.074 as shown in table 4.3. On the basis of the observed “ r ” values, following inferences were made regarding relationship between these variables:

- ❖ The computed value of ‘ r ’ was found to be less ($r = 0.074$) than the tabulated value with 99 degrees of freedom at 0.05 level of probability. Thus, statistically the relationship was not significant.
- ❖ So, the null hypothesis was accepted and there had no relation between these two variables.

On the basis of above findings, the research concluded that the attitude towards Grameen Bank micro credit program had no relations with the impact of Grameen Bank micro credit program on poverty alleviation.

4.4 Comparative change pattern in terms of ‘before’ and ‘after’ involvement with Grameen Bank micro credit program

An attempt was made in this section to test the significance (t-test) of the changes in relation to income, food consumption and housing environment of the respondents’ families after their involvement with Grameen Bank micro credit program. The data is presented in the Table 4.4

Table 4.4 Comparative change patterns in terms of 'before' and 'after' involvement with Grameen Bank micro credit program

Variables	Average		Observed <i>t</i> -value with 99 df
	Before	After	
Income (thousand Tk.)	21.17	23.518	16.77**
Food consumption (k.cal)	2117.59	2309.47	12.83**
Housing environment (score)	17.40	23.42	21.10**

Critical value of $t(0.01) = 2.62$ with 99 df.

** Significant at 0.01 level of probability.

4.4.1 Income

The difference income of the respondents between 'after' and 'before' involvement with Grameen Bank micro credit program was tested by testing the following null hypothesis—"there was no significant change in income of the respondents' families before and after involvement with Grameen Bank micro credit program".

The findings indicate that the average annual income of the respondents increased to Tk 23.518 thousand from Tk 21.17 thousand after involvement with Grameen Bank micro credit program.

The calculated 't' value was 16.77, which was highly significant at 0.01 level (Table 4.4). The result showed in between the 'before' and 'after' involvement clearly indicate on improvement of income, which is further supported by the highly significant t-value (16.77* *).

On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that income of the respondents after involvement with Grameen Bank micro credit program increased significantly.

4.4.2 Food consumption

The difference food consumption of the respondents between 'after' and 'before' involvement with Grameen Bank micro credit program was tested.

The findings indicate that the average food consumption of the respondent increased from 2117.59 kilocalories to 2309.47 kilocalories after involvement with Grameen Bank micro credit program.

The calculated 't' value was 12.83 which was highly significant at 0.01 level (Table 4.4). The result showed in between the 'before' and 'after' involvement clearly indicate improvement of food consumption, which is further supported by the highly significant t-value (12.83**).

On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that food consumption of the respondents after involvement with Grameen Bank micro credit program increased significantly.

4.4.3 Housing environment

The difference housing environment of the respondents between 'after' and 'before' involvement with Grameen Bank micro credit program was tested by testing the following null hypothesis-"there was no significant change in housing environment of the respondents' families before and after involvement with Grameen Bank micro credit program".

The findings indicate that the average housing environment score of the respondent households increased from 17.40 to 23.42 after involvement with Grameen Bank micro credit program.

The calculated 't' value was 21.10, which was highly significant at 0.01 level (Table 4.4). The result showed in between the 'before' and 'after' involvement clearly indicate improvement of housing environment, which is further supported by the highly significant t-value (21.10**).

On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that housing environment of the respondents after involvement with Grameen Bank micro credit program improved significantly.

4.5 Problem faced by the rural women in their poverty alleviation

Problem confrontation scores of the respondent rural women ranged from 22 to 27 with an average 24.26 and a standard deviation 1.126. On the basis of problem confrontation of the respondents were classified into three categories shown as Table 4.5.

Table 4.5 Categories of the respondents according to their problem confrontation

Problem confrontation categories (score)	Respondents		Average	Standard deviation
	Number	Percent		
Low problem confrontation (upto 24)	62	62	24.26	1.126
Medium problem con frontation (25 to 26)	34	34		
High problem confrontation (above 26)	4	4		

Data contained in table 4.5 reveal that highest proportion (62 per cent) of the respondents had low problems confrontation in the implementation of Grameen Bank micro credit program where as 34 percent of the respondents had medium problem confrontation in the Grameen Bank micro credit program. Only 4 per cent problem confrontation of the respondents had high problem confrontation in the Grameen Bank micro credit program. So, it was found that the recipients faced low problem in activities of Grameen Bank micro credit program.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 Summary of Findings

The present study was undertaken with the following objectives:

- To determine and discuss the impact of micro credit towards poverty alleviation
- To explore the relationship between the impact of micro credit and respondents' selected characteristics while the selected characteristics were- age, education, family size, farm size, annual savings, cosmopolitaness, credit received, duration of involvement with Grameen Bank and attitude towards Grameen Bank micro credit program.
- To identify the problems faced by the borrowers of Grameen Bank in receiving and utilizing the micro credit.

Idilpur union of Goshairhat upazila under Shariatpur district was the locale of the study. A sample of 100 respondents was drawn from a population of 513. Data were collected from 8th June to 25th June 2007 using a interview schedule. However, the major findings of the study are summarized below:

5.1.1 Selected characteristics of the respondents

Age: Age of the respondents ranged from 19 to 48 with the average of 32.35 years. About half (46 per cent) of the respondents had middle aged while 43 per cent had young and 11 per cent old aged.

Education: The level of education of the respondents had found to range from 0 to 11 years of schooling with the average of 3.595. About half (48 per cent) of the respondents had primary level; while 23 per cent could sign their names only; 22 per cent had secondary level; 5 per cent had no education and 2 per cent of the respondents were higher level.

Family size: The family size of the respondents ranged from 3 to 8 with the average of 5.1. More than half (54 per cent) of the respondents had medium size family, while 35 per cent being small size family and 11 percent had small size family.

Farm size: Farm size of the respondents ranged from 0.07 to 0.92 hectare and with an average being 0.2747. Where 71 per cent of the respondents had very small farm size, while small farm size and medium were 23 per cent and 6 per cent respectively.

Annual savings: Annual savings scores of the respondents ranged from -4.3 to 2.3 with the average of 0.279. Where 70 per cent of the respondents had small savings; 16 per cent had medium savings and 14 per cent had no savings.

Cosmopolitaness: The observed cosmopolitaness scores of the respondents ranged from 3 to 8 with the average of 5.17. Where 58 per cent of the respondents had low cosmopolitaness; 30 per cent had very low and 12 per cent had medium Cosmopolitaness.

Credit received: Credit receiving scores of the respondents varied from 4 to 19 with the average of 7.79. Where 52 per cent of the respondents were medium credit recipient, while 42 per cent of the respondents were small and 6 per cent of the respondents were large credit recipients.

Duration of involvement with Grameen Bank micro credit program:

Duration of involvement with Grameen Bank micro credit program of the respondents ranged from 1 to 7 years with an average of 3.23. More than half that 56 per cent of the respondents had short duration duration of involvement with Grameen Bank, while 29 per cent had very short duration duration of the involvement and 15 per cent had medium duration duration of involvement with Grameen Bank.

Attitude towards Grameen Bank micro credit program: Attitude of the respondents towards Grameen Bank micro credit program had found to range from 10 to 17 with an average of 12.58. Where 70 per cent of the respondents had moderately favorable attitude towards Grameen Bank micro credit program, while 21 per cent had low favorable and 9 per cent had favorable attitude towards Grameen Bank micro credit program.

5.1.2 The extent of change in income, food consumption and housing environment of the respondents

Change in income: Average annual income of the respondent households increased to Tk. 23.518 thousand from Tk 21.17 thousand. The income difference of the respondent households ranged from 40.8 thousand taka to 6.9 thousand taka with an average of Tk. 2.348 thousand. The highest proportion (49 per cent) of the respondents had very low income difference compared to 40 per cent low income difference; 8 per cent of the respondents' medium income difference and 3 per cent of the respondents' had no difference.

Change in food consumption: Average daily calorie intake (food consumption) of the respondents increased 2117.59 kilo calories to 2309.47 kilo calories. The calorie intake difference of the respondents ranged from -

114.4 kilo calories to 548.9 kilo calories with an average of 191.8 kilo calories. Highest proportion (48 per cent) of the respondents had low caloric intake difference compared to 22 per cent medium caloric intake difference; 21 per cent very low caloric intake difference and 9 per cent of the respondents had no caloric intake difference.

Change in housing environment: Average housing environment score of the household respondents increased from 17.40 to 23.42. The housing environment score difference of the household respondents ranged from 0 to 13 score with an average of 6.02. Highest proportion (48 per cent) of the respondents had medium housing environment score difference compared to 28 per cent low housing environment score difference. 20 per cent of the respondents had high housing environment score difference and only 4 per cent respondents had no change.

Change in housing unit: After involvement with Grameen Bank micro credit program 93 per cent of the respondents increased their house that is Katcha Ghar with tin roof from 89 per cent before involvement with micro credit program, present 4 per cent of the respondents tin house while before involvement it percentage was 3.

Change in toilet condition: Before membership 38 per cent families had half sanitary toilet while at present this percentage is 55. Before membership 7 per cent families had sanitary toilet.

Change in source of drinking water: Before involvement with Grameen Bank micro credit program 9 per cent of the families used to drink water from own tube-well, while after involvement with Grameen Bank its percentage was 19.

Change in family asset (score): Family asset of the respondents in medium category had 52 per cent before involvement and after involvement its percentage was 58.

5.1.3 Summary of hypothesis testing

Relationship between the selected characteristics of the respondents and the impact of Grameen Bank micro credit program

Age, education, farm size, cosmopolitaness, credit received and attitude towards Grameen Bank micro credit program had significant relationship with impact of Grameen Bank micro credit program. But family size had no relationship with impact of Grameen Bank micro credit program.

5.1.4 Difference between 'before' and 'after' involvement with Grameen Bank micro credit program

The changes between 'before' and 'after' involvement with Grameen Bank micro credit program in the income, food consumption and housing environment were statistically significant at 0.01 level of probability.

5.1.5 Problem confrontation by the rural women on their poverty alleviation

The problem confrontation scores of the respondents ranged from 22 to 27 with an average 24.26. Most (62 per cent) of the respondents had low problem confrontation, where 34 per cent medium and 4 per cent had high problem.

5.2 Conclusion

On the basis of the findings of the study and the logical interpretation of their meaning in the light of other relevant facts enabled the researcher to draw the following conclusions:

- ❖ The findings indicate that the respondents having marginal farm size were more likely to have higher impact of micro credit. It may, therefore, be concluded that income-earning ability of rural women was increased who had marginal farm size.
- ❖ Majority (70 per cent) of the respondents had small savings. Annual savings of the respondents showed a strong positive relationship with their impact of micro credit towards poverty alleviation. Therefore, it may be concluded that annual savings of the respondents had influence on the acceleration of impact of micro credit.
- ❖ Ninety-four per cent of the respondents were small to medium credit recipient. Amount of credit received the respondents showed a significant positive relationship with their change in income and housing environment. Amount of credit received had a great influence on socio-economic development of the respondents. There was a scope to increase impact of micro credit towards poverty alleviation by increasing number of credit receiver.
- ❖ Involvement with micro credit had a great influence on socio-economic development of the respondents. Fifty-two per cent of the respondents had involvement within the 3 to 4 years. So it is likely that impact on women will be high in the course of time.

- ❖ The respondents having moderately favorable attitude towards Grameen Bank was likely to have higher impact of micro credit. It may therefore, be concluded that motivational work and various training programs may increase favorable attitude towards Grameen Bank micro credit program.
- ❖ It might be concluded that food consumption of the respondents after involvement with Grameen Bank micro credit program increased and they can change their economical condition.
- ❖ Respondents faced very low problem when they were involved with Grameen Bank micro credit program. So, other NGOs can follow the activities of Grameen Bank micro credit program.

5.3 Recommendation

5.3.1 Recommendation for policy implication

On the basis of the conclusions of the study and also on the present and past experience, the following recommendations are formulated as bellows:

- ❖ Grameen Bank micro credit availability among the respondents had significant and positive relationship with their poverty alleviation. Credit is an important input, which supports other inputs for higher production, and raising income of the women. It is, therefore recommended to supply sufficient amount of credit, which must be provided timely to the respondents at low interest rate, with simple terms and conditions.
- ❖ The credit borrowers should be allowed more time to return their money after receipt. Otherwise, they may have the tendency to borrow

money from village moneylenders and return the Grameen Bank's loan as per schedule.

- ❖ Special care should be taken by Grameen Banks' authorities and concerned others to enhance participation of the women with micro credit program.
- ❖ Grameen Bank needs to take steps for wider literacy programs in order to accelerate different activities of the women.
- ❖ As cited by the respondents, there were some problems in receiving and utilizing the micro credit. All those problems deserve to be addressed by the Grameen Bank personnel. It is, therefore, recommended that the Grameen Bank authorities should give attention for the solution of those problems as far as possible in order to make their programs successful.
- ❖ The women, having favorable attitude towards Grameen Bank, were more likely to have higher impact of micro credit. Motivational work and various training programs should be strengthened to increase favorable attitude of the respondents towards Grameen Bank.

5.3.2 Recommendation for further research

Short term and sporadic study being conducted in some specific location cannot provide all information for proper understanding related to actual impact of micro- credit program towards poverty alleviation of rural women. Further studies should be undertaken covering more dimensions in the related matters. The following recommendations are suggested in this connection:

- ❖ Impact of micro credit on alleviating poverty of the Grameen Banks' rural women was conducted in Goshairhat upazila of Shariatpur district. Findings of the study may be verified and compared by similar studies in other upazila of different districts in Bangladesh.
- ❖ This research examined the effect of nine characteristics of the respondents on the impact of micro credit towards poverty alleviation. Therefore, it is recommended that further research may be undertaken involving other characteristics of the respondents and impact of micro credit in this regard.
- ❖ To assess the impact of micro credit on poverty alleviation, in this study, three dimensions like change in income, change in food consumption and change in housing environment have been considered. Further study may be undertaken involving other dimensions like change in social status, change in purchasing power, and change in confidence of the respondents.
- ❖ Similar study may be conducted on the credit program of other leading NGOs of the country such as BRAC, ASA, PROSHIKA, RDRS etc. in order to gain more meaningful insights.
- ❖ A study on problems faced by the participating members of Grameen Bank in different dimensions of micro credit program can also be undertaken.

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APPENDICES

APPENDIX-A

(English Version of the Interview Schedule)

**Department of Agricultural Extension and Information System
Sher-e-Bangla Agricultural University
Dhaka-1207**

Interview schedule of the study on **“Impact of Grameen Bank Micro Credit Program on Poverty Alleviation of Rural Women in a Selected Area”**.

(Please answer the following questions)

Sample No
Name of the respondents
Village
Union
Upazila
District

1. Age : What is your present age? Years.

2. Educational Qualification : Please mention your educational qualifications

- a) I cannot read and write
- b) I can sign only
- c) I can't read in school but read in another institution and my educational qualificationclass
- d) I have studied up to class.....

3. Family size : Please mention your total number of family members.

- a) Male b) Female.....c)Total.....

4. Farm size : Please, give your farm information depending on the utilization

Sl. No.	Type of land use	Land area		
		Local unit	Acre	Hectare
1.	Homestead (including pond, garden etc.)			
2.	Land under own cultivation			
3.	Land given to others on borga or lease			
4.	Land taken as borga or lease from others			
Total				

5. Yearly savings: Please, give the information relating to your annual family savings

Sl. No.	Type of savings	Amount of savings (Taka)
1.	Saving in NGO group	
2.	Saving in Bank	
3.	Saving on own hand	
4.	Others way	

6. Cosmopolitaness: Please indicate the frequency of visit out side of your village

Sl. No.	Place of visit	Frequency of visit			
		Regular	Occasional	Suddenly	Not even once
1.	Visit market or relatives or friends home out side your own village				
2.	Visit union parishad				
3.	Visit own upazila sadar				
4.	Visit own district sadar				
5.	Visit another upazila sadar				
6.	Visit another district sadar				
7.	Visit divisional head quarter				
8.	Visit Capital city				

7. Credit received: Have you get loan from any organization? Yes / Not. If yes then please mention the source

Sl. No.	Source of credit received	Amount of loan (Taka)
1.	Grameen Bank	
2.	Bank or others NGO	
3.	From money lender	
4.	Friends or relatives	
5.	From neighbors	

8. Duration of involvement with Grameen Ban : How many years you are involved with Grameen Bank micro-credit program?
.....Years.

9. Attitude towards Grameen Bank: Please, express your attitude towards Grameen Bank micro credit program on the basis of following aspects

Sl. No.	Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
1.	I am happy because I took loan from GB					
2.	My social status hampered due to took loan from GB					
3.	This program is very helpful to reduce the poverty of poor people					
4.	The rate of interest of GB is high rather than others					
5.	This micro-credit program of GB is better than any other poverty alleviation program					
6.	The amount of loan is not sufficient as per demand					
7.	GB loan increase the economical condition of the loan borrower.					
8.	For lack of management practices some loan project become hampered					

10. Please give the information of following aspects “before” and “after” condition taking loan from GB

b) Change in income:

Sources of income	Before involvement with Grameen Bank (Tk.)	After involvement with Grameen Bank (Tk.)
Agriculture		
Rice		
Vegetable		
Fruits		
Livestock		
Poultry		
Fisheries		
Seed production		
Others		

Non-agriculture		
Service		
Small business		
Day labor		
Small and Cottage industries		
Polli phone program		
Others		

b) Change in food consumption: Please, mention the quantity of the following food items you uptake “before” and “after” involvement with Grameen Bank

Food items	Before involvement with Grameen Bank (gm)	After involvement with Grameen Bank (gm)
Rice (daily)		
Bread (daily)		
Vegetable (daily)		
Pulse (weekly)		
Fish (weekly)		
Milk (weekly)		
Meat (monthly)		
Egg (monthly)		

c) Change in housing environment:

- **Change in housing unit:** Please, give the information of your dwelling house

Sl. No.	Type of housing unit	Before involvement with Grameen Bank	After involvement with Grameen Bank
1.	No house at all		
2.	Katcha Ghar with straw or plastic roof		
3.	Katcha Ghar with tin roof		
4.	Paka Ghar		

- **Change in toilet condition:** Please, give the information of your toilet condition

Sl. No.	Type of toilet	Before involvement with Grameen Bank	After involvement with Grameen Bank
1.	Bushes or open places		
2.	Katcha toilet		
3.	Half sanitary toilet		
4.	Sanitary toilet		

- **Change in source of drinking water:** Please, give the information of your source of drinking water

Sl. No.	Type of source of drinking	Before involvement with Grameen Bank	After involvement with Grameen Bank
1.	Water from river or pond		
2.	Tube well of others people		
3.	Tube well of own		

- 11. Change in family asset:** Please, give the information following items, goods, furniture of your family

Sl. No.	Items of assets	Unit score	Before involvement with Grameen Bank			After involvement with Grameen Bank		
			No.	Score	Total	No.	Score	Total
1.	Hurricane							
2.	Chair							
3.	Chowki							
4.	Bench							
5.	Fishing net							
6.	Goat							
7.	Wooden almriah							
8.	Radio							
9.	Two-in-one							
10.	Black & white TV							
11.	Wrist watch							
12.	Wall clock							
13.	Electric fan							
14.	Bi-cycle							
15.	Rickshaw							
16.	Torch light							
17.	Van							
18.	Sewing machine							
19.	Khat							
20.	Show case							
21.	Cow							
22.	Hen or Cock							
23.	Duck							
24.	Color TV							
25.	Motor cycle							
Total								

12. Problem confrontation on poverty alleviation of GB: Please indicate your problems and give your comments that you faced after involved with Grameen Bank micro credit program

Sl. No.	Problems	Type of comments				
		Very high	High	Medium	Low	Not at all
1.	The amount of loan is not adequate in terms of demand					
2.	Loan is not available when need					
3.	Loan repayment period is very short					
4.	Need new loan for repayment of the previous loan					
5.	Need long time for loan					
6.	Loans are misused for social activities					
7.	High rate of interest					
8.	Social status is hampered					
9.	New loan cannot be taken until repayment of the previous loan					
10.	Loan cannot be taken until making group					

Thank you for your co-operation

.....
Signature of interviewer

Date:.....

APPENDIX-B

কৃষি সম্প্রসারণ ও ইনফরমেশন সিস্টেম বিভাগ

শেরে বাংলা কৃষি বিশ্ববিদ্যালয়, ঢাকা- ১২০৭

সাক্ষাৎকার অনুসূচি

“নির্দিষ্ট এলাকার গ্রামীণ মহিলাদের অংশগ্রহণের মাধ্যমে ঋষি বিমোচনে গ্রামীণ ব্যাংকের ক্ষুদ্র ঋণ এর প্রভাব”

সম্পর্কীয় সাক্ষাৎকার অনুসূচি

(অনুগ্রহ পূর্বক নিম্নের প্রশ্নগুলির উত্তর দিন)

ক্রমিক নং :

উত্তর দাতার নাম :

গ্রাম :

ইউনিয়ন :

উপজেলা :

জিলা :

০১। বয়স : আপনার বর্তমান বয়স কত? বৎসর

০২। শিক্ষাগত যোগ্যতা :

অনুগ্রহ পূর্বক আপনার শিক্ষাগত যোগ্যতা উল্লেখ করুন।

ক) আমি লিখতে ও পড়তে পারি।

খ) শুধুমাত্র নাম স্বাক্ষর করতে পারি।

গ) কোন স্কুলে পড়িনি তবে অন্য কোন প্রতিষ্ঠানে পড়েছি এবং আমার লেখা-পড়ার মান হবে

..... শ্রেণী সমতুল্য।

ঘ) শ্রেণী পর্যন্ত লেখাপড়া করেছি।

০৩। পরিবারের সদস্য সংখ্যা :

আপনার পরিবারের সদস্য সংখ্যা কত?

ক. পুরুষ খ. মহিলা গ. মোট জন।

০৪। খামারের আয়তন :

অনুগ্রহ পূর্বক ব্যবহার অনুযায়ী আপনার খামার সংক্রান্ত তথ্য দিন।

ক্রমিক নং	জমির ধরন	জমির পরিমাণ	
		স্থানীয় একক	হেক্টর
ক)	বসত বাড়ির আওতায় জমি (পুকুর, বাগান ইত্যাদি)		
খ)	নিজ চাষের নিজ জমি		
গ)	অন্যের কাছে বর্গা/লিজ দেয়া নিজ জমি		
ঘ)	বর্গা/লিজ নেয়া অন্যের জমি		

০৫। বাৎসরিক সঞ্চয় :

অনুগ্রহ পূর্বক আপনার পরিবারের বাৎসরিক সঞ্চয়ের তথ্য দিন।

ক্রমিক নং	সঞ্চয়ের ধরন	সঞ্চয়ের পরিমাণ (টাকা)
ক)	এন.জি.ও. ফ্রপে সঞ্চয়	
খ)	ব্যাংক সঞ্চয়	
গ)	নিজের কাজে নগদ সঞ্চয়	
ঘ)	অন্যান্য উপায়	

০৬। বহির্গমনতা :

অনুগ্রহ করে নিজের গ্রামের বাইরে নিম্নলিখিত স্থানগুলোতে আপনার বহির্গমনের যাত্রা উল্লেখ করুন।

ক্রমিক নং	পরিদর্শনের স্থান	পরিদর্শনের মাত্রা			
		নিয়মিত	মাঝে মাঝে	কদাচিৎ	মোটাইনা
১।	নিজ বাড়ির বাইরে আত্মীয় স্বজন/বন্ধু-বান্ধব/বাজার পরিদর্শন	৬ বা তার অধিক বার/সপ্তাহ	৩-৫ বার/সপ্তাহ	১-২ বার/সপ্তাহ	০ বার
২।	নিজ ইউনিয়ন পরিষদ পরিদর্শন	৬ বা তার অধিক বার/মাস	৩-৫ বার/মাস	১-২ বার/মাস	০ বার
৩।	নিজ উপজেলা পরিদর্শন	৬ বা তার অধিক বার/মাস	৩-৫ বার/মাস	১-২ বার/মাস	০ বার
৪।	নিজ জিলা পরিদর্শন	৪ বা অধিক বার/বছর	২-৩ বার/বছর	১ বার/বছর	০ বার
৫।	অন্যান্য উপজেলা পরিদর্শন	৫ বা অধিক বার/বছর	৩-৪ বার/বছর	১-২ বার/বছর	০ বার
৬।	অন্যান্য জেলা পরিদর্শন	৪ বা অধিক বার/বছর	২-৩ বার/বছর	১ বার/বছর	০ বার
৭।	বিভাগীয় সদর দপ্তর পরিদর্শন	৩ বা অধিক বার/বছর	২ বার/বছর	১ বার/বছর	০ বার
৮।	রাজধানী পরিদর্শন	৩ বা অধিক বার/বছর	২ বার/বছর	১ বার/বছর	০ বার

০৭। ঋণ গ্রহণ :

আপনি কোন সংস্থা থেকে গ্রহণ করেছেন কি? হ্যাঁ/না যদি আপনি কোন সংস্থা থেকে ঋণ পেয়ে থাকেন তাহলে তা উল্লেখ করুন।

ক্রমিক নং	ঋণ প্রাপ্তির উৎস	প্রাপ্ত ঋণের পরিমাণ (টাকা)
১।	গ্রামীণ ব্যাংক	
২।	ব্যাংক অথবা অন্যান্য এন.জি.ও.	
৩।	মহাজনের কাছ থেকে	
৪।	বন্ধু অথবা আত্মীয় স্বজন	
৫।	প্রতিবেশীর কাছ থেকে	
৬।	অন্যান্য	

০৮। গ্রামীণ ব্যাংকের সাথে সম্পৃক্ততার সময় :

কত বছর ধরে আপনি গ্রামীণ ব্যাংকের ক্ষুদ্র ঋণ কার্যক্রমের সাথে জড়িত ?

..... বছর।

০৯। গ্রামীণ ব্যাংক সম্পর্কে আপনার মনোভাব :

অনুগ্রহ পূর্বক নিম্নোক্ত দিক বিবেচনা করে গ্রামীণ ব্যাংকের ক্ষুদ্র ঋণ কার্যক্রম সম্পর্কে আপনার মনোভাব ব্যক্ত করুন।

ক্রমিক নং	বিবৃতি সমূহ	খুবই একমত	একমত	মতামত নেই	একমত নই	একেবারেই একমত নই
১	আমি খুশি কারণ আমি গ্রামীণ ব্যাংক থেকে ঋণ নিয়েছি					
২	গ্রামীণ ব্যাংক থেকে ঋণ নেয়ায় আমার সামাজিক সম্মান শূন্য হয়েছে					
৩	দারিদ্রের দারিদ্র দূরীকরণে এই কার্যক্রম সাহায্য করে					
৪	গ্রামীণ ব্যাংকের সুদের হার অন্যান্যদের চেয়ে বেশি					
৫	গ্রামীণ ব্যাংক ক্ষুদ্র-ঋণ কার্যক্রম অন্যান্য দারিদ্র বিমোচন কার্যক্রমের চেয়ে ভাল					
৬	চাহিদা অনুযায়ী ঋণের পরিমাণ পর্যাপ্ত নয়					
৭	গ্রামীণ ব্যাংক ঋণ গ্রহীতা হিসেবে আয়ের অবস্থা বৃদ্ধি করে					
৮	খারাপ ব্যবস্থাপনার কারণে কিছু উপকারী ঋণ কার্যক্রম বাহত হয়					

১০। অনুগ্রহ পূর্বক গ্রামীণ ব্যাংকের ক্ষুদ্র ঋণ গ্রহণের পূর্বে ও পরে আপনার নিম্নলিখিত অবস্থার পরিবর্তনের বিবরণ দিন।

(ক) আয়ের পরিবর্তন :

আয়ের উৎস	গ্রামীণ ব্যাংক এ সম্পৃক্ততার পূর্বে (টাকা)	গ্রামীণ ব্যাংক এ সম্পৃক্ততার পরে (টাকা)
কৃষি ১. ধান ও অন্যান্য দানা জাতীয় শস্য ২. শাকসবজী ৩. ফল ৪. পশুপালন ৫. হাঁস-মুরগী পালন ৬. মৎস্য চাষ ৭. বীজ উৎপাদন ৮. অন্যান্য অ-কৃষি ১. চাকরী ২. ক্ষুদ্র ব্যবসা ৩. দিন মজুরী ৪. কুটির শিল্প ৫. পল্লী ফোন কার্যক্রম ৬. অন্যান্য		

(খ) খাদ্যাভাসের পরিবর্তন :

নিম্ন বর্ণিত খাদ্য সামগ্রী আপনি গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার আগে কি পরিমাণে গ্রহণ করেছিলেন এবং বর্তমানে কি পরিমাণে গ্রহণ করেন তা অনুগ্রহ করে বলুন।

খাদ্যের ধরন	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পূর্বে (গ্রাম)	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পরে (গ্রাম)
ভাত (দিন)		
রুটি (দিন)		
শাকসবজি (দিন)		
ডাল (সপ্তাহ)		
মাছ (সপ্তাহ)		
মাংস (মাস)		
ডিম (মাস)		
দুধ (মাস)		

(গ) আবাসিক অবস্থার পরিবর্তন :

- আবাসিক গৃহ সংক্রান্ত পরিবর্তন: অনুগ্রহ পূর্বক আপনার বাসস্থান সম্পর্কে তথ্য দিন।

ক্রমিক নং	বাসস্থানের ধরণ	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পূর্বে	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পরে
১.	আদৌ কোন ঘর ছিল না		
২.	কাঁচা ঘর ছনের ছাদ / প্লাষ্টিকের ছাদ		
৩.	কাঁচা ঘর টিনের ছাদ		
৪.	পাকা ঘর		

- পয়ঃনিষ্কাশন ব্যবস্থা সংক্রান্ত পরিবর্তন: আপনার পরিবারের পায়খানা ব্যবহারের ধরন সম্পর্কে তথ্য দিন

ক্রমিক নং	পায়খানা ব্যবহারের ধরন	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পূর্বে	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পরে
১.	ঝোপঝাড় বা খোলা জায়গা		
২.	কাঁচা পায়খানা		
৩.	অর্ধেক সেনেটারী পায়খানা		
৪.	সেনেটারী পায়খানা		

- পানীয় জলের উৎস: আপনার পরিবারের পানীয় জলের ব্যবহারের উৎস সম্পর্কে তথ্য দিন

ক্রমিক নং	পানীয় জলের ব্যবহারের উৎস	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পূর্বে	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পরে
১.	নদী অথবা পুকুর হতে		
২.	অন্যের টিউবওয়েল		
৩.	নিজের টিউব ওয়েল		

১১। পারিবারিক সম্পদের পরিবর্তন :

- অনুগ্রহ পূর্বক আপনার পরিবারের সম্পত্তি সম্পর্কে তথ্য দিন

ক্রমিক নং	সম্পত্তির ধরন	ইউনিট স্কোর	গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পূর্বে		গ্রামীণ ব্যাংক এ সম্পৃক্ত হওয়ার পরে	
			সংখ্যা	স্কোর	সংখ্যা	স্কোর
১।	হারিকেন					
২।	চেয়ার					
৩।	চৌকি					
৪।	বেঞ্চ					
৫।	মাছের জাল					
৬।	ছাগল					
৭।	কাঠের আলমারী					
৮।	রেডিও					
৯।	টু-ইন-ওয়ান					
১০।	সাদাকালো টেলিভিশন					
১১।	হাত ঘড়ি					
১২।	দেয়াল ঘড়ি					
১৩।	পাখা (বৈদ্যুতিক)					

১৪।	বাই-সাইকেল					
১৫।	রিকশা					
১৬।	টর্চ লাইট					
১৭।	ভেন					
১৮।	সেলাই মেশিন					
১৯।	খাট					
২০।	শোকেস					
২১।	গরু					
২২।	মুরগী					
২৩।	হাস					
২৪।	রঙ্গিন টেলিভিশন					
২৫।	মোটর সাইকেল					
	মোট					

১২। স্বাধীন বিমোচনে গ্রামীণ ব্যাংকের সমস্যা সমূহ :

গ্রামীণ ব্যাংকের ক্ষুদ্র ঋণ কার্যক্রমের সাথে সম্পৃক্ততার পরে আপনি কোন কোন সমস্যার সম্মুখীন হয়েছেন সে সম্পর্কে আপনার মতামত দিন।

ক্রমিক নং	সমস্যা	মতামতের ধরন				
		খুব বেশি	বেশি	মাবামাঝি	কম	মোটাইনা
১।	চাহিদা অনুযায়ী ঋণের পরিমাণ পর্যাপ্ত নয়					
২।	প্রয়োজনের সময় ঋণ পাওয়া যায় না					
৩।	তাড়াতাড়ি ঋণ পরিশোধ					
৪।	পূর্বে লোন পরিশোধের জন্য নতুন ঋণ নেয়ার দরকার হয়					
৫।	ঋণের জন্য আবেদন সময়োপযোগী					
৬।	সামাজিক কর্মকাণ্ডে ঋণের অপব্যবহার করা					
৭।	উচ্চ সুদের হার					
৮।	সামাজিক মর্যাদা ক্ষুণ্ণ হয়					
৯।	পূর্বের লোন শোধ না করা পর্যন্ত নতুন লোন পাওয়া যায় না					
১০।	গ্রুপ তৈরী না হওয়া পর্যন্ত লোন পাওয়া যায় না					

সহযোগীতার জন্য আপনাকে ধন্যবাদ

তারিখ :

স্বাক্ষরকারী গ্রহণকারীর স্বাক্ষর

APPENDIX-C

GRAMEEN BANK

The Grameen Bank is a unique financial institution in Bangladesh. Grameen Bank (GB) has reversed conventional banking practice. It was originated to provide small loans exclusively to the poor who possess not more than a half acre of land or assets not exceeding the value of one acre of medium quality cultivable land. It also provides comprehensive investment counseling and close supervision over borrowers' entrepreneurial activities so that they can make the most productive use of the loans and succeed in their business ventures.

GB provides credit to the poorest of the poor in rural Bangladesh, without any collateral. At GB, credit is a cost effective weapon to fight poverty and it serves as a catalyst in the over all development of socio-economic conditions of the poor who have been kept outside the banking orbit on the ground that they are poor and hence not bankable.

Origin of The Grameen Bank

Grameen Bank Project was born in the village of Jobra, Bangladesh, in 1976. In 1983 it was transformed into a formal bank under a special law passed for its creation. The Bank was begun as an experimental project in 1976 and turned into a formal financial institution in 1983 but with only 75 branches in the whole of Bangladesh. Since then, it has been experiencing a remarkable rate of growth.

As of May, 2007, it has 7.21 million borrowers, 97 percent of whom are women. With 2431 branches, GB provides services in 78,659 villages, covering more than 94 percent of the total villages in Bangladesh.

The Objectives of the Grameen Bank Project

The Grameen Bank was initiated with the following objectives in mind (Yunus, 1982)

- ❖ To extend the banking facilities to the poor men and women
- ❖ To eliminate the exploitation of the moneylenders
- ❖ To create opportunity for self-employment for the vast utilized and underutilized manpower resources
- ❖ To bring the disadvantaged people within the folds of some organizational format which they can understand and operate, and can find socio-political and economic strength in it through mutual support
- ❖ To reserve the age-old vicious circle of low income, low savings, low investment, low income into an expanding system of low income credit invest more income more credit more investment more income.

Mode of operation

The Grameen Bank now follows standard operational procedures that evolved throughout the 1976-83 period in a process of continuous interaction with the poor. A Grameen Bank branch normally covers an area of about 15 to 20 villages located in a union, at most two unions, in the vicinity of branch. The branch is headed by a branch manager and includes six bank workers, an accountant, and one or two bank assistants. Because of the fact that most members of the target group are illiterate and are shy about coming to banks. The banking services are brought to the doorsteps. The size of the branch and the area covered is determined by the workers daily travel to maintain contact with the target group.

When the Grameen Bank decides to open a branch, the first task of the branch is to prepare a socio-economic report covering the geography, economy,

demography, and transport and communication infrastructure of the area to be covered by the branch. The branch manager thus becomes acquainted with the locality and people before starting the operation. When the head office approves the report, the manager arranges a general public information meeting inviting all classes of people in the locality. At the meeting, the manager introduces bank officials and explains the Grameen banks purpose, rules and programs.

The Group and the Centre

Interested persons are asked to form groups of five like-minded people having similar economic standing who enjoy mutual trust and confidence. The bank has settled on a group of five through trial and error. Initially loans were given to individuals, but that quickly proved to be uncontrollable for the staff. Only one person from household can be a member and relatives must not be in the same group. Each group elects a chairperson and a secretary, and this position rotate among members on a yearly basis so that all members have the learning experience that accompanies the responsibilities of these positions. The chairperson is responsible for maintaining discipline in the group and the supervision of loan utilization by the members. A number of groups from the same village are federated into a centre and the weekly meetings are held at the centre level. Again groups of female members from separate centre. The group chairpersons elect a centre chief and deputy centre chief. who hold office for one year only. Centre chief ensures attendance at the weekly meetings. payment of loan installments, and overall discipline, and conduct the programs of the meetings. The bank worker attends the centre meetings.

Income generating activities matched with credit program

❖ Major income generating activities includes Bamboo basket	❖ Fish cultivation
❖ Umbrella repairing	❖ Laundry business
❖ Tree plantation	❖ Family planning
❖ Vegetable cultivation	❖ Fruit business
❖ Rickshaw purchase	❖ Sewing with the help of sewing machine
❖ Poultry rearing	❖ Rickshaw business
❖ Cloth business	❖ Agricultural equipments
❖ Rice business	❖ Cattle rearing

Organizational structure

The managing director is the chief executive of the bank. The organizational chart of the bank may be seen at the next page. The 1983 Grameen Bank ordinance stipulates a board of directors composed of the chairman, the managing director, and nine other members-five persons appointed by the government and four persons appointed by the borrower-shareholders. 'The 1986 amendment of the ordinance' provides for 13 members of the board of which 9 are to be selected from the borrower-shareholders. The board approves the policies of the bank and serves as the officers. It is also responsible for supervising the training of bank staff and for research and development activities.

Most of the functions of the head office were assigned to zone office when they were established. The zone offices delegated to area offices the power of account, supervision and loan approval. Social development programs were initially located at the head office, but authority for these was soon transferred to zone offices. The zone offices are now planning to transfer responsibility for these programs to area offices.

Formulation and change of policies are arrived at by a consensual approach through meetings of the managing directors with the heads of various departments located in the head office and with zone managers. The managing directors meet with the zone manager twice a year to exchange experiences and discuss issues for further development of the bank.

The branch office is the lowest administrative unit of the Grameen Bank and is considered the profit-responsibility unit. For accounting purposes, the bank charges 10 per cent interest on the funds it lends to branch offices for disbursement to the borrowers at an annual interest rate of 16 per cent. About 10 to 15 branch offices are supervised by an area office, which is usually located in a small town. The area manager is the final authority for approval of loans and supervises loan utilization and recovery with the help of a number of program officers. The area officers are accountable to the zone office located in the district headquarters. The zone manager is responsible for handling accounts and managing funds. Recently the zone office has also taken responsibility for monitoring, evaluating and supervising the social development programs. A zone manager works in close contact with the area managers, who attend management meetings once or twice a month in the zone office.

The head office, located in Dhaka, maintains liaison with the government and provides feedback to lower-level management, to pass them on to higher levels for testing and development and ultimately for replication in other areas.

'Stars' for Achievements

Grameen Bank provides colour-coded stars to branches and staff for 100 percent achievement of a specific task. A branch (or a staff) having five-stars indicate the highest level of performance. At the end of December 2006 branches showed the following result.

- 1553 branches, out of the total of 2,319 branches, received stars (green) for maintaining 100 per cent repayment record.
- 1627 branches received stars (blue) for earning profit. (Grameen Bank as a whole earns profit because the total profit of the profit-earning branches exceeds the total loss of the loss-incurring branches.)
- 1375 branches earned stars (violet) by meeting all their financing out of their earned income and deposits. These branches not only carry out their business with their own funds, but also contribute their surpluses to meet the fund requirement of deficit branches.
- 337 branches have applied for stars (brown) for ensuring education for 100% of the children of Grameen families. After the completion of the verification processes their stars will be confirmed. 54 branches have applied for stars (red) indicating branches those have succeeded in taking all its borrowers' families (usually 3,000 families per branch) over the poverty line.

GAIN

The Norwegian Nobel Committee decided to award the Nobel Prize for 2006, divided into two equal parts, to Muhammad Yunus and Grameen Bank for their efforts to create economic and social development from below. Lasting peace can not be achieved unless large population groups find ways in which to break out of poverty. Loans to poor people without any financial security had appeared to be an impossible idea. From modest beginning three decades ago, Yunus has, first and foremost through Grameen Bank, developed micro credit into an ever more important instrument in the struggle against poverty. Grameen Bank has been a source of ideas and models for the many institutions in the field of micro credit that have sprung up around the world.

Correlations between independent and dependent variables (N=100)

VARIABLE	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀
X ₁	1									
X ₂	-.374**	1								
X ₃	.617**	-.427**	1							
X ₄	.153 ^{NS}	.301**	.092 ^{NS}	1						
X ₅	.139 ^{NS}	.007 ^{NS}	.144 ^{NS}	.305**	1					
X ₆	.031 ^{NS}	.512**	.010 ^{NS}	.401**	.223*	1				
X ₇	.245*	.249*	.160 ^{NS}	.560**	.387**	.530**	1			
X ₈	.565**	-.166 ^{NS}	.387**	.125 ^{NS}	.125 ^{NS}	.122 ^{NS}	.297**	1		
X ₉	.193 ^{NS}	-.117 ^{NS}	.204*	-.046 ^{NS}	-.005 ^{NS}	.223*	.053 ^{NS}	.220*	1	
X ₁₀	.184 ^{NS}	.186 ^{NS}	.186 ^{NS}	.482**	.405**	.408**	.678**	.259**	.074 ^{NS}	1

^{NS} = Not significant
 ** = Significant at the 0.01 level
 * = Significant at the 0.05 level

X₁ = AGE
 X₂ = EDUCATION
 X₃ = FAMILY SIZE
 X₄ = FARM SIZE
 X₅ = ANNUAL SAVINGS
 X₆ = COSMOPOLITENESS
 X₇ = CREDIT RECEIVED

X₈ = DURATION OF INVOLVEMENT WITH GB
 X₉ = ATTITUDE TOWARDS GB
 X₁₀ = IMPACT