# IMPACT OF MICROCREDIT ON POVERTY ALLEVIATION: A CASE OF ADIBASHI BENEFICIARIES OF DINAJPUR

## **MD. MASUD RANA**



# DEPARTMENT OF AGRICULTURAL EXTENSION & INFORMATION SYSTEM SHER-E-BANGLA AGRICULTURAL UNIVERSITY DHAKA -1207

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# IMPACT OF MICROCREDIT ON POVERTY ALLEVIATION: A CASE OF ADIBASHI BENEFICIARIES OF DINAJPUR

BY

## MD. MASUD RANA

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### Approved by

## .....

(Prof. M. Zahidul Haque) Supervisor Dept. of Agril. Ext. and Info. System Sher-e-Bangla Agricultural University (**Prof. Md. Abul Bashar**) Co-Supervisor Dept. of Agril. Ext. and Info. System Sher-e-Bangla Agricultural University

(Md. Mahbubul Alam, Ph.D)

Associate Professor and Chairman Department of Agricultural Extension & Information System Sher-e-Bangla Agricultural University, Dhaka-1207



# Department of Agricultural Extension and Information System Sher-Bangla Agricultural University

Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh. Website: www.sau.edu.bd

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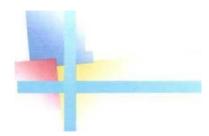
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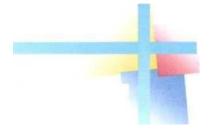
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> (Prof. M. Zahidul Haque) Supervisor Department of Agricultural Extension and Information System Sher-e-Bangla Agricultural University, Dhaka-1207

# **DEDICATION**



# DEDICATED TO MY BELOVED PARENTS



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# LIST OF CONTENTS

CHAPTER	TITLE	PAGE
	ACKNOWLEDGEMENT	i
	LIST OF CONTENTS	ii - vi
	LIST OF TABLES	vii- viii
	LIST OF FIGURES	ix
	LIST OF APPENDICES	ix
	ABBREVIATIONS AND ACRONYMS	Х
	ABSTRACT	xi
CHAPTER 1	INTRODUCTION	01-09
1.1	General Background	01
1.2	Statement of the Problem	02
1.3	Research Questions	03
1.4	Specific Objectives	04
1.5	Justification of the Study	04
1.6	Assumption of the Study	05
1.7	Limitation of the Study	06
1.8	Definition of Terms	07
1.9	Thesis Outline	09
CHAPTER 2	<b>REVIEW OF LITERATURE</b>	10-31
2.1	Concept of Poverty	10
2.2	Poverty in Bangladesh	12
2.3	Adibashi or Tribal Community	13
2.4	Poverty and Plain Land Adibashi/Tribal Community	15
2.5	Concept of Microcredit	17
2.5.1	Core Objectives of Microcredit Program	17
2.5.2	The Grameen Model	17
2.5.3	Access to Microcredit	19
2.6	Microcredit in Bangladesh	19
2.6.1	Microcredit Sector Regulation and Monitoring	21
2.6.2	Fund Composition of the Microcredit Sector	21

2.7	The Impact of Microcredit on Poverty Alleviation in Bangladesh	22
2.8	Relationship between Selected Characteristics of Adibashi Beneficiaries and Impacts of Microcredit on Poverty Alleviation	27
2.8.1	Age and Impacts of Microcredit on Poverty Alleviation	27
2.8.2	Education and Impact of Microcredit on Poverty Alleviation	27
2.8.3	Family Size and Impact of Microcredit on Poverty Alleviation	28
2.8.4	Farm Size and Impact of Microcredit on Poverty Alleviation	29
2.8.5	Cosmopoliteness and Impact of Microcredit on Poverty Alleviation	29
2.8.6	Credit Received and Impact of Microcredit on Poverty Alleviation	29
2.8.7	Utilization of Credit and Impact of Microcredit on Poverty Alleviation	29
2.8.8	Effect of Credit Utilization and Impact of Microcredit on Poverty Alleviation	30
2.8.9	Duration and Impact of Microcredit on Poverty Alleviation	30
2.8.10	Attitude and Impact of Microcredit on Poverty Alleviation	30
2.9	Conceptual Framework of the Study	31
CHAPTER 3	METHODOLOGY	32-46
3.1	Locale and Population	32
3.2	Sampling Procedure	3.
3.3	Instrument for Collection of Data	34
3.4	Data Collection	34
3.5	The Variables and their Measurement	35
3.5.1	Measurement of Independent Variables	35
3.5.1.1	Age	35
3.5.1.2	Education	36
3.5.1.3	Family Size	36

	3.5.1.4	Farm Size	36
	3.5.1.5	Cosmopoliteness	36
	3.5.1.6	Credit Received	37
	3.5.1.7	Utilization of Credit	37
	3.5.1.8	Effect of Credit Utilization	37
	3.5.1.9	Duration of Involvement with Microcredit Program	38
	3.5.1.10	Attitude towards Microcredit Program	38
	3.5.2	Measurement of Dependent Variables	38
	3.5.2.1	Change in Income	39
	3.5.2.2	Change in Food Consumption	39
	3.5.2.3	Change in Housing Environment	40
	3.5.2.3.1	Change in Housing Unit	40
	3.5.2.3.2	Change in Toilet Condition	41
	3.5.2.3.3	Change in Drinking Water Source	41
	3.5.2.4	Change in Family Asset	42
	3.5.2.5	Change in Health Status	42
	3.5.2.5.1	Change in Health Seeking Behavior	43
	3.5.2.5.2	Change in Health Related Practices	43
	3.5.2.6	Change in Participation and Social Position	43
	3.5.2.6.1	Change in Participation	43
	3.5.2.6.2	Change in Social Position	44
	3.5.2.7	Change in Vulnerability	44
	3.6	Measurement of 'Impact of Microcredit Program on Poverty Alleviation of Adibashi'	44
	3.7	Problem Confrontation by Adibashi Beneficiaries with Microcredit	45
	3.8	Data Processing and Statistical Analysis	46
	3.9	Hypothesis of the Study	46
CH	IAPTER 4	<b>RESULTS AND DISCUSSION</b>	47-67
	4.1	Selected characteristics of the respondents	47
	4.1.1	Age	48
	4.1.2	Education	48
	4.1.3	Family Size	49

4.1.4	Farm Size	49
4.1.5	Cosmopoliteness	50
4.1.6	Credit Received	50
4.1.7	Credit Utilization	51
4.1.8	Effect of Credit Utilization	51
4.1.9	Duration of Involvement with Credit Programs	52
4.1.10	Attitude towards Credit Programs	53
4.2	The extent of change in dimensions of the respondents and contribution on poverty alleviation	53
4.2.1	Change in Income	53
4.2.2	Change in Food Consumption	54
4.2.3	Change in Housing Environment	55
4.2.3.1	Change in Housing Unit	55
4.2.3.2	Change in Toilet Condition	56
4.2.3.3	Change in Drinking Water Source	56
4.2.4	Change in Health Status	57
4.2.4.1	Change in Health Seeking Behavior	57
4.2.4.2	Change in Health Related Practices	58
4.2.5	Change in Family Assets	58
4.2.6	Change in Participation and Social position	59
4.2.6.1	Change in Participation	59
4.2.6.2	Change in Social Position	60
4.2.7	Change in Vulnerability	61
4.3	Impact of Microcredit on Poverty Alleviation	61
4.4	Contribution of Selected Characteristics of the Adibashi Respondents on Poverty Alleviation	62
4.5	Comparative change pattern in terms of 'before' and 'after' involvement with microcredit program	63
4.6	Challenges of Microcredit	65
4.7	Problem Faced by the Adibashi Beneficiaries in Receiving and Utilizing Microcredit	66

CHAPTER 5	SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION			
5.1	Summary of Findings	68		
5.1.1	Selected Characteristics of the Respondents	68		
5.1.2	The extent of change in selected dimensions of the respondents	69		
5.1.3	Contribution of Selected Characteristics of the Respondents on Poverty Alleviation	71		
5.1.4	Difference between 'before' and 'after' involvement with microcredit program	71		
5.1.5	Challenge of Microcredit	71		
5.1.6	Problem Confrontation by the Respondents with Microcredit	71		
5.2	Conclusion	71		
5.3	Recommendation	72		
5.3.1	Recommendation for Policy Implication	72		
5.3.2	Recommendation for Further Research	73		
	REFERENCES	75-83		
	APPENDICES	84-97		

# LIST OF TABLE

Table No.	Title	Page No.
2.1	Basic Statistics of NGO-MFIs in Bangladesh	21
3.1	Distribution of population and sample of the study	34
3.2	Cosmopoliteness scoring of the respondents	37
3.3	Credit utilization scoring	37
3.4	Effect of credit scoring	38
3.5	Attitude scoring of the respondents	38
3.6	Energy content of some selected items	40
3.7	Poverty Line Range based on Food Consumption	40
3.8	The scoring of housing unit	41
3.9	The scoring of toilet condition	41
3.10	The scoring of drinking water source	42
3.11	Family asset owned by household	42
3.12	Health seeking behavior scoring	43
3.13	Participation Scoring	44
3.14	Social position scoring	44
3.15	Vulnerability scoring	44
3.16	Measurement of overall impact of microcredit	45
4.1	A summary statement showing measuring units and salient features of the selected characteristics of the adibashi respondents	47
4.2	Distribution of the respondents according to their age	48
4.3	Distribution of the respondents according to their education	48
4.4	Distribution of the respondents according to their family size	49
4.5	Distribution of the respondents according to their farm size	49
4.6	Distribution of the respondents according to their cosmopoliteness	50
4.7	Distribution of the respondents according to credit received	50
4.8	Distribution of the respondents' according to their utilization of credit	51
4.9	Distribution of the respondents according to effect of credit utilization	52

4.10	Distribution of the respondents according to duration of involvement with credit Programs	52
4.11	Distribution of the respondents according to attitude towards credit	53
4.12	Distribution of the respondents according to their income change	54
4.13	Distribution of the respondents according to their calorie intake	54
4.14	Distribution of the respondents according to change in housing environment	55
4.15	A summary statement showing categories and salient features of dimensions of housing environment	56
4.16	Distribution of the respondents according to change in health status	57
4.17	Distribution of the respondents according to change in healthcare	57
4.18	Distribution of the respondents according to change in health related practices	58
4.19	Distribution of the respondents according to change in family assets	58
4.20	Distribution of respondents according to change in participation and social position	59
4.21	Distribution of the respondents according to change in participation	60
4.22	Distribution of the respondents according to change in social position	60
4.23	Distribution of the respondents according to change in vulnerability	61
4.24	Distribution of the respondents according to impact of microcredit	61
4.25	Regression Coefficients of contributing variables related to impact of microcredit	62
4.26	t-Test value of the comparative mean differences of the dimensions in terms of 'before' and 'after' involvement with microcredit	63
4.27	Distribution of the respondents according to their problem confrontation	66

# LIST OF FIGURE

Figure No.	Title	Page No.
2.1	The deprivation trap (Chambers, 1983)	11
2.2	Grameen Bank Model	18
2.3	Source of fund of MFIs on June, 2015	22
2.4	The conceptual framework of the study	31
3.1	A map of Dinajpur District showing Fulbari upazila	32
3.2	A map of Fulbari upazila showing study area	33
4.1	Pattern of multiple borrowing by the adibashi respondents	65

# LIST OF APPENDICES

Appendix No.	Title	Page No.
Ι	Field Trip Experiences	84
II	Interview Schedule (English Version)	83-92
III	List of GOs/NGOs working with microcredit found in the study area	93
IV	List of plain land adibashis found in the study area	93
V	Problem Faced Index (PFI)	94
VI	Plain land adibashi community in Dinajpur	95

# ABBREVIATIONS AND ACRONYMS

ASA	Association for Social Advancement
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BRAC	Bangladesh Rural Advancement Committee
BRDB	Bangladesh Rural Development Board
CHT	Chittagong Hill Tract
DCI	Direct Caloric Intake
et al.	All others
FAO	Food and Agriculture Organization
GOs	Government Organizations
GoB	Government of Bangladesh
IDB	Islamic Development Bank
IFAD	International Fund for Agriculture Development
k. cal.	kilo calorie
MDGs	Millennium Development Goals
MFI	Micro Finance Institute
MRA	Microcredit Regulatory Authority
NCB	Nationalized Commercial Banks
NGO	Non Government Organization
PCB	Private Commercial Bank
PDBF	Palli Daridra Bimochan Foundation
PKSF	Palli Karma Sahayak Foundation
RDRS	Rangpur Dinajpur Rural Service
TMSS	Thengamara Mohila Sabuj Shanga
UNDP	United Nations Development Programme
UNO	United Nations Organization
US \$	United States Dollar

# IMPACT OF MICROCREDIT ON POVERTY ALLEVIATION: A CASE OF ADIBASHI BENEFICIARIES OF DINAJPUR

MD. MASUD RANA

#### ABSTRACT

The objective of this study was to assess the impact of microcredit program on poverty alleviation of adibashis credit borrowers and to explore the contribution of the selected characteristics to impact of microcredit programs. Poverty alleviation was measured by computing the seven dimensions of change, such as change in income, food consumption, housing environment, health status, family assets, participation and social position and vulnerability of adibashi credit receivers on the basis of before and after their involvement with microcredit programs. Data was collected through household-level survey of 77 adibashi credit receivers of purposively selected two unions e.g. Eluary and Kazihal under Fulbari upazila of Dinajpur district applying random sampling. Findings indicated that 75.3 percent of the respondents had medium to low change in income after the involvement with microcredit. 80.2 percent of the respondents were belonged to poverty line II before the involvement with credit but calorie intake changed to 61.30 percent that belonged to below poverty line I after the involvement with credit. Before involvement, 54.5 percent of the respondents had katcha ghar with tin roof but after involvement the percentage increased to 89.6. Before involvement 3.9 percent of the respondents used half sanitary toilet where after involvement this percentage turned into 20.8 percent. 79.2 percent of the respondents had medium to low change in health status, 74 percent of the respondents had low to medium change in possession of assets, 59.8 percent of the respondents had low to medium change in participation and social position and 71.5 percent of the respondents had positively low to medium change in vulnerability after involvement with microcredit. 88.3 percent of the respondents had medium to low poverty alleviation after involvement with microcredit. Farm size, credit utilization, effectiveness of credit utilization and duration of involvement with microcredit program had significant contribution to the impact of microcredit. Need new loan for repayment of the previous loan was identified as respondents' main problem.

## CHAPTER 1

#### **INRODUCTION**

#### **1.1 General Background**

Bangladesh is a least developing country with a vast population of 160 million of 24.3% people living below poverty line and 12.9% living in absolute poverty (BBS, 2016). The country is also a home of 3 million (around 2% of the total population) adibashi or tribal people (Borchgrevink and McNeish, 2007). The adibashi who lived in the plain areas of northern part of Bangladesh are Rajbangshi, Santal, Oraon, Mahato, Pahan, Shing, Malo, Mahali, Rai, Turi, Munda and Koach etc. (Islam and Noami, 2013).

Over the years, indigenous people have encountered a gradual extinction of their distinctive identity and cultural heritage due to various political, cultural and economic reasons (Kamal *et al.* 2006). In fact a continuous process of disenfranchisement and marginalization has bought them on the verge of extreme political, economic and social vulnerability. The socio-economic profile of adibashis from plain land provides a grim picture of this situation. The plain land Bengalis could improve their social and economic status remarkably, whereas the tribal community continued to suffer from a scarcity of resources and was forced to dispose of their moveable and immoveable properties gradually. Compared to the 39.5% of people in rural Bangladesh who are belong to the group of absolute poor, 60% of adibashis from plain land fall within the group of absolute poor. On the other hand, 24.6% of adibashi from plain land belong to hard core poor group, which is 7% higher compared to the national figure (17.9%).

The status of adibashi is also very low in terms of education, livelihood, as well as economic and human rights (Barkat *et al.* 2009). Again, there are variations in prevalence of poverty in the adibashi groups. Poverty situation is much worse among the Oraon, Santal, Pahan and Khashi communities than among the other plain land adibashi communities (Barkat *et al.* 2009). The Santal is the largest tribes among the plain land adibashis, around 300,061 of adibashi population (World Bank report, 2008). But they are disadvantaged even in comparison with other smaller indigenous groups living in absolute poverty. They are lack of access

to education, employment opportunities and land rights to an extent (Borchgrevink and McNeish, 2007). Barkat *et al.* (2009) using the deprivation index showed that the Santal are one of the most deprived ethnic minorities in the plain land areas.

However, financial sector in low-income countries has failed to serve the poor, especially the adibashis. With respect to the formal sector, banks and other financial institutions generally require significant collateral, have a preference for high income and high loan clients and have lengthy and bureaucratic application procedures. With respect to the informal sector, money-lenders usually charge excessively high interest rates, tend to undervalue collateral, and often allow racist and/or sexist attitudes to guide lending decisions. The failure of the formal and informal financial sectors to provide affordable credit to the poor is often viewed as one of the main factors that reinforce the vicious circle of economic, social and demographic structures that ultimately cause poverty.

As a partial response to this failure, there has been significant growth in what can be termed "microcredit" over the past two decades. As microcredit, an extension of small, collateral-free institutional loans to jointly-liable poor group members (especially women) for their self-employment and income-generating activities (United Nations, 2010) has been considered one of the most significant innovations as an anti-poverty tool in the development field worldwide in the last thirty years (Hasan et al., 2009) for poverty alleviation (Chowdhury *et al.*, 2005; Ahlin and Jiang, 2008; Barboza and Trejos, 2009; Kotir and Obeng-Odoom, 2009). So it is worthy to assess the impact of microcredit on poverty alleviation of the plain land adibashi beneficiaries.

#### **1.2 Statement of the Problems**

It is debatable whether microcredit programs in Bangladesh have been effective in enhancing not only poor people's income but their overall wellbeing. According to Abdul Hakim & Ismail (2010) the well-being or quality of life of people is as important for development as income. Graham (2005) found that people value aspects like health, stable employment, marriage as much as, if not more than, income. However it is not clear from the studies assessing the impact of microcredit on the poor adibashis in Bangladesh whether these programs are really efficient in alleviating poverty and promoting the overall wellbeing of its adibashi recipients. According to International Fund for Agriculture Development (IFAD), adibashi community suffer higher rates of poverty, landlessness, malnutrition, human rights violation, unemployment and internal displacement than other sects of the society and they have lower level of literacy and less access to health services (Barkat *et al.* 2008). This raises a main question on the efficiency of microcredit programs in reaching those poor. It has been pointed out by Hermes and Lensink (2007) that microcredit does not reach out to those in extreme poverty. Even if credit reaches and in many cases some adibashi beneficiaries did enhance their income through a loan it remains unclear whether other aspects of their social wellbeing improved as well.

So, to assess the impact of microcredit on plain land adibashi beneficiaries of Dinajpur district of Bangladesh, the researcher undertook a piece of study entitled 'Impact of Microcredit on Poverty Alleviation: A Case of Adibashi Beneficiaries of Dinajpur'.

#### **1.3 Research Questions**

The study aims to find out the answer to the following questions:

i.What is the impact of microcredit on poverty alleviation in relation to:

- Increased income
- Improved food consumption
- Increased housing environment
- Increased family assets
- Increased health status
- Increased participation and social position
- Reduced vulnerability
- ii. What are the characteristics of adibashi beneficiaries?
- iii. What is the contribution of selected characteristics to impact of microcredit?
- iv.What are the problems faced by the adibashis in receiving and utilizing the microcredit?

#### **1.4 Specific Objectives**

The main focus of the present study is to assess the 'Impact of Microcredit Program on Poverty Alleviation of Adibashi Beneficiaries'.

To achieve this objective, following specific objectives were set forth to give proper direction to the study:

- 1. To assess the impact of microcredit program on poverty alleviation of adibashi beneficiaries regarding their :
  - Change in income
  - Change in food consumption
  - Change in housing environment
  - Change in family asset
  - Change in health status
  - Change in participation and social position
  - Change in vulnerability
- 2. To determine and describe the selected characteristics (age, education, family size, farm size, cosmopoliteness, credit received, credit utilization, effectiveness of credit utilization, duration of the involvement with microcredit program and attitude towards microcredit program) of the respondents
- 3. To explore the contribution of the selected characteristics of the respondents to the impact of microcredit on poverty alleviation
- 4. To identify the problems faced by the adibashi beneficiaries in receiving and utilizing microcredit.

#### 1.5 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. The government of Bangladesh and most of the NGOs are believed to be working to meet-up the prerequisites for socio-economic development of the poorest section of the population since the independence of the country. But as adibashis 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 GOs/NGOs activities, it is expected that this individual, social and economic integration would be possible through access to credit. As it is important for the poor adibashi people (including both men and women) to improve socio-economic condition and their standards of livings, GOs and most of the NGOs are working to improve the socio-economic condition and employment generation. But there is a very little study on the impact of its activities on plain land adibashi community.

So, there is a need to conduct study to see and realize the performance and effectiveness of microcredit programs on poverty alleviation. The researcher intended to take an attempt to know how the adibashi respondents develop their socio- economic condition through the involvement with microcredit 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 and credit workers to initiate and develop effective policies, methods, systems and tools for the advancement of plain land adibashis.

#### **1.6** Assumptions of the Study

An assumption is the supposition that an apparent fact or principle is true in the light of the available evidence (Goode and Hatt, 1952). The following assumptions were in mind of the researcher while undertaking this study:

- i. The adibashi respondents included in the sample were capable of furnishing proper responses to the questions contained in the interview schedule.
- ii. The responses furnished by the respondents were valid and reliable.
- iii. Information furnished by the Adibashi beneficiaries included in the sample was representative of the whole population of the study area.
- iv. The researcher who acted as interviewer was well adjusted to the environment of the study area.
- v. The data collected from the adibashi beneficiaries were free from bias.

- vi. The independent and the dependent variables of this study were normally and independently distributed with their respective means and standard deviation.
- vii. The findings of the study are expected to be useful for planning and execution of various programs in connection with poverty alleviation and development of the country.

#### **1.7 Limitations of the Study**

Considering the time, money and other necessary resources available to the researcher, the following limitations had to be imposed in conducting this research:

- The study was confined to the adibashi beneficiaries of 2 unions under Fulbari upazila of Dinajpur district.
- ii. There were many landless Adibashi in the study area but only the adibashi involved with microcredit were considered for this study.
- iii. In a peasant economy like Bangladesh where adibashis are mostly illiterate, it is very difficult to get accurate information with respect to their activities on production, income and so on. So, some of the information had to be based on their statements.
- iv. For information about the study, the researcher depended on data as furnished by the selected respondents during collection of data.
- v. Characteristics of the adibashi beneficiaries are many and varied. However, only ten characteristics were selected for investigation.
- vi. Only 77 adibashi beneficiaries were considered as respondents for the survey.
- vii. The adibashi men and women always remain busy in doing field and household works and often they are not encouraged to provide household information without consulting their husbands or guardians. So, effort was made to incorporate that information which was within their easy work.
- viii. The researcher was male and the respondents were both males and females.So, some initial difficulties were faced in interviewing the respondents due to language and cultural barriers. However, this problem was subsequently

overcome by creating proper rapport by the researcher and also with the support of Adibashi opinion leader.

Findings of the study will be particularly applicable to the adibashi beneficiaries of 2 unions under Fulbari upazila of Dinajpur district.

However, the findings may also have relevance to other areas of Bangladesh residing in plain land where the physical, socio-economic, cultural and geographic conditions do not differ much from those of the study area.

Thus, the findings are expected to be useful to the researchers, planners, policymakers, extension workers of Bangladesh and beneficiaries of Adibashis and similar organizations involved and engaged in microcredit programs.

#### **1.8 Definition of Terms**

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

Adibashi: Adibashi is the collective term for the indigenous peoples of plain land areas of northern part of Bangladesh.

In this study, adibashis refer to the tribal communities of Dinajpur.

**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 (Encarta, 2006).

**Poverty line:** Poverty line I: It is defined as daily intake up to 2162 k.cal. per person. Poverty line II: It is defined as daily intake up to 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. Using DCI (Day Calorie Intake) method in 1998 absolute and hardcore poverty was estimated based on per capita per day calorie intake of 2112 kcal and 1805 kcal respectively.

**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 standards of living like food, cloth shelter and personal amenities cannot be maintained.

**Microcredit:** Professor Dr. M. Yunus of the Grameen Bank has created a system that delivers the credit to the poor without collateral, it's popularly known as microcredit. Moreover, microcredit 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 microcredit.

**Impact of microcredit:** The term referred to sustained desirable changes due to microcredit 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 seven dimensions.

**Beneficiaries:** In this study, beneficiaries are those adibashis male or female who took credit.

Attitude towards microcredit program: An altitude may be defined as predisposition to act towards an object in a certain manner.

Here attitude towards microcredit program means the beliefs or feelings of the respondents towards the activities of microcredit.

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

Intermediary organizations engaged in funding or offering other forms of support to communities and other organizations that seek to promote development (Hulme and Edwards, 1997).

**Vulnerability:** The concept of vulnerability extends the idea of poverty to include idiosyncratic as well as aggregate risks which can be defined as the probability of being in poverty or to fall deeper into poverty in the future.

It can be categorized on the micro-and macro level where macro vulnerability refers to worldwide threats to social welfare, e.g. globalization and recent international financial crises. Conversely, micro vulnerability refers to the household level risks including health risks, economic shocks, social shocks, natural disasters, and demographic shocks (Tesliucand, 2004).

**Participation:** Participation indicates people's involvement in decision-making processes, in implementing programs, their sharing in the benefits of development programs and their involvement in efforts to evaluate such programs (Cohen and Uphoff, 1979).

#### **1.9 Thesis Outline**

This thesis is organized into five distinctive chapters:

**Chapter 1** gives an introduction to the study. The research objectives, research questions and a rational for the study are also provided.

**Chapter 2** provides a literature review on poverty and microcredit and its complex relationship with poverty alleviation.

**Chapter 3** presents the methods used in conducting the research and outlines the data collection and analysis methods employed.

**Chapter 4** outlines the empirical findings and provides a discussion in the light of main research questions and lastly,

**Chapter 5** gives conclusion to the study and implicates policy recommendations based on findings.

#### 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 microcredit towards poverty alleviation.

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

#### 2.1 Concept of Poverty

Poverty is a 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 (Encarta, 2006). According to OECD/DAC Guidelines on Poverty Reduction (2001), poverty is described as the lack of the following five capabilities.

- i. Economic capabilities: to earn an income, to consume, and to have assets
- ii. Human capabilities: to have access to health care, education, sufficient nutrition, clean water, and hygienic living conditions
- iii. Political capabilities: human rights, to participate in political and policymaking process, and to be able to have an influence on decision-making
- iv. Socio-cultural capabilities: to participate as a valued member of the community with social status and dignity
- v. Protective capabilities: to prevent vulnerability from food insecurity, illness, crime, war and conflict.

However 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.

On the basis of levels or types of poverty, poverty was identified as: absolute poverty and relative poverty. Absolute poverty is defined as the cost of the minimum necessities needed to sustain human life. In 2008, the World Bank regarded people earning less than US\$ 1 a day to be absolutely poor, but recently updated to US\$ 1.90 in 2015 (World Bank, 2015).

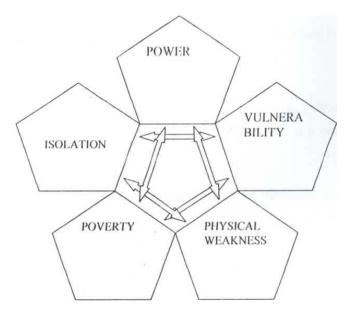


Fig. 2.1 The deprivation trap (Chambers, 1983)

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 (Sinha *el al.*, 1998).

#### Who are the 'Poor'?

Palli Daridra Bimochan Foundation (PDBF) has given a definition of 'poor' person. 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'.

#### Why does poverty persist?

Poverty is most often accompanied by large inequalities of income and access to resources, services, and opportunities. There is no straightforward correlation between the incidence of poverty and levels of economic inequality, but most poor people live in countries where there are also non-poor people. The relevance of inequality for the persistence of poverty is another long-standing field of economic research (Alesina and Rodrik, 1994; Persson and Tabellini, 1994; Banerjee and Duflo, 2003; Galor and Zeira, 1993). Income inequality often entails unequal

access to resources and services as diverse as health, credit, insurance, law or schooling, which in turn contributes to the persistence of poverty of disadvantaged groups. Moreover, economic inequality is usually accompanied by unequal access to political power (Acemoglu and Robinson, 2008; Flechtner and Panther, 2016), making it much more difficult for disadvantaged people e.g. adibashis to defend their interests politically.

#### 2.2 Poverty in Bangladesh

Poverty in Bangladesh is a multi-faceted problem involving income, consumption, nutrition, health, education, housing, crisis coping, insecurity, isolation, gender inequality, population growth, etc. National per capita annual income was estimated BDT.11480 in 2014 (adjusted by purchasing power parity) which increased to US\$1602 or BDT.1125999 (BBS, 2016). Bangladesh remains one of the poorest, most densely populated and developing nations especially characterized by pervasive poverty in both rural and urban areas. The poverty extent is possibly more alarming in rural areas where problems of inequality and unemployment are growing rapidly.

In Bangladesh, poverty scenario was first surveyed in 1973-1974. The survey method was Household Income and Expenditure survey (HIES). In HIES, Food Intake and Direct Calorie Intake method were used. Daily per capita 2122 k calorie and 1805 k cal were respectively as relative and hardcore poverty. According to HIES, poverty head count ratio was 58.8 percent in 1991-92, which has been reduced to 49.8 percent in 2000. Other indices such as poverty gap index (PGI) and squared poverty gap index (SPGI) are also reduced in national, rural and urban levels. In terms of the upper poverty line based on calorie intake, 41.2 million in rural areas and 14.8 million in rural areas were poor in 2005. The numbers of hardcore poor was 18.7 million in rural areas and 8.3 million in urban areas in 2005 (BBS, 2005). However, the situation has been improving over the years. According to the findings from HIES-2010, 31.5 percent of the population in Bangladesh remained below the poverty line (BBS, 2011) that dropped to 24.3% in 2016 (BBS, 2016) and to 23.5% in 2017 (Economic Review, 2017). There are significant regional variations of poverty in Bangladesh. A study by Sen

(2003) revealed that Rajshahi had the highest rate of poverty; 61 percent in contrast to Barisal, which had 40 percent only and Kurigram district has the highest rate of poverty in 2017 (BBS, 2017). Still now land ownership remains the key element of living standards because land is the most important income-earning asset. Among the landless in rural areas, 61.8 percent were very poor and 83 per cent were poor. Among the marginal landless (owning less than 0.50 acre) 28.6 percent were very poor and 43.8 percent were poor (BBS, 2006) which also dropped in 2010 as 21.1 percent were very poor and 35.2 percent were poor (HIES, 2010).

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 (Nawaz, 2000). The social causes for becoming extreme poor includes family break up, bad habit of household heads and inherited poverty (Haider, 2001). Muzzaffar (2001) revealed that the misallocation of resources based on priority is undoubtedly one of the major causes of absolute poverty. However 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.

#### 2.3 Adibashi or Tribal Community

The term 'Adibashi/Adivasi' was and is generally used by Bengali-speakers – the major ethno-linguistic group in Bangladesh – to refer to the indigenous groups of the regions outside the Chittagong Hill Tract (CHT), referred to here as the

"plains". Members of these groups are still referred to as *Adibashi/Adivasi* in Bengali, although this term now also extends to the indigenous groups of the CHT (also otherwise known as "*pahari*" or hillpeople). According to the International Labour Organization (ILO) convention, people are regarded as indigenous on account of their descent from the population which inhabited the country, or a geographic region to which the country belongs, at the time of the conquest or colonization, or the establishment of the present state boundaries, and who, irrespective of their legal status retain some or all of their social, economic, cultural, and political institutions (Godinho, 2008).

The East Bengal State Acquisition and Tenancy Act, 1950 (Act XXVIII, 1950) recognizes 21 "aboriginal castes and tribes". Of the 21 groups, only six e.g Garo, Hajong, Koch, Munda, Oraon and Santal are accounted for in the 1991 census. The National Poverty Reduction Strategy Paper adopted by the Government of Bangladesh in 2005 ("PRSP-I") uses "adivasis/ethnic minorities"; and the 2008 PRSP-II uses "indigenous communities" and "indigenous people" (Roy, 2009). The groups claiming indigenous status, or known by others to be such, but whose indigenous status has remained unrecognized by the government so far. As the Bangladesh government has declared that there are no indigenous peoples (Bengali: Adivasi) in the country and has preferred to use terms such as "tribe" and "tribal" ("upajati" in Bengali) instead of "indigenous" (Roy, 2009). In the 15th amendment of the constitution in 2011 Adibashis are declared as "tribes", "minor races" and "ethnic sects and communities" (Dhamai, 2014). Whatever officially the Bangladesh Government recognizes 27 ethnic minorities in the Small Ethnic Minority Cultural Institute Act of 2010. But different rights based organizations claim that more than 45 ethnic minorities lived in Bangladesh before independence in 1971 (Barman and Neo, 2014).

There are also disagreements over the size of the ethnic population. The latest population survey in 2011 shows that ethnic minorities represent 1.10 percent of the population in Bangladesh, in other words a total of 1,586,141 citizens. However, ethnic minorities claim that the exact number is closer to 2 million (Barman and Neo, 2014). Not only are there differences in statistical estimations

14

but the latest censuses actually exclude questions about ethnic minorities. In reality, we have no updates on the ethnic population since 1991.

#### 2.4 Poverty and Plain Land Adibashi/Tribal Community

Bangladesh has achieved remarkable progress in regard to reducing extreme poverty. In 2010, the percentage of extreme poor in the total population was 17.6 against 13.1 in 2013 and 12.4 in 2014 (Sen and Ali, 2015). This success was however only partly shared with ethnic minorities. Islam and Noami (2013) reveal that majority of the families of small ethnic groups have low and inadequate income, poor savings, high rate of illiteracy, marginal land holdings and poor sanitation and hygiene practices. They are also less conscious about family planning, have limited access to GO/NGO facilities, less participation in local institutions and lack awareness on basic human rights. Death of the main income earner and incidence of natural disaster always bring major economic crisis in small ethnic families.

Barkat et al., (2009 a, b) conducted important analyses on CHT and plain land ethnic minorities, which identify an achievement gap between national poverty reduction and other ethnic groups' experiences. Overall, studies find that low economic opportunities, specific geographic locations, exclusion, deprivation and dispossession of lands are the main drivers of poverty among the ethnic minorities in Bangladesh (Barkat et al., 2009 a. b.; Adnan, 2004; Kamal et al., 2006). Sen and Ali (2015) argue that non-income poverty is also widespread in the CHT, particularly education and health indicators, due to geographic conditions. Barkat et al. (2009a) using the Direct Calorie Intake (DCI) method found that among ten plain land ethnic communities in Greater Sylhet and Mymensingh 60 percent of the indigenous people were absolute poor compared to only 39.5 percent of rural Bengalees. Hardcore poverty among plain land indigenous peoples is also significantly higher (24.6 percent) than the hardcore poverty (17.9 percent) in rural Bangladesh (Barkat et al., 2009a). Using a similar method, Barkat et al. (2009b) found in the CHT about 62 percent of households in the CHT region, irrespective of ethnicity, live below the absolute poverty line (below 2,122 k.cal), while about 36 percent are hardcore poor (below 1,805 k.cal) (Barkat et al., 2009b). Most

importantly, the poverty status of women in the CHT is of greater concern as 94 percent of them live below the absolute poverty line and about 85 percent below the hardcore poverty line based on the DCI method (Barkat *et al.*, 2009b). UNDP Bangladesh also published the MDG acceleration report in 2013, covering the whole of the country including the CHT. The GED and UNDP (2013) report also shows the highest percentage of population below the national upper poverty line (defined as 2,122 k.cal) was found in Khagrachari district (50.5 percent) followed by Bandarban (41.1 percent) and then Rangamati district (33.2 percent) compared to the national average of 31.5 percent (UNDP, 2013).

Poverty levels vary amongst to ethnic groups too, with the Oraon, Santal, Pahan and Khasia communities in the plain land suffering from more severe forms of poverty than the Hajong, Garo and Rakhain communities among the plain land ethnic minorities (Barkat *et al.*, 2009a). On the other hand, high poverty incidence can be found found among the marginalised ethnic minorities particularly the Lushais, the Bawms, the Chaks, the Khyangs, and the Pangkhuas in the Chittagong hill tract ethnic minorities (Barkat *et al.*, 2009b). The well-being status of plain land ethnic minorities has been documented by Barkat *et al.* (2009) using the deprivation index. According to this index, Patro ethnic minorities are the most deprived in the plain land, with a score of 3.7 points (on a scale of "0" to "8" with "0" being the most deprived). They are followed by Santal-3.9 points, Pahan-4.2 points, Oraon-4.3 points, Dalu-4.4 points, Hajong-4.6 points, Khasia-4.7 points, Garo-5.4 points, Rakhain-5.1 points, and Mahato-5.6 points.

On the other hand, in rural CHT poverty is about 1.6 times higher than other parts of rural Bangladesh and is the most socially deprived region in Bangladesh (BBS, 2013). Within the CHT Bandarban is the only district that systematically scores below the national average in many socio-economic indicators. BBS report (2013) also showed that Bandarban and Khagrachari had the poorest types of housing, (with most people live in Kutcha houses) with Bandarban also had the highest proportion of households lacking access to sanitation and electricity. More importantly, 6 out of 7 upazila's of Bandarban, and 6 out of 10 upazilas of Rangamati are considered deprived using the composite deprivation index.

#### 2.5 Concept of Microcredit

Microcredit, as a poverty reduction strategy first was started by Grameen Bank of Bangladesh in 1970s. The Grameen Bank practice has been expanded to various parts of the world: Asia, Latin America and Africa (Aghion and Morduch, 2004). Dr. Muhammad Yunus, the founder of Grameen Bank in Bangladesh started a series of experiment by lending a small amount of money to the poor households in a small village called Jobra in the year 1976. Through his experiment, Dr. Yunus demonstrated that the poor not only make profit from the loan they get but also that they can repay the loan in a reliable way.

According to the Grameen Bank (2009), microcredit is a special type of financial service for people who are underprivileged, unemployed, and unable to provide collateral to access the traditional banking system. The term 'microcredit' refers to programs which provide small loans and other financial services without any sort of collateral for empowering women, supporting self-employment, and raising awareness (Daley-Harris, 2006; D'Espallier *et al.*, 2011).

#### 2.5.1 Core Objectives of Microcredit Program

The main objectives of the microcredit programs include encouraging savings, improving the debt collection rate and the creation of platforms for providing training to borrowers so that they may gain confidence in tackling problems such as domestic violence, oppression, injustice, and illegal divorce (Zohir *et al.*, 2001). Microcredit programs also target small and medium enterprises (SMEs) for developing the socioeconomic status of poor people and easing the unemployment problem. It is not only widely known as a supportive program for the poor but is also strongly believed to be a successful program model that has managed to pull tens of thousands out of poverty (Rahman and khan, 2013).

#### 2.5.2 The Grameen Model

The Grameen model emerged from the poor-focused grassroots institution, Grameen Bank, started by Prof. Mohammed Yunus in Bangladesh. The Grameen model is a 'group-lending model' that replaces the more traditional collateral system used in the formal financial and banking sector.

#### The model

A bank unit is set up with a field manager and a number of bank workers, covering an area of about 15 to 22 villages. The manager and workers start by visiting villages to familiarize themselves with the local milieu in which they will be operating and identify prospective clientele, as well as explain the purpose, functions, and mode of operation of the bank to the local population. Groups of five prospective borrowers (with similar socio-economic status usually from the same village) are formed; in the first stage, only two of them are eligible for and receive a loan. The group is observed for a month to see if the members are conforming to rules of the bank. Only if the first two borrowers repay the principal plus interest over a period of 50 weeks installment (installment being equal to 2 percent of the principal) do other members of the group become eligible themselves for a loan.

Microcredit Institutions (MCIs)	(Poor) Rural Households needing finance
	<ul> <li>(1) Monitoring</li> <li>a) Group formation through social networks and solidarity lending. Group hedging and compulsory savings from loans are capitalized to minimize lending risk.</li> <li>b) Informal social structures, gushtis (kinship based groupings), which makes it easier to organize women with a sense of solidarity and contributes to the success of mutual monitoring.</li> <li>c) Maintaining sequential weekly lending based on loan repayment behavior. Routine meetings of the group members to create space for peer pressure in case of any repayment failure.</li> <li>d) Learning on self-help groups to promote and deliver loans generates substantial savings in transaction costs and cerates incentives for expansion.</li> </ul>
rents as incentives for <i>mon</i> b) Participatory approach	(subsidized sources of funds and compulsory savings) gave MCIs
Microcredit Regulatory Author Bangladesh Bank Pally Karma Sahayak Foundat Donors, other fund providers a	ion (PKSF)

Fig. 2.2 Supervising and monitoring system of the Grameen Bank (Suzuki et.al., 2013)

Because of these restrictions, there is substantial group pressure to keep individual records clear. In this sense, collective responsibility of the group serves as collateral on the loan (adopted from http://www.grameen.com).

#### 2.5.3 Access to Microcredit

The access to credit is among the channels that have received the largest attention by economists. In economics, credit market imperfections have been discussed as a major hindrance to economic growth at the macroeconomic (Bencivenga and Smith, 1991) as well as at the microeconomic level. For example, Eswaran and Kotwal (1990) indicate that individuals can absorb risks better when they can smooth their consumption through credit. In order to make investment capital available for disadvantaged people, microcredit has been proposed and received large attention (Gersovitz, 2010).

However, empirical studies of the impact of microcredit on behavior and welfare have been ambiguous (Diagne and Zeller, 2001 and Banerjee *et al.*, 2015). Notwithstanding, it is consensual that credit constraints and limited access to and disposal of economic resources more generally are a major factor holding individuals back from improving their living conditions, for instance because they lack resources to invest in the education of their children, to set up a business, or to adopt new technologies.

In addition, disadvantaged people like plain land Adibashi often have limited access to GO/NGO facilities (Islam and Noami, 2013) and have poor access to insurances, making them more vulnerable to a range of factors beyond their control such as weather and climate conditions, accidents, or betrayal (Besley, 1995).

#### 2.6 Microcredit in Bangladesh

Microcredit programs in Bangladesh is implemented by NGOs, Grameen Bank, state-owned commercial banks, private commercial banks, and specialized programs of some ministries of Bangladesh government. In the microfinance sector as of June, 2016 total loan disbursement is around BDT 1005.57 billion and savings BDT 372 billion (including Grameen Bank, 10 Government project and Commercial Banks). The total clients of this sector is 31.72 million (including

6.96 million clients from Grameen Bank) that accelerates overall economic development process of the country (MRA-MIS Database, 2016).

Credit services of this sector can be categorized into six broad groups: i) general microcredit for small-scale self employment based activities, ii) microenterprise loans, iii) loans for ultra poor, iv) agricultural loans, v) seasonal loans, and vi) loans for disaster management. Loan amounts up to BDT 50,000 are generally considered as microcredit; loans above this amount are considered as microenterprise loans. In the backdrop of global 'double-dip' recession and overindebtedness crisis in microcredit sector in several countries, Bangladesh's microfinance sector shows strong resilience and continues to contribute towards enhancement of macroeconomic growth. Total outstanding loan of this sector (only licensed MFIs) has increased by 21 percent from BDT 211 billion in June 2012 to BDT 257 billion in June, 2013 and 8 percent from June, 2013 to June, 2014 which is BDT 278 billion disbursed and with a growth rate of 37 percent the total loan disbursement stood at BDT 634 billion at the end of June 2015 among 19.98 million poor people, helping them to be self-employed and accelerating overall economic development process of the country (MRA Annual Report, 2016).

In recent years, micro-entrepreneurs show excess demand for loans though some critics urge that, overlapping is caused higher demand for loan in microenterprise financing. Fund injection from banking sector, presence of a higher surplus ability of MFIs as well as the increasing saving tendency of the clients contribute to create the MFIs' high disbursement capacity.

In June, 2015 the average loan outstanding per borrower was BDT 16,824 which was BDT 14,153 in the preceding year and in 2014 average disbursement per borrower was BDT 23,789 which reached to BDT 31,154 in 2015 with a 30 per cent growth rate. The total savings has also increased by 24 percent from BDT 75.20 billion in June 2012 to BDT 93.99 billion in June 2013 and 20 Percent from June, 2013 for June, 2014 which is BDT 299 billion among 25.17 million clients (MRA Statistical Publication, 2015).

Particulars	June,	June,	June,	June,	June,	June,
	2010	2011	2012	2013	2014	2015
No. of Licensed	516	576	590	649	676	697
NGO-MFIs						
No of Branches	17252	18066	17977	14674	16991	15609
No. of Clients	25.28	26.08	24.64	24.60	25.17	26.00
(Million)						
No. of borrowers	19.21	20.65	19.31	19.27	19.98	20.35
(Million)						
Amount of Loan	145022	173797	211283	257010	278017	352410
Outstanding						
(BDT. Millions)						
Amount of	51362	63304	75206	93990	112991	135410
Savings (BDT.						
Millions)						
Loan Recovery	280.78	271.83	314	375.07	447.89	522.47
(Tk. Billion)						
Recovery Rate	97.35	95.52	97.74	97.69	95.64	96.02

Table 2.1 Basic Statistics of NGO-MFIs in Bangladesh

(Source: MRA Statistical Publication, 2015)

#### 2.6.1 Microcredit Sector Regulation and Monitoring

The government of Bangladesh entrusted Microcredit Regulatory Authority - MRA (Under Microcredit Regulatory Authority Act, Act no. 32 of 2006) with a view to ensuring transparency and accountability of microcredit activities of the MFIs in the country. The Authority is empowered and responsible to implement the said act and to bring the microcredit sector of the country under a full-fledged regulatory framework. The authority runs inspection, investigation and audit of the activities of microcredit organization (MRA Annual Report, 2016).

#### 2.6.2 Fund Composition of the Microcredit Sector

Since its inception, microfinance sector of Bangladesh has been transformed from grant-based small operation to loan based large operation and reached more than 26 million people in June, 2015 which would not have been possible without a loan-based more commercial type financing structure. This transformation has been characterized by the tendency of the major organizations to move towards commercial type sources as well as deepening internally generated funds and funds that are more reliable and predictable. The sector is broadly financed by the following types of resources: savings collected from clients, cumulative surplus (profit), concessional loan received from sources such as PKSF, grants received from national and international donors and commercial bank borrowing.

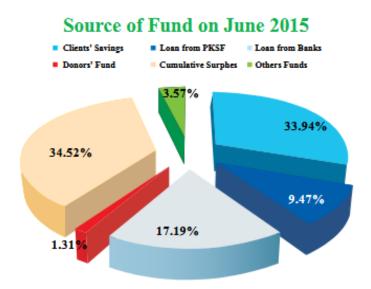


Figure 2.3 Source of fund of MFIs on June, 2015 (MRA Statistical Publication, 2015)

Total fund increased from BDT 183 billion in 2011 to BDT 378 billion in June 2015-a growth rate of 16 percent per year. The most important source of fund turned out to be client's savings. GoB has allowed mobilization of savings by MFIs from their members/clients. It is notable that in 2015, cumulative surplus was the highest most important source of fund. This was followed by client saving, loan from commercial and specialized banks.

Beside Microfinance wholesale funding agency Palli Karma Sahayak Foundation (PKSF) provided a large portion of loan fund at a subsidized rate. The least important source was appeared to be grants from the donor agencies as the previously donor driven NGOs are now trying to rely more and more on internal sources of fund with the decline in foreign funding (MRA Statistical Publication, 2015).

#### 2.7 The Impact of Microcredit on Poverty Alleviation in Bangladesh

Microcredit has appeared in the literature as a popular source of financing that provides small loans in rural and remote regions of developing countries (Zeller and Sharma, 2000). As far as developing countries are concerned, Bangladesh may

be considered as the pioneer, having started this financial innovation that provides loans to the poor especially to women engaged in self-employment projects that allow them to generate income and in many cases, begin to build wealth and eliminate poverty (Hulme and Mosley, 1996; Yunus, 1983; World Bank, 1994).

The World Bank (Microcredit Summit, 1997) classified the microcredit program in Bangladesh as one of the most effective anti-poverty tools for the poorest people. The program extends small loans to unemployed poor people who are not creditworthy. These individuals lack collateral, and stable employment and therefore cannot meet even the most minimum qualifications to gain access to formal credit.

The microcredit (or known as microfinance) program, provides collateral-free small loans to extremely impoverished people (mostly women) for incomegenerating activities thereby reducing poverty (Hossain, 1988; Rahman, 1995; Khandker, 1998). Since loans are provided in a group, according to Stiglitz (1993), Varian (1990), and Ghatak (1999) and Besley and Coate (1995) the members in a group are well placed to umpire the creditworthiness and scrutinize the actions of their peers, as a consequence mitigating the problems of adverse selection and moral hazard. Group lending also gives incentives to members to avoid excessively risky projects (Stiglitz, 1993). It also provides insurance to other members in the event their projects fail (Coleman, 1999). Mutual trust among group members created by their long association with each other provides strong inducement to self-monitoring which reduces the monitoring cost down to zero. Many studies have attempted to measure the impact of microcredit on poverty, income, employment, contraceptive use and fertility (Hossain, 1988; Hulme and Mosley, 1996; Hashemi and Schuler, 1996). One of the limitations of these studies is that they fail to address whether improvement in the quality of life is due to program participation or not.

Existing research on the impact of microcredit on poverty in Bangladesh provides a controversial picture. Apart from the studies that suggest access to credit has the potential to significantly reduce poverty (as mentioned above) others argue that microcredit has a minimal impact on poverty reduction (Morduch, 1999 and 2000; Weiss and Montgomery, 2005). However, one issue is beyond controversy: everyone agrees that the "vulnerability" of the poor has been reduced due to microcredit programs. On the issue of vulnerability it is worth mentioning, the study conducted by Montgomery, Bhattacharya and Hulme (1996), which found an improvement in household income, is higher for third time borrowers compared to first time borrowers. There is also a study by Mustafa et al. (1996) that showed the older members' asset valuation is 112% higher compared to those of the newer members. The study further showed that the average weekly expenditure of the household is higher for the older members than for the newer ones. Another interesting finding of the study is that it shows 80% of the credit is invested and the rest is used for consumption. Money is fungible and often the cash obtained from the microfinance institutions is used to meet immediate consumption needs. Several empirical studies support that the view that credit market involvements improve both consumption and production of the poor via smoothing consumption and reducing constraints in production (Feder et al., 1988 and Foster, 1995). Even though it is evident from the literature that not all money borrowed is invested by the households, a portion of it is used for consumption. Therefore, it may be assumed that microcredit may benefit households in terms of income as well as consumption. However, there are costs associated with joining the program. The explicit cost is the interest payment and the implicit cost is the opportunity cost of attending meetings etc. Rural women in Bangladesh are preoccupied with household work and producing non-market products which makes the opportunity cost of wage employment higher for women. This issue is addressed by Khandker (1998) where he shows that households would benefit from withdrawing labour from the wage market if funds are made available to buy the minimum capital needed to initiate home-based marketable products.

It is observed that the credit program makes a borrower switch from wage employment to self-employment in farm or non-farm sectors. This process may increase self-employment, but wage employment will reduce. However, Khandker *et al.* (1998) show that wage employment may have declined, but the increases in self-employment are large enough to offset a reduction in wage employment at the village level. It has also been suggested in the studies that rural wages have increased (as there is a reduction in labour supply) at the expense of wage employment due to the microcredit program. The study further shows that the Grameen Bank's credit program has induced about 13.5% increase in the rural wage and that is due to a reduction in wage employment. In another study, Rahman and Khandker (1994) show that male and female employment in the Grameen Bank villages are 14 and 39% higher respectively than those in nonprogram areas. It has been argued in the studies that, the marginal gain from micro borrowing to participants may be large, but the accrued total benefits from microfinance in reducing poverty are likely to be small, as microfinance transactions are often too small in volume to have a sustained aggregate impact on poverty reduction. Yaron *et al.* (1998) have argued that absence of appropriate methodology prevents to find out the welfare impact or the poverty level in the presence of the microcredit program.

In a comparative study among the major small-scale credit programs in Bangladesh that provide productive credit and other services to the poor such as those provided by the Grameen Bank, BRAC, and RD-12 project of BRDB, Khandker et al. (1998) using housing survey data collected by the World Bank and Bangladesh Institute of Development Studies (BIDS) in 1991-92, attempted to quantify the village-level impact. Their econometric analysis shows that these programs have positive impacts on income, production and employment particularly in the non-farm sector. In a separate study, Pitt and Khandker (1998) evaluated the effect of same group based credit programs (again the Grameen Bank, BRAC, and BRDB's RD-12 programs) on a variety of household behaviours and on the intra-household distribution of resources. The study estimated the impact of participation, by gender, in each of the three group-based credit programs on women and men's labour supply, boys' and girls' schooling, expenditure, and assets using the "Weighted Exogenous Sampling Maximum Likelihood-Limited Information Maximum Likelihood-Fixed Effects" (WESML-LIML-FE) approach. They found that credit is a significant determinant of many outcomes such as household expenditure, non-land assets held by women, male and female labour supply and boys' and girls' schooling. Furthermore, credit provided to women is more likely to influence these behaviors than credit provided to men. The impact of credit on these six outcomes provided to women is found significant at the 5% level. Annual household consumption expenditure, the most comprehensive measure available of program impact, increased 18 taka for every 100 additional taka borrowed by women from these credit programs, compared with 11 taka for men. These findings suggest that credit is not perfectly fungible within a household.

An extension of Pitt and Khandker's (1998) study is conducted by Khandker (2003) where he estimated the long-run impacts of microfinance on household consumption and poverty in Bangladesh, based on panel data. The household survey data was collected in 1992-93 and 1998-99. Pitt and Khandker (1998) showed that the endogeneity of both microcredit program placement and program participation is a serious issue and findings could be misleading if this endogeneity is not taken into consideration while estimation. The method used by Pitt and Khandker (1998) is based on cross-section data but they employed a quasiexperimental survey design to resolve the problems of endogeneity associated with non-random program placement and self-selected program participation. In the study, Khandker used panel data analysis, which helped measure the program effects on long-term household or individual welfare. Morduch (1998) using the same data as used by Pitt and Khandker (1998), (BIDS World Bank data, 1992-93) but employing a different technique (difference-indifference method), finds that program effects are either non-existent or are very small. Morduch found no evidence of an increase in consumption (and therefore reduction in poverty) using the same data. Therefore, the contradictory results in findings provide scope for further study in the area of impact of credit in poverty reduction.

It appears from the literature that the impact assessment on microcredit provides a contradictory result. Therefore it is justifiable to assess the impact of microcredit on various household indicators. It also appears from the literature that many researchers have used 'savings' as an indicator that may reduce poverty. There may be other indicators that may also contribute to reduce poverty. As far as poverty alleviation of the borrowers are concerned it is necessary to analyze how these credit programs may influence in bringing higher income and assets for the borrowers.

# 2.8 Relationship between Selected Characteristics of Adibashi Beneficiaries and Impact of Microcredit on Poverty Alleviation

The selected characteristics of the respondents of adibashi were selected as independent variables of this study. The available literatures regarding relationship between the selected characteristics of the adibashi respondents and their socioeconomic impact on poverty alleviation are presented below.

#### 2.8.1 Age and Impact of Microcredit on Poverty Alleviation

There is a debate among scholars on the relationship between age of the respondents and poverty reduction. Khan (2006) in his study found that age of the respondents had significant relationship with the impact of Grameen Bank microcredit program. 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. 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.

But Samad (2004) argued that age of the rural women had no significant relationship with their poverty alleviation. Islam (2002) also argued that the age of the rural women had no significant relationship with their poverty alleviation activities. Naher (2000) found that there was no relationship between age and participation in homestead vegetable cultivation, post harvest practices, poultry and goat rearing, while the activities in vegetable cultivation are mostly participated by the younger houses wives. Sharmin (2005) observed that age of the respondents did not show any significant relationship with their perception of benefit.

#### 2.8.2 Education and Impact of Microcredit on Poverty Alleviation

Education is the most powerful tool to fight against poverty. Education provides a foundation for eradicating poverty and fostering economic development (anonymous, 1981). Education and poverty are inversely related. The higher the level of education of the population, lesser will be the number of poor persons because education imparts knowledge and skills which is supportive in higher

wages (Masood, 2011). The direct effect of education on poverty reduction is through increasing the earnings/income or wages. The indirect effect of education on poverty is important with respect to 'human poverty' because as education improves the income, the fulfillment of basic necessities becomes easier and raises the living standard which surely means the fall in human poverty. It has been seen that the likelihood of being poor is higher even for the lower level of education (Rodriguez, 1994).

Coady (2017) found a large, positive, statistically significant and stable relationship between inequality of schooling and income inequality, especially in emerging and developing economies. As the education indirectly helps in the fulfillment of basic needs like water and sanitation, utilization of health facilities, shelter, and it also affects the women's behavior in fertility decisions and family planning (Jeffery, 1996).

It is evidenced 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 (Akter, 2000). Begum (1998) confirmed that education of the rural women had a positively significant relationship with their poverty alleviation owing to participation TMSS activities. Besides the uneducated people not in work usually sit in cafes and waste their times; many of them smoke (Baloglu, 1998).

#### 2.8.3 Family Size and Impact of Microcredit on Poverty Alleviation

Naher (2000) reported that there was no relationship between family size and participation of women in homesteads vegetable cultivation, poultry rising and goal rearing but she found a significant positive relationship between family size and participation in post-harvest practices. In a later study Samad (2004) also observed that family size of the rural women had no significant relationship with their poverty alleviation activities.

But Islam (2002) argued that the number of family members of the respondents had positive significant relationship with their poverty alleviation.

#### 2.8.4 Farm Size and Impact of Microcredit on Poverty Alleviation

Farm size always matters in poverty reduction. There was a positively significant relationship with farm size of the respondents and their poverty alleviation (Akter, 2000; Samad, 2004).

The respondents having large farm size were more likely to have impact of micro credit towards uplifting their socioeconomic condition (Khan, 2006), family income and social development (Rahman, 2005). Earning ability of rural women is to be increased, their chance in food consumption increased depending on farm size (Sarkar, 2002).

#### 2.8.5 Cosmopoliteness and Impact of Microcredit on Poverty Alleviation

Orientation of the respondents had a significant relationship with their awareness on farming environment to increase household income (Miah and Rahman, 1994). Individual contact of respondents had significant influence on their improvement of knowledge, attitude and skills (BRAC, 1995) that enabled respondents to eradicate poverty.

#### 2.8.6 Credit Received and Impact of Microcredit on Poverty Alleviation

Credit is the vital factors for increasing income, if respondents get medium amount of loan then they can increase their income (Ali, 2003) as credit received has a great influence for socio-economic development of the beneficiaries. There was an existence of small to medium credit received was the higher proportion of the respondents there is a scope to increase income (Khan, 2006).

#### 2.8.7 Credit Utilization and Impact of Microcredit on Poverty Alleviation

Rao (1994)) conducted a study and showed that 25.70 percent, 56.34 percent, 12.22 per cent and 4.74 percent of total borrowed money was utilized for crop based agricultural purpose; non crop based agricultural purpose, family consumption purpose and other expenses purposes respectively. Nagabhushanum and Halyal (1989) stated that 50.48% of the amount borrowed was utilized for productive purposes. And about 17% of the amount was spent on partially productive purpose. However, about 32% of the amount had been spent on unproductive purposes.

# 2.8.8 Effectiveness of Credit Utilization and Impact of Microcredit on Poverty Alleviation

In a study on women beneficiaries of BRDB (IWP), Zakaria (2000) showed that 88.33 percent had made profit through utilizing received credit while 6.67 percent had loss and 5 percent mad neither profit nor loss.

# 2.8.9 Duration of Involvement with Credit and Impact of Microcredit on Poverty Alleviation

The rate of poverty reduction appears to decline with duration of membership or involvement. For households who had been a member for more than five years moderate poverty fell by 9% and ultra-poverty by 18%. These figures were considerably lower than for households who had been members three years or less (Khandker and Chowdury, 1996). Khan (2006) indicated in his study that involvement with microcredit program had a great influence for socio-economic development of the respondents. After forming the groups of Grameen Bank, the income of the members was increased by 70 percent 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 percent of the members took loan from non-institutional sources (BBS, 2002).

# 2.8.10 Attitude towards Microcredit and Impact of Microcredit on Poverty Alleviation

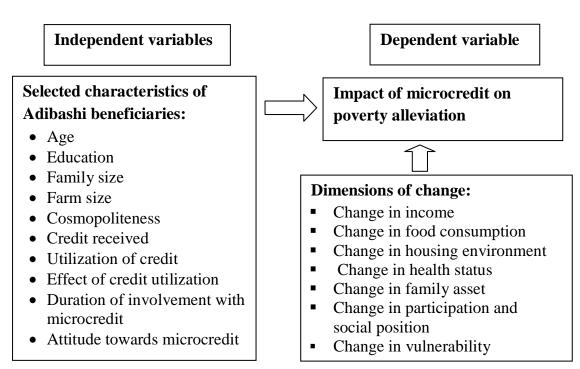
Attitude has a great influence on receiving and utilization of credit. Jebarajakirthy (2015) revealed that positive affect enhanced intentions to obtain microcredit, whereas perceived deterrents reduced them. Knowledge of microcredit enhanced attitudes towards microcredit. Also, entrepreneurial desire enhanced the association between positive affect and intentions to obtain microcredit and it decreased the negative association between perceived deterrents and intentions to obtain microcredit. Jaman (2014) found that attitude towards SSKS microcredit program of the beneficiaries of SSKS was an important factor for impact of SSKS microcredit program toward uplifting the socio-economic condition of beneficiaries and with the increases of attitude towards SSKS microcredit program of the respondent's impact of SSKS microcredit program toward uplifting the socio-economic condition to a social program toward uplifting the socio-economic condition of beneficiaries and with the increases of attitude towards SSKS microcredit program toward uplifting the socio-economic condition of beneficiaries and with the increases of attitude towards SSKS microcredit program toward uplifting the socio-economic condition of beneficiaries and with the increases of attitude towards SSKS microcredit program toward uplifting the socio-economic condition of beneficiaries and with the increases of attitude towards SSKS microcredit program toward uplifting the socio-economic condition of beneficiaries and with the increases of attitude towards SSKS microcredit program toward uplifting the socio-economic condition of beneficiaries and with the increases of attitude towards SSKS microcredit program toward uplifting the socio-economic condition of the respondent's impact of SSKS microcredit program toward uplifting the socio-economic condition of social program toward uplifting the social program toward

socio-economic condition of beneficiaries also increase. And the attitude towards BRAC of the rural Women had significant positive relationship with their impact of participation in BRAC rural employment activities (BRAC Annual Report, 1995).

# 2.9 Conceptual Framework

This study is concerned with the impact of microcredit program on poverty alleviation of adibashi or tribal beneficiaries. Impact of microcredit program on poverty alleviation of an individual may be affected through interacting forces of many factors. It is not possible to deal with all the factors in a single study.

It was therefore, necessary to limit the factors i.e. the selected characteristics of the beneficiaries, which include age, level of education, family size, farm size, cosmopoliteness, credit received, utilization of credit, effect of credit utilization, duration of involvement with microcredit program and attitude towards microcredit program. Considering the above mentioned discussion, a conceptual framework has been developed for this study, which is diagrammatically presented in the following Figure 2.4.



# **Conceptual Framework of the Study**

Figure 2.4 The conceptual framework of the study

# CHAPTER 3 METHODOLOGY

In any scientific research, methodology plays an important role. To perform 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 Locale and Population**

This study was conducted at the areas of two unions namely Eluary and Kazihal under Fulbari upazila of Dinajpur district where microcredit programs have been operating. Those two unions were selected because microcredit activities among Adibashis were more concentrated in these unions in comparison with the other unions of Fulbari upazila. There were 286 credit borrowers in these unions. For clear of understanding, one map of Dinajpur district showing Fulbari upazila and another map of Fulbari upazila showing the study area have been presented in Fig. 3.1 and Fig. 3.2 respectively.

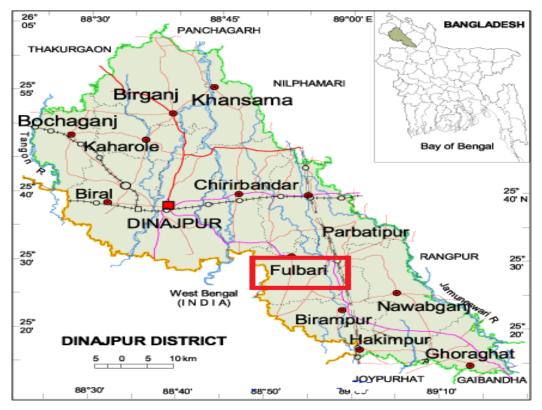


Fig. 3.1 A map of Dinajpur District showing Fulbari upazila

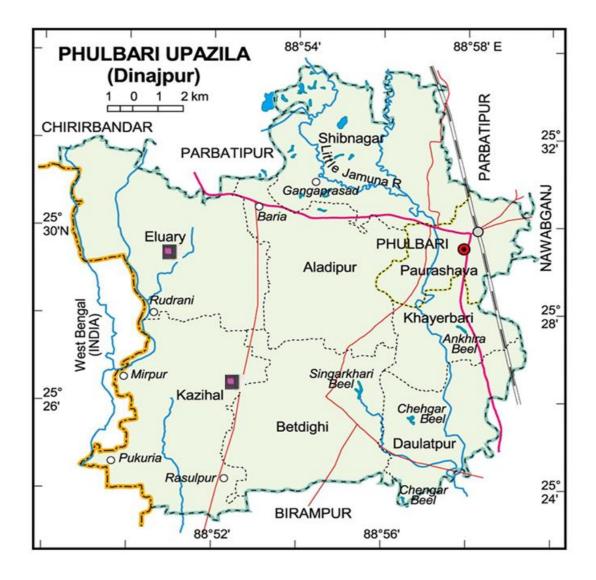


Fig. 3.2 A map of Fulbari upazila showing study area

#### **3.2 Sampling Procedure**

An updated list of all the Adibashi respondents involved with microcredit program of the selected unions were collected with the help of local credit supervisors. Two unions out of six were selected purposely for the study. Data for this study were collected from a sample rather than the whole population. Out of 286 beneficiaries, a sample of 77 respondents was selected by random sampling technique using a table of random numbers (27% of the population). A reserve list of 10 respondents was also prepared for covering the positions in case of the absence of the selected respondents during interview for data collection. The distribution of the population and the sample size are presented in table 3.1

Name of the	Name of the	Total	Sample	Reserve list
Unions	villages	number of	(no. of	
		beneficiaries	respondents)	
	Shrirampur	44	11	1
	Parbotipur	25	7	1
Eluary	West Moheshpur	29	8	1
	Dhamahara	17	5	1
	Gojkumor	33	9	1
	Chatonipara	7	2	1
Kazihal	Missionpara	31	8	1
	Rameshorpur	21	6	1
	Palashi	45	12	1
	Pukhuri-	34	9	1
	Kamarpara			
	Total	286	77	10

 Table 3.1 Distribution of population and sample of the study area

## 3.3 Instrument for Collection of Data

Two data collection tools were developed for data collection. An interview schedule was carefully designed keeping the objectives of the study in mind in order to collect valid and reliable information from the plain land Adibashi credit receivers of the study area, 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.

## 3.4 Data Collection

In this research two types of data collection methods were used:

## 1. Survey Research

The researcher himself collected essential data through personal interview with the individual adibashi respondents. An introductory visit to the respondents' house was made. 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 field supervisors of credit lending organization. Brief information regarding the nature and purpose of the study was given to the respondents before actual interview with the help of an adibashi opinion leader.

After preparation of data collection instrument pre-test was conducted on 10% of the sample i.e. 8 respondents from the population but excluded from the sample. Necessary correction, addition and alternation were made in the interview schedule based on the pre-test results. After correction, the interview schedule was finalized for the data collection. 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 12 days from 2nd March to 13th March of 2017.

## 2. Secondary Sources

Reviewing previous studies on microcredit program in Bangladesh provided a good background for understanding these programs; their impact assessment techniques; and the kinds and content of surveys and questionnaires used in research of this nature.

#### 3.5 The Variables and their Measurement

#### 3.5.1 Measurement of Independent Variables

Ten selected characteristics of the Adibashi credit debtors are considered as independent variables.

#### 3.5.1.1 Age

Age of a respondent was measured on the basis of time from his/her birth to the time of interview. 1 (one) was assigned for each year of age.

#### 3.5.1.2 Education

A respondent in educational institutions measured the education on the basis of completed years of schooling. One (1) was assigned for each completed year of schooling. If a respondent does not know reading and writing his/her score was zero (0). A score of 0.5 was assigned to a respondent who only could sign his/her name.

#### 3.5.1.3 Family Size

Family size of a respondent was measured on the basis of the actual of number of member in his/her family. The family members included himself, wife/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 the family, then 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 their family carried out farming operations. The farm size of a respondent was calculated by using the following formula and was expressed in terms hectares.

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

Where, FS = Farm size

 $A_1$ = Homestead area,  $A_2$ = Cultivated area owned by a respondent,

 $A_3$  = Land taken from others on borga,  $A_4$  = Land given to others on borga.

#### 3.5.1.5 Cosmopoliteness

The term cosmopoliteness was used to refer to the orientation of an individual external to his/her social system. The cosmopoliteness score was computed for each respondent to determine the degree of the cosmopoliteness on the basis of his/her different outstanding.

Score corresponding to these five options were given in the following manner

Table 3.2 Cosmopoliteness scoring of the respondents

Option	Score
Regular	4
Frequently	3
Occasional	2
Rarely	1
not even once	0

Cosmopoliteness scores could be ranged from 0 to 32.

# 3.5.1.6 Credit Received

It refers to the amount of money received by a respondent as loan from any institutional score. 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 ('000' TK.).

# 3.5.1.7 Utilization of Credit

Initially, utilization of credit was divided into three categories, fully in assigned purpose, partially in assign purpose and fully in other than assigned purpose. A single credit was supposed to be utilized by a borrower in any one of the above three ways.

Weights were assigned in the following approach:

# Table 3.3 Credit utilization scoring

Credit utilization	Weights
Fully in assigned purpose	2
Partially in assign purpose	1
Fully in other than assigned purpose	0

The obtained score for utilization of any credit could therefore range from 0 to 2.

# 3.5.1.8 Effect of Credit Utilization

Effect of credit utilization divided into three categories: profit, neither loss nor profit and loss. A single credit was supposed to be effect of a borrower in any one of the above three ways.

Weights were assigned in the following approach:

# Table 3.4 Effect of credit scoring

Effect of credit	Weights	
Profit	1	
Neither loss nor profit	0	
Loss	-1	

The obtained score of the respondents for effect of credit utilization could therefore range from -1 to 1.

## 3.5.1.9 Duration of Involvement with Microcredit Program

It was measured considering the period of involvement of the respondents with micro-credit program to the time of interview. It was calculated in terms of years on the basis of the respondent's response. One (1) was assigned for each year.

## 3.5.1.10 Attitude towards Microcredit Program

Attitude of a respondent was used to refer her feeling, belief and action tendency towards microcredit program. For measuring the attitude of respondents towards microcredit program, a number of eight items analyses were done to cheek 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 his/her opinion about each of the statements on with a 5-point Likert scale: 'strongly agree', 'agree', 'no opinion', 'disagree' and 'strongly disagree'.

Options	Scores assigned		
	For positive statement	For negative statement	
Strongly agree	4	0	
Agree	3	1	
No opinion	2	2	
Disagree	1	3	
Strongly disagree	0	4	

 Table 3.5 Attitude scoring of the respondents

The attitude score of a respondent was computed by adding his/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 microcredit program

## 3.5.2 Measurement of Dependent Variables

The dependent variable is "Impact of microcredit program on poverty alleviation of adibashi beneficiaries". Impact of microcredit was measured on the basis of the extent of change occurred in selected dimensions of the respondents as a result of their involvement with microcredit program. The measurements of selected dimensions are as follows:

#### **3.5.2.1 Change in Income**

A respondent's household income was measured in Taka on the basis of him/her and other family member's total annual earnings 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 those might be dependent in use of microcredit e.g. wage, service, small business was estimated. The total income in Taka was converted into household income score. A score of one (1) was assigned for each one thousand Taka ('000' TK). The change in income was determined by the following formula:

#### Change in Income, C.I = I.Ai-I.Bi

Where, **I.Ai** = Income after involvement,

**I.Bi** = Income before involvement

#### 3.5.2.2 Change in Food Consumption or Calorie Intake

It refers to the improvement of a respondent in respect of him/her amount of food consumption after involvement.

In this study nine 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 3.6.

The change in food consumption was determined by the following formula:

#### Change in Food consumption, C.F.C = FC.Ai – FC.Bi

Where, **FC.Ai** = Food consumption after involvement,

**FC.Bi** = Food consumption before involvement

Food items (100 g)	Energy (k.cal)	Food items (100 g)	Energy (k.cal)
Rice (daily)	364	Fish (weekly)	89
Bread (daily)	341	Meat (monthly)	127
Vegetable (daily)	53.75	Milk (monthly)	61
Pulse (daily)	338	Egg (monthly)	158

Table 3.6 Energy content of some selected items

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:

## Table 3.7 Poverty Line Range based on Food Consumption

Below poverty line II (Hard core poverty) ) ► Less than 1850 Kcal/day			
Below poverty line I (Absolute poverty)► Less than 2122 Kcal/day			
Upper poverty line ► More than 2122 Kcal/day			
Source: HIES (Household Income and Expenditure Survey), 2010			

It refers to the condition of different dimensions of the respondents both 'before' and 'after' involvement with microcredit program.

# 3.5.2.3 Change in Housing Environment

Change in housing environment was measured by addition of change in housing unit, change in toilet condition and change in source of drinking water by the following formula:

## Change in housing environment, C.H.E= C.H + C.T + C.DWS

Where, **C.H** = Change in housing unit, **C.T** = Change in toilet condition

**C.DWS** = Change in source of drinking water

#### **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 Gliar.

For determining the change in housing unit of the respondents by the following formula:

#### Change in Housing unit, C.H = H.Ai – H.Bi

Where, **H.Ai** = Housing unit after involvement

**H.Bi** = Housing unit before involvement

Respondents said that he used which type of house before involvement and after involvement with credit 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:

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, kateha toilet, half-sanitary toilet and sanitary toilet. For determining the type of toilet facilities, the respondent was asked to indicate type of toilet facilities. The change of toilet condition facilities was converted into score. All score was calculated by the following formula:

## Change in Toilet condition, C.T = T.Ai – T.Bi

Where, **T.Ai** = Toilet condition after involvement,

**T.Bi** = Toilet condition before involvement

## Table 3.9 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 four types of drinking water source namely pond or river water, well 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 changed score was determined by the following formula:

## Change in Drinking water source, C.DWS=Dws.Ai -Dws.Bi

Where, **Dws.Ai**= Drinking water source after involvement

**Dws.Bi** = Drinking water source before involvement

Types of drinking water source	Score assign
Pond or River water	0
well	.5
Others tube well	1
Own tube well	2

#### Table 3.10 The scoring of drinking water source

#### **3.5.2.4 Change in Family Asset**

In this study 17 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 items were as follows:

SL.	Items of assets	Unit score	SL.	Items of assets	Unit score
1.	Cow	3	10.	Electric fan	1
2.	Goat	1	11.	Sewing machine	2
3.	Pig	1	12.	TV	3
4.	Hen/ Duck	0.5	13.	Bi-cycle	2
5.	Fishing net	0.5	14.	Rickshaw /Van	4
6.	Almriah	2	15.	Motor cycle	5
7.	Khat	2	16.	Swallow machine	4
8.	Golden	1	17.	Mobile phone	2
	ornaments/ana				
9.	Show case	1			

Table 3.11 Family asset owned by household

The changed score in family asset was measured by the following formula:

## Change in Family Asset, C.FA = FA.Ai-FA.Bi

Where, **FA.Ai**= Family asset after involvement

**FA.Bi** = Family asset before involvement

## 3.5.2.5 Change in Health Status

Each respondent was asked to indicate their five health seeking behaviors and six health related practices to measure change in health status. Change in health status were measured by using following formula

# Change in health status, C. HS= C.HSB + C. HRP

Where, **C.HSB** = Change in health seeking behavior

**C. HRP**= Change in health related practice

# 3.5.2.5.1 Change in Health Seeking Behavior

Each respondent was asked to indicate health seeking behavior. The change health seeking pattern was converted into score. The score was determined by the following formula:

# Change in health seeking behavior, C.HSB=HSB.Ai -HSB.Bi

Where, **HSB.Ai** = health seeking behavior after involvement

HSB Bi = health seeking behavior before involvement

## Table 3.12 Health seeking behavior scoring

pattern	score
Quake/ Direct pharmacy	0
Traditional Tribal Kabiraj/Ojha	1
Community hospital/ local Church health service	2
Local experienced doctor	3
MBBS/ Specialist doctors	4

## **3.5.2.5.2 Change in Health Related Practices**

Change in health related practices were measured of the respondents on the basis of score between 'before' and 'after' involvement with credit program. Health related practices were measured by scoring 1 for 'Yes' and 0 for 'No against health tips.

## 3.5.2.6 Change in Participation and Social Position

Change in participation and social position was measured using following formula

## Change in participation and social position, C. PSP= C.P + C. SP

Where, **C.P** = Change in participation,

**C. SP** = Change in social position

## 3.5.2.6.1 Change in Participation

Change in participation was measured based on nature of five types of participation. Frequency of participation e.g. regularly, occasionally, suddenly and not at all at before-after basis of involvement were used.

Participation of the respondents was scored as stated in the below.

frequency of participation	Scoring
Not at all	0
Suddenly	1
Occasionally	2
Regularly	3

# 3.5.2.6.2 Change in Social Position

Change in social position was measured based on the nature of involvement with organization, group, committee and club. Nature of involvement was measured with types of involvement at before-after basis of involvement with credit. Social position was scored as stated in the below.

 Table 3.14 Social position scoring

Nature of involvement	Score
No involvement	0
General member	1
Executive member	2

# 3.5.2.7 Change in Vulnerability

Change in vulnerability was measured with reference to eight statements. Degree of vulnerability e.g. vulnerability to food, income, employment, dept savings, schooling of children and social integration was measured on the scale of high, medium and low at before-after basis of involvement with credit. Change in vulnerability was scored as below:

Table 3.15 vulnerability scoring

Degree of vulnerability	score
high	0
medium	1
low	2

# 3.6 Measurement of 'Impact of Microcredit Program on Poverty Alleviation of Adibashi'

The dependent variable was determined in the light of seven (7) different dimensions stated before. Here, change scores are concerned. The unit of each dimension (in case of change score) differed from other, as for example the unit of income change score was in '000' Tk. and the unit food consumption change score was in kilo calorie.

So, to get unit-free score by calculating change score for the purpose of measuring impact score, the researcher had to categorize the change scores in four categories for each of seven dimensions as indicated bellow:

Dimension of impact of microcredit	Categories	Score assigned
	No and negative difference	0
Change	Low difference	1
	Medium difference	2
	High difference	3

Table 3.16 Measurement of overall impact of microcredit

The change scores of all the seven dimensions were added together to get a score for 'Impact of microcredit on poverty alleviation of adibashi beneficiaries'. Possible ranges of impact of microcredit may be 0-21, where o indicates no impact and 21 indicates highest impact of microcredit on poverty alleviation.

The impact evaluation is measured using a framework similar to that in Coleman (1999), Montgomery (2005) and Kondo (2007). More precisely the following equation was estimated for the measurement of impact of microcredit programs:

$$Y = Y_1 + Y_2 + Y_3 + Y_4 + Y_5 + Y_6 + Y_7$$

Where, Y = Impact score of microcredit program

 $Y_1$  = Income difference score,  $Y_2$  = Food difference score,

 $Y_3$  = Housing environment change score,  $Y_4$  = Family asset change score,

 $Y_5$  = Health status change score,  $Y_6$  = Participation and Social position change score and  $Y_7$  = Vulnerability change score.

#### 3.7 Problem Confrontation by Adibashi Beneficiaries with Microcredit

It refers to the extent to which a respondent faces difficulties in performing various activities after the involvement with microcredit program. Each respondent was asked to indicate the extent to which he/she considered each of the selected 12 problems as problematic on a five-point Likert scale: 'Very high, 'High', 'Medium', 'Low' and 'Not at all' scores were assigned to five scales are 4, 3, 2, land 0 respectively.

The possible problem confrontation score of the respondent may range from 0 to 48. Where 0 indicates no problem confrontation at all and 48 indicates problem confrontation to the high possible extent.

#### **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. Impacts of microcredit program towards the poverty alleviation of the respondents were examined by drawing 'before' and 'after' comparison. Data were presented mostly in the tabular form. For describing the various independent and dependent variables, the respondents were classified into several categories in respect of each variable. These categories were developed by considering the nature of distribution of the data and general understanding prevailing in the social system. Various statistical measures like number, percentage, range, mean, standard deviation etc. were calculated for describing the selected characteristics of the respondents and the impact of microcredit program. To explore the level of contribution of the selected characteristics of the adibashi respondents to the impact of microcredit program, linear regression was used. .01 and .05 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 microcredit program.

#### 3.9 Hypothesis of the Study

The following research hypotheses were put forward to test the level of contribution of different characteristics considered. Each of ten selected characteristics (age, education, family size, farm size, cosmopoliteness, credit received, utilization of credit, duration of involvement with microcredit program, attitude towards microcredit program) of the respondents was related to impact of microcredit program 'after' involvement.

However, for statistical advantage, each of the above research hypotheses was change into 'null hypothesis' which states that 'There is no contribution of the selected characteristics of respondents to impact of microcredit on poverty alleviation'.

#### **CHAPTER 4**

## **RESULTS AND DISCUSSION**

The findings of the research have been presented in this chapter in the following six sections: a) Selected characteristics of the adibashi respondents, b) The extent of changes in income, food consumption, housing environment, health status, family assets, participation and social position and vulnerability of the respondents and contribution on poverty alleviation, c) Contribution of the selected characteristics of the respondents to impact of microcredit program on poverty alleviation, d) Comparative change pattern in terms of 'before' and 'after' involvement with microcredit program, e) Challenges of microcredit, f) Problem faced by the adibashi beneficiaries in receiving and utilizing the microcredit.

#### **4.1 Selected Characteristics of the Respondents**

Characteristics of	Measuring	Ra	nge	Mean	Standard	
the adibashi	Unit	Possible	Observed		deviation	
respondents						
Age	Year	Unknown	21-60	37.01	8.39	
Education	Year of schooling	Unknown	0-12	2.246	3.38	
Family size	Score	Unknown	2-8	4.89	1.21	
Farm size	Hectare	Unknown	0 to 0.81	0.22	0.17	
Cosmopoliteness	Score	0-32	10-28	14.77	3.56	
Credit received	'000' TK	Unknown	3.50 to 50	17.53	9.37	
Credit utilization	Score	0-2	0-2	1.12	0.71	
Effectiveness of credit	Score	-1 to 1	-1 to 1	0.47	0.72	
Duration of involvement	Year	Unknown	1-15	5.25	3.35	
Attitude toward microcredit	Score	0-32	9-25	17.73	3.35	

 Table 4.1 a summary statement showing measuring units and salient features

 of the selected characteristics of the respondents

# 4.1.1 Age

Age of the respondents ranged from 21 to 60 years, the average being 37.01 years with a standard deviation of 8.39.

Categories	Basis of	Respondents		Mean	Sd
	categorization (year)	No.	%		
Young aged	up to 35	42	54.50	37.01	8.39
Middle aged	36-50	31	40.30		
Old aged	above 50	4	5.20		
Tot	tal	77	100.00		

Table 4.2 Distribution of the respondents according to their age

Results presented in the Table 4.2 showed that among the respondents, 54.50 percent were young while 5.20 percent were old aged and 40.30 percent were middle aged.

Findings indicated that overwhelming majority (94.8%) of the respondents were young to middle aged. It may be young aged adibashi respondents were more energetic and could take more risks in microcredit.

# 4.1.2 Education

The level of education of the respondents ranged from 0 to 12, the average being 2.25 with a standard deviation of 3.38.

Categories	Basis of	Respo	Respondents		Sd
	categorization (year of schooling)	No.	%		
Illiterate	0	12	15.60	2.25	3.38
Can sign only	0.5	42	54.50		
Primary education	1-5	10	13.00		
Secondary education	6-10	10	13.00		
Higher education	above 10	3	0.90		
Total		77	100.00		

Table 4.3 Distribution of the respondents according to their education

Results presented in the Table 4.3 showed that among the respondents of Adibashis, 15.6 percent had no education, 54.80 percent could sign only, 13.0 percent had education at primary level, 13 percent had education at secondary level and only 0.9 percent had education at higher secondary level.

Findings indicated that majority (70.1%) of the respondents had no formal education. It concluded that that adibashis are deprived of basic education and seemed that may be due to discrimination and lack of awareness.

# 4.1.3 Family Size

Family size of the adibashi respondents ranged from 2 to 8 members, having an average of 4.8961 and standard deviation 1.20.

Categories	Basis of	Respo	Respondents		Sd
	categorization (score)	No.	%		
Small family	up to 4	26	33.80	4.89	1.20
Medium family	5-6	42	54.50		
Large family	above 6	9	11.70		
Tot	al	77	100.00		

 Table 4.4 Distribution of the respondents according to their family size

Data presented in Table 4.4 showed that 54.5 percent of the respondents had medium family size, while 33.8 percent of the farmers had small family and 11.7 percent had large family size.

Findings of the study indicated that overwhelming majority (88.3%) of respondents had medium to small family size. It may be due to awareness of family planning programs.

# 4.1.4 Farm Size

Farm size of the respondents ranged from 0 to 0.81 ha having an average of 0.22 ha and standard deviation 0.17.

Categories	Basis of	Respondents		Mean	Sd
	categorization	No. %			
	(ha)				
landless	0	13	16.90	0.22	0.17
Marginal	0.01 to 0.2	22	28.60		
Small	0.201-1.0	42	54.50		
r	Fotal	77	100		

 Table 4.5 Distribution of the respondents according to their farm size

Results presented in Table 4.5 showed that 54.50 percent of adibashis had small farm size, while 28.60 percent had marginal and 16.90 percent were landless.

Findings of the study indicated that majority (83.1%) of the respondents had small to marginal farm size. The study revealed that there were no adibashis with medium or large farm size but.

It may be concluded that adibashi respondents were in less possession of land.

# 4.1.5 Cosmopoliteness

The level of cosmopoliteness of the adibashi respondents ranged from 10 to 28 having average of 14.77 and standard deviation of 3.56.

Categories	Basis of	Respondents		Mean	Sd
	categorization (x̄±Sd)	No.	%		
Low	up to11	13	16.90	14.77	3.56
Medium	12-17	50	64.90		
High	above 17	14	18.20	1	
	Total	77	100	1	

Table 4.6 Distribution of the respondents according to their cosmopoliteness

Results presented in Table 4.6 showed that 64.9 percent of the adibashis had medium level of cosmopoliteness while 16.9 percent had low and 18.2 percent had high level of cosmopoliteness.

Findings of the study indicated that majority percent (83.1 percent) of respondents had medium to high level of cosmopoliteness.

It concluded that level of cosmopoliteness and orientation of the adibashi respondents were medium due to tribal inconvenience.

# 4.1.6 Credit Received

Credit received of the respondents ranged from 3.50 to 50 thousand Taka having average of 17.53 thousand Taka and standard deviation of 9.37.

Categories	Basis of	Resp	Respondents		<b>Respondents</b> Mean		Sd
	categorization ('000' Tk.)	No.	%				
small	up to 8	13	16.90	17.53	9.37		
Medium	9-26	54	70.10				
large	above 26	10	13.00				
	Total	77	100				

Table 4.7 Distribution of the respondents according to credit received

Results presented in Table 4.7 showed that 70.1 percent of the adibashi respondents were medium credit recipient while 16.9 percent were small credit recipient and 13 percent were large credit recipient.

Findings of the study indicated that majority (87%) of the respondents were medium to small credit recipients.

It concluded that they could not maintain large credit or might be they had less access to credit as no government credit programs was available to them.

## 4.1.7 Credit Utilization

Credit utilization of the adibashi respondents ranged from 0 to 2 score having average of 1.12 and standard deviation of 0.71.

Table 4.8	Distribution	of the	respondents'	according	to	their	utilization	of
	credit							

Categories	Basis of	Respondents		Mean	Sd
	categorization (score)	No.	%		
Fully in assigned purpose	2	24	31.20	1.12	0.71
Partially in assigned purpose	1	38	49.40		
Fully in other than assigned	0	15	19.50		
purpose					
Total		77	100		

Results presented in Table 4.8 showed that 49.40 percent of adibashi respondents used credit partially in assigned purpose while 31.20 percent used fully in assigned purpose and 19.50 percent used fully other than assigned purpose.

Findings of the study indicated that highest portion (80.6%) of the respondents used partially to fully in assigned purpose.

It concluded that some amounts of credit were used for food consumption and other purposes.

## 4.1.8 Effect of Credit Utilization

The effect of credit utilization of the adibashi respondents ranged from -1 to 1 score having average of 0.47 and standard deviation of 0.72.

Categories **Basis of Respondents** Sd Mean categorization No. % (score) Profit 46 59.70 0.47 0.72 1 Neither loss 0 21 27.30 nor profit Loss -1 10 13.00 Total 77 100

 Table 4.9 Distribution of the respondents according to effect of credit

utilization

Results presented in Table 4.9 showed that 59.70 percent of adibashi respondents had profit as the effect of credit utilization while 13.0 percent had loss and 27.30 percent had neither profit nor loss profit as the effect of credit utilization.

Findings of the study indicated that highest portion (87%) of the respondents had neither loss nor profit to profit for effectiveness of credits utilization. It concluded that credit programs were profitable as they meant to be benefited from food consumption.

# 4.1.9 Duration of Involvement with Credit Programs

Duration of involvement with of the adibashi respondents ranged from 1 to 15 years having average of 5.25 years and standard deviation of 3.35.

Table 4.10 Distribution of the respondents according to duration ofinvolvement with credit Programs

Categories	Basis of	Respondents		Mean	Sd
	categorization (year)	No.	%		
Short	0-2	19	24.70	5.25	3.35
Medium	3-8	47	61.00		
Long	above 8	11	14.30		
	Total	77	100		

Results presented in Table 4.10 showed that 61.0 percent of adibashi respondents had medium duration of involvement with credit programs while 24.70 percent had short duration and 14.30 percent had long duration of involvement with credit programs.

Findings of the study indicated that majority (85.7%) of the adibashi respondents were involved with credit for medium to short period of time.

#### 4.1.10 Attitude towards Credit Programs

Attitudes towards credit programs of the adibashi respondents ranged from 9 to 25 score having average of 17.73and standard deviation of 3.35.

Categories	Basis of	Respo	ndents	Mean	Sd
	categorization (score)	No.	%		
Unfavorable attitude	Below 16	17	22.10	17.73	3.35
Neutral attitude	16	8	10.40		
Favorable attitude	above 16	52	67.50	1	
Total		77	100	1	

 Table 4.11 Distribution of the respondents according to attitude towards credit programs

Results presented in Table 4.11 showed that 67.5 percent of adibashi respondents had favorable attitude towards microcredit programs while 22.1 percent had unfavorable attitude and 10.4 percent had neutral attitude towards the involvement with microcredit programs.

Findings of the study indicated that overwhelming majority (89.6%) of the adibashi respondents involved with credit program had favorable to unfavorable attitude towards microcredit programs.

# 4.2 The extent of change in dimensions of the respondents and contribution on poverty alleviation

The socio-economic condition of the adibashi respondents was assessed by comparing information about 'before' and 'after' condition on change in income, food consumption, housing environment, healthcare, health related practice, family assets, participation and social position and vulnerability of the respondents.

#### 4.2.1 Change in Income

The distribution of income difference of the respondents ranged from -9.60 thousands taka to129 thousands taka with a mean difference of Tk. 19.30 thousand and a standard deviation 23.54.

Categories	<b>Basis of</b>	Respondents		Mean	Sd
	categorization ('000' Tk.)	No	%		
Negatively change	below 0	6	7.80	19.30	23.54
No change	0	2	2.60		
Low change	1-7	11	14.30		
Medium change	8-31	47	61.00		
High change	above 31	11	14.30	]	
Total		77	100		

Table 4.12 Distribution of the respondents according to their income change

Results presented in Table 4.12 showed that 61 percent of adibashis had medium income difference, 14.30 percent had low income difference and 14.30 percent had high income difference after involvement with microcredit while 2.60 percent had no income difference and 7.80 percent of respondents faced reduction in income after involvement with microcredit compared to before of involvement with credit.

The findings of the study indicated that majority (75.3%) of the adibashi respondents had medium to low change in income after the involvement with microcredit compared to before of involvement with microcredit.

# 4.2.2 Change in Food Consumption

Efforts were made to measure the k.cal intake by the respondents before and after involvement with microcredit.

Table 4.13 shows the k.cal intake by the respondents before and after involvement with poverty line. Data presented in the Table 4.13 indicated that 80.2 percent of the respondents were belonged to hardcore poverty (poverty line II) before the involvement with credit but calorie intake changed to 61.30 percent that belonged to below poverty line I after the involvement with credit.

Table 4.13 Distribution	of the respondents ad	ccording to pove	rty line based on
their calorie	intake		

Poverty line	B	Before After Ave		Before After Average		After		age
	No.	Percent	No.	Percent	Before	After		
Below Poverty line II	62	80.20	22	28.0				
(up to 1805 k.cal)								
Below Poverty line I	11	14.20	47	61.30	1887.8	2171		
(up to 2122 k.cal)								
Upper Poverty line	4	5.60	8	10.70				
(over 2122 k.cal)								

The average energy intakes by the adibashi respondents were 1887.8k.cal before involvement and 2171 k.cal after involvement with microcredit.

According to BBS (2002), national average per capita per day k.cal intake of rural people was 2263 k.cal while of urban people was 2150 k.cal. The average k.cal intake of the adibashi respondents was lower than that of the national level after their involvement with microcredit.

#### 4.2.3 Change in Housing Environment

The change in housing environment of the adibashi respondents ranged from -2 to 5 score with a mean difference of 1.77 and a standard deviation 1.94.

 
 Table 4.14 Distribution of the respondents according to change in housing environment

Categories	<b>Basis</b> of	Respondents		Mean	Sd
	categorization	No.	%	-	
	(score)				
Negative change	below 0	4	5.2	1.77	1.94
No change	0	26	33.8	-	
Low change	1 to 3	25	32.5	-	
Medium change	4 to 5	22	28.6		
Tota	ıl	77	100	]	

Results presented in Table 4.14 showed that 33.8 percent of adibashis had no change in housing environment while 28.6 percent had medium change in housing environment, 32.5 percent had low change and even 5.2 percent had negatively change in housing environment.

Findings indicated that majority (61.1%) of adibashis respondents had positive change in housing environment while 33.8% had no change and 5.2 percent had negatively change in housing environment.

#### **4.2.3.1 Change in Housing Unit**

Data presented in the Table 4.15 showed that before involvement with credit, 29.9 percent of the adibashi respondents had no house at all while 54.5 percent had tin shed kacha ghar and 15.6 percent had kaca ghar with khor roof. And after involvement with credit, 89.6 percent of the adibashi respondents had tin shed kacha ghar while 2.6 percent had paka ghar and 6.5 percent of the adibashi respondents had kaca ghar with khor roof.

Detailed data are shown in the below of housing environment on before-after basis in the Table 4.15.

Change	e in Hous	ing Unit			
Types	В	efore	After		
	No	Percent	No	Percent	
No house at all	23	29.9	0	0	
Katcha Ghar with straw or plastic roof	12	15.6	5	6.5	
Katcha Ghar with tin roof	42	54.5	69	89.6	
Paka Ghar	0	0	2	2.6	
Change i	n Toilet	Condition			
Types	В	efore	A	fter	
	No	Percent	No	Percent	
Bushes or open places	48	62.3	12	15.6	
Katcha toilet	26	33.8	48	62.3	
Half sanitary toilet	3	3.9	16	20.8	
Sanitary toilet	0	0	1	1.3	
Change in D	rinking <b>V</b>	Water Source			
Types	В	efore	A	fter	
	No	Percent	No	Percent	
Water from river or pond	6	7.8	0	0	
well	6	7.8	6	7.8	
Tube well of others people	27	35.1	11	14.3	
Tube well of own	38	49.4	60	77.9	

 Table 4.15 A summary statement showing categories and salient features of dimensions of housing environment

# 4.2.3.2 Change in Toilet Condition

Data presented in the Table 4.15 showed that before involvement with credit, 62.3 percent of the adibashi respondents had no toilet at all while 33.8 percent had kacha toilet and 3.9 percent had half sanitary toilet.

After involvement with credit, 62.3 percent of the adibashi respondents had kacha toilet while 15.6 percent had no toilet and 20.8 percent of the adibashi respondents had half sanitary toilet.

# 4.2.3.3 Change in Drinking Water Source

Data presented in the Table 4.15 showed that bore involvement with credit, 49.4 percent of the adibashi respondents had tube well while 35.1 percent had to use tube well of others people, 7.8 percent had to drink water from well and pond.

After involvement with credit, 77.9 percent of the adibashi respondents had tube well of own while 14.3 percent had to use tube well of others people and 7.8 percent of the adibashi respondents had to drink water from well.

# 4.2.4 Change in Health Status

The change in health status of the adibashi respondents ranged from 0 to 10 score with a mean difference of 4.03 and a standard deviation 2.35.

Categories	Basis of	Respondents		Mean	Sd
	categorization	No.	%		
	(score)				
No change	below 0	7	9.1	4.03	2.35
Low change	1to 2	13	16.9		
Medium change	3 to 6	48	62.3	]	
High change	above 6	9	11.7	]	
Total		77	100		

Tale 4.16 Distribution of the respondents according to change in health status

Results presented in Table 4.16 showed that 62.3 percent of respondents had medium change in health status while 16.9 percent had low change in health status, 11.7 percent had high change and 9.1 percent had no change in health status after involvement with microcredit.

Findings of the study revealed that majority (79.2%) of the respondents had medium to low change in health status.

# 4.2.4.1 Change in Health Seeking Behavior

The change in healthcare of the adibashi respondents ranged from 0 to 7 score with a mean difference of 3.10 and a standard deviation 1.97.

Categories	Basis of	Resp	Respondent		Sd
	categorization	No	No %		
	(score)				
No change	0	16	20.8	3.11	1.97
Low change	1-2	6	7.8		
Medium change	3-5	47	61.0		
High change	above 5	8	10.4		
Т	otal	77	100		

Tale 4.17 Distribution of the respondents according to change in healthcare

Results presented in Table 4.17 showed that 61 percent of adibashis had medium change in healthcare while 20.8 percent had no change in healthcare, 7.8 percent

had low change and 130.4 percent had high change in healthcare after involvement with credit. Findings showed that majority (79.2%) of the respondents had positive change in healthcare while one fifth (20.8%) of the respondents had no change in healthcare. It might be due to availability of community healthcare services provided by the government.

# 4.2.4.2 Change in Health Related Practices

The change in health related practices of the adibashi respondents ranged from - 1.00 to 4.00 scores with a mean difference of 0.92and a standard deviation 1.01.

Tale 4.18 Distribution of the respondents according to change in Health related practices

Categories Basis of		Respo	ondents	Mean	Sd
	categorization	No.	%	]	
	(score)				
Negatively change	below 0	1	1.30	0.92	1.01
No change	0	28	36.40		
Low change	.01 to 2	41	53.20		
Medium change	3-4	7	9.10		
Total		77	100		

Results presented in Table 4.18 showed that 53.6 percent of adibashis had low change in health related practices while 36.4 percent had no change in health related practices and 9.1 percent had medium change but 1.3 percent had negatively change in health related practices after involvement with microcredit.

Findings indicated that very large portion (89.6%) of the respondents had low to no change in health related practices. It might be due to lack of awareness about health related practices.

# 4.2.5 Change in Family Assets

The change in household assets of the adibashi respondents ranged from -12 to

22.50 scores with a mean difference of 4.49 and a standard deviation 6.18.

Categories Basis of		Respo	ondents	Mean	Sd
	categorization	No.	%		
	(score)				
Negatively change	below 0	10	13.0	4.49	6.18
Low change	0-7	46	59.7		
Medium change	8-12	11	14.3		
High change	above 12	10	13.0		
Total		77	100		

Table 4.19 Distribution of respondents according to change in family assets

Results presented in Table 4.19 showed that 59.7 percent of adibashis had low change in possession of assets while 13 percent had high change in assets and 14.3 percent had medium change but 13 percent had negatively change in possession of assets after involvement with microcredit.

Findings indicated that majority (74%) of the respondents had low to medium change in possession of assets. It might be concluded that they lack of assets.

#### 4.2.6 Change in Participation and Social Position

The change in participation and social position of the respondents ranged from -8 to 4 scores with a mean difference of 0.47 and standard deviation 2.59.

<b>Table 4.20</b>	Distribution of respondents according to change in participation
a	nd social position

Categories	Basis of		ndents	Mean	Sd
	categorization (score)	No.	%		
Negatively change	below 0	20	26.0		
No change	0	11	14.3		
Low change	1 to 2	31	40.3		
Medium change	3 to 6	15	19.5	0.47	2.59
Total		77	100	]	

Results presented in Table 4.20 showed that 40.3 percent of respondents had low change in participation and social position while 19.5 percent had medium change in participation and social position but 14.3 percent had no change even 26.0 percent had negative change in participation and social position.

Findings of the study revealed that three-fifth majority (59.8%) of the respondents had low to medium change in participation and social position and two-fifth (40.3%) had negatively to no change in participation and social position after involvement with microcredit.

#### **4.2.6.1** Change in Participation

The change in participation of the adibashi respondents ranged from -7 to 3 scores with a mean difference of -0.75 and a standard deviation 2.32.

Results presented in Table 4.21 showed that 31.2 percent of adibashis had low change while 26 percent had no change even 42.9 percent had negatively change in participation after involvement with microcredit.

Categories	Basis of	Respo	Respondents		Sd
	categorization	No.	%		
	(score)				
Negatively change	below 0	33	42.9	75	2.32
No change	0	20	26.0		
Low change	1-3	24	31.2	-	
total		77	100		

 Table 4.21 Distribution of respondents according to change in participation

Findings indicated that a large portion (68.9%) of the respondents had negatively changed to no change in participation after involvement with microcredit.

It might be concluded that the adibashi respondents were absent in organizational or developmental activities due to either less opportunities or less desire.

# 4.2.6.2 Change in Social Position

Change in social position of the adibashi respondents ranged from -1 to 4 scores with a mean difference of 1.22 and a standard deviation 0.80.

Categories	Basis of	Respo	Respondents		Sd
	categorization (score)	No.	%		
Negatively change	below 0	3	3.9	1.22	0.80
No change	0	1	1.3		
Low change	1	55	71.4		
Medium change	2-3	16	20.8		
High change	above 3	2	2.6	]	
Total		77	100		

Table 4.22 Distribution of respondents according to change in social position

Results presented in Table 4.22 showed that 71.4 percent of adibashis had low change in social position while 2.6 percent had high change in social position and 20.8 percent had medium change but 1.3 percent had no change even 3.9 percent had negatively change in social position after involvement with microcredit.

Findings of the study showed that overwhelming majority (92.2%) of the respondents had low to medium change in social position.

It might be concluded that due to group based approach model of microcredit, most of the respondents were engaged in group or sumity which helped them to change in social position.

# 4.2.7 Change in Vulnerability

Change in vulnerability of the adibashi respondents ranged from -2 to 10 scores with a mean difference of 3.12 and a standard deviation 3.04.

Categories	<b>Basis of</b>	Respo	ondents	Mean	Sd
	categorization (score)	No.	%		
Negatively change	below 0	9	11.7	3.12	3.04
No change	0	9	11.7		
Low change	1-4	34	44.2		
Medium change	5-8	21	27.3		
High change	above 8	4	5.2		
Tota	77	100			

Table 4.23 Distribution according to change in vulnerability

Results presented in Table 4.23 showed that 44.2 percent of adibashis had low change in vulnerability while 27.3 percent had medium change in vulnerability and 5.2 percent had high change in vulnerability but 11.7 percent had no change even 11.7 percent had negative change in vulnerability after involvement with microcredit.

Findings indicated that a large portion (71.5%) of the respondents had positively low to medium change in vulnerability. It may be concluded that credit reduced the degree of after involvement.

# 4.3 Impact of Microcredit on Poverty Alleviation

Impact of microcredit on poverty alleviation of the respondents ranged from 3 to 16 scores with a mean difference of 9.61 and a standard deviation 3.29.

Categories	Basis of	Ranges	Resp	ondents	Mean	Sd
	categorization $(\bar{x}\pm Sd)$		No.	%		
Low impact	$\frac{(\mathbf{x} \pm \mathbf{S}\mathbf{u})}{\mathbf{U}\mathbf{p} \text{ to } 6}$	3 to 16	19	24.7	9.61	3.29
Medium impact	7 to 13	-	49	63.6		
High impact	Above 13		9	11.7		
total			77	100		

Table 4.24 Distribution of the respondents according to impact of microcredit

Results presented in Table 4.24 showed that 63.6 percent of adibashis had medium poverty alleviation while 24.7 percent had low and 11.7 percent had high poverty alleviation after involvement with microcredit.

Findings indicated that overwhelming majority (88.3%) of the respondents had medium to low poverty alleviation after involvement with microcredit.

It may be concluded that respondents had medium to low poverty alleviation after involvement with microcredit due to partial utilization of credit.

# 4.4 Contribution of Selected Characteristics of the Respondents on Poverty Alleviation

 Table 4.25 Regression Coefficients of contributing variables related to impact of microcredit

Dependent	Independent	В	p	R2	Adj.	F	Sig.
variables	variables				R2		
	Age	0.077	0.518	0.55	0.477	7.93	.000***
	Education	-0.031	0.792				
	Family size	0.095	0.307				
Impact of	farm size	0.347	.001***				
microcredit	Cosmopoliteness	0.199	0.076				
on poverty	Credit received	0.154	0.086				
alleviation	Credit utilization	0.230	.035**				
	Effectiveness of	0.252	.022**				
	credit						
	Duration of	0.206	.030**				
	involvement						
	Attitude toward	0.186	0.054				
	credit						

\*\*\* Significant at p<0.01. \*\* Significant at p<0.05.

Table 4.25 shows that there was a significant contribution of respondents' age, credit received, credit utilization, effectiveness of credit utilization and duration of involvement with microcredit on poverty alleviation of the adibashi respondents. Of these- farm size was the most important contributing factor (significant at the 1% level of significance) and credit utilization, effectiveness of credit utilization and duration of involvement with microcredit were the second most contributing factor (significant at the 5% level of significance) on impact of microcredit on poverty alleviation.

However, age, education, family size, cosmopoliteness, credit received of the adibashi respondents and their attitude toward microcredit had no significant contribution on impact of microcredit on poverty alleviation.

Fifty five percent ( $R^2=0.55$ ) of the variation in the changes in socio-economic condition of the adibashi respondents may be imposed to their age, education, family size, farm size, credit received, credit utilization, effectiveness of credit utilization and duration of involvement with microcredit and attitude toward credit. The F value indicates that the model is significant (p=0.000). Adjusted R-square value (Adjusted R Square=0.477) indicates the addition of future predictors in the model and that the models could be suitable.

# 4.5 Comparative change pattern in terms of 'before' and 'after' involvement with microcredit program

To compare the mean difference before and after condition of the dimensions e.g. income, food consumption, housing environment, health status, family assets, participation and social position and vulnerability of the adibashi respondents, pair t-test was employed for hypothesis testing.

# Hypothesis:

The following null hypothesis was formulated:

'There is no significant difference of each of the dimension e.g. income, food consumption, housing environment, health status, family assets, participation and social position and vulnerability of the respondents before and after involvement with microcredit.'

Dimension	Average		<b>Observed</b> t-test	Significant
	before	after	value with 76 df	(2-tailed)
Income	20.02	39.31	7.19***	.000
calorie intake	1883.78	2171.30	15.27***	.000
Housing environment	3.04	4.81	7.99***	.000
Health status	7.04	11.06	15.03***	.000
Family assets	8.21	12.62	6.19***	.000
Participation and	6.58	7.39	3.04**	.003
Social position				
Vulnerability	4.23	7.41	9.38***	.000

 Table 4.26 t-Test value of the comparative mean differences of the dimensions

 in terms of 'before' and 'after' involvement with microcredit program

\*\*\* Significant at 0.01 level of Significance \*\* Significant at 0.05 level of Significance

Critical value of t is 2.64 at 0.01 and 2.00 at 0.05 level of Significance with 76 df

#### **Change in Income**

Results presented in the Table 4.26 showed that in case of income change, calculated t-test value (t = 7.19) was greater than the tabulated value of t (2.64) with 76 df at 0.01 level of Significance. On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that income of the respondents after involvement with microcredit program increased significantly.

#### **Change in Calorie Intake**

Results presented in the Table 4.26 showed that in case of food consumption, calculated t-test value (t = 15.27) was greater than the tabulated value of t (2.64) with 76 df at 0.01 level of Significance. On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that food consumption of the respondents after involvement with microcredit program increased significantly.

#### **Change in Housing Environment**

Results presented in the Table 4.26 showed that in case of housing environment, calculated t-test value (t = 7.99) was greater than the tabulated value of t (2.64) with 76 df at 0.01 level of Significance. On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that housing environment of the respondents after involvement with microcredit program increased significantly.

## **Change in Healthcare**

Results presented in the Table 4.26 showed that in case of healthcare, calculated ttest value (t = 15.03) was greater than the tabulated value of t (2.64) with 76 df at 0.01 level of Significance. On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that healthcare of the respondents after involvement with microcredit program increased significantly.

#### **Change in Family Assets**

Results presented in the Table 4.26 showed that in case of family assets, calculated t-test value (t = 6.19) was greater than the tabulated value of t (2.64) with 76 df at 0.01 level of Significance. On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that family assets of the respondents after involvement with microcredit program increased significantly.

## **Change in Participation and Social Position**

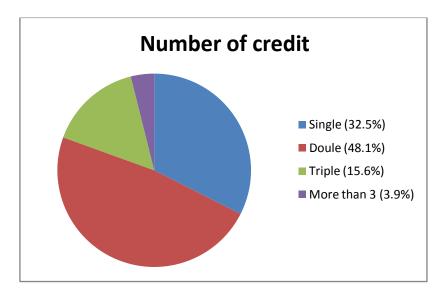
Results presented in the Table 4.26 showed that in case of participation and social position, calculated t-test value (t = 3.04) was more than the tabulated value of t (2.00) with 76 df at 0.05 level of Significance. On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that participation of the respondents after involvement with microcredit program increased significantly.

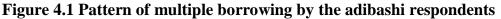
#### **Change in Vulnerability**

Results presented in the Table 4.26 showed that in case of vulnerability, calculated t-test value (t = 9.38) was greater than the tabulated value of t (2.64) with 76 df at 0.01 level of Significance. On the basis of above findings the null hypothesis was rejected. Hence, it was concluded that vulnerability of the respondents after involvement with microcredit program increased significantly.

#### 4.6 Challenges of Microcredit

The main challenge of microcredit found in the study area was multiple borrowing.





Results showed in the Figure 4.1 that 32.5 percent of respondents took credit single while 48.1 percent of respondents took credit double, 15.6 percent of respondents took triple credit and 3.9 percent of respondents took more than three credits. Findings indicated majority (67.6%) of respondents took multiple credits from different sources.

However, the study revealed that most of the households that took more than one loans from two or more NGOs fall in the poverty trap. They borrow from where ever they can get loans to manage the installments and household expenses.

# 4.7 Problem Faced by the Adibashi Beneficiaries in Receiving and Utilizing Microcredit

Problem confrontation by the adibashi respondents ranged from 17 to 41 scores with a mean difference of 28.44 and a standard deviation 4.84.

 Table 4.27 Distribution of the respondents according to their problem confrontation

Categories	Basis of	Ranges	<b>Respondents'</b>		Respondents'		Mean	Standard
	categorization		No.	%		deviation		
	$(\bar{x}\pm Sd)$							
Low	up to 24	17-41	16	20.8	28.44	4.84		
Medium	25-32		47	61.0				
High	above 32		14	18.2				
Total			77	100				

Data presented n the Table 4.27 showed that 61 percent of respondents confronted problems at medium level while 18.2 percent confronted problems at high level and 20.8 percent confronted problems at low level.

Findings indicated that maximum (61%) respondents faced medium level problems with microcredit.

#### Need new loan for repayment of the previous loan(s)

Need new loan for repayment of the previous loan was the main problem they encountered. The problem facing score was 257 and raked first. As day labor is main source of income of the respondents and suffers from seasonality i.e. lack of continuous working opportunity, they cannot manage to pay installments in time. So, they need, in many cases, new loan for repayment of the previous loan(s).

#### Loan repayment/grace period is very short

Payback period was very short and considered as the second main problem (problem facing score of 255) in their point of view. They did not have enough time within which they could produce crops or rear animals to make benefit.

#### Loans are used for other purposes

The misuse of credit for other activities was felt as third important problem in order to rank with the problem facing score of 236. The beneficiaries were very poor and hard core. To meet up their need they used plucked money for their daily purposes.

## High rate of interest

High rate of interest was 4th main problem of adibashi respondents with the problem facing score of 208. The beneficiaries received credit comparatively at a high rate of interest. But how the rate of interest is high most of them were unknown to the reasons. But there were no alternative path open to them.

#### CHAPTER 5

#### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

This chapter presents summary of major findings, conclusion and recommendation of the study.

#### 5.1 Summary of Empirical Findings:

The major findings of the study are summarized below:

#### 5.1.1 Selected Characteristics of the Adibashi Beneficiaries

**Age:** Majority (54.5%) of the respondents was young aged compared to old aged (5.2%) and middle aged (40.3%) of the respondents.

**Education:** The highest number (54.8%) of the respondents could sign only where lowest number (0.9%) of the respondents had higher secondary level of education followed by no education (15.6%) and education at primary level (13%).

**Family Size:** Maximum (54.5%) family was medium in size while 33.8 percent of the farmers had small family and 11.7 percent had large family size.

**Farm Size**: Majority of adibashis (54.5%) had small farm in size, while 28.6 percent of the farmers had marginal, 16.9 percent were landless and there were no adibashis with medium or large farm size.

**Cosmopoliteness:** Majority percent (64.9 percent) of respondents had medium level of cosmopoliteness while 18.2 percent of respondents had higher level of cosmopoliteness and very few of respondents (16.9 percent) had lower level of cosmopoliteness.

**Credit Received:** Majority (70.1 percent) of respondents was medium credit recipients while 16.9 percent were small credit recipient and 13 percent were large credit recipient.

**Credit Utilization:** Highest portion (80.6%) of the respondents used partially to fully in assigned purpose

**Effect of Credit Utilization:** Highest portion (87%) of the respondents had neither loss nor profit to profit for effectiveness of credits utilization.

**Duration of Involvement with Credit Programs:** Majority (85.7%) of the respondents were involved with credit for medium to short period of time.

Attitude towards Credit Programs: Overwhelming majority (89.6%) of the respondents involved with credit program had favorable to unfavorable attitude towards microcredit programs.

#### 5.1.2 The extent of change in selected dimensions of the respondents

**Change in Income:** majority (75.3%) of the respondents had medium to low change in income after the involvement with microcredit.

**Change in Food Consumption:** Overwhelming majority (80.2%) of the respondents were belonged to hardcore poverty (poverty line II) before the involvement with microcredit but calorie intake changed to 61.30 percent that belonged to below poverty line I after the involvement with microcredit.

**Change in Housing Environment:** Majority (61.1%) of the respondents had positive change in housing environment while 33.8% had no change and 5.2 percent had negatively change in housing environment.

**Change in Housing Unit:** 29.9 percent of the respondents had no house at all while 54.5 percent had tin shed kacha ghar before involvement with credit and the percentage increased to 89.6 percent of the adibashi respondents having tin shed kacha ghar before involvement with credit. Again percentage residing in kaca ghar with khor roof decreased to 6.5 from 15.6 and 2.6 percent having paka ghar after involvement with credit.

**Change in Toilet Condition:** Percentage of the adibashi respondents having no toilet at all decreased to 15.6 from 62.3 percent, having kacha toilet increased to 62.3 from 33.8 and having half sanitary toilet increased to 20.8 from 3.9 percent after involvement with credit.

**Change in Drinking Water Source:** Percentage of the adibashi respondents having tube well of own increased to 77.9 from 49.4 percent, using tube well of others decreased to 14.3 from 35.1 and increased to 20.8 from 3.9 percent after involvement with credit still 7.8 percent of the adibashi respondents had to drink water from well after involvement with credit.

**Change in Health status:** 62.3 percent of respondents had medium change in health status while 16.9 percent had low change in health status, 11.7 percent had high change and 9.1 percent had no change in health status after involvement with microcredit.

**Change in Health Seeking Behavior:** Majority (79.2%) of the respondents had positive change in healthcare while one fifth (20.8%) of the respondents had no change in health seeking behavior.

**Change in Health Related Practices:** Very large portion (89.6%) of the respondents had low to no change in health related practices.

**Change in Family Assets:** Majority (59.7%) of adibashis had low change in possession of assets while 13 percent had high change in assets and 14.3 percent had medium change but 13 percent had negatively change in possession of assets.

**Change in Participation and Social Position:** 40.3 percent of respondents had low change in participation and social position while 19.5 percent had medium change in participation and social position but 14.3 percent had no change even 26.0 percent had negative change in participation and social position after involvement with microcredit.

**Change in Participation:** A large portion (68.9%) of the respondents had negatively changed to no change in participation after involvement with microcredit.

**Change in Social Position:** Overwhelming majority (92.2%) of the respondents had low to medium change in social position.

**Change in Vulnerability:** Higher portion (44.2%) of adibashis had low change in vulnerability while 27.3 percent had medium change in vulnerability, and less portion (5.2%) had high change in vulnerability but 11.7 percent had no change even 11.7 percent had negative change in vulnerability.

**Overall Impact of Microcredit**: 63.6 percent of adibashis had medium poverty alleviation while 24.7 percent had low poverty alleviation and 11.7 percent had high poverty alleviation after involvement with microcredit.

# 5.1.3 Contribution of Selected Characteristics of the Respondents on Poverty Alleviation

There was a significant contribution of respondents' farm size, credit utilization, effectiveness of credit utilization and duration of involvement with microcredit on poverty alleviation of the respondents. However, age, education, family size, cosmopoliteness, credit received of the respondents and their attitude toward microcredit had no significant contribution on impact of microcredit on poverty alleviation.

# 5.1.4 Comparative change pattern in terms of 'before' and 'after' involvement with microcredit program

There was significant difference before and after involvement with microcredit in income, food consumption, housing environment, healthcare, health related practice, family assets and vulnerability of the adibashi respondents with 76 df at 0.01 level of Significance and in participation and social position with 76 df at 0.05 level of Significance before and after involvement with microcredit.

## 5.1.5 Challenges of Microcredit

The main challenge of microcredit found in the study area was multiple borrowing. Findings indicated majority (67.6%) of respondents took multiple credits from different sources at a same time.

#### 5.1.6 Problem Confrontation by the Adibashi Beneficiaries with Microcredit

Most (61%) of respondents confronted problems at medium level and 20.8 percent confronted problems at low level while lower portion (18.2%) confronted problems at high level.

## **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:

Overwhelming majority (88.3%) of the respondents had medium to low poverty alleviation after involvement with microcredit. It may be concluded that there was a scope to alleviate poverty through microcredit programs among the respondents.

- Farm size of the respondents had a great influence on poverty alleviation. It may be concluded that increasing farm size would be a great help to the respondents to alleviate their poverty.
- Utilization of credit and effect of credit utilization had significant impact of microcredit program toward uplifting the socio-economic condition of beneficiaries. So after getting the credit the beneficiaries take the responsibility to fully utilize the credit to get its better effect in the life.
- Involvement with microcredit had a great influence on socio-economic development of the respondents. Sixty one percent of the respondents had involvement within the 3 to 8 years. So it is likely that impact on adibashi would be high in the course of time.
- It might be concluded that food consumption of the respondents after involvement with microcredit program increased and they can change their economical condition.
- Majority (61%) of the respondents had medium problem confrontation. It might be concluded that minimizing problems would have more impact of microcredit on poverty alleviation.

## **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:

 Microcredit availability among the respondents had significant contribution on their poverty alleviation. Credit is an important input, which supports other inputs for higher production, and raising income of the respondents. 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 to alleviate poverty.

- 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 to return loan as per schedule.
- Special care should be taken by credit organization to enhance more participation of the adibashi women with microcredit program.
- Credit organization needs to take steps for wider literacy programs in order to accelerate different activities of the adibashis.
- Proper supervision should be ensured and logistic support should be provided for utilization of received credits.
- As cited by the respondents, there were some problems in receiving and utilizing the microcredit. All those problems deserve to be addressed by the credit organization. It is, therefore, recommended that the credit organization should give attention for the solution of those problems as far as possible in order to make credit programs successful.

# **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 microcredit program towards poverty alleviation of adibashi beneficiaries. Further studies should be undertaken covering more dimensions in the related matters. The following recommendations arc suggested in this connection:

- Impact of microcredit on alleviating poverty of the adibashis was conducted in two unions namely Eluyary and Kazihal union under Fulbari upazila of Dinajpur district. Findings of the study may be verified and compared by similar studies in other upazilas of different districts in Bangladesh.
- This research examined the effect of ten characteristics of the respondents on the impact of microcredit towards poverty alleviation. Therefore, it is recommended that further research may be undertaken involving other characteristics of the adibashi respondents and impact of microcredit in this regard.

- To assess the impact of microcredit on poverty alleviation, in this study, dimensions like change in income, change in food consumption, change in housing environment, change in healthcare, change in health related practice, change in family assets, change in social position, change in participation and change in vulnerability have been considered. Further study may be undertaken involving other dimensions like change in decision making, change in purchasing power, and change in confidence etc. of the adibashi respondents.
- Similar study may be conducted on the credit program of specific credit organization of the country such as Savecred, CCDB, and Caritas Bangladesh etc. in order to gain more meaningful insights.
- A study on problems faced by the participating members of adibashis in different dimensions of microcredit program can also be undertaken.

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#### **APPENDIX- I: FIELD TRIP EXPERIENCES**

The researcher had experienced field level visible impact, challenges and problems of microcredit on poverty alleviation of plain land adibashi communitythe Santals in the study area of Dinapur district during data collection.

The researcher noticed that access to credit by the Santals was limited. No common MFIs like BRAC or ASA were found in the study area. Some Christian credit organizations like Caritas, savecred etc. were involved.

The researcher noticed that impact of microcredit was difficult to identify in many cases. But direct impact was found if the received credit was used for cultivation by taking agricultural land as agreement or khaikhalashi (money assumed as paid after certain seasons) or investing in small business through generation of income. But respondents those used the credit for non productive purposes fall in vicious cycle of poverty or in poverty traps. Partial positive impact also found if credit was used for building or repairing house, toilet and tube well or food consumption to overcome seasonality.

Lack of monitoring and support were identified as main challenges of microcredit in the study during interview with adibashi respondents. Field level credit officials admitted that they could not monitor in many cases whether credit being used sanctioned purposes or not.

The overall situation was seemed to the researcher that credit had become a business than so called service to the credit organizations though microcredit is still effective to fight against poverty.

## **APPENDIX- II: INTERVIEW SCHEDULE (ENGLISH VERSION)**

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

An interview schedule of the study on

"Impact of Microcredit on Poverty Alleviation: A Case of Adibashi Beneficiaries of Dinajpur".

(Please answer the following questions. Provided information will be kept confidential and will be used only for research purpose.)

Sample No. : .....

Name of the respondents:	
Village:	Union:

Mobile No.:

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

2. Educational Qualification: Please mention your educational qualifications

a) Cannot read and write

b) I can sign only

c) I can't read in school but read in another institution up to class.....

d) I have studied in school/college 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	Type of land use	Land area	
No.		Local unit	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		

SL.	Place of visit		Exten	t of Visits		
No.		Regularly	Frequently	Occasionally	Rarely	Not at all
1.	Visit market	10 or more times/month	5-9 times / month	2-4 times /month	Once / month	
2.	Relatives or friends home outside your own village	8 or more times/month	5-7 times / month	2-4 times /month	Once /2 month	
3.	Visit union parishad	6 or more time /month	4-5 times / month	2-3 times / month	Once/ month	
4.	Visit own upazila sadar	6 or more time/ month	4-5 times / month	2-3times / month	Once / month	
5.	Visit own district sadar	4 or more time/month	2-3 times / 2 month	1-2 times/ 3month	Once /6 month	
6.	Visit another upazila sadar	1 or more time /month	2-3 times / 4 month	1-2 times/ 6 month	Once/ 6 month	
7.	Visit another district sadar	1 or more time /year	1-2 times / 3 year	2-3 times/ 6 year	Once / 6 year	
8.	Visit credit organization office	4 or more time/month	2-3 times / month	1-2 times/ month	Once /3 month	

5. Cosmopoliteness: Please indicate the frequency of visit outside of your village.

6. Credit Received: Please mention the source current loan(s) you get from.

SL. No.	Source of credit received	Amount of loan (Taka)
1.	Govt. credit programs	
2.	Bank	
3.	NGOs credit programs	
4.	Local sumity	
5.	From money lenders	

7. Credit Utilization: Please indicate the utilization of your last credits.

Purpose of credit	Utilization of credit			Effect of credit utilization		
	Fully in assigned purpose	Partially in assigned purpose	Fully in other than assigned purpose	Profit	Neither loss nor profit	Loss
Agriculture						
Small business						
Household expenditure						
Others						

**10. Attitude towards Microcredit:** Please, express your attitude towards micro credit program on the basis of following aspects

SL.	Statement	Strongly	Agree	No	Disagree	Strongly
No.		agree		opinion		disagree
1.	I am happy because					
	credit helped me to					
	increase the standard					
	of living					
2.	My social status					
	hampered due to					
	microcredit					
3.	Microcredit is very					
	helpful to reduce the					
	poverty of poor					
	people					
4.	The rate of interest					
	of NGOs is higher					
5.	The microcredit					
	program of GoB is					
	better than any other					
	poverty alleviation					
	program					
6.	Credit increases the					
	economic condition					
	of the loan borrower					
7.	Microcredit makes					
	borrowers poorer					
8.	Microcredit program					
	manages to crate					
	social awareness					
	among borrowers					

11. Please give the information of following aspects "before" and "'after" condition taking credit

a) Change in Income: Please mention your income

Sources of income	Before involvement with credit (Tk.)	After involvement with credit (Tk.)
Agriculture		
Small business		
Small and Cottage industries		
handicrafts		
Others		

**b)** Change in Food Consumption: Please, mention the quantity of the following food items you uptake "before" and "after" involvement with credit

SL.	Food items	Intake before involvement	Intake after involvement
No.		with Credit (gm)	with Credit (gm)
1.	Rice (daily)		
2.	Bread (daily)		
3.	Vegetable		
	(daily)		
4.	Pulse (weekly)		
5.	Fish (weekly)		
6.	Milk (weekly)		
7.	Meat (monthly)		
8.	Egg (monthly)		
9.	Fruit (daily)		

## c) Change in Housing Environment:

i. Change in housing unit: Please, give your dwelling house the information

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

ii. Change in toilet condition: Please, give the information of toilet condition

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

iii. Change in source of drinking water: Please give the information of your

source of drinking water

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

# d) Health Status

SL.	Type of Healthcare	Before involvement	After involvement
No.		with credit	with credit
1.	Quake/ Direct pharmacy		
2.	Traditional Tribal Kabiraj		
3.	Community hospital/ local		
	Church health service		
4.	Local experienced doctor		
5.	MBBS/ Specialist doctors		

# i. Health seeking behavior: Please give the information of healthcare

**ii. Health related practices:** Please give the information about household's health related practices

SL.	Type of Healthcare	Before involvement		After involvement	
No.					
		Yes	No	Yes	No
1.	Received Immunization dose of baby				
2.	Use of contraceptives/family planning				
	tools/methods				
3.	Use of soap after toilet				
4.	Received trained health worker/hospital				
	facilities during delivery of baby				
5.	Skilled in preparing oral saline				
6.	Intake of medicine				

e) Change in family Asset: Please give the information following items, goods or furniture of your family

SL. No.	Items of assets	Unit score	Before involvement with Microcredit			After involvement with Microcredit		
			No.	Score	Total	No.	Score	Total
1.	Cow							
2.	Goat							
3.	Pig							
4.	Hen/ Duck							
5.	Fishing net							
6.	Almriah							
7.	Khat							
8.	Golden ornaments							
9.	Show case							
10.	Electric fan							

11.	Sewing machine				
12.	TV				
13.	Bi-cycle				
14.	Rickshaw /Van				
15.	Motor cycle				
16.	Swallow machine				
17.	Mobile phone				
	Total				

# f) Participation and Social position

# i. **Participation:** Please mention your nature of participation

SL.	Statement	Nature of Participation							
		Regu	larly	Occasionall		Suddenly		Not at all	
				У					
		Before	After	Before	After	Before	After	Before	After
1.	Invited to social								
	gatherings								
2.	Invited to salish of								
	own tribe								
3.	Invited to salish of								
	outside village								
	other than own tribe								
4.	Tell your problems								
	to people's								
	representative								
5.	Invited to								
	development								
	activities								

# ii. **Social position:** Please mention your nature of involvement with the following organizations

SL.	Name of	Nature of involvement (duration							
	organization	]	Before involv	rement	After involvement				
		No	Ordinary	Executive member	No	Ordinary	Executive member		
1.	Microcredit								
	lender sumity								
2.	Other GO/NGOs								
	society								
3.	School/Collage								
	Committee								
4.	Church/Mondir								
	Committee								
5.	Sporting club								
6.	Others								

**g**) **Vulnerability of Adibashi:** Please mention the degree of vulnerability ("before" and "after" involvement with credit)

SL.	Statement related to economic and social vulnerability	Degree ofvulnerability beforeinvolvement withmicrocreditHighMediumLow			Degree ofvulnerability afterinvolvement withmicrocreditHighMediumLow		
1.	How is your household's economic status?						
2.	Household owns that can be turned into cash quickly, such as livestock, or personal belongings for unexpected shock recovery like flood						
3.	Stability of source of income generation throughout the year						
4.	Extent of your debt condition						
5.	Extent of your savings						
6.	Extent of availability of food daily at least 3 times						
7.	Ability for schooling of children						
8.	Extent of Discrimination in social integration with the mainstream Bengali society						

**12. Problem Confrontation:** Please indicate your problems and give your comments that you faced after involved with micro credit program

SI.	Problems	Severity of Problem Confrontation				tion
No.		Very	High	Medium	Low	Not
		high				at all
1.	The amount of loan is not sufficient					
	in terms of demand					
2.	Loan is not available when you					
	need					
3.	Loan repayment/grace period is					
	very short					
4.	Take long time for loan sanction					
5.	High rate of interest					
6.	New loan cannot be taken until					
	repayment of the previous loan					

7.	Need new loan for repayment of the previous loan			
8.	Cannot provide weekly installment of loan			
9.	Need to sell family assets to pay loan installment			
10.	Loan cannot be taken until forming group/sumity			
11.	Loans are used for other purposes e.g. social activities			
12.	Religious status is hampered by receiving microcredit			

Thank you for your information.

Signature of interviewer

Date: .....

# **APPENDIX-III**

# LIST OF GOS/NGOS WORKING WITH MICROCREDIT FOUND IN THE STUDY AREA

Types of organization		Name of organization
	Govt.	Ekti Bari Ekti Khamar
orga	nization/program	
	National NGO	ASA
		Christian Commission for Development in Bangladesh
		(CCDB)
NGO	International NGO	Caritas Bangladesh
		Santal Mission Norwegian Board-SMNB Savecred
	Local NGO	Pollisree
		Gram Bikash Kendra (GBK)
Local I	Microcredit Sumity	Kodbir Pukhurikutu Jubo Songha
		Golap Nari Unnayan Dal

## **APPENDIX – IV**

# LIST OF PLAIN LAND ADIBASHIS FOUND IN THE STUDY AREA

Unions under Fulbari Upazilla	Name of Adibashi/Tribal community
Eluary	The Santal
Kazihal	The Santal

# **APPENDIX - V**

# **PROBLEM FACED INDEX (PFI)**

SL	Statement of the problems encountered	Scored	Rank
1.	Need new loan for repayment of the previous loan	257	1
2.	Loan repayment/grace period is very short	255	2
3.	Loans are used for other purposes	236	3
4.	High rate of interest	208	4
5.	New loan cannot be taken until repayment of the previous loan	204	5
6.	Need to sell family assets to pay loan installment	166	6
7.	Cannot provide weekly installment of loan	148	7
8.	The amount of loan is not sufficient in terms of demand	137	8
9.	Loan cannot be taken until forming group/sumity	136	9
10.	Loan is not available when you need	133	10
11.	Take long time for loan sanction	131	11
12.	Religious status is hampered by receiving microcredit	25	12

#### **APPENDIX-VI**

#### PLAIN LAND ADIBASHI COMMUNITY IN DINAJPUR

#### THE SANTAL COMMUNITY

The Santal is the 2<sup>nd</sup> largest community in Bangladesh. The Santals are found mostly in North Bengal (Northern part of Bangladesh) especially in the then greater districts of Dinajpur, Rangpur, Bogra, and Rajshahi.

By nature, they are very peace loving, honest, industrious and trustworthy people. They always respect their social customs and are satisfied with what they earn and what they eat. They have profound respect for the land they live in, the soil they till and the community they live with. The Santal mostly speaks Santali, a member of the Munda language family.

## Origin

Since how long the Santals landed in the territory of present Bangladesh, is not precisely known. Some believe that the Kherwars reached the land of Bengal immediately after the first clashes with the invading Aryan tribes (2500 B. C.) (Duyker, 1987). With every probability the Santals landed in Bangladesh with their actual ethnic identity, not after 1000 B. C. It is probable that the Santals scattered throughout Bengal at the time of the Muslim invasion of this region during the last decades of the twelfth century or at the beginning of thirteenth century.

#### **Physical Appearance**

The Santals are of ebony colour with little growth by way of beard, are generally of stocky build and capable of undertaking hard labour. Physically the Santals are not prepossessing. The face is round and softly contoured; the cheekbones moderately prominent; eyes full and straight, nose broad and depressed, mouth large and lips full, hair straight, black and coarse. They are longheaded and of medium height.



Plate: The Santal race (Masud, 2017)

#### The Clans

Santals are endogamic as a people because they cannot get married outside their tribe, but they are exogamic as clan because they cannot be married between the same clan (parish). Traditionally the Santals used to have fostered a total of twelve clans but unfortunately in the course of history one has been missing. Major functions of the clans are to regulate marriage, inheritance, succession and affiliation. One becomes a clan member by birth (Anwar, 1984).

The clans are: 1) Kisku, 2) Marandi, 3) Murmu, 4) Soren, 5) Tudu, 6) Baskey, 7) Besra, 8) Core, 9) Pauria, 10) Hasdak, 11) Hembrom and 12) Bedea (the lost one).

## Social structure of Santal village

The primary feature of every Santal village is the "Manjhi Council" or the village council headed by a manjhi (headman). The village council is the representative body of the community consisting of seven officials, namely: Manjhi, Paranik (a deputy headman), Jog Manjhi (an overseer of the village on moral issues), Jog Paranik (assistant to Jog Manjhi), Godet' (a messenger), Naeke (a village priest), and his assistant is Kudam Naeke (Archer, 1974). These officials in fact are the servants, not the masters of the village and their role is purely functional. The Manjhi remains as the overall leader of the village council and presides over the village meeting but with the accepted principle that no one overrules anyone else. The functions of the council on the other hand, are categorically divided among

the members in order to avoid any overlapping. The council members perform their functions in accordance with their tribal customs and traditions.

#### The Santals in Search of "new identity"

Every ethnic group or society has its own unique characteristics, value-systems, language, religious belief, mores, life-attitudes, culture, customs and traditions. It has its own approach to life and death, disease and sickness, individual and community, and above all, a sense of identity. Anyone visiting a Santal village or an area with vast majority of Santal inhabitants will easily realize the difference and the identity that applies to the Santals. This sense of identity or cultural self-image defines the traits of solidarity, uniqueness, and also seeks differences with other groups in the larger society around.

Yet, in many ways, the Santals of Bangladesh today can be seen going through an identity crisis for a variety of reasons. They have not been able to make concerted efforts to face the rapid changing situation. Whatever changes seem to have taken place due to the outside pressure, promotion of education and some initiatives taken by the Church, do not reach out to the bulk of the Santals living in the rural villages scattered around the countryside. As the time passes, Santals are more and more becoming marginalized, struggling for survival without having proper direction to move forward to improve their life situation.

There is clearly a confrontation between the ritual-based sense of traditional culture and the forces of change and modernization represented by the socio-political and socio-economic factors allied to these changes. In fact, the Santals are badly caught up between the mythological past of glorious traditions and the present with its ever degrading and desperate poverty caused by ignorance, exploitation and oppression by their neighbors.

Moreover, Santals are found to be more divided than being united due to the fact that there are Santals who have already embraced the Christian faith belonging to different church denominations while a minority still remains following the old traditional pattern of culture and religious practices. The gap among these groups has been widening in the course of history.