Impact of Urban Microfinance on Livelihood Strategies of Borrower Slum Dwellers in Dhaka City

(ThisThesis issubmittedforthePartialFulfillmentofthe DegreeofMaster of Philosophy in Economics)

Submitted to

Master of Philosophy Committee
Department of Economics
University of Dhaka

Submitted by

BasharatHossain
Master of Philosophy
Session: 2012-2013,Roll No-01
Department of Economics
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Supervised by

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Date of Submission: 18 June, 2017
Date of Submission (Revised): 04 October, 2020

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……
Signature of the Supervisor

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Letter of Submission

October04, 2020

The Chairman
Master of Philosophy Committee
Department of Economics
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Subject: Submission of M. Phil. Thesis

Dear Sir,

With due respect and humble submission, I, the undersigned student of Master of Philosophy (M. Phil.), would like to inform you that, I am submitting herewith my M.Phil.thesis entitled "**Impactof Urban Microfinance on Livelihood Strategies of Borrower Slum Dwellers in Dhaka City**". As of my degree requirement, supervisor's suggestion and guidance, I have prepared this thesis with depth analysis through econometric Difference in differences and Probit model. I have tried my level best to demonstrate the insights and impact of urban Microfinance on its borrowers. I believe and hope that this study will be informative, insightful and beneficial for enthusiastic learner, researcher, Microfinance institutions, Microfinance borrowers, Microfinance experts and Microfinance regulatory authority. My dear sir, thank you for your cordial and supportive guidance in preparing this report. Without your inspiring efforts, this report would have been an incomplete one.

Finally, I would be thankful once again if you please give your judicious advice on my efforts and accept my M.Phil.thesis

Yours Faithfully,

……
BasharatHossain
Master of Philosophy
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Certificate of Approval

This is to certify that, BasharatHossain, a student, a learner and researcher of Master of Philosophy (M. Phil.), Session: 2012-2013, Roll No-01, Department of Economics, University of Dhaka, has completed his M.Phil. thesis on the topic entitled"**Impact of Urban Microfinance on Livelihood Strategies of Borrower Slum Dwellers in Dhaka City**" under mysupervision and guidance. In preparing this report, he has also taken help and information from different corner of resources from primary as well as secondary sources. It is a compulsory work for the completion of Master of Philosophy (M.Phil.) degree offered by the department of economics, faculty of social science in the University of Dhaka.

I also certify that, I have scrutinized the report and found it satisfactory for the submission as partial fulfillment of the degree of Master of Philosophy (M. Phil.).

I wish him every success in his life.

……
Dr. Syed NaimulWadood
Associate Professor
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Acknowledgement

This thesis would not have been completed without the guidance, support and inspiration of several important people. First and foremost, I would like to express my gratitude and gratefulness to my honorable supervisor, Associate Professor **Dr, Syed NaimulWadood**, department of economics, university of Dhaka, Bangladesh-for his uninterrupted support and care from the very beginning to the end of my Master of Philosophy (M. Phil.) study and research. His suggestions, guidance, patience, motivation, stillness, enthusiasm, immense knowledge, kind and caring approach helped me in all the time of research and writing of this thesis. I could not have imagined having a better supervisor and mentor for my M.Phil. study.

Besides my supervisor, I would like to be grateful to the honorable examiner of my thesis : Professor Dr. HelalUddin and Professor Dr.Abdul Hamid, for their inspiration, insightful comments, and guides.

Moreover, I am thankful to the respondents and residents of the three slums: Korail slum, Jurain slum and WASA colony slums. More specifically, I expressed my gratitude to Mrs. Noor Jahan, Mrs. HosneAra, Mr. Badol, Mr. Babu and Mrs. Bokul- the recipients of Microfinance for helping in collecting data in the Korail slum. Besides, in Jurain slum, Mrs. Zahura, Mrs. Taslima, Mrs. Najma, Md. MintuMiah and Md. Nadim Ahmad- recipient of Microfinance, also acted as helping hand and guide for data collections from different borrowers and non-borrowers family. Similarly, I am grateful to Mrs. ParvinApa, recipient of Microfinance services since 2005 in the WASA colony slum helped me to collect data from WASA slum. In addition, the residents of these three slums show cordial and amiable behavior (in collecting data, directing the way of different family) to the team member.

I am also grateful to several important people in Korail slum including Mr.SajjadAlam-director of a local club and journalist in the Korail, Mr. Kamran-Imam of local Mosque, Mr. Badol-owner of a local dispensary and Mrs.RiyaAkter-local leader of Jubo League. In Jurain slum, Mr. Forhad- teacher of BRAC school in slum and Mrs. SharminAkter- worker of NariMoitri awareness program. In the

WASA colony slum, Mr. KaziMasum Ahmad-local Businessman, Mr. Babor Ali-employee of the WASA, Mr. SarwarHossain-local transportation business man, they participated in key informant interview.

After that, I owe to my team member of the sample survey. My closest and real friend Mr. MahbuburRahman delivered his maximum efforts and energy in collecting the data. Some areas of the Jurain and the WASA slum areas were unknown to me. But he helped me willingly and spontaneously. I am also grateful to my friends and well-wishers Mr. Shariful Islam Tareq and Lavelu for their participation and help in data collection.

Then, I expressed my recognition to my beloved and adored wife ZubaidaAsma, for her nonstop support, encouragement, inspiration in collecting data. Her patience, sacrifice, mental strength, inspiration and participation boosted our team to collect the data from a large area of the Korail slum.

In addition, I would like to acknowledge my wife for sacrificing the most for me. I am grateful and thankful to my wife, ZubaidaAsma (Tamunn), for her unflagging love, amiable care, motivation, immeasurable patience, direction and mental supports. I am also grateful to my mother, Mrs. JannatAra Begum and my father Janab Md. Abdul Halim for their praying for my good health and success of the study. Their blessing is always with me. I also express my gratitude and gratefulness to my elder brother Mr. Md. GoolgerHossain for his cordial help in staying in his house during my M.Phil examination. My earnest thanks to my father-in-law-Md. GiasUddin and mother-in-law Mrs. ShahinAkter for their praying and inspiration.

Finally, my praises, loves and gratefulness for Almighty ALLAH, for His help to complete my M.Phil thesis after overcoming different obstacles and impediments.

Dedication

To the destitute, helpless and deprived slum people of Bangladesh

Abstract

This is a Master of Philosophy (M.Phil.) thesis that has been prepared to fulfill the requirement of Master of Philosophy (M.Phil.) degree. The aim of this study is to examine the impact of urban microfinance on livelihood strategies of borrower slum dwellers of Dhaka, Bangladesh (with primary and secondary data). The primary data was collected through a structured questionnaire on a total of 200 sample slum households (100 borrowers and the 100 non-borrowers) of three slums (Korail, Jurain and WASA Colony slum) of Dhaka city by a systematic random sampling). Besides, Key informant interview (KII) was a part of data collection in this field survey. In addition, the relevant secondary datawere collected from different recent publications of national and international institutions. Besides, different books, articles, reports, brochures, magazines and newspapers have been reviewed to prepare this report.

This study uses econometric techniques of the Instrumental variable (IV) regression model, the Probit model, and the difference in differences (DID) model to analyze the data by econometric software Stata.13. However, the findings of the study state that the overall impact of urban Microfinance on its borrower is mixed (positive or no impac for some indicators). The result of Instrumental variable (IV) regression model states that the microfinance borrowing has significant positive impact on the income (at 5% level of significance) the borrowers. The income of borrowers is estimated to be .181 taka higher than the non-borrowers. Besides, the borrowing of microfinance loan (*borrowed*) has the significant impact (at 10% level of significance) on the non-food consumption expenditures of the borrowers. The non-food consumption expenditures of borrowers is estimated to be .205 taka higher than the non-borrowers. On the contrary, microfinance loan has no significant impact on the food consumption expenditures of the borrowers. The results of Difference in differences (DID) model have been estimated of 200 samples for different categories such as income, expenditure, asset value, savings, and housing and utility expenditure changes respectively. The key finding (DID) is that urban microfinance has a statistically significant positive impact on some income or expenditure variables such as savings (at the 1% level of significance), educational expenditure (at the 5% level of significance), and transportation expenditure (at the 1% level of significance), but not with regards to all the income and expenditure variables. The Probit analysis

illustrates that the probability of changing occupations of the microfinance borrowers is statistically significantly (at the 1% level of significance) higher compared to the case of the non-microfinance borrowers. Only 20% borrowers and 4% non-borrower respondent have secondary occupation. Besides, Microfinance also improved the Housing and utilities (gas, electricity) conditions of the 93% borrowers and water and sanitation conditions of the 95% borrowers. Moreover, Microfinance borrower successfully crossed the poverty line and presently, no families are found below the poverty line. Before receiving Microfinance, 1% borrower was extremely poor (less than $1.25 income per day) and 33% borrower was moderately poor (less than $2 income per day). Conversely, presently, no families are found below the poverty line.

This paper recommends to take different steps and policies lead by the Government and MFIs. For example, slum development program, rehabilitation program, charity and donations, motivate the religious and business group to participate in the development of slum people, includes the slum under the coverage of social safety net programs, reduction of the lending interest rate and increasing the saving interest rate, provide adequate time for investment and taking special policies for extremely poor people. Though it has some limitations**,** this study will be informative, insightful and beneficial for enthusiastic learners, researchers, Microfinance institutions, Microfinance borrowers, Microfinance experts and Microfinance regulatory authority. This study highlights the household's information roster of 200 borrowers and non-borrowers. Also information regarding education, gender, occupation, income, expenditures, asset value, Microfinance services, interest rate, role of microfinance to improve the living condition, open comments about microfinance, and so more. The results of this study are consistent with the earlier research findings. Hope thatthis study would encourage the microfinance institutions (MFIs) to expand their activities among the urban slum dwellers to obtain positive changes in the livelihood strategies of them.

Keywords: Urban Microfinance, Impact, Livelihood Strategy, Microfinance Institutions (MFIs), Borrower, Non-borrower, Slum, Korail, Jurain, WASA, Dhaka city

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Abbreviations and Acronyms

ABI	Average Numbers of Borrowers per Institution
ALS	Average Loan Size
APA	American Psychological Association
ASA	Association for Social Advancement
ASCAs	Accumulating Savings and Credit Associations
BARD	Bangladesh Academy for Rural Development
BASA	Bangladesh Association for Social Advancement
BASIC	Bangladesh small Industries and Commerce Bank Limited
BB	Bangladesh Bank
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BEES	Bangladesh Extension Education services
BIDS	The Bangladesh Institute of Development Studies
BKB	Bangladesh Krishi Bank
BRAC	Building Resources Across Communities
BRDB	Bangladesh Rural Development Board
BURO	Basic Unit for Resources and Opportunities of Bangladesh
CDF	Credit and Development Forum
CGAP	The Consultative Group to Assist the Poor
CUS	Centre for Urban Studies
CUMED	Credit for Urban Women Micro Enterprise Development
DSK	Dustha Shasthya Kendra
EAC	Educate A Child
ESEHP	Economic and Social Empowerment of the Hard-core Poor

FSVGD	Food Security for Vulnerable Group Development
GB	Grameen Bank
GO	Government Organization
IADB	Inter-American Development Bank
JCF	Jagorani Chakra Foundation
IBBL	Islami Bank Bangladesh Ltd
IFAD	The International Fund for Agricultural Development
Inm	Institute of Microfinance
IRDP	Integrated Rural Development Programs
MSC	Microcredit Summit Campaign
MFIRB	Microfinance Industry Report Bangladesh
MFIs	Microfinance Institutions
MIX	The Microfinance Information Exchange
MRA	Microcredit Regulatory Authority
MSS	Manabik Shahajya Sangstha
NGOs	Non-Government Organizations
OECF	Overseas Economic Cooperation Fund (OECF) Japan
OPTIX	Optimizing Performance through Improved Cross (X)
PERSGA	The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden
PKSF	Palli Karma-Sahayak Foundation
PMUK	Proshika Manobik Unnayan Kendra
PRIME	Programmed Initiatives for Monga Eradication
RAKUB	Rajshahi Krishi Unnayan Bank
RDP	Rural Development Programme
RDS	Rural Development Scheme
RMC	Rural Microcredit
ROSCAs	Rotating Savings and Credit Associations (ROSCAs)
SEEP	Social and Economic Enhancement Programme

Shakti	Shakti Foundation for Disadvantaged Women (SFDW)
SIDA	Swedish International Development Cooperation Agency
SSS	Society for Social service
TMSS	Thengamara Mohila Sabuj Sangha
tk	Taka-the currency of Bangladesh
UMC	Urban Microcredit
UP	Ultra Poor
UN	United Nations
UNC	University of North carolina at Chapel Hill
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Program
UPDS	Urban Poor Development Scheme
USAID	United States Agency for International Development
USD	United Sates Dollar
WASA	Water Supply and Sewerage Authority

Glossary

BASIX:	BASIX is a livelihood promotion institution established in 1996, working with over a 3.5 million customers, over 90% being rural poor households and about 10% urban slum dwellers. BASIX works in 18 states - Andhra Pradesh, Karnataka, Orissa, Jharkhand, Maharashtra, Madhya Pradesh, Tamilnadu, Rajasthan, Bihar, Chattisgarh, West Bengal, Delhi, Uttarakhand, Sikkim, Meghalaya, Assam, Gujarat and Jammu & Kashmir, 223 districts and over 39,251 villages.
Bishop:	a senior member of the Christian clergy, typically in charge of a diocese and empowered to confer holy orders
CARE:	A Leading Humanitarian Organization Fighting Global Poverty. It works in 95 countries around the world to support over 890 poverty-fighting development and humanitarian aid projects.

CGAP:	The Consultative Group to Assist the Poor (CGAP) is a global partnership of 34 leading organizations that seek to advance financial inclusion. CGAP develops innovative solutions through practical research and active engagement with financial service providers, policy makers, and funders to enable approaches at scale. Housed at the World Bank, CGAP combines a pragmatic approach to responsible market development with an evidence-based advocacy platform to increase access to the financial services the poor need to improve their lives.
Cahorsian:	Christian Ethno regional group who traditionally engaged in finance, continued to practice their trade.
Comilla Model:	The Comilla Model was a rural development program introduced in 1959 under the Pakistan Rural Development Board latterly changed to the Bangladesh Rural Development Board
Confraternities:	A Confraternity is a Christian voluntary association that provides Christian charity for poor people
Guild:	Guild was a religious institution to which non-Christian men or women could not be admitted.
Hijra:	Hijra-Transgender, People who belong to transgender category.
Intervida:	A Spain based international NGO
Irish Loan Funds:	Irish Loan Funds (Ireland) were one of the first forms of institution that provide small loans to poor people without collateral
Lac: Lakh	Hundred Thousand, 1, 00000 or 0.1 Million, also known as
Lombards:	Christian Usurer

Lucrum Cessans:	Lucrum Cessans from Medieval Latin. It was A Roman & canon law: the interest or compensations that are given for loss of reasonably estimated profits or for loss of using of property
Manoshi:	BRAC started Manoshi, a community based healthcare program, in 2007 at urban slums of nine city corporations in Bangladesh. The aim of this program is to improve the health condition of the slum population, especially women and children, through an integrated, community-based package of essential health services.
Micro-insurance	Micro-insurance is generally meant to provide risk protection to poor people having very limited assets and irregular cash flows in the informal sector, who do not have access to either social protection or formal insurance mechanisms (Ahsan and Mahmud, 2010).
Monte DI Pieta:	a public pawnshop worked across Italy, Spain and a century later in low income countries to offer low interest credit or interest free credit for the poor (Pullan, 1971).
OXFAM:	Oxfam is an international confederation of 18 NGOs working with partners in over 90 countries to end the injustices that cause poverty.
Pawnshop:	Pawnshop is a form of the shop or business which function is lending money at collateral.
PERSGA:	The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden, is an intergovernmental body dedicated to the conservation of the coastal and marine environments found in the Red Sea, Gulf of Aqaba, Gulf of Suez, Suez Canal, and Gulf of Aden surrounding the Socotra Archipelago and nearby waters. PERSGA's member states include: Djibouti, Egypt, Jordan, the Kingdom of Saudi Arabia, Somalia, Sudan and Yemen.
Silver Marks:	Currency
table de pret:	Loan Tables

CHAPTERONE:INTRODUCTION

1.1. **Background and Motivation of the Study**

Since the birth of microfinance, therehave been intense debateson whether thishas an impact on the economic life of the borrowers or not. As the home country of the Nobel Prize laureate economist Dr. Muhammad Yunus and his micro finance institution (MFI) 'Grameen Bank',microfinance of Bangladesh has occupied a significant portion of research with theacademic world.

It should be mentioned that, currently, about 688 MFIs are working in Bangladesh. They provide microfinance services in rural as well as urban areas of Bangladesh. The rural areas cover the villages while urban areas cover the urban slums and shanties in town or cities (MRA, 2016).

The aim of microfinance is to improve the livelihood and living standards of borrowers, to ensure the access to social and economic means, entrepreneurship and skill development, self-dependency, empower the women and destitute in the family and the society.

Moreover, therural microfinance program (RMP) has been operating in Bangladesh since 1976. Out of 688 MFIs, about 70% MFIs are working in the rural areas of Bangladesh (MRA, 2016). Several research findings reveal that the rural microfinance program (RMP) has a positive or sometimesmixed impact on the borrowers in Bangladesh, this pointis discussed in the literature review.

However, the urban microfinance program (UMP) has been operating in Bangladesh since 1984 that was initiated by the Manabik Shahajya Sangstha (MSS) in Dhaka city. Out of 688 MFIs, about 30% MFIs are working in the urban areas of Bangladesh (MRA, 2016).

Unfortunately, only 2 or 3 separate research on the urban microfinance program (UMP) was conducted by only a few researchers and research institutions in Bangladesh. Most of the research was conducted on the overall Microfinance program, including both rural and urban Microfinance programs. Recently, since 2010, two distinguished researchers,Toriqul Bashar and Salim Rashid have started research on urban

Microfinance and urban microfinanceborrowers in Bangladesh. Toriqul Bashar is the research fellow of Institute of Microfinance (InM), Dhaka, Bangladesh, and Salim Rashid is the professor of economics at theDepartment of Economics,University of Illinois at Urbana Champaign, Illinois, USA.Besides, Institute of Microfinance (InM) has been providing access to data on urban Microfinance and urban borrowers during the last 5 years. In addition, Credit Development Forum (CDF) contributes positively and provides some separate data on urban Microfinance through the publication entitled 'Bangladesh MicrofinanceStatistics'.

Furthermore, Bashar and Salim (2012) discussed the nature of urban Microfinance and urban poverty in Bangladesh. In another research they analyzed the potentials of urban Microfinance and suggest some measures to improve the effectiveness of urban Microfinance in Bangladesh. Otherwise, there were no research has been found on urban Microfinance in Bangladesh.

Conversely, the research on 'the impact of urban Microfinance on the livelihood strategies of borrowers' slum dwellers of Dhaka city' was untouched in these researches. The objective of this study is to examine the impact of urban microfinance on the livelihood strategies of borrower slum dwellers of Dhaka city. It should be mentioned that, currently, about 2.23 million people are living in the slum of Bangladesh. Among them, the largest portion, 1.06 million slum people are living in the slum of Dhaka city that is 24.39% of the total slum population. Moreover, slum population increases mainly for eight reasons such as river erosion, uprooted, driven out, abandoned, insufficient income, insecurity, for job and others (BBS, 2015a). Most of the slum population is engaged in the informal sector and their sources of funds are relatives, friends, local money lenders and Microfinance institutions (MFIs). Along with Microcredit, MFIs also provides Micro-savings, Micro-insurance, education, training and skill development, health care, maternity care, water and sanitations etc. programs to improve the living standards of the slum people.

The aim of this study is to examine the impact of the urban Microfinance program on the livelihood strategies of borrower slum dwellers in Dhaka city. To scrutinize the impact, the data on 200 (two hundred) sample households (100 borrowers and 100 non-borrowers) were collected from the three slums of Dhaka city.

The details analysis and discussion of this report is organized through sevenchapters. First chapter includes the introduction. Second chapter provides an overview on Microfinance and its proliferation in developing countries as well as in Bangladesh. Third chapter discusses the nature, extend and magnitude of urban Microfinance in Bangladesh. Chapter fourth and fifth describes the Study Methodology and findings respectively. Chapter six incorporates the Consistency with earlier research findings, whereas chapter seven states the conclusion andpolicy recommendations.

1.2. ObjectivesoftheStudy

1.2.1 Main Objective:

The main objective of this study is to examine the impact of urban Microfinance on livelihood strategies of borrower slum dwellers in Dhaka City of Bangladesh.

1.2.2 Specific Objectives:

More precisely, the aim of this study is

- To give an overview on the status of Microfinance programs in Bangladesh
- To discuss the latest status, nature and proliferation of the urban Microfinance program in the slum of Dhaka city and in Bangladesh
- To examine the impact of the urban Microfinance program on the overall livelihood strategies of borrower slum dwellers in Dhaka city-the capital city of Bangladesh
- To make recommendations on the basis of the findings for the improvement of the livelihood strategies of the slum-dwellers of Dhaka city through the urban Microfinance program more effectively

1.3. ResearchQuestions

The research question of this study is: Does the urban Microfinance program improve the livelihood strategies of the borrower slum dwellers in Dhaka city?

1.4.TestableHypothesis

The Main- Hypothesis of this study is: The urban Microfinance programs contribute to the livelihood strategies of the borrower slum dwellers in Dhaka city.

More precisely,

Null hypothesis: Ho= The urban Microfinance programs have no impact on the livelihood strategies of the borrower slum dwellers in Dhaka city.

Alternative hypothesis: H1= The urban Microfinance programs have an impact on the livelihood strategies of the borrower slum dwellers in Dhaka city.

1.5. Overview of the Literature

Impact of Microfinance on the borrower - is obviously a widespread area of research. But the focus of this study is to only highlight the impact of the urban Microfinance program on the livelihood strategies of borrower slum dwellers of Dhaka city-the capital city of Bangladesh.

As well, Microcredit-a component of Microfinance was introduced in Bangladesh in 1976 by the Nobel laureate economist Professor Dr. Muhammad Yunus. After that, he founded the Grameen Bank in 1983 to provide Microfinance services more smoothly and superbly. It was the successful attempt to institutionalize the Microfinance in Bangladesh. Ahmed (2013) in his study discussed about the four stages of growth of Microfinance in rural as well as urban areas of Bangladesh. The first stage (1971-1982) was the period of traditional institutions based Microcredit, second stage (1982-1989) experienced the birth of modern Microfinance, and third stage (1990-1996) was the phase of growth and

institutionalization of modern MFIs. And the final stage (1997-present) is the matured stage of MFIs. In this era, Microfinance experienced the vigorous growth in rural as well as urban economy.

However, there are many studies have been done on the topic entitled 'impact of Microfinance on the borrowers of Bangladesh'. Basically, most of these studies are done on rural borrowers or on combined rural and urban borrowers, but the available separate research was not found that only analyze the impact of urban Microfinance on the urban borrowers in Bangladesh.

But the first study on the impact of urban Microfinance and urban borrowers was done by Mr. Toriqul Bashar and Salim Rashid in 2012. Mr. Toriqul Bashar is the research fellow of Institute of Microfinance (InM), Dhaka, Bangladesh, and Salim Rashid is the professor of economics at the department of economics, university of Illinois at Urbana Champaign, Illinois, USA.

a) The Literature on the impact of Overall Microfinance in Bangladesh:

However, several studies on the impact of the overall Microfinance program are presented in table-1. 1. The findings of these studies illustrate that,

Microfinance has a positive impact on its borrower and Rahman & Khandker (1994) concluded that, Microfinance creates employment and stimulates productivity (Rahman & Khandker 1994). In contrast, Morduch (1998) in his research showed that, there was no or little impact of Microfinance in Flagship Programs in Bangladesh. But Pitt (1999) presented (through a reply to Jonathan Morduch's) the evidences that, Microfinance has a positive impact on the poor.

Moreover, Zaman, (1999) stated that, though Microfinance has a positive impact on moderate poor but has no long run impact. In addition, it induces the member for savings and thereby builds up asset (Khandker, 2000). The study by Zahir et al (BIDS, 2001) covered 13 regions of Bangladesh, including 91 villages spread over 23 sub-districts.

They found that, Microfinance encourages the participants to be self-employed and showed the evidence that, the income and ownership of wealth (land and other resources) of participants is higher than non-participants. Another study exposes that, it strengthens the empowerment of women in decision making (Pitt, Khandker &cartwright, 2006).

Also, Rabbani (2010) found the evidence that, Microfinance contributed in reducing the seasonal hunger and shocks. Besides, the study of Ahmad (2011) revealed that, Microfinance has a positive impact on some borrowers, but they have to struggle with over-indebtedness and asset loss. Moreover, the study of Khalily (2011) showed that, Microfinance ensure the access to credit for poor people and breaks the circles of *mahajan*s' (local/informal money lender with higher interest rate).

From the above discussion, it can be concluded that, Microfinance has some positive, little or sometimes has no impact on the livelihood of its borrowers.

b) The Literature on the impact of Urban Microfinance in Bangladesh:

However, the number of studies on the impact of urban Microfinance is, very few compared to the research on the impact of rural Microfinance. The main reason is that, there is no separate data on the urban Microfinance program in Bangladesh. Recently, Inm and CDF published some different statistics on the urban Microfinance data. Most of the researchers complained it in their researches.

Matin (2003) urges to the MFIs and microfinance authorities to emphasize on the urban Microfinance program. He pointed out that, poverty spreads tremendously in the urban area, but the initiative and the impact of urban microfinance is almost zero.
Besides, the author complained that, all microfinance data are published by several institutions in an aggregate form and there is no separate data for urban microfinance in Bangladesh.

In addition, Khan and Rahman (2007) studied on the borrowers who engaged in microfinance programs for at least two years in Chittagong district of Bangladesh. This study revealed that, Microfinance improved their living standard and made them capable financially to start the new small-scale businesses as well as in the expansion of old businesses. They also found that, microfinance has a positive result on poverty alleviation of poor people in the Chittagong district ofBangladesh.

Furthermore, Faruqee and Badruddoza (2011) discussed that, like as rural sectors, NGOs are the dominant provider of Microfinance services in urban areas. The three largest MFIs (namely, ASA, BRAC and Grameen Bank) capture the three-fourth of the market share of Microfinance services both in rural and urban areas.

It should be mentioned that, in Bangladesh, two distinguished scholars, Toriqul Bashar and Salim Rashid emphasized on the research of the urban Microfinance program during the last five to ten years.

Bashar and Rashid (2012) explained the nature of urban Microfinance in urban low-income communities and disclosed its importance. They emphasized on the urban Microfinance program because the urban poverty is growing faster than the rural poverty (BBS, 2014). This paper exposed that, urban Microfinance is growing at an 18.35 % rate and it has about three million members in urban areas of Bangladesh. It has about 12 to 15 % of the total members in Microfinance program. About 220 MFIs are working in urban areas and 50 MFIs are serving only in urban areas. Besides, the research of the InM (2012) exposed that, the members of the urban Microfinance program have risen sharply since 2005. In another article, Bashar and Rashid (2015) revealed the potential of urban Microfinance in Bangladesh perspectives. They exposed that, 95% recovery rate of urban Microfinance made the MFIs capable to build social capital.

They also assessed through the previous findings that, Microfinance has a positive impact on increasing income and building assets, creating employment opportunity, developing

skill and entrepreneurship, reducing vulnerability. As a result, the borrowers established micro-enterprises that further strengthen their economic and social status.

They emphasized on the maximum and appropriate utilization of social capital so that, it can be used to provide urban services to the urban poor. Because this social capital is an asset, that is capable of doing further good. Hence, they suggested the three new directions for urban Microfinance. These are-infrastructures and housing, informal sector labor, and nursing education.

Moreover, Bashar and Rashid (2012) examined the impact of urban Microfinance through conducting research in thirteen major cities on 1500 hundred members, who has been involved with MFIs since 2005 or earlier and finds that, economic condition improved to 66.61%, remain unchanged for 22.52 % and deteriorated to 11.50 % borrowers. Also, they found mixed results in measuring the impact Microfinance in major cities including Dhaka, Khulna, Rajshahi, Rangpur, Bogra, Kushtia of Bangladesh. Microfinance cannot change the condition of healthcare, sanitation, drinking water, utility services, food intake, and clothing of the borrowers except a little upgrading of housing condition. On the contrary, about 40% borrowers reported that, they developed their livelihood by investing the fund into business.

Besides, Priyanka (2016) took semi-structured interviews of 35 women slum dwellers of the Sylhet division to show the effect of Microcredit on women. She found that, the most of the women have no knowledge of diversified using of Microloans and are not conscious to make it effective. Rather, they only use Micro-loans for family consumption, but not for the investment purposes.

Table1.1: Impact of Microfinance on Household Income/Expenditure (Existing Research Findings)

Source	Name of Organization Studied	Income or Expenditure per Annum (BDT)	Participants	Control (Nonparticipants)	% Difference
Hossain, 1984	GB	Income, per capita	1762	1346	30.9
Hossain, 1988	GB	Income, per capita	3524	2523	39.7
BIDS, 1990	BRDB	Income, per household	6204	4260	45.6
BIDS, 1990	BRAC-RDP	Income, per household	2844	1560	82.3
IMEC, 1995	Proshika	Income, per household	22,244	17,482	27.2
Rahman, 1996	PKSF	Expenditure, per household	26,390	23,802	10.9
Khandker, 1998	BRAC	Expenditure, per capita	5180	4202	23.8
Khandker, 1998	GB	Expenditure, per capita	5050	4335	16.5
Khandker, 1998	RD-12	Expenditure, per capita	4931	4279	15.2
Holder, 1998	BRAC	Expenditure, per capita	8244	6480	27.2
BIDS, 1999	PKSF	Expenditure, per capita	36,528	33,732	8.3
IMEC, 1999	Proshika	Income, per household	48,635	43,584	11.6
Zohir, 2001	PKSF	Wage income, per capita	5858	5559	5.3
Hossain 2002	GB	Income, per household	18134	14204	27.7
Khandker, 2003	GB, BRAC, RD-12	Expenditure, per capita	3923	3838	2.2
Rahman, Atiur, 2005	PKSF	Annual Income, per household	58109	38968	49.1
Khalily, 2010	PRIME-2 of PKSF	Annual income, per household	53394	48505	10.1
Rabbani, 2011	PRIME-3 of PKSF	Annual Income, per household	61530	45680 (benchmark)	34.7
Khalily, 2011	FSVGD & UP of PKSF	Monthly Income, per household	5224	4463 (early dropouts)	17.0

Source: Badruddoza, S (2011)

Finally, from the above discussion, it can be concluded that, the earlier research on urban Microfinance analyzed and discussed the coverage, potentiality, importance, future directions of urban Microfinance. Besides, it showed the some positive, little, negative or sometimes has no impact on the livelihood of its borrowers on 13 (thirteen) major cities in Bangladesh. Another research scrutinized the impact of Microfinance on borrowers of Chittagong.

However, my research topic is different from the earlier researches that have done. The aim of my research is to inspect the effect of urban Microfinance programs run by Microfinance Institutions on the livelihood strategies of borrower slum dwellers in Dhaka city. The issue of 'livelihood strategies of borrower slum dwellers in Dhaka city' remained untouched in the earlier research.

1.6 Methodology of the Study

1.6.1. Sources of the Data

a) **Primary Sources:** Primary data were collected through a sample survey on the three slums of Dhaka city.Three sample slums Korail, Jurain and WASA colony slum were selected for field survey. These samples are categorized by large, medium and small in terms of size. The data were collected on the livelihood conditions of the 100 borrowers and the 100 non-borrowers for the last 5 (2010 - 2015) years. More precisely, detailed discussion of the study area, designing sample, data collection, editing and analyzing procedureis given in chapter four.

b) **SecondarySources:** The relevant secondary dataare collected from different recent publications, national and international institutions. Besides, the main sources of secondary data are: population census 2001 and 2011 published by Bangladesh bureau of statistics (BBS), preliminary report on the census of slum areas and floating population 2014, census of slum areas and floating population 2014 by BBS, Final reporton'monitoring and evaluation of

Microfinanceinstitutions' by BIDS, Bangladesh Microfinance statistics: 2008-2015 by Institute of Microfinance (InM),Bangladesh Microfinance country profile- 2006-2015, CDF Statistics 2015 & 2016 by Credit Development Forum (CDF), slum of urban Bangladesh: mapping and census2005 by Centre for Urban Studies (CUS), Bangladesh - urban population database-2015 by the Index mundi, Microfinance industry report Bangladesh-2009 by 'The Banking with the poor network in collaboration with the SEEP Network', list of licensed MFIs and microcredit database by MicrofinanceRegulatory Authority (MRA), list of NGOs by the NGO affairs bureau Bangladesh (NGOAB), Microfinance Market Outlook 2015 by responsibility, Sajida Annual Report, urbanization prospects: the 2014 revision by the United Nations, Asia –Pacific human development report-2016 by UNDP, CARE savings and credit sourcebook-2006, World Bank population estimates-2012 by the world Bank, ASA annual report-2003-2013 and world population review-2016 by food and agriculture organization of the United Nations (FAO) etc.

1.6.2. Analysis of the Data:

To interpret, summarize and determine the findings of data, descriptive statistics such as use of mean, standard deviation, t-values and percentage were used in this study.

Furthermore, the data are analyzed through the econometric technique of the Instrumental Variable (IV) regression model and the 'Difference in differences (DID)' model. The DID estimator represents the difference between the pre-post, within-subjects' differences in the treatment and control groups. Both quantitative and qualitative data are analyzed in this study.

In addition, econometric model "probit" model were used to analyze the data. "probit" model helped to appropriately examine the impact of the urban Microfinance program on average monthly income, changing occupation, secondary job creation, average monthly consumption expenditures, savings, asset building, children education, health care, transportation, housing condition, and water and sanitation condition of borrower

respondents. Stata.13 version was used in this study. Moreover, detailed study methods ad models are discussed in chapter four.

1.7. LimitationsoftheStudy

- It is asmall scaled study for M.Phil. Thesis that is funded by the researcher himself. Inadequate personal funding imposes the limitation of data collecting from a large number of sample respondents and to include more slums. Besides, it is quite difficult to manage efficient survey member for longer periods by personal arrangement.

- In this study, Data were collected from the 200 sample respondents by visiting the whole slum, but not from a corner or particular areas of the slum. Though this number is not sufficient as impact size, but in this study it represents the whole slum scenario because 200 respondents were scattered at the different location of the three slums.
- According to the suggestions of Examiner, The Instrumental Variable (IV) model is estimated to inspect the impact of microfinance on borrowers. But it is difficult to choose suitable instrumental variable. Moreover, the questionnaire is designed and data were collected to estimate the ‘Difference in differences (DID) model.

- It is the first thesis of the researcher in pursuing higher study. According to the advice of Supervisor, the ‘Difference in differences (DID) model and Probit model is selected for this study. The researcher informed the every steps of data collection process to the supervisor.

- Microfinance clients are self-selected and systematically biased, therefore not exactly comparable to non-clients.

- Family Trauma: Just after the data collection, the researcher faced a family trauma during the May 2016-February 2017 period. It was the severe hindrance for making the data analysis.

1.8. Definitionsofthe KeyConcepts

Microfinance: Microfinanceistheprovisionofabroadrangeoffinancial servicessuchas – deposits,loans, payment services, moneytransfersandinsurance products–tothepoor andlow-incomehouseholds, for their microenterprisesand small businesses, toenablethem toraisetheir incomelevels and improvetheirliving standards.

Microfinance comprises with financial intermediation and social intimidation. Microfinance services offer savings and credit scheme, insurance and payment services, enterprise development services such as group formation, development of self-confidence, skills training, marketing, and management capabilities and social intermediation services such as literacy training and health care (Ledger wood, 2000).

Microcredit: Microcredit, a significant component of Microfinance, is characterized by small loans with frequent repayments, usually monthly or bi-monthly, and short maturities that typically range between four months and two years. The target group is the poor people who are excluded from formal financial services (Lend with care, 2015).

MicrofinanceInstitutions(MFIs): A microfinanceinstitutionisanorganization,engagedinextendingmicrocreditloans and other financialservices to poor borrowersfor income generatingand self-employmentactivities.AnMFIisusuallynotapartoftheformalbankingindustryor government.It isusuallyreferredas an NGO(Non-GovernmentOrganization).

Urban Microfinance: The microfinance services that are provided in the urban areas

Slum: A slum can be defined as a cluster of housing units or a compact settlement with a minimum of 5-10 households or a mess unit with a minimum of 25 members and mostly very poor housing which grow unsystematically in the government owned or private vacant land, very high population density and room crowding, very poor environmental services, especially water and sanitation, very low socioeconomic status, lack of security of tenure (CUS, 2006).

Livelihood: A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain and enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation, and which contributes net benefits to other livelihoods at the local and global levels in the long and short term (Chambers & Conway, 1992.)

Livelihood Strategies: Livelihood strategies encompass the aspects such as occupational status, income and consumption, clothing, housing expenditure, medical treatment, education level, household asset building, knowledge and skill, housing condition, decision making ability, women empowerment, and participation in social activity (Alamgir *et al*.2009).

1.9. Organizations of the Thesis

This report consists of seven chapters. First chapter includes the introduction. Second chapter provides an overview on Microfinance and its proliferation in developing countries as well as in Bangladesh. Third chapter discusses the nature, extend and magnitude of urban Microfinance in slums of Dhaka city and in Bangladesh. Chapter fourth and fifth describes the Study Methodology and findings respectively. Chapter six incorporates the Consistency with earlier research findings, whereas chapter seven states the conclusion and policy recommendations

ChapterTwo:

Microfinance and Its Proliferation in Bangladesh

2.1. Financing for the Poor in Developing Countries

Small or micro loan program for financing poor is not a new concept in the history of money lending. The awareness for a small loan program for working poor emerged in the middle ages (Irani and Silver, 1995). In the half of thirteen century, Jews money lenders and the *Lombards* (Christian Usurer) would provide the interest based loans to the rich and the head of the state in Cambridge, England. In the fourteen century, the authorities of Venice made negotiation with Jews money lenders to launch a *Pawnshop* to provide small loans to the poor (Calimani, 1985). Other sources of poor financing were *confraternities*, associations, nascent credit unions and some hospitals and charitable foundations respectively. They would offer interest free small loans to the poor. Moreover, the most common form of collateral against loan was land. The hospitals made an emergency loan for during the harvest and it was the lender of last resort (Rubin, 1987). In addition, in 1361, the *Bishop* of London donated a foundation with 1000 *Silver Marks* to give interest free loans. The amount of the loan was 10, 20 or 50 *Marks* based on the status of the borrower (Mollat, 1986). Such kinds of credit helped the poor from losing their foothold during the crisis of the economy. In Europe, *Guild* and other associations disbursed same loan for the members. Moreover, in low income countries, *Lombards* and an unidentified group called '*Cahorsians*' run licensed '*Pawnshop*' and '*table de pret* (Loan Tables)' to give loans on interest (due Roover, 1948). Furthermore, to avoid usury in financing of poor, many foundations relied on the doctrine of '*Lucrum Cessans'*. These foundations arranged for interest free loans against collateral, but the borrower would make a 10 percent gift to cover the opportunity cost of money (Irani and Silver, 1995).

Likewise, in the mid of the fifteenth century, the institutions '*Monte DI Pieta'* –a public pawnshop worked across Italy, Spain and a century later in low income countries to offer low interest credit or interest free credit for the poor (Pullan, 1971). This institution

spread its activities among the low income countries in the late sixteenth and early seventeenth centuries but was not accepted in France until the eighteenth century.

In addition, in the early 1700s, "*Irish Loan Funds*" (Ireland) was one of the first forms of institution that would provide small loans to poor people without collateral. During the 19th and early-20th centuries, there were various savings and credit institutions initiated micro-loan programs in Europe, Africa and Asia. Mostly eminent savings and credit group was *Rotating Savings and Credit Associations* (ROSCAs)**.** ROSCA is a group of members where they united for a particular period and agreeto save and borrow together. It can be defined as a form of combined peer to peer banking and peer to peer lending. It is also known as "tandas"(Mexico), "*arisan*"(Indonesia), "*cheetu*" (Sri Lanka), "*tontines*" (West Africa),"*pasanaku*"(Bolivia), "*chitfunds*"(India), *pandeiros* (Brazil), *juntas* (Peru), *paluwagan* (Philippines), *Stokvel* (South Africa), *hui*(Asia),*Game'ya* (Middle East), *kye* (South Korea), and "*susus*" (Ghana) and so more (Bouman, 1995,Ramakumar, 2012).

In the mid-20th century, many developing countries instigated Integrated Rural Development Programs (IRDP). Under this program, public banks provided small loans to small farmers and agricultural laborers. In 1958, under this program, Bangladesh Academy for Rural Development (BARD)-also known as '*Comilla Model'* was founded by Dr. Akhtar Hameed Khan (Khan, 2015). These small loan programs can be regarded as the forerunners of today's modern Microfinance institutions (Ramakumar, 2012).

2.1.1. Origins and Evolution of Modern Microfinance:

The current Microfinance-also known as 'Grameen model' was first introduced in 1976 by the Nobel laureate economists Dr. Muhammad Yunus through 'Jobra Village' project in Bangladesh. At the first stage, Dr. Yunus lent only $27 (USD) or BDT 856 (taka) to forty-two people (women) who were hard working and industrious and producing handicraft by using bamboo. His friend Mr. Latifee and his graduate student Mrs. Maimuna helped him to visit the village, to collect data and disburse credit to the forty-two workers (Yunus and Jolis, 2006, Counts, 2008).

Later, in 1983, Dr. Muhammad Yunus founded the Grameen Bank and a group of companies to carry on the Microcredit program more smoothly (See Table-1 in Appendix) (GB, 2015). Moreover, In 2006, the Nobel peace prize, was awarded to the Microfinance pioneer, Dr. Muhammad Yunus and his institution' Grameen Bank' for their contribution to alleviate poverty through Microcredit program.

Table-2.1: Evolution of Modern Microfinance around the World during the Last Four Centuries

Year	Organization	Initiator/Founder	Region
Early 1700s	The Irish Loan Fund System	Jonathan Swift	Ireland
1864	Credit Union	Friedrich Wilhelm Raiffeisen	Rhine Province. Germany
1895	Indonesian People's Credit Banks (BPR) or The Bank Perkreditan Rakyat	Raden Bei Aria Wirjaatmadja	Indonesia
1900	The Caisse Populaire	Alphone and Dorimène Desjardins	Quebec, Canada
1961	ACCION International	Joseph Blatchford	Latin America, USA and Africa
1972	Self Employed Women's Association (SEWA)	Elaben R. Bhatt	Gujarat, India
1974	Shorebank	Milton Davis, James Fletcher,May Houghton and Ron Grywinski	Chicago, USA
1976	Grameen Model	Dr. Muhammad Yunus	Bangladesh
1983	Grameen Bank	Dr.Muhammad Yunus	Bangladesh

Source: compiled by Author from Krieger, 2006**,**Yunus and Jolis, 2006, Counts, 2008, Ramakumar, 2012, CGAP, 2015

Latterly, followed by Grameen model, numerous institutions, including Government and non-Government (NGO) were established in developing countries including Bangladesh. Table-2.1 presents this information. For instance, BRAC, ASA, Proshika (Bangladesh), SANASA (Sri Lanka), Muzdi Fund (Malawi), Caja Los Andes, Prodem, Banco Sol (Bolivia), Unibanka (Latvia), Accumulating Savings and Credit Associations (ASCAs) (Kenya), BASIX (India), The national Microfinance bank (Tanzania), ADOPEM

(Dominican Republic), GAPI and CLUSA (Mozambique), savings-based, agriculture-oriented rural credit unions - SICREDI (Brazil), Banco Postal (Brazil) and so more. These NGOs accumulated funds from international donors such as IFAD, SIDA, OECF, OXFAM and CARE, etc. (Krieger, 2006**,**Ramakumar, 2012, CGAP, 2015).

2.1.2. Microfinance as an Innovative Tool of Financingfor the Poor

Microcredit- 'a component of a Microfinance programhas been operated over the different centuries by several savings and credit institutions around the world.
Historically, it has been the topic of intense debate that, the formal credit institutions such as public banks do not provide credit for the needy and poor household because of having no collateral. Consequently, formal credit institutions left the poor "unbanked". That consequently gave the birth of a Microfinance program (Ramakumar, 2012). In addition, Microfinance originated from the non-profit sector as a response to the failure of the formal credit market and has remained segmented from the formal capital market (Sobhan 2014). The failures of documented or formal sector are driven by urban-biased credit allocation, higher transaction costs, and interest rate restrictions, politicization of credit disbursement procedure, high default rates, poor loan recovery and corrupt practices (Lipton et al., 1997, Hulme and Arun, 2009).

In addition, Microfinance sector has been ripened gradually by providing savings, credit and insurance facilities to the poor. It employed the aptitude of poor in executing income-generating economic projects by reducing the social and economic deprivations from credit, saving, skill development and training. Thereby it shrank the government involvement and offered suitable incentives that drive efficient performance (Morduch et al, 1999, Matin et al, 2002, Hulme and Arun, 2009).

Further, Microfinance itself is a product that combined social and economic well being. social sides programs include- making people united through forming group, discussion of social issues in weekly group meeting, reduce gender discrimination by empowering women, raising awareness, reducing rich-poor gap, reduce urban-rural discrimination etc. Besides, it incorporates economic part such as-savings and credit,allocation of resources,

informal support, empowerment and efficiency, asset accumulation, better nutrition, health and productivity, higher levels of consumption, smoothing consumption,small business formation, making new entrepreneur, capacity build-up program, mitigating challengesrelated to moral hazard and adverse selection by revealing local or root level information on borrowers and products, reducing poverty, improvingmanagerial skills etc.,(Bueno, 2009**,**Kwamie, 2011, Cervantes and Montoya, 2015).

Moreover, according to the combining report of the Microfinance Information Exchange (MIX), Microcredit Summit Campaign (MSC) and Inter-American Development Bank (IADB), Microfinance program has been spread around the world due to its philanthropic nature. Moreover, according to the Microfinance Market Outlook 2015, the global Microfinance market is growing by 19.4%. Currently, about 2500 Microfinance Institutions (MFIs) are operating their activities in 117 countries with 100 million borrowers. Most of the MFIs are situated in Latin America andCaribbean (714) and South Asia (606) followed by Sub-Saharan Africa (533), Eastern Europe and Central Asia (259) and East Asia and Pacific (241) respectively. The smallest numbers of MFIs are situated in the Middle East and North-Africa (67).

On the contrary, most borrowers are concentrated in South Asia (52 million), and East Asia and Pacific region (18.4 million) followed by Latin America andCaribbean (13.8 million) and sub-Saharan Africa (9.6 million) correspondingly. Only 2.5 million borrowers are existed in the Middle East and North-African region (Gonzalez, 2008,responsAbility, 2015)

Table-2.2: Regional Distribution of Borrowers and MFIs in the World

Region	Borrowers (million)	Number of MFIs
East Asia and Pacific	18.4	241
Eastern Europe and Central Asia	2.6	259
Latin America and Caribbean	13.8	714
Middle East and North-Africa	2.5	67
South Asia	52.4	606
Sub-Saharan Africa	9.6	533
Total	99.4	2,420

Source: Microfinance Information Exchange (MIX)

2.1.3. Definition and Characteristics of Microfinance:

Renowned Microfinance experts and institutions defined Microfinance in different ways. Some of these are mentioned below:

Microfinance comprises with financial intermediation and social intermediation. Microfinance services offer savings and credit scheme, insurance and payment services, enterprise development services such as group formation, development of self-confidence, skills development, training, marketing, and management capabilities and social intermediation services such as literacy training and health care (Ledger wood, 2000).

Microfinanceistheprovisionofabroadrangeoffinancial servicessuchas –deposits,loans, payment services, moneytransfersandinsurance products–tothepoor andlow-incomehouseholds, for their microenterprisesand small businesses, toenablethem toraisetheir incomelevels and improvetheirliving standards.

Moreover, it can be defined as financial services, such as credit, savings, insurance, money transfers, and other financial products for low-income clients who are either un-served or underserved by the mainstream financial services industry (Lend with care, 2015).

Microcredit, a significant component of Microfinance, is characterized by small loans with frequent repayments, usually monthly or bi-monthly, and short maturities that typically range between four months and two years. The target group is the poor people who are excluded from formal financial services (Lend with care, 2015).

According to the Nobel laureate economists, Dr. Muhammad Yunus, Microcredit is based on the ground that the poor have skills which remain unutilized or underutilized. It helps to unleash the energy and creativity of each human being. Thus, Microcredit will break the wall of poverty (Muhammad Yunus, 2003).

Moreover, Professor Yunus emphasized on the importance of credit and explained that, Right to credit is also a human right. So that people can create their self-employment with that money. If they can create income for themselves, they can take care of right to food, right to shelter much more easily than the Government can ever do it (PBS Foundation, 2017).

Different kinds of institutions provide Microfinance services. In the formal sector, the most common form of Microfinance institutions are non-governmental organizations (NGOs), Government specialized banks, commercial banks, savings and loan cooperatives, credit unions, or nonbank financial institutions. The informal Microfinance providers are mainly local moneylenders, pawnbrokers, and savings and credit associations.

Most of the clients in Microfinance program are small income people among them about 80 percent are women. The members of Microfinance program are generally poor people, but not the "poorest of the poor". Basically, small traders, street vendors, small farmers, artisans, hairdressers, rickshaw drivers, and small producers, such as blacksmiths and seamstresses are the clients of Microfinance services. (Ledger wood, 2000)

Table-2.3: The Common Characteristics of Microfinance services:

Criteria	Characteristics
Nature of Clients	Poor people, but not the poorest of the poor, lowincome people, people who have no access to formal financial sources, employment inthe informalsector,low wage, lackof physicalcollateral,closelyinterlinked household and small business activities,more than 80 percent of clients are women
Nature of products:	Credit and savings scheme, micro-insurance, training, marketing, healthcare, institution building etc.
The Nature of Loans and Savings	The small size of loans and savings, repeated loans, loan for working capital short term loan (usually up to a year) , secured saving products, loan size increases in the repeated loans or subsequent cycles
Procedure	Simplified savings and loan procedures, short processing periods, generally 2 to 4 weeks, MFIs go to clients rather than clients going to

	MFIs, mostly it is collateral free, collateral substitutes, such as group guarantees or compulsory savings
Regulations	Free use of loans (no restrictions on specified purpose) , streamlined loan disbursement and monitoring,insufficientexternalcontrolandregulation
Interest rate	Interest rates are usually higher than commercial bank rates, but lower than money lender's rates, interest rates generally range from 20 to 50 percent
Repayments	Payment schedules are determined based on frequent deposits, repayment considers the incomes from the business as well as other sources
Recovery Rate	More than 90 percent

Sources: (Ledgerwood, 2000, Armendáriz and Labie, 2011)

2.1.4. Best PracticesofMicrofinance Methodology

Group lending is the most common methodology of Microfinance in the world. It has two categories: solidarity group lending and community-based organizations. The Grameen Bank and other MFIs in Bangladesh follow the solidarity group lending model. The solidarity group lending model has been practiced by the 43 countries in the world.

Figure-2.1: Microfinance Lending Methodology

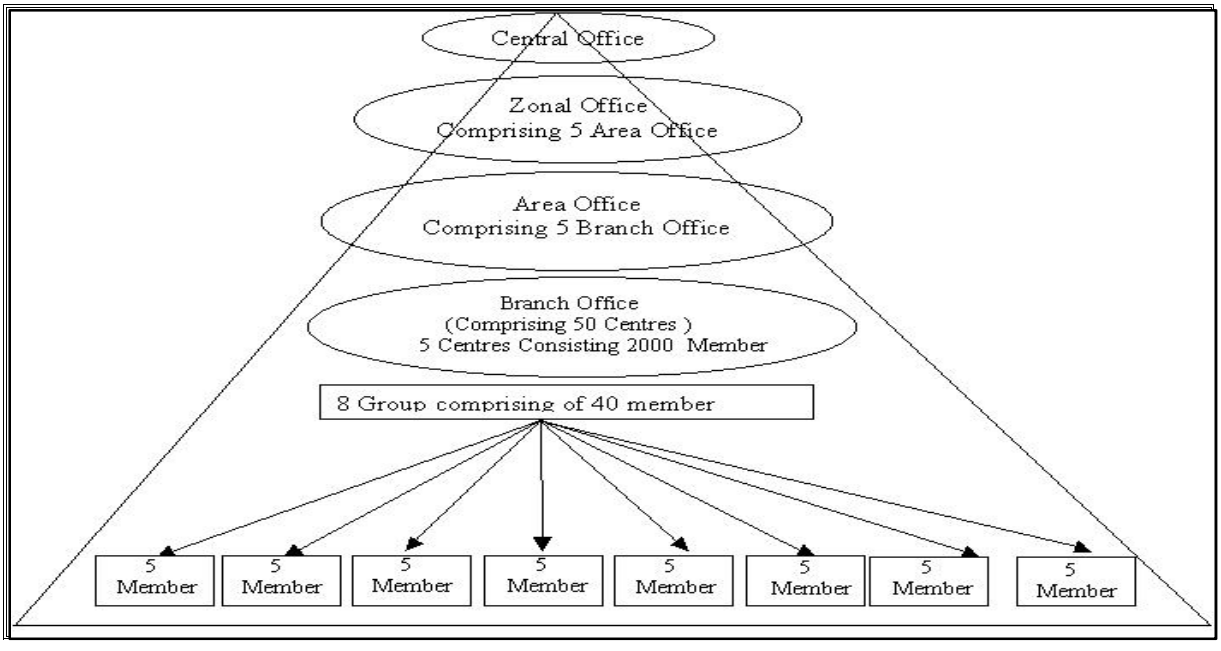
Source: Water field and Duval (1996)

In solidarity group lending model, Grameen model is widely accomplished in the world. The Grameen Foundation replicates the Grameen solidarity lending model and spread it around the world. For instance, Grameen Model is used In Asia, it works in India, the Philippines and Indonesia. Since 1999,it has been applied in the Latin American region (Haiti, Peru, Mexico and Colombia), the Caribbean region and in Sub-Saharan Africa (Ghana, Kenya, and Uganda. Moreover, the Middle East, North Africa and Turkey implemented this model since 2003 (GF, 2017).

Here, **Grameen model** has been presented below to give an idea of solidarity group lending methodology:

Grameen model has a bank unit called Grameen Bank, that is constructed with a field manager and a number of bank workers, covering an area of about 15 to 22 villages. The manager and workers will visit the area to select a group of individual to disburse loan for investment in small project such as pottery, weaving, buying of milk cows, goats, rice-husking, machine repairing and garment making, etc. In this model, borrower has options to choose the project.

Figure-2.2: General Organizational Structure of Grameen Bank Replicators

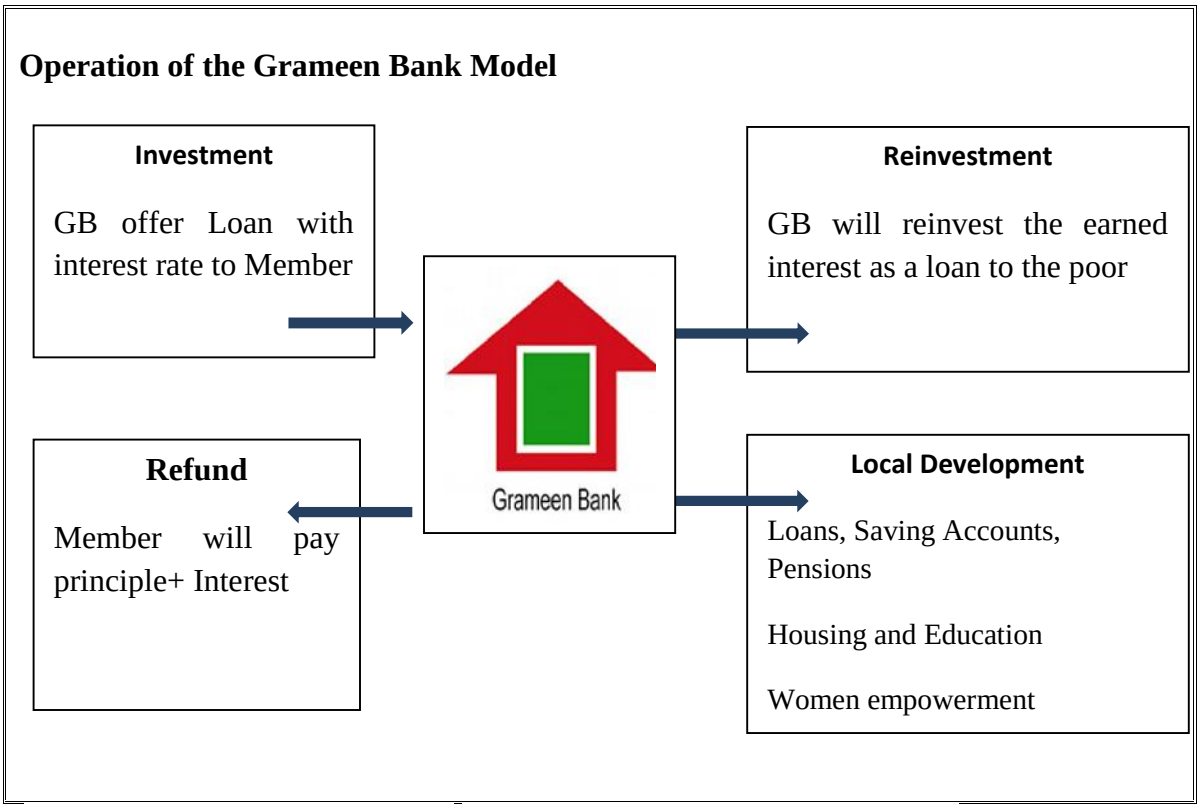


Source: Dhakal and Panthi, (2002), Bangladesh Bank (2015)

Moreover, each group consists of five members. In the first stage, only two of them are eligible to get a loan. In repaying the loan, borrowers have to repay the principal plus interest within fifty weeks. The other members will qualify for loan if and only if the first two borrowers repay the loan and abide by the rules of the bank. Consequently, group members will pressurize the other members to clear theloans that stimulate collective responsibility of the group (Grameen Bank, 2015). Grameen bank encourages savings by allowing 5 percent of loans to be credited to a group fund.

Furthermore, Grameen Bank has also applied other Microfinance tool for the development of poor such as education, housing, sanitary water, environmental health, and other basic social and economic needs (Fotabong, 2011, PERSGA, 2015).

Figure-2.3: Operation of Grameen Bank Model



Source: Yunus and Weber (2009), Hub page (2015), GB- Grameen Bank

2.2. Status of Microfinance Programs in Bangladesh

2.2.1. Proliferation of Microfinance Programs in Bangladesh

The development of MFIs took place in several distinct phases over the last three and half decades in Bangladesh. After Grameen Bank, a good number of Government organizations (GOs), Non-Government Organizations (NGOs), public and private commercial banks, savings and cooperatives expanded their activities among rural and urban poor through different types of Microfinance products (CDF, 2015).

In Bangladesh, basically four types of institutions provide Microfinance services. The first one is Grameen Bank (GB)-that is founded by Dr.Muhammad Yunus. Secondly, about 2457 Non- Governmental Organizations (NGO) including 688 Microfinance institutions such as BRAC, ASA, Shakti, BEES, TMSS, Action- Aid, Proshika etc. thirdly, commercial and specialized banks like Bangladesh Krishi Bank (BKB), Rajshahi Krishi Unnayan Bank (RAKUB) and finally, Government sponsored micro finance projects / programs like BRDB, swanirvar Bangladesh, RD-12 and others which are run through several ministries such as ministry of women & children affairs, ministry of social welfare, ministry of youth & sports, etc. (Bangladesh Bank, 2015, MRA, 2015, NGOAB, 2017).

Besides, the Microfinance of Bangladesh has been experienced four stages of growth in rural as well as in urban areas. The first stage covers 1971-1982 periods. During this stage, traditional institutions, includingbanks and local cooperative societies were the key sources of Microfinance, second stage (1982-1989) is the period of the birth of modern Microfinance institutions such as Bangladesh Rural Development Board (BRDB), Grameen Bank, Rajshahi KrishiBank, Rajshahi Krishi Unnayan Bank and so more. Third stage (1990-1996) is the growth phase of MFIs. During this period, central bank reformed the policy of Microcredit through merging the branches of banks. And the final stage (1997-present) is the matured stage of MFIs. In this era, Microfinance experienced the vigorous growth in rural as well as in theurban economy (Ahmed, 2013).

Like as rural sectors, NGOs are the dominant provider of Microfinance services in urban areas (Faruqee and Badruddoza, 2011)).The three largest MFIs (namely, ASA, BRAC and Grameen Bank) capture the three-fourth of the market share of Microfinance services both in rural and urban areas. Table-2.4 describes the status of Microfinance in Bangladesh.

As reported by Credit and Development Forum (CDF) and Institute of Microfinance (Inm) (2016), about 688 licensed micro-finance institutions are working in Bangladesh with 18,635 branches. MFIs provide financial services to 34.36 million members which almost covers 72 percent of poor population. MFIs have nearly 36.23 million active borrowers, including 32 million rural and 3.6 million urban borrowers respectively. Most of the active borrowers are women that are almost 92.79percent and only about 7.21percent male are the active borrowers (MRA, 2016 and CDF, 2016).

Status of Microfinance in Bangladesh-2016

Table-2.4: Trends in Microfinance Institution of Bangladesh (1996-2016)

Year	Reported MFIs	Active members (In Million)	Outstanding borrowers (In Million)	Cumulative disbursement* (In Million-BDT)	Net savings (In Million -BDT)
1996	351	6.006	3.12	27,837.24	2,390.72
2000	585	11.02	7.99	125,607.61	8,866.02
2005	690	18.79	13.94	431,230.50	20,343.67
2009	745	35.70	27.05	1,731,465.46	131,306.45
2011	576	26.08	20.65	1,73,79.60	63,304.44
2013	649	24.6	19.27	257,010	93,990
2014	676	25.17	19.98	647,215.61	227,130.70
2015	688	36.23	34.36	827,768.40	270,689.68

Source: Bangladesh Microfinance Statistics (CDF, 1996-2006, InM & CDF, 2007-2013, CDF Statistics 2015 & 2016, MRA, 2017)

In Bangladesh, about 23.23 percent of the households do not have access to any financial services. Moreover, 25 percent of rural and 18.32 percent of urban households does not get financial services from any kind of financial institutions (InM, 2010). In addition,

nearly 80 percent of total population cannot access to credit through commercial banks. The MFIs of Bangladesh reaches to about 87 percent of them through credit (Mahjabeen, 2008). Generally, the interest rates on these credits vary from 20 to 50 percent (Lewis, 2011). The loan recovery rate varies between 90 and 95 percent (CDF, 2016). Therefore, we observed a rapid proliferation of Microfinance activities in Bangladesh in recent years.

2.2.2. Microfinance Products in Bangladesh

However, MFIs-NGOs offer different types of Microfinance products including credit services, savings, micro-insurance as well as social services, training, institution building and innovations respectively (CDF, 2015). Basically, Microfinance service finances the small-scale sectors including agriculture, food processing, handicraft, livestock, fisheries, poultry, housing, trading, and transportation etc.

Table 2.5: Microfinance Products and their Feature (Details)

Microfinance Products and their feature (details)	
Credits	Micro-credit and others loan: entrepreneurs, housing, special, consumption loans etc.
Savings	Family savings, member savings, mandatory and voluntary savings, time deposit, fixed deposits
Micro-Insurance	Health, life , credit, property, crop insurance
Health care	Health & sanitary loans, family planning, immunization, counselling, health awareness, Interest free loan for emergency treatment, vaccination program, family planning education, selling medicines, distribution of family planning goods like oral pills, injectable items and condoms, clinic services: health center, satellite clinics, community health workers, mini clinics, medical consultation
Women Empowerment	Legal aid and awareness, women's centre, women entrepreneurship, nursing college
Education	Children and old age school, scholarship and financial support, buying materials, computers and laptops, english speaking ability enhancement, standard english language course, education and career counselling,
Agriculture	Agri-loans on crops, vegetable, fruits , spice, veterinary, fisheries, nursery, krishi upokoron, agro business, marketing of the products, agricultural knowledge, training on agricultural equipment,

	processing the crops, rearing program on goat, cow, chicken, duck, rabbit, quail, seed preservation, shallow machine, fisheries,
Innovation and Technology	Computer training, cyber cafe service
Training/ Counselling	Training program for employee, member,basic accounting & cash management, training on handicrafts, driving, tailoring, Nursery, livestock and poultry rearing, agriculture, business planning & management
Marketing	Marketing outlay, production centre, promotional activities, infrastructure support
Institution building	Group formation, awareness raising, leadership development, linking/ networking, information sharing
Disaster Management,	Disaster loans (interest free), disaster management, awareness raising, campaigning, relief programs, medical camp, food and seed distribution, house repair,
Climate Change	Community Climate Change Project (CCCP), seasonal loans, programs for sea and riverside area, safe drinking water and sanitation, installing deep tube wells, sanitary latrines
Entrepreneurship Development/ Micro Enterprise	Manufacturing, processing, distribution, retailing, handicrafts, cottage & small industries, livestock & poultry, fisheries, transportation, agriculture, small trade & business, food processing, small trade & business, timber business/carpentry, water, health & sanitation, housing, phone/fax, garments & tailoring etc.
Power and energy	Solar program
Social Development service	Education and academic support, water and sanitation, forestation, health and treatment, women empowerment and development, rehabilitation of disabled, vulnerable and unemployed, housing, agricultural equipment support, good governance and legal support, prevention of women and children trafficking, environment and disaster management, prevention of child marriage, HIV-AIDS and family planning, food & food processing, relief, human rights etc.

Source: Inm Report (2009-2013), MRA (2015), CDF (2015) and websites of different MFIs. Collected and compiled by the author

Micro-Credit: Micro-Credit services of this sector can be categorized into six broad groups: i) general Microcredit for small-scale self-employment based activities, ii) micro-enterprise loans, iii) loans for the ultra-poor, iv) agricultural loans, v) seasonal loans, and vi) loans for disaster management (MRA, 2015).

Micro-Insurance:

Delta Life Insurance company Ltd. – the largest commercial insurer in Bangladesh, is one of the first initiator to introduce micro-insurance policies in Bangladesh. It offers four micro-insurance products, the savings plan being the most popular among others. The micro-insurance services in Bangladesh cover life, health and livestock insurance. In 2007, INAFI-Bangladesh initiated a 4-year pilot project entitled 'Micro-insurance for Mutual Enabling (MIME)' and it started the 'micro-life insurance'.

BRAC, Dustha Shasthya Kendra (DSK), Gono Shasthya Kendra (GSK), Grameen Kalyan, SAJIDA foundation and many others MFIs offer micro-health-insurance services in both rural and urban areas. SAJIDA foundation provides loan and life insurance, health insurance, disaster insurance, education, scholarships and legal support under 'HELP' project. Micro-health-insurance product includes prepaid pregnancy package, health card, equity package, destitute and ultra-poor package etc. health insurance product offer loan and discount on consultations, medicine and pathology.

Grameen Bank and Proshika are offering livestock insurance for their members. Grameen insures 50 percent of the loan amount at a premium of 2.5 percent with no additional benefits and Proshika covers 100 percent of loan at 3 percent with the benefit of an equivalent cash loan to start a new business.

2.2.3. Problem and Prospects of Microfinance Programs in Bangladesh

(a) Problem of Microfinance Programs in Bangladesh

Microfinance sector of Bangladesh still faces some difficulties in the source of financing accompanied by higher transaction costs, higher interest rate and service charge, risk of loans, loan repayment policy, loan using opportunity, weak management, low skilled and illiterate client or credit receiver, lack of co-ordinations among NGOs and MFIs, disciplinary imperatives, religious restrictions, and so more (Ashraf, 2014).

The most-common loophole is inadequate regulations to monitor the activities of MFIs in Bangladesh. Different MFIs and NGOs are sometimes confused about the nature of their activities, such as they sometimes work like voluntary organizations and sometimes like business organizations (Khandakar & Lila, 2002, Nargis, 2009).

Besides, there is no unique rule by the Government for charging interest rate on the loan and service charge for MFIs. The range of interest rate is 10 percent to 30 percent and service charges are 8 percent to 37 percent. Such kind of variation generates huge suffering and distress for the poor clients. In contrast, MFIs offer low interest rate for savings (in some cases, lower than the commercial banks) that further discourages the clients to save (Nargis, 2009, Badruddoza, 2011).

Another issue arises in case of loan size, in most of the cases MFIs provide a very small amount of loans which is inadequate with the respect of client's necessity. Furthermore, though the poor receive micro-finance for investment, but they commonly expend the largest portion of loans for the consumption (Hulme and Mosley, 1996, Rahman, 2015).

In addition, the poor clients receive loan from several MFIs simultaneously. The prime reason is- to repay the loans of other institutions. Such overlapping problems arise due to high interest rate and using the loan in unproductive purposes like as consumption. These problems create a higher risk of loan repayment and reduce the benefits of the Microfinance (Badruddoza, 2011, Rahman, 2015).

Moreover, the target group of MFIs is to make poor women socially important and empowered. But in most of the cases, it is found that, rural women are illiterate or half-educated, unskilled as well as inexperienced. Consequently, they lose their control of loaned money and it is captured by the male members of the family. The result is nothing but the failure of targeted investment and non-repayments of the loans (Goetz and Gupta, 1995). Besides, the research of Todd (1996) shows that, among the women borrowers in Grameen Bank, at least ten out of 40 women have lost control of their micro fund to the male member of their family (Todd, 1996, Nargis, 2009).

Besides, some exogenous factors create problem in Microfinance disbursing, collecting and executing. Such as infrastructure, information and insecurity issues (Badruddoza, 2011).

Finally, it is found in the research that, repayment rates are lower in MFIs compared to with traditional financial institutions (Miller and Martinez, 2006, Stephens and Tazi, 2006). Furthermore, there is no bonding and collaboration or alliance among the Microfinance institutions in Bangladesh to exchange information on clients. The problem becomes more complex because clients are not transparent to provide information and purpose of the loan. In this regards, micro finance institutions have nothing to do except coercion if the beneficiaries fall into a debt trap. Consequently, MFIs forces the borrower to repay the loan and too much interest in harsh and coercive methods (Business Week, 2005, The Financial Express, 2005).

Moreover, Microcredit helps to meet the subsistence needs of the poor and reduced some of their vulnerability to risk, but is not designed to empower them to participate in the macro-economy or to withstand the hazards of the market. The poor, therefore remain in the ghetto of the micro-economy. Structural constraints in the way of market injustice leave the resource poor with little scope for graduation into a level of entrepreneurship where they could compete with those who dominate the macro-economy.

(b) Prospects of Microfinance Programs in Bangladesh:

It is a matter of great pleasure that, MFIs are continually lessening the gap of credit access for the poor people. Bangladesh is a country of 150 million people with 30 percent poor people (BER, 2015). MFIs have the greatest contribution in offering collateral free loans and saving opportunity for assetless poor and achieved impressive loan repayment.

Out of 688 MFIs, about 524 MFIs are providing a very small range of loan and Microfinance facilities among the poorest people (MRA, 2015). Moreover, 19, 23 and 2 MFIs are providing medium, large and very large amount of credit respectively (MRA, 2015, CDF, 2016).

In addition, another problem was the loan size. Recently, different MFIs have increased their loan size in respect to the client's investment and repayment performance. Currently, loan size varies from BDT 1,000 to BDT 10, 00000 and above. The loan outstanding per borrower increased during 2009-2015 periods and the average growth rate are around 20 percent. The loan outstanding per borrower has increased by more than 100 percent during 2009-2015 periods.

Besides, savings per member has been increased by more than doubled during the last six years (2009-2015). These two indicators, outstanding loan per borrower (average loan size) and savings per member (average saving size) increased over time, perhaps due to the increase in the income level of the poor by investment level (CDF, 2016).

Furthermore, there is an intense debate about the interest rate of MFIs. Usually, MFIs charges higher interest rate than the commercial banks. MFIs argued that, the rate of interest of MFIs and commercial banks cannot be used in the same sense. The main objective of commercial banks is profit maximization while MFIs work for the poor.

MFIs have to charge interest to cover the cost of operation, to stop the misuse of loan in consumption and productive sector (Rahman, 2015). It is the matter of hope that, recently, MRA set a ceiling of 27% declining interest rate for MFIs (Badruddoza, 2011). Table-2.6 presented the interest rate of MFIs in Bangladesh.

Table-2.6: Interest Rate or services Charges of MFIs in Bangladesh

Rate* (percent per annum)	Number of MFIs is charging in this range	Percentage of MFIs
Up to 10	26	5.38
11-15	290	80.25
16-20	61	12.63
21-25	2	0.41
26-30	4	0.83

* The reported service charges include both flat and decreasing balance type. Source: Rahman, Rushidan Islam (2015)

ChapterThree:Urban Microfinance

3.1. **Urbanization in Bangladesh**

Bangladesh has a long urban history, although its level of urbanization still remains low, but in recent decades, it has been experiencing a rapid rate of urbanization. The proportion of urban population in Bangladesh has increased from 7.9 percent in 1971 to 35.70 percent in 2015, and most of the urban growth took place in the major cities of the country namely Dhaka, Chittagong, Rajshahi and Khulna (BBS (2003), World Bank (2012), Index Mundi, 2015). The census of 2001 reported that, about 28.6 million people lived in an urban area that was 23.1 percent (24.10% in Index Mundi) of the total population (BBS, 2001, Index Mundi, 2015). Conversely, in 2010, this number rose to 41.78 million and it about 28.10 percent of the total population (World Bank, 2012). After the 2011 census, it is estimated that, the total urban population was approximately 48 million. Moreover, according to the Asia –Pacific human development report, (2016), the current urban population in Bangladesh is 55 million and it is expected to rise to 83.2 million and 112.4 million in 2030 and 2050 respectively (UNDP, 2016).

Table 3.1: GrowthoftheUrbanPopulationinBangladesh during 1971–2050 Periods

	Urbanpopulation (as %oftotal population)	**Total urban population (In million)**	**Decadalincrease ofurban population(%)**
1971	7.90	5.34	-
1981	15.80	13.39	150.74
1991	20.26	22.26	66.24
2001	24.10	32.46	44.92
2011	31.23	47.73	47.04
2013	32.75	51.28	8.38
2016	34	55	-
2030*	45	83.2	-
2050*	56	112.4	-

Source: UNDP, 2016, Khan and Phibbs, (2005),*Projected Value

However**,** Dhaka, the capital city has been facing the prompt growth of urbanization with 14.54 million of the urban population (BBS, 2011) while it was recorded as 9.91 million

in 2001 (BBS (2001)). Consequently, Dhaka alone contains just about one-third of the total urban population. Besides, the four largest cities (Dhaka, Chittagong, Rajshahi and Khulna) account for over half of the total population (Nurun Nabi, 2012).According to the world urbanization prospects-2014, the population in Dhaka city was 16.98 million in 2014 and the average growth rate of population changes by 3.6 percent during 2010-2015 periods. Furthermore, according to the report of the world population review (2016), the present population of Dhaka city is 18.237 million and density of population is 23,234 people per square Kilometre. Moreover, the United Nations world urbanization prospects (the 2014 revision) forecasted that, by 2030, the population of Dhaka city will be 27.37 million and it will place the 6th rank among top 70 densely cities of the world.

Table 3.2: Population of Dhaka City inBangladesh during1975–2030 Periods

Years	Total population (In million) of Dhaka city	Percentageoftotal urbanpopulation
1975	2.20	-
1991	6.48	29.11
2001	10.07	31.02
2011	14.54	30.46
2014	16.98	-
2016	18.23	33.16
2030	27.37	-

Source: (BBS, 2003, 2011) United Nations (2014), WPR (2016)

Understandably, these additional people have created tremendous pressures on the urban utility services and other amenities. The common problems in this city are poverty, slum population, social vulnerability, unplanned and inadequate housing facilities, infrastructure problem, inadequate social services, contaminated environment, and low quality of physical and social surroundings, political clashes and inefficient urban management.

This has resulted in an adverse effect on the urban environment where a large number of people have settled in slums and squatter settlements where majority of them live below the poverty line (Hossain 2008a). The adverse surroundings of low-income settlements,

coupled with a highly dense population, give rise to a myriad of social, health and environmental problems (Siddiqui et al. 2000, World Bank (2007)) (Hossain (2010)).

3.2. Urbanization and Slum of Bangladesh: An Overview

3.2.1. Slum: Definition and Characteristics:

Center for Urban Studies (CUS) defined the slum as a cluster of housing units or a compact settlement with a minimum of 5-10 households or a mess unit with a minimum of 25 members and mostly very poor housing which grow unsystematically in government owned or private vacant land, very high population density and room crowding, very poor environmental services, especially water and sanitation, very low socioeconomic status, lack of security of tenure (CUS, 2006).

On the other hand, Bangladesh bureau of statistics (BBS) defined the slum as a cluster of compact settlements of 5 or more households which generally grow very unsystematically and haphazardly in an unhealthy condition and atmosphere on government and private vacant land. Slums also exist on the owner based household premises (BBS, 2015).

Basically, Slum houses are situated beside the main roads, highways, near the market places, railway stations, junctions, alongside the railway line, or nearby mills, factories, small scale industries, etc. The physical and hygienic conditions of such houses are far below standard of urban residential area. Generally, this portion of people is distressed and forced to live in such unhygienic condition due to economic reason.

Moreover, about 60 percent of the living condition of slums is characterized by high density living, inadequate of public goods, lack of basic facilities, unhealthy and contaminated environment, lacking of street lighting, insufficient or no paved streets, low literacy rate, unemployment, absence of ventilation in houses, lack of pure drinking water, lack of electricity and sewerage facilities. Besides, some problems arise like

unemployment, underemployment, crime, and creation of shanty towns, social, moral and psychological abasement.

Additionally, slum dwellers work mostly in the informal sectors, characterized by low wage, insecurity and uncertainty of working hours. The major sectors of employment are garment industry, rickshaw pulling, street vending, construction works,housemaid, hawking and petty business (BBS, 1988, 1999, 2015 CUS, 2006, Hossain, 2014).

3.2.2. Slum of Bangladesh: An Overview

Slum population increases in Bangladesh tremendously during 1986-2014 periods. In 2014, the number of slum population stood at 2.23 million, which is 168.67 % higher than the number of 1986 (BBS (2015)). However, United Nations Data (2015) reported that the slum population in Bangladesh is 2.92 million. The increasing trend is alarmingly high during 2000s, and the half of 2010s. Basically, slum population increases for eight reasons such as river erosion, uprooted, driven out, abandoned, insufficient income, insecurity, for job and others (BBS, 1997, 2015).

Table 3.3: Total Number of slums in Bangladesh

Years	Number of slums and squatter clusters	Number of slum households	Slum population
1986	-	176745	831645
1997	2991	334431	1,391459
2005*	9048	1043329	5233217
2014	13,938	5,92,998	22,27,754

Source: Islam et.al. (2006), CUS (2005), BBS (1986, 1997 and 2015), *Due to the variation in the definition of the slum, the figures on the table ill matched for different years.

However, among the seven divisions of Bangladesh, the worse situation has seen in Dhaka, the capital city of Bangladesh where about 1.06 million (about 47.65% of total) people live in the slum. The second highestproportion slum dwellers (28.41%) live in Chittagong, the second largest city of Bangladeshfollowed by Khulna (7.69 %), Rangpur

(5.35 %), Rajshahi (4.57 %) and Sylhet (4.09 %) respectively. Only 2.19 %, the lowestpercentage of people lives in Barisal division (BBS, 2015).

Table 3.4: Number of Slums by Division in Bangladesh

Number of Slum and Cluster between 1997 and 2014 Census						
City	1997	% of total	2005	% of total	2014	% of total
Dhaka mega city	1579	52.79	4966	54.9	3399	24.39
Chittagong SMA	186	6.22	1814	20	2215	15.89
Khulna SMA	202	6.75	520	5.7	1134	8.14
Rajshahi SMA	84	2.81	641	7.1	103	0.74
Barisal	*	-	351	3.9	136	0.98
Sylhet	**	-	756	8.3	670	4.81
Rangpur	-	-	-	-	48	0.34
Comilla	-	-	-	-	40	0.29
Gazipur	-	-	-	-	1286	9.23
Narayanganj	-	-	-	-	81	0.58
Municipalities	-	-	-	-	3350	24.04
Other urban area	-	-	-	-	1476	10.59
14 cities	293	9.8	***	***	-	-
100-Paurashavas	647	21.63	***	***	-	-
Total	2991	100	9048	100	13938	100

*Included with Khulna** Included with Chittagong*** not coverage, Source: Islam et.al. (2006), CUS (2005), BBS (1986, 1997 and 2015)

In addition, Dhaka, the capital city has been experiencing fast growth in slum population. Between 1974 and 2014, the slum population increased by 286.07 %. This figure is 40.64% higher than that of the 1997 census. Dhaka division comprises with 6,489 slum clusters and 292,780 households. Among the total population of 1.06 million, about 51.49 % are male, 48.42% are female and 0.086% is*Hijra* respectively (BBS, 2015). .

Table 3.5: Number of Slums in Dhaka City

Slum survey/Census	Years of survey	Number of slums and squatter clusters	Number of slum households	Slum population
The survey of the slums and squatter population in Dhaka	1974	-	-	275,000
The slum area census	1986	-	121328	-
The slums survey in the Dhaka metropolitan area	1991	2,156	-	718,143
The slums survey in the Dhaka metropolitan area	1996	3,007	-	1500000
Census of slum areas and floating population, Bangladesh	1997	1579	185917	754866
Slum of urban –Bangladesh: mapping and census,	2005*	4966	673883	3286770
Census of slum areas and floating population, Bangladesh	2014	6489	175076	1061699

Source: Islam et.al. (2006), CUS (2005), BBS (1986, 1997 and 2015)

*Due to the variation in the definition of the slum, the figures on the table is ill matched for different years, but table depicted the tremendous increase in the slum, slum household as well as the slum population in Dhaka city.

3.3. Status of Urban Microfinance in Bangladesh

3.3.1: Origins and Evolution of Urban Microfinance in Bangladesh:

In Bangladesh, the services of MFIs in urban areas was started between the late 80s and early 90s and increased rapidly since 2005 (InM, 2010).Manabik Shahajya Sangstha (MSS)-one of the oldest MFIs,initiated the urbanmicrofinance operation in 1984 through an integrated saving and credit program for the urban poor (MSS, 2015). SAJIDA Foundation, another renowned MFI, started its urban Microfinance in 1987 through a small family-funded school for underprivileged children in Dhaka city. In 1993, it disbursed formal micro-credit to urban poor women in old Dhaka, Dhaka city (Sajida, 2015).

In 1990, Proshika initiated the first operation in urban areas through the urban poor development program (Khaze Alam, 1996). Since 1992, Shakti foundation has been providing Microfinance services to urban women who were living in the Dhaka slums (MFIRB, 2009, SHAKTI, 2015). In the same year (1992), DSK-(Dushtha Shasthya Kendra) offered urban Microcredit through Grameen model in an urban slum of Dhaka city (DSK, 2015). In addition, Safe Save, a savings and credit cooperative gained international fame for its success in individual lending model in urban Dhaka since 1996 (MFIRB, 2009).

Furthermore, SEEP (social and economic enhancement program) started its urban Microfinance program in 1995 for slum children in Mirpur-11, Dhaka. Besides, it offered different programs for the hard-core child laborers at Ward-5 in Mirpur who were employed in handlooms and embroidery activities (SEEP, 2015).In 1999, PKSF (Palli Karma-Sahayak Foundation (PKSF) - a specialized Government organization, expanded it coverage in urban areas by starting urban Microcredit (UMC) program for the urban poor (PKSF, 2015). In the same year (1999), Intervida - a Spain based international NGO has begun its operation in urban slums of Bangladesh.

Additionally, since 2004, **'**BURO Bangladesh' has been providing Microfinance services in urban areas of Dhaka **(**Uttar khan, DakkhinKhan, Turag, Uttara**)** through theeconomic and social empowerment of the hard-corepoor (ESEHP) program. Moreover, during the last two years, it designed another program- **'**hard-core poor development program' for rural and urban poor (BURO, 2015).

In addition to Microcredit, BRAC provides education and health services to the urban slum population. In 2007, it initiated Manoshi, a community based healthcare program, at urban slums of nine city corporations in Bangladesh (Manoshi-BRAC, 2015). It also arranges school services for urban poor child (EAC, 2015). Besides, ASA-another MFI-extended its services through 316 branches in urban areas and provides several types of credits, savings, micro-insurance and loan security products in urban areas (ASA-2011).
It should be noted that, a large number of MFIs provide urban Microfinance, but the starting year of urban Microfinance is not found on their website.

Table: 3.6: List of Some Initiator (MFIs) of Urban Microfinance in Bangladesh

Name of MFIs	Established	Initiated Urban MF	City/Urban area
Manabik Shahajya Sangstha (MSS)	1977	1984	Urban Dhaka
Sajida Foundation	1987	1987	Dhaka
PROSHIKA	1975	1990	Urban Dhaka
Shakti Foundation	1992	1992	Dhaka, Urban slums
DSK	1988	1992	Dhaka
Social and Economic Enhancement Program- SEEP	1985	1995	Dhaka, Urban slums, Mirpur
Safe Save	-	1996	Dhaka
PKSF	1990	1999	Dhaka
Intervida (Spain based) 1994, in Bangladesh	1999	1999	Urban Dhaka
BURO Bangladesh	1990	2004	Uttara, Dhaka
BASA – Bangladesh Association for Social Advancement	1991	2007	Taltala slum of Mirpur, Dhaka
BRAC	1972	-	Urban Slum in divisional cities
ASA	1978	-	Urban Slum

Source: websites of the above MFIs. Collected and formatted by the author.

3.3.2: Status of Urban Microfinance in Bangladesh:

The urban micro-finance programs have been flourishing day by day in Bangladesh. According to the statistics of Microcredit Regulatory Authority (MRA), out of a total of 688 MFIs, 220 MFIs are operating Microcredit programs in urban areas and 84 MFIs are working only in urban areas (Bashar and Rashid, 2012, MRA, 2015). BRAC is the largest MFI in Bangladesh but its urban operation is limited compared to its rural operation. BRAC and TMSS have 244,766 and 120,081 active urban members out of its total 7,370,847 and 654,543 active members, correspondingly (Bashar and Rashid, 2012). Moreover, overall, MFIs has 19% urban borrowers from the slum dwellers in Bangladesh (CDF, 2016)

However, in Bangladesh, generally two types of formal financial institutions: commercial banks and two specialized banks, BKB (Bangladesh Krishi Bank) and RAKUB (Rajshahi

Krishi Unnauan Bank) offer Microfinance services. Before the appearance of the modern Microfinance sector, these banks would provide Microcredit in agriculture and trade sector. Besides, Bangladesh small industries and commerce bank limited- BASIC bankprovide Microcredit to the urban poor through linkages with NGOs (BASIC, 2015). Among the commercial banks, they provide Microcredit to individual borrowers mostly in urban centers. Sonali bank, the largest state owned commercial bank provide Microcredit for the urban poor of Dhaka, Chittagong and Sylhet through the 'credit for urban women Micro-enterprise development (CUMED) project' without collateral up to tk. 5.00 *lacs* or 0.5 million (Sonali bank, 2015). In addition, among the private commercial banks, Islami Bank Bangladesh Ltd (IBBL) replicated the 'Grameen group based lending model' and offers 'urban poor development scheme (UPDS)' since 2012 (InM, 2013, IBBL, 2015).

Furthermore, the urban Microfinance growth shows the upward trend during the last 5 years from 2011 to 2015. The urban micro-finance programs have 3.6 million active members that comprises with 3.28 million women and 0.38 million men respectively. The recent statistics (CDF, 2016) reveal that, during 2011-2015 periods, the growth rate of urban Micro-finance members is 9.59 % which is 1.76% higher than the rural rate (7.84 %). Besides, the growth of members per MFI in urban areas (12.94%) grows more than that of rural areas (9.96%). Likewise, the yearly average growth rate of urban Microfinance (18.99%) is also higher than that of the rural growth rate (12.03%)(CDF, 2016a, CDF, 2016b).

Status of Urban Microfinance in Bangladesh-2016

Table-3.7: Trends of Urban Microfinance Institution in Bangladesh (2006-2015)

Year	Reported MFIs in Bangladesh	Total member in Urban areas (In No.)	Cumulative Disbursement* (In Million- BDT) in	Net savings (In Million –BDT) in Urban areas

			Urban areas	
2006	-	2,363,835	39792.80	3635.57
2007	-	2,500,726	47431.28	4248.73
2008	611	2,555,416	127,612.01	4972.83
2009	745	3,358,383	164,009.04	8,010
2010	773	3,109,312	217,941.69	9,062
2011	695	2,859,124	46,543.81	10,165
2012	540	2,862,113	-	11,953
2013	550	3,036,724	-	15,923
2016	688	3,662,814	157275.996	51431.0392

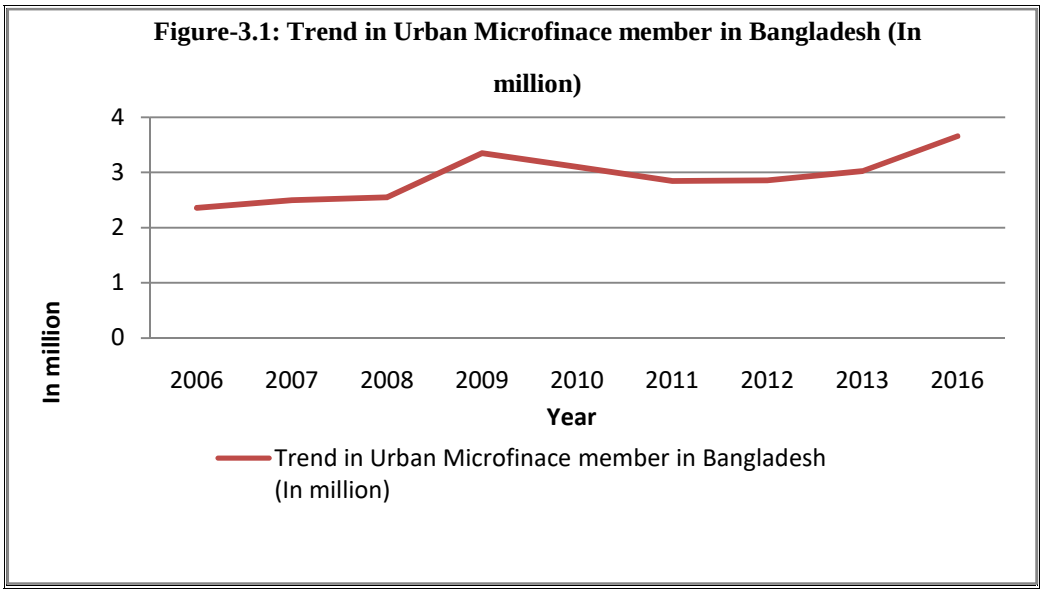
Source: Bangladesh Microfinance Statistics (CDF, 2008-2013, InM & CDF, 2007-2013, MRA, 2015, CDF, 2016)

Furthermore, urban MFIs offer a wider loan range for urban members' compared to its rural members. In ASA, loan range for urban members (tk. 6,000 to tk. 20,000) is higher than that of rural members (tk. 4,000 to tk. 6,000) (ASA, 2003).

Besides, table-3.7 and fig-3.1 depicts that, between 2011 and 2015, the growth rate of MFIs savings in urban areas was 158.29% that was 119.39 percent higher than that of rural areas (38.89%). In addition, yearly average growth in net savings of MFIs was also higher in urban Microfinance (34.28 %) compared to rural Microfinance (19.88 %).

Moreover, net saving in urban Microfinance was 338.04 percent higher in 2013 compared to that in 2006 and stood at 26,256 million in 2015 (InM, 2008-2013, (CDF, 2016b), MRA, 2015). Besides, in 2013, average net savings per member was tk. 6,105 in rural areas and tk. 5,244 in urban areas respectively. As well, between 2009 and 2015, average net savings mobilized per member increased by 15.95% to 18.91 % yearly (CDF, 2013 and 2016b). Besides, in 2015, average net savings mobilized per borrower grows by 9.07 percent yearly (CDF, 2016b).).

Figure-3.1: Trend in Urban Microfinance Member in Bangladesh (In million) during 2006-2016 Periods



Additionally, saving withdrawal rate varied from 70.60 percent to 76.50 percent during 2006-2009 periods. In ASA-one of the largest MFIs in Bangladesh, the member can save any amount based on their income. In the weekly group meeting, an urban member can withdraw up to tk. 1,000. To withdraw any additional amount, they have to go to the branch office (ASA, 2012-13). Moreover, In Microfinance industry, about 8% to 19 % of total Microfinance services were available in urban areas in 2012 (Rashid, 2012, CDF, 2016a).

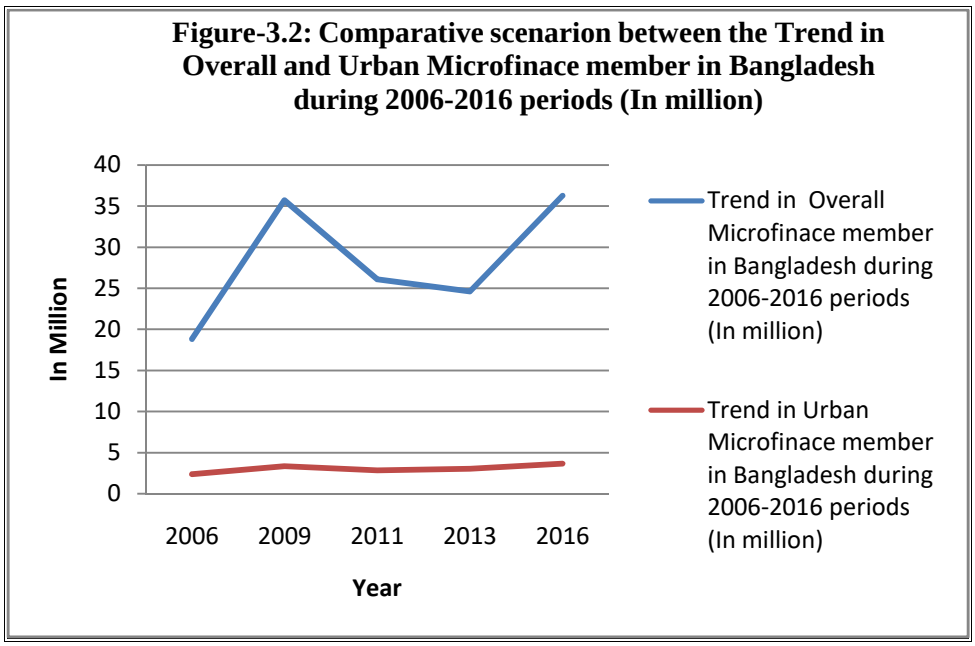
However, interest is determined in MFIs by widely used two techniques: the declining balance method and the flat method. The declining balance method levies lower costs to the borrower than that of the flat method. Consequently, the declining balance method is beneficial for the borrowers whereas it generates lower profit for MFIs than that of the flat method (Water field and Duval (1996 a), Rosenberg (2002)).

AccordingtoBangladeshMicrofinancestatistics, (2007 and 2015), only5%ofMFIsappliesthedecliningmethod including GrameenBank and RDS (IBBL). Moreover, PKSF- one of the top domestic financiers of MFIs in Bangladesh, fixed the flatratetoitspartnerorganizationsat12.5 percent and declining balancemethod as25 percent. The Microfinance Regulatory Authority set a ceiling of 27% declining interest rate for MFIs (Badruddoza, 2011, CDF, 2016a).Inaddition,manyMFIsalso impose

differentcharges,suchasprocessingfees, operation cost, etc. on itsborrowers (Bashar and Rashid, 2012). However, the Microcredit Regulatory Authority (MRA) has also fixed the minimum savings interest rate at 6 % per annum. Moreover, it varies from 6 to 10% per annum among MFIs in Bangladesh (CDF, 2016a).

In case of loan recovery, the average recovery rate was 99.5 percent in urban areas. It varied from 94.27 to 98.61 percent during 2006-2016 periods (CDF, 2016).

Figure-3.2: Comparative scenario between the Trend in Overall and Urban Microfinance member in Bangladesh during 2006-2016 periods (In million)



Finally, it can be said that, diversification of using urban Microfinance has been expanded day by day. Most common businesses or areas of using urban Microfinance are cosmeticsbusiness, handy craft, pottery, fishselling, furnitureshop, hotel/restaurant, ironshop, riceselling, electricshop, sellingchatpati,teastall, vegetablebusiness, wood-fuelbusiness, cloth/ sareebusiness, fruitselling, pettyshop keeping, tailoring, scrapmaterialbusiness, rickshaw andgarage business etc. (InM field survey 2009).

3.4. Problem and Prospects of Urban Microfinance in Bangladesh

(a) Problem of Urban Microfinance in Bangladesh

Rapid urbanization in Bangladesh increases the poor people in urban areas and shifts the poverty from the rural areas to the urban areas. But urban MFIs do not have required funds, infrastructure, manpower and technology to provide services for the huge migrant poor. Out of 688 MFIs in Bangladesh, only 50 MFIs work only in the urban areas and 220 MFIs provide some services for urban poor (Bashir and Rashid, 2012, MRA, 2017).

Moreover, climate change is another cause of suffering, displacement and migration of rural people that increase the urban population. There is a possibility of displacement of about 20 million rural poor, who migrate into urban areas. It also threatens the urban Microfinance program (Hermes, 2011).

Furthermore, urban members of MFIs face higher interest rates due to a gap between demand and supply. On the other hand, the extreme poor people cannot enter into the coverage of MFIs because of their level of poverty. The most important point is that, multiple MFIs are working in almost every community in urban areas. The average number of MFIs in a community is 3 (Bashar and Rashid, 2012). In the recent years, the urban MFIs face some difficulties in portfolio quality, human resources management, application of information and communication technology and support for business expansion (InM (2009)). Another finding is that, about 33.4% MFI members in the urban Dhaka not yet taken any loans from MFIs (CUS, 2006).

Furthermore, A BRAC's research finds that, cash and food provided by MFIs are consumed by the recipient because of extreme poverty. So, training and capacity building program is essential to build up their livelihoods by strengthening materials and social assets. BRAC urges the MFIs to provide both cash payments and an asset, such as a cow, along with functional education, health-support services, social protection schemes and rights awareness building" (Lewis, 2011, Sharma, 2012).

Another problem is that, most of the urban members are living in slum having limited literacy and numeracy skills. Besides, they have no permanent address, in addition, slum evictions are common that jeopardizes the recovery of loans (MFIRB, 2009).

Hulme and Aron (2009) mentioned in their research that, “the poor can save, do save, and want to save money”. But insufficient financial services in urban slums make it difficult for the poor to save money in a safe place.

Besides, Bangladesh has not taken full advantage of the potential of urban Microfinance.Microfinance institutions have the potential to build social capital and to implement both national and local level programs. It may further make an innovative change in the urban poverty policy. It needs investment in infrastructure and housing, informal sector labor and nursing education (Bashar and Rashid, 2015).

In addition, demand and supply gap is higher in urban areas that further increase the interest rate of the loan. The demand is at least three times greater than the supply of credit. The study of Rashid (2012) shows that, around 72.9% borrowers want more credit than they actually received.

The alarming threat is that, many members and borrowers spend the loaned money in unproductive or non-income-generating purposes, for instance, food and non-food consumption, entertainment, buying cloth, home materials, TV, mobilephone set, furniture, jewellery, and in medical treatment and house repairing purposes etc.

(b) Prospects of Urban Microfinance in Bangladesh

- Urban micro-finance institutions has many advantages compared to rural areas such as lower transaction costs of services, large number of women's participation rate, high recovery rate, higher level of net saving growth compared to borrowing rate, urban economic environment, and urban informal sectors and diversified economic opportunities for urban people (Bashar and Rashid (2015).

- Due to the activities of MFIs in urban areas, average numbers of borrowers per institution (ABI) and average loan size (ALS) in Bangladesh increases day by day. Moreover, Bangladesh has 18 MFIs (including both rural and urban) in the list of most influential and active MFIs in south Asia that ranks the South Asia as the 4^{th} biggest Microfinance region in the world (Harmincova and Janda, 2014).

- A well, MFIs build social capital-that is an asset capable of producing further products and services. Social capital makes the poor, capable to get urban services. Besides, it increases the income, asset, entrepreneurship development, employment creation, social well-being and low rates in vulnerability (Prema, 2010, Bashar and Rashid, 2015).

- This is the matter of great hope that, recently many programs were developed by the national and international MFIs to make the Microfinance program more effective. Sajida foundation adopted such a program named -OPTIX-optimizing performance through improved cross (X)-Sell a program to provide MFIs and cooperatives in four countries – Bangladesh, Mexico, Colombia and Vietnam. Met-life foundation, USA funded this program (Sajida, 2015).

- The sector activities of the rural Microfinance program are confined to agriculture, poultry and livestock, handy craft, etc.., but the potentials of urban Microfinance program in terms of employment creation, expansions of informal business is higher than the rural Microfinance program. Besides, women's participation in urban Microfinance is also higher because of having better access

to financial and non-financial resources and the labor market, better influence in the family and more freedom of movement etc. (PKSF, 2015).

- Finally, as the borrowers demand more loan, average loan size is increasing day by day for expanding businesses, or to start a new micro-enterprise that is the sign of improvement of economic conditions. This is the positive impact of urban Microfinance. (InM field survey 2009).

3.5. Presence of Microfinance Programs in Urban Slums of Dhaka city

According to the slum mapping and census, 2005, around 71.5% of the slum areas were under the coverage of different NGOs, social, Government, MFIs, savings or credit and non-profit organization (CUS, 2005). Moreover, nearly 69.8 % of slum in Dhaka city were under the coverage of different NGOs where as 30.2 % slums did not receive any services from NGOs or MFIs. It is reported that, about 5,000 slums of Dhaka city were under the coverage of different NGOs and MFIs. Moreover, only one NGO or MFI provides services in nearly 11.3 percent of slum in Dhaka city while more than one NGO or MFI works in 58.5 percent of slum in Dhaka city accordingly (CUS, 2006). In addition, 1.98 % and 22.72 % slum dwellers of Dhaka city received education services and relief from NGOs and MFIs. Moreover, NGOs and MFIs are operating about 5,441 educational institutions in the slums in Dhaka city (BBS, 2015a). Furthermore, according to the statistics of credit development forum (CDF) in 2016, MFIs have 19% client coverage in urban areas (CDF, 2016).

As mentioned earlier, about 220 MFIs are operating Microcredit programs in urban areas. Some of the major MFIs working in the urban slum in Dhaka city, including typically known only by their acronyms, are ASA, BURO, BRAC, JCF, PMUK, SAJIDA, SSS, TMSS, PROSHIKA, SHAKTI, SEEP, Water aid, WASA, BRAC, DSK, icddr‘‘b, Muslim aid and Padakkhep. They generally provide Microcredit, health care, education, water supply, family planning services, etc. (DSK, 2015).

Table-3.8: Percentage of Slums Covered by NGO/MFIs Programs (percentage of clusters/Slum) in Different cities of Bangladesh

NGO coverage	Dhaka	Chittagong	Khulna	Rajshahi	Sylhet	Barisal	All Cities
One NGO	11.3	7.2	27.1	7	34.8	13.1	13.1
More than one	58.5	50.4	51.3	86	40.7	81.2	58.4
None	30.2	42.4	11.5	7	24.5	5.7	28.5
Don't know	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100
Total slum	4966	1814	520	641	756	351	9048

Source: Slum Mapping and Census, 2005, CUS (2006)

Furthermore, about 13.1% and 58.4% slum households would receive services from one and more than one organization respectively. Among the six divisions of Bangladesh, Rajshahi received the highest services followed by Barisal, Dhaka city. Likewise, the savings and credit programs were very common among the urban poor like slum dwellers for their development. According to the slum census report in 2005, 13.1 percent and 58.4 percent of slum received services from one and more than one NGOs respectively. On the other hand, 30.2 percent of slums did not receive any services from NGOs (CUS, 2006).

However, BRAC is one of the world's largest NGOs, offers Microfinance programs in 1,716 urban slums in all 64 districts of Bangladesh (CDF, 2008-2015). In addition to Microcredit, BRAC offer education services in Dhaka slums by establishing schools and provide health care services by MONISHA project.To educate theabout 62,000 day laborers'slum children, BRAC has been working since 2013 to establish2,000 single-classroom schools in the slum areas of Dhaka, Sylhet, Chittagong, Rajshahi, Khulna, Barisal, Rangpur, Jessore, Mymensingh, Comilla, Gazipur, and Norsingdi districts, Bangladesh. This project was finished in 2016. After five years, 2000 teachers will be appointed and 10,000 parent committee members will be trained to monitor children's attendance and schooling. This project is financed by EAC-Educate a Child- a Qatar based development organization *(*Kabir, 2014,EAC, 2015).

Moreover, PROSHIKA, another largest NGO, serves 2,101 urban slums in 57 districts of Bangladesh through Microfinance programs (CDF, 2008-2015). Moreover, The Safe Save program in the urban slums of Dhaka has found that the average length of loan term between time of disbursement and repayment is highly flexible and repaymentduration 6.1 months (Matin, Rutherford, and Maniruzzaman, 2000).

ChapterFour:Study Methodology

4.1 4.1 Data collection, Editing and Analyzing Procedure

4.1.1. Description of the Study Area:Korail, Jurain and WASA colony slum

This study inspected the impact of urban Microfinance on the livelihood strategies of borrower slum dwellers in Dhaka city. Three sample slums Korail, Jurain and WASA colony slum were selected for field survey. Two sample slums (Jurain and WASA colony) of these three slums are located in the Dhaka south city corporation and the largest slum (Korail) situated in the Dhaka north city corporation.In designing the sample, the size of the slums in terms of population, the area and location of the slum, coverage of MFIs in the slums, member of MFIs were considered in this study. These samples are categorized by large, medium and small in terms of size. Samples slum related information is given below:

Table-4.1: Demographic Information of Three Sample Slums

Sl no	Name of Slum (In Bengali-*Bastee*)	Area in Acre	No. of Household	Household Population	Mess Population	Total Population	Location
1	Korail Slum,	90	14,480	78,800	1,200	80,000	Dhaka north city corporation
2	Jurain Slum	18	5,000	25,000	5,000	30,000	Dhaka South city corporation
3	WASA colony slum	3.83	1,800	9,000	0	9,000	Dhaka South city corporation

Source: the Population and Housing Census 2011

Korail Slum-the largest slum of Dhaka city in terms of population, area and coverage of MFIs. It is situated in Gulshan under the Dhaka north city corporation. The address is of Korail slum Gulshan lake road, Karail, Gulshan, Dhaka north city corporation, Dhaka.

Besides, Jurain slum located in Shyampur -is the largest slum of the Dhaka south city corporation. Jurain slum is situated adjacent to rail line of Jurain, Shyampur. MFIs have strong coverage in this slum.

In addition, WASA colony slum positioned behind the WASA, K.M. das lane, Shamibag, in Sutrapur under Dhaka south city corporation. MFIs has also wide coverage in the WASA colony slum.

4.1.2. Sampling Design:

This survey is carried on two hundred sample slum households, including 100 households from Control (Non-Borrowers) and 100 households from the treatment group (Borrowers) respectively. The data were collected on the livelihood strategies of the respondents for the last 5 (five) years, that is 2010 to 2015 periods. Sample respondents were selected randomly by visiting the different places of slums. Samples and data related information is given in table 4.2.

Table 4.2: Slum wise Distribution of Borrower and Non- Borrower

Respondent/Slum Category	Largest slum: Korail slum	Medium slum: Jurain slum	Small slum: WASA slum	Total
Borrower (Treatment group)	45	35	20	100
Non-borrower (Control group)	45	35	20	100
Total	90	70	40	200

The justification of selecting 100 households Borrowers and 100 Non-Borrowers:

This study considers 200 sample respondents (100 households Borrowers and 100 Non-Borrowers) from three slums. The sample size 200 is selected as a minimum standard. It should be mentioned that the optimum sample size should be larger than the 200 samples compared to the population of three slums. But for some reasons, it was troublesome to collect data from more than 200 sample respondents as mentioned in the following:

- It is asmall scaled study for M.Phil. Thesis that is funded by the researcher himself. Inadequate personal funding imposes the limitation of data collecting from a large number of sample respondents and to include more slums. Besides, it is quite difficult to manage efficient survey member by personal arrangement.

- In this study, Data were collected from the 200 sample respondents by visiting the whole slum, but not from a corner or particular areas of the slum. Though this number is not sufficient as impact size, but in this study it represents the whole slum scenario because 200 respondents were scattered at the different location of the three slums.

To conduct the research superbly, this study applied the systematic random sampling in selecting the sample unit (borrower or non-borrower). In systematic random sampling, only the first unit is selected randomly, then the other units of the sample are selected at fixed intervals. The Systematic sampling has some advantages. Kothari (2004) states that it represents the population as an improvedform over a simplerandom sample. Because the systematic sample is spread more evenly over the entire population. Moreover, It is an easier and less costlier method of sampling and can be conveniently used even in the case of large populations. But researchers have to be concerned about defective sample in this method.

According to the method of the systematic random sampling, data were collected by visiting several houses, places, corners, markets in the three slums. In Korail slum and Wasa colony slum, the first single borrower and non-borrower respondent was selected from a column or row of housing areas. Then each single borrower and non-borrower respondent was selected from each another column/row from the housing areas. Then after skipping a column/row, data were collected from another column/row of housing areas. Since, Jurain Slum is located at the both sides of Rail line. In this slum, respondents were selected from the first house, then skipping a house we select another one. We also collect data from at least one shopkeeper from the local market (bazaar) areas.

4.1.3. Data Collection Procedure:

a) **Methods of Data collection:** A well designed and structured questionnaire and Key Informant Interview (KII) was the common process of data collection in this field survey. The details questionnaire is given in the appendix.

i. Key Informant Interview (KII): the interviews were taken from the key persons of the respective slum. These key persons were the local government councilor, member, school teacher, community leader and representative of religious institutions respectively.

ii. Questionnaire: to finalize the questionnaire, an experiment sample survey was conducted among the 2 (two) slums. After that, based on experiment's finding, the questionnaire had been revised and finalized. The questionnaire is given in the appendix. Moreover, the questionnaire consists of 5 (five) sections. Section-1, 2 and 3 included the household information roster. It included the information related to household ID, income, expenditure and saving, asset and income of respondents. Section-4 incorporated the information related to Microfinance. Finally, section-5 encompassed the impact of Microfinance on the living conditions of the borrowers.

b) **Survey Group:** To collect the data, two survey groups were formed and each group consisted of two members. The members of these groups were economics and business graduate from Dhaka University, Jagannath University and National University of Bangladesh. Besides, to collect data more appropriately, an indoor discussion program on 'Microfinance program, questionnaire and data collection procedure' was arranged on 19th December 2015. Besides, Identity card for surveyor, pen, lunch and conveyance were provided for each group member.

c) **Period of Data Collection:** The data were collected in the period of 20th December 2015 to 30th December 2015.

d) **Editing the Data:** Moreover, on each day, during the lunch break of data collection on the day, the respective member revised and edited the information. Again, at the end of the day, each member edited and revised the collected data and information.

e) **Data Storage and the Use of Software:** data were inputted by the author in SPSS. Then transfer to Microsoft excel and Stata. Besides, SPSS and Stata were used to tabulate the data.Finally,Stata.13 version was used to construct and analyze the econometric model.

4.2. Specification of the Model:

In this study, to examine the impact of urban Microfinance program, the collected data are analyzed through the econometric technique Instrumental Variable (IV) Regression model; "probit" model and'Difference in differences (DID)' model. "probit" model helped to appropriately examine the impact of the urban Microfinance program onchanging the occupation of the borrower respondents. Stata.13 version was used in this study.The details of these models equations have been presented in the section 4.2.1, 4.3.1 and 4.4 respectively.

4.2.1. Instrumental Variable (IV) Regression: Model Specifications

Three models of the Instrumental Variable (IV) Regression were run to assess the impact of urban Microfinance on the Income and consumption expenditures. The first model represents the income model while second and third model tested the food consumption and non-food consumption expenditures respectively. The details of Model specifications and the results will be discussed below.

It should be mentioned that the specification of the OLS Regression and Instrumental Variable (IV) regression model was constructed by getting idea from the study of Schwartz (2008) on Bangladesh; Lensink and Tra Pham (2008) on Vietnam and Muhumed (2016) on Bangladesh. Schwartz (2008) measured the impact of rural microfinance on the consumption of 3266 respondents Bangladesh for the 1991/1992 and 1998/1999 periods. Lensink and Tra Pham (2008) analyzed the impact of microcredit on the income or self-employment profit of 5694 respondents of Vietnam for 2004 and 2006 periods. Muhumed (2016) tested the effect of microcredit on the food and non-food consumptions of the 362670 respondent borrowers and non-borrower of Bangladesh. He

employed the data on Household Income and Expenditure Survey (HIES)-2010 from the Bangladesh Bureau of Statistics (BBS).

a) The Income model equation:

The OLS Regression equation: $Y = \beta_0 + \beta_1 X + \beta_2 b + e_i$

Here,
Y= Yearly Income of respondent
X = Vector of variable of the characteristics of the respondent. It includes the Gender; age; marital status; member in the family; occupational status and educational qualifications of the respondent.
b = dummy variable indicates that whether the respondent borrowed from Microfinance or not. b =1 if borrowed from Microfinance; otherwise b =0.
$\beta_0, \beta_1, \beta_2$ = The parameters to be estimated.

More specifically;

$$\text{The OLS Regression equation: } Lyincome = \beta_0 + \beta_1 age20 + \beta_2 GenderW + \beta_3 married + \beta_4 FMemb + \beta_5 employed + \beta_6 Educ + \beta_7 borrowed + e_i$$

Here,
Lyincome= Log value of the Yearly Income of the respondent
$age20$ = Age of the respondent equal and greater than 20.
$GenderW$ = Gender of the respondent =1 if Women.
$married$ = Marital status of the respondent =1 if married.
$FMemb$= number of Family member of the of the respondent
$employed$ = Occupational status of the respondent =1 if employed by doing Job or Business.
$Educ$ = Educational qualification of the respondent. Indicates the class of education completed.
$borrowed$=dummy variable indicates that whether the respondent borrowed from Microfinance or not. $borrowed$ =1 if borrowed from Microfinance; otherwise 0.
$\beta_0, \beta_1, \beta_2, \beta_3; \beta_4; \beta_5; \beta_6; \beta_7$ = The parameters to be estimated.

Instrumental Variable (IV) regression equation in Income Model:

$$ivregress\ 2sls \text{Lyincome} = \beta_0 + \beta_1 age20 + \beta_2 GenderW + \beta_3 married + \beta_4 FMemb + \beta_5 employed + \beta_6 Educ + \beta_7 (borrowed = YRMF) + e_i$$

Here,
Lyincome= Log value of the Yearly Income of the respondent
$age20$ = Age of the respondent equal and greater than 20.
$GenderW$ = Gender of the respondent =1 if Women.
$married$ = Marital status of the respondent =1 if married.
$FMemb$= number of Family member of the of the respondent
$employed$ = Occupational status of the respondent. =1 if employed by doing Job or Business.
$Educ$ = Educational qualification of the respondent. Indicates the class of education completed.
$borrowed$=dummy variable indicates that whether the respondent borrowed from Microfinance or not. $borrowed$ =1 if borrowed from Microfinance; otherwise 0.

YRMF = Year of Receiving Microfinance Loan. It is instrumental variable. Because, the amount of microfinance loan depends on the year of receiving microfinance loan. *YRMF* fulfilled the two conditions for being an instrumental variable. These are:*YRMF* is uncorrelated to the e_i but *YRMF*it is strongly correlated with the $borrowed$ (borrowing status). *YRMF* has the strong positive correlation (0.6894) with the $borrowed$ (borrowing status).
$\beta_0, \beta_1, \beta_2, \beta_3;\ \beta_4; \beta_5; \beta_6; \beta_7 =$ The parameters to be estimated.

b) The Food Consumption Expenditure model Equation:

The OLS regression equation: $F = \beta_0 + \beta_1 X + \beta_2 b + e_i$

Here,
F= Food consumption Expenditureof respondent
X = Vector of variable of the characteristics of the respondent. It includes the Gender; age; marital status; member in the family; occupational status and educational qualifications of the respondent.
b = dummy variable indicates that whether the respondent borrowed from Microfinance or not. b =1 if borrowed from Microfinance; otherwise b =0.
$\beta_0, \beta_1, \beta_2 =$ The parameters to be estimated.

More specifically;

The OLS regression equation: $\text{LFoodexp} = \beta_0 + \beta_1 age20 + \beta_2 GenderW + \beta_3 married + \beta_4 FMemb + \beta_5 employed + \beta_6 Educ + \beta_7 borrowed + e_i$

Here,

LFoodexp = Log value of the Food consumption Expenditureof respondent

$age20$ = Age of the respondent equal and greater than 20.

$GenderW$ = Gender of the respondent =1 if Women.

$married$ = Marital status of the respondent =1 if married.

$FMemb$= number of Family member of the of the respondent

$employed$ = Occupational status of the respondent =1 if employed by doing Job or Business.

$Educ$ = Educational qualification of the respondent. Indicates the class of education completed.

$borrowed$=dummy variable indicates that whether the respondent borrowed from Microfinance or not. $borrowed$ =1 if borrowed from Microfinance; otherwise 0.

$\beta_0, \beta_1, \beta_2, \beta_3; \beta_4; \beta_5; \beta_6; \beta_7 =$ The parameters to be estimated.

Instrumental Variable (IV) regression equation for the Food consumption Expenditure Model:

$ivregress\ 2sls\text{LFoodexp} = \beta_0 + \beta_1 age20 + \beta_2 GenderW + \beta_3 married + \beta_4 FMemb + \beta_5 employed + \beta_6 Educ + \beta_7 (borrowed = YRMF) + e_i$

Here,

LFoodexp = Log value of the Food consumption Expenditureof respondent

$age20$ = Age of the respondent equal and greater than 20.

$GenderW$ = Gender of the respondent =1 if Women.

$married$ = Marital status of the respondent =1 if married.

$FMemb$= number of Family member of the of the respondent

$employed$ = Occupational status of the respondent =1 if employed by doing Job or Business.

$Educ$ = Educational qualification of the respondent. Indicates the class of education completed.

$borrowed$=dummy variable indicates that whether the respondent borrowed from Microfinance or not. $borrowed$ =1 if borrowed from Microfinance; otherwise 0.

$YRMF$ = Year of Receiving Microfinance Loan. It is instrumental variable.

$\beta_0, \beta_1, \beta_2, \beta_3; \beta_4; \beta_5; \beta_6; \beta_7 =$ The parameters to be estimated.

c) The Non-Food Consumption Expenditure model equation:

The OLS regression equation: NF $= \beta_0 + \beta_1 X + \beta_2 b + e_i$

Here,
NF= Non-Food consumption Expenditureof respondent
X = Vector of variable of the characteristics of the respondent. It includes the Gender; age; marital status; member in the family; occupational status and educational qualifications of the respondent.
b = dummy variable indicates that whether the respondent borrowed from Microfinance or not. b =1 if borrowed from Microfinance; otherwise b =0.
$\beta_0, \beta_1, \beta_2$ = The parameters to be estimated.

More specifically;

$$\text{The OLS regression equation: LnFoodexp} = \beta_0 + \beta_1 age20 + \beta_2 GenderW + \beta_3 married + \beta_4 FMemb + \beta_5 employed + \beta_6 Educ + \beta_7 borrowed + e_i$$

Here,
LnFoodexp = Log value of the Non-Food consumption Expenditureof respondent. The Non-Food consumption includes the Expenditure of clothing; house rent; utility services; education; healthcare; and transportation respectively.
$age20$ = Age of the respondent equal and greater than 20.
$GenderW$ = Gender of the respondent =1 if Women.
$married$ = Marital status of the respondent =1 if married.
$FMemb$= number of Family member of the of the respondent
$employed$ = Occupational status of the respondent =1 if employed by doing Job or Business.
$Educ$ = Educational qualification of the respondent. Indicates the class of education completed.
$borrowed$=dummy variable indicates that whether the respondent borrowed from Microfinance or not. $borrowed$ =1 if borrowed from Microfinance; otherwise 0.

$\beta_0, \beta_1, \beta_2, \beta_3; \beta_4; \beta_5; \beta_6; \beta_7$ = The parameters to be estimated.

Instrumental Variable (IV) regression equation for the Non-Food consumption Expenditure Model:

$$ivregress\ 2sls \text{LnFoodexp} = \beta_0 + \beta_1 age20 + \beta_2 GenderW + \beta_3 married + \beta_4 FMemb + \beta_5 employed + \beta_6 Educ + \beta_7 (borrowed = YRMF) + e_i$$

Here,

LnFoodexp = Log value of the Non-Food consumption Expenditureof respondent. The Non-Food consumption includes the Expenditure of clothing; house rent; utility services; education; healthcare; and transportation respectively.

$age20$ = Age of the respondent equal and greater than 20.

$GenderW$ = Gender of the respondent =1 if Women.

$married$ = Marital status of the respondent =1 if married.

$FMemb$= number of Family member of the of the respondent

$employed$ = Occupational status of the respondent =1 if employed by doing Job or Business.

$Educ$ = Educational qualification of the respondent. Indicates the class of education completed.

$borrowed$=dummy variable indicates that whether the respondent borrowed from Microfinance or not. $borrowed$ =1 if borrowed from Microfinance; otherwise 0.

$YRMF$ = Year of Receiving Microfinance Loan. It is instrumental variable.

$\beta_0, \beta_1, \beta_2, \beta_3;\ \beta_4; \beta_5; \beta_6; \beta_7$ = The parameters to be estimated.

(d) Endogeneity test:

Endogeneity test was performed for instrumented variable ($borrowed$) according to the formula of Woodridge (2007.p532). The null hypothesis is H_0: variables are exogenous. If the p value is greater than 5%, thenthere is no indication to reject it.

Table 4.3: Results of Endogeneity test:

Sl no	Dependent Variable	Comments
1	Dependent Variable: Lyincome : Log(Yearly income)	
	F(1, 191) = 3.57, Prob > F = 0.0605	exogenous variable.
2	Dependent Variable: Lfoodexp : Log(Food exp)	
	F(1, 190) = 1.08, Prob > F = 0.3001	exogenous variable.
3	Dependent Variable: Lnfoodexp : Log(Non-Food exp)	
	F(1, 190) = 0.38,Prob > F = 0.5382	exogenous variable.

Endogeneity test in Table-4.3 depicts that p value is greater than 5% in all cases. So the instrumented variable ($borrowed$) is an exogenous variablein all cases.

4.3 "Probit" Model Specifications:

4.3.1. Definition of Probit Model:

The probit model is a method to analyze regression for binary outcome variables. The Binary outcome variables are dependent variables with two possibilities, like yes=1 and no=0. The word "probit" consists of two words. These are 'probability' and 'Unit'. The probit model assesses the probability a value will fall into one of the two possible binary (i.e. unit) outcomes. The probit model is also known as probit regression (Scott (1997).

4.3.1(a) Probit Model Equation:

$$\Pr(Y = 1 \mid X) = \phi(X^T \beta)$$

$Y_i^* = X_i^T \beta + e_i$

Here,

Pr= Probabily

Y= is the dependent Variable. It denotes the change in occupation of the respondent. It is a binary variable and have two values 1= yes, occupation changes and 0= no, the occupation did not change.

$$Y = \begin{pmatrix} 1 = yes \\ 0 = no \end{pmatrix}$$

X= is the independent variable.

Y_i^* =a continuous real-valued variable for observation i that is *unobservable*, or *latent*.

$X_i^T = (X_i{}^1, X_i{}^2, X_i{}^3, \ldots\ldots X_{iK})^T$,a 1xK row vector of regressor values for observation i,

$\beta = (\beta_0, \beta_1, \beta_2, \ldots\ldots\ldots \beta_K)$, a K×1 column vector of regression coefficients,

e_i =Error term

4.3.2. The Probit Model of Changing the Occupations of the Respondents:

The following is a model of respondent's occupation change, where the observed binary dependent variable $\text{Occchngr}_i$is defined as follows:

$\text{Occchngr}_i = 1$if the occupation changed of the ith respondent

$= 0$if the occupation did not changed of the ith respondent

The Probit Equation of the Model is:

The aim of this model is to examine the impact of age, gender, marital status, Microfinance, education, charity, asset and savings on changing the occupation of the respondent.

$$X_i^T\beta = \beta_0 + \beta_1\,\text{age}_i + \beta_2\,\text{female}_i + \beta_3\,\text{married}_i + \beta_4\,\text{borw\_type}_i + \beta_5\,\text{edursome}_i + \beta_6\,\text{agerb30and50}_i + \beta_7\,\text{agera50}_i + \beta_8\,\text{charityyravg}_i + \beta_9\,\text{lnasset5yrago}_i + \beta_{10}\,\text{positsaving5yrago}_i + e_i$$

Here,

age_i = Age of the ith respondent

female_i = Occupational change of theith female respondents

married_i = Occupational change of the ith married respondent

borw_type_i = Borrower type of the ith respondent

edursome_i =educational qualification of the ith respondents. The ith respondents who have some educational qualifications.

agerb30and50_i = Number of the ith respondent in the range of the age between 30 years and 50 years

agera50_i = Number of the ith respondent in the range of the age above 50 years

charityyravg_i = Yearly Average Charity received by the ith respondent

lnasset5yrago_i = Asset value of the ith respondent at 5 years ago

$\text{positsaving5yrago}_i$ = Positive Savings of the ith respondent at 5 years ago

4.4. The Difference in Differences (DID) Models Specification:

There are 9 (nine) DID models were estimated in this study for three slums. These are presented in the following:

b) The Income model equation: $Y = \beta_0 + \delta_0 2015 + \beta_1 T + \delta_1 2015T + e_i$
c) The Expenditure model equation: $Yex = \alpha_0 + \theta_0 2015 + \alpha_1 T + \theta_1 2015T + e_i$
d) The asset value model equation: $Wav = \Phi_0 + \lambda_0 2015 + \Phi_1 T + \lambda_1 2015T + e_i$
e) The Savings model equation: $S = \mu_0 + \rho_0 2015 + \mu_1 T + \rho_1 2015T + e_i$
f) The Housing and utility expenditure model equation: $Hex = \Omega_0 + \pi_0 2015 + \Omega_1 T + \pi_1 2015T + e_i$
g) The Food expenditure model equation: $Fex = \Theta_0 + \varphi_0 2015 + \Theta_1 T + \varphi_1 2015T + e_i$
h) The Educational expenditure model equation: $Eex = \chi_0 + \partial_0 2015 + \chi_1 T + \partial_1 2015T + e_i$
i) The Healthcare expenditure model equation: $\hat{H} = \kappa_0 + \varpi_0 2015 + \kappa_1 T + \varpi_1 2015T + e_i$
j) The Transportation expenditure model equation: $Tex = \Phi_0 + \vartheta_0 2015 + \Phi_1 T + \vartheta_1 2015T + e_i$

a) The Income Model Equation:

The Income model equation: $Y = \beta_0 + \delta_0 2015 + \beta_1 T + \delta_1 2015T + e_i$

Here,

Y=Impact of Urban Microfinance on Income
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
β_0= Income of non- borrower (control group) of Microfinance in 2010

β_1= Income of borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the income of treatment (borrower) and control group (non- borrower) in 2010

δ_0 = It includes the change in Income of both groups: Control (non- borrower) and treatment (borrower) group between 2010 and 2015

δ_1 =This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in Income of treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in income level of treatment group after receiving Microfinance. δ_1 is also known as an average treatment effect. It measures the effect of the treatment on the average monthly income (Y).

Here, difference in differences estimator' can be estimated in following ways:

1. Calculate the differences in averages between the treatment and control groups in two periods and then difference the results of two periods. In symbolically,

$$\delta_1 = (\bar{y}_2\mathrm{T} - \bar{y}_2\mathrm{C}) - (\bar{y}_1\mathrm{T} - \bar{y}_1\mathrm{C})$$

2. Calculate the changes in averages for two periods of the treatment and control groups and then difference these changes. Such as follows:

$$\delta_1 = (\bar{y}_2\mathrm{T} - \bar{y}_1\mathrm{T}) - (\bar{y}_2\mathrm{C} - \bar{y}_1\mathrm{C})$$

Table-4.4: Illustration of the Difference in Differences Estimator

	Before	After	After-Before
Control			
Treatment			
Treatment- Control			

Source: Wooldridge, (2013), pp. 457

b) The Expenditure Model Equation:

The Expenditure model equation: $\Upsilon ex = \alpha_0 + \theta_0 2015 + \alpha_1 T + \theta_1 2015T + e_i$

Here,

Υex =Impact of Urban Microfinance on the overall expenditure
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
α_0 = Expenditure of non- borrower (control group) of Microfinance in 2010

α_1 = Expenditure of borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the monthly average expenditure of treatment (borrower) and control group (non- borrower) in 2010

θ_0 = It includes the change in expenditure of both groups: control (non- borrower) and treatment (borrower) group between 2010 and 2015

θ_1 = This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in the monthly average expenditure of treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in the expenditure level of treatment group after receiving Microfinance. $\theta_1$is also known as an average treatment effect. It measures the effect of the treatment on the average monthly expenditure (Υex).

c) The asset Value Model Equation:

The asset value model equation: $\mathrm{W}av = \Phi_0 + \lambda_0 2015 + \Phi_1 T + \lambda_1 2015T + e_i$

Here,

$\mathrm{W}av$ =Impact of Urban Microfinance on the asset Value
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
Φ_0 = asset Value of non- borrower (control group) of Microfinance in 2010

Φ_1 = asset Value of borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the asset Value of treatment (borrower) and control group (non- borrower) in 2010

λ_0= It includes the change in the asset Value of both groups: control (non- borrower) and treatment (borrower) group between 2010 and 2015

λ_1= This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in the asset Value of treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in the asset value level of treatment group after receiving Microfinance. $\lambda_1$is also known as an average treatment effect. It measures the effect of the treatment on the average asset value ($\mathrm{W}av$).

d) The Savings Model Equation:

The Savings model equation: $S = \mu_0 + \rho_0 2015 + \mu_1 T + \rho_1 2015T + e_i$

Here,

S = Impact of Urban Microfinance on the Savings
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
μ_0 = Savings amount of non- borrower (control group) of Microfinance in 2010

μ_1 = Savings amount of borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the savings amountof treatment (borrower) and control group (non-borrower) in 2010

ρ_0= It includes the change in savings amount of both groups: control (non- borrower) and treatment (borrower) group between 2010 and 2015

ρ_1= This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in savings amount of the treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in the savings amount of treatment group after receiving Microfinance. $\rho_1$is also known as an average treatment effect. It measures the effect of the treatment on the monthly average savings (S).

e) The Housing and Utility ExpenditureModel Equation:

The Housing and Utility Expenditure model equation: $H = \Omega_0 + \pi_0 2015 + \Omega_1 T + \pi_1 2015T + e_i$

Here,

H = Impact of Urban Microfinance on the Housing and Utility expenditure
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
Ω_0 = Housing and Utility expenditureof non- borrower (control group) of Microfinance in 2010

Ω_1 = Housing and Utility expenditureof the borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the housing and utility expenditureof the treatment (borrowers) and the control group (non- borrower) in 2010

π_0= It includes the change in the Housing and Utility Expenditureof both groups: control (non- borrower) and treatment (borrower) group between 2010 and 2015

π_1= This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in the Housing and Utility expenditureof the treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in Housing and Utility expenditureof treatment group after receiving Microfinance. π_1 is also known as an average treatment effect. It measures the effect of the treatment on the monthly average Housing and Utility expenditure (H).

f) The Food Expenditure Model Equation:

The Food Expenditure model equation: $Fex = \Theta_0 + \varphi_0 2015 + \Theta_1 T + \varphi_1 2015T + e_i$

Here,

Fex = Impact of Urban Microfinance on the Food expenditure
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
Θ_0 = Food expenditureof non- borrower (control group) of Microfinance in 2010

Θ_1 = Food expenditure of borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the food expenditureof treatment (borrower) and control group (non- borrower) in 2010

φ_0= It includes the change in food expenditureof both groups: control (non-borrower) and treatment (borrower) group between 2010 and 2015

φ_1= This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in food expenditureof the treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in food expenditureof treatment group after receiving Microfinance. $\varphi_1$is also known as an average treatment effect. It measures the effect of the treatment on the monthly average food expenditure (Fex).

g) The Educational Expenditure Model Equation:

The Educational expenditure model equation: $Eex = \chi_0 + \partial_0 2015 + \chi_1 T + \partial_1 2015T + e_i$

Here,
Eex = Impact of Urban Microfinance on the Educational expenditure
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
χ_0 = Educational expenditureof non- borrower (control group) of Microfinance in 2010
χ_1 = Educational expenditure of borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the educational expenditureof treatment (borrowers) and Control group (non- borrowers) in 2010

∂_0= it includes the change in educational expenditureof both groups: control (non-borrower) and treatment (borrower) group between 2010 and 2015

∂_1= this is the parameter of interest and called as 'difference in differences estimator'. It shows the change in the educational expenditureof the treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in educational expenditureof treatment group after receiving Microfinance. $\partial_1$is also known as an average treatment effect. It measures the effect of the treatment on the monthly average educational expenditure (Eex).

h) The Healthcare Expenditure Model Equation:

The Healthcare expenditure model equation: $\hat{H} = \kappa_0 + \varpi_0 2015 + \kappa_1 T + \varpi_1 2015T + e_i$

Here,
$\hat{H}$ = Impact of Urban Microfinance on the Healthcare expenditure
2015=Year 2015
1 = First period
2= Second period
T= Treatment Group
C= Control group
κ_0 = Healthcare expenditureof non- borrower (control group) of Microfinance in 2010
κ_1 = Healthcare expenditure of borrower (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the healthcare expenditureof the treatment (borrowers) and control group (non- borrower) in 2010

ϖ_0= It includes the change in healthcare expenditureof both groups: Control (non-borrower) and treatment (borrower) group between 2010 and 2015

ϖ_1= This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in healthcare expenditureof the treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in healthcare expenditureof treatment group after receiving Microfinance. $\varpi_1$is also known as an average treatment effect. It measures the effect of the treatment on the monthly average healthcareexpenditure (Ĥ).

i) The Transportation Expenditure Model

The Transportation Expenditure Model equation: $Tex = \Phi_0 + \vartheta_0 2015 + \Phi_1 T + \vartheta_1 2015T + e_i$

Here,
Tex = Impact of Urban Microfinance on the Transportation Expenditure
2015=Year 2015
1 = First period
2= second period
T= Treatment Group
C= Control group
Φ_0 = Transportation expenditureof non- borrowers (Control group) of Microfinance in 2010
Φ_1 = Transportation expenditure of borrowers (treatment group) of Microfinance in the absence of treatment (Microfinance) or before the receiving Microfinance in 2010. It measures the differences in the transportation expenditureof treatment (borrower) and control group (non- borrower) in 2010

ϑ_0= It includes the change in transportation expenditureof both groups: Control (non-borrower) and treatment (borrower) group between 2010 and 2015

ϑ_1= This is the parameter of interest and called as 'difference in differences estimator'. It shows the change in transportation expenditureof the treatment (borrower) group between 2010 and 2015. Besides, it measures the increase or decrease in transportation expenditureof the treatment group after receiving Microfinance. $\vartheta_1$is also known as an average treatment effect. It measures the effect of the treatment on the monthly average transportation expenditure (Tex).

ChapterFive: Findings of the Study

5.1The Structure of the Family/ Household Information of the 100 Borrower Respondents:

This is the description of the data on 100 Borrowers and 100 Non-borrowers of three slums (Korail slum, WASA colony slum and Jurain slum) in Dhaka City. The data were collected from 100 borrowers and 100 non-borrowers respectively. Figure 5.1, fig-5.2, fig-5.3, and fig-5.4 depict the household information of 100 borrowers. Among the 100 borrowers, 40 % are male and 60 % are Female respondents. Besides, among the 100 borrowers, 43 % is representing the family as husband and head, 48 % is the wife of the head, 3 % is the son of the head and the remaining 6 % is the daughter of the head. Moreover, 83 % respondents are married, 10 % are unmarried, and 5 % are widowed. Finally, 1 % of them are divorced and another 1 % areseparated respectively.

Fig-5.1: Gender of 100 Borrowers

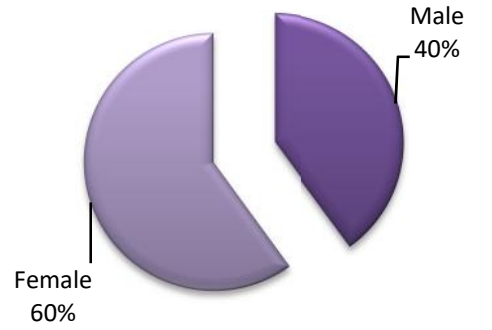


Fig-5.2: Marital Status of 100 Borrowers

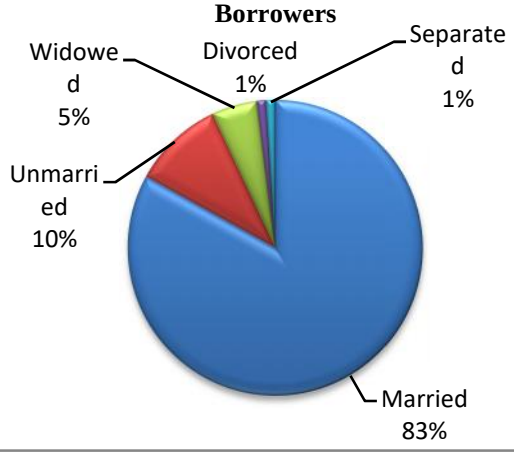
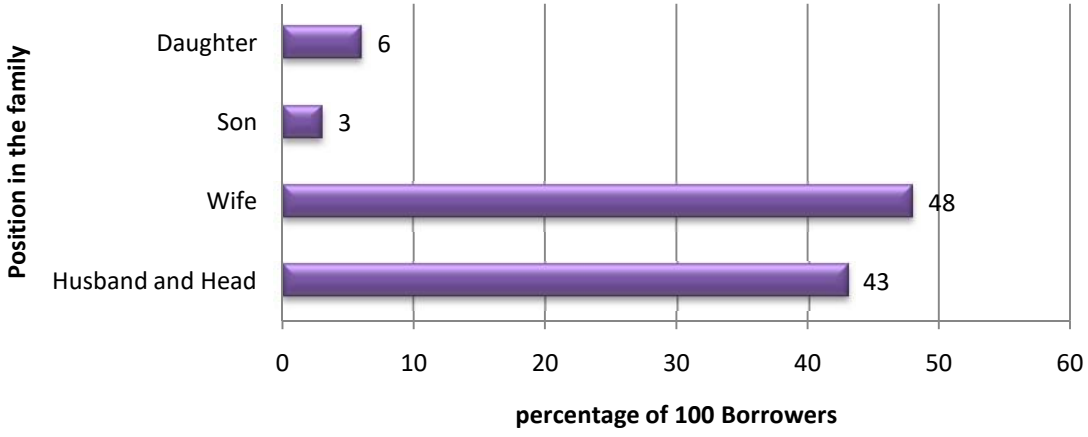


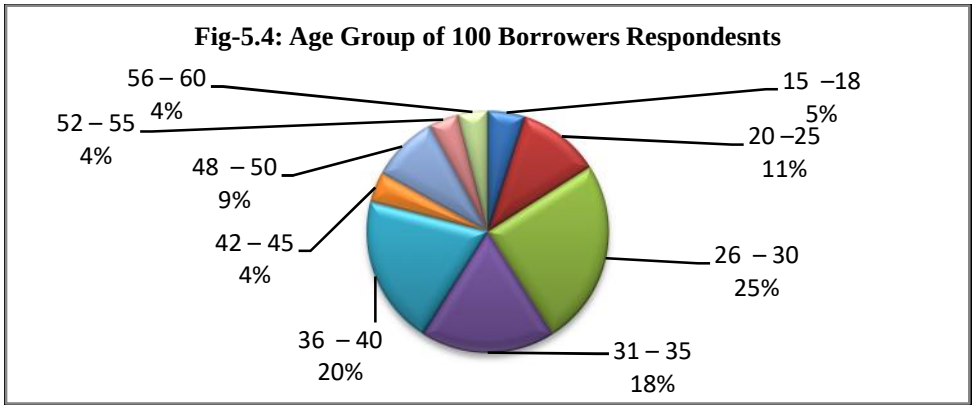
Fig-5.3: Position of 100 Borrower Respondent in the Family



The age groups of respondent are as follows: the first group (15 years –18 years) represents 5 %, the second group (20 years –25 years) represents 11 %, the third group (26 years – 30 years) represents 25 %, the fourth group (31 years – 35 years) represents 18 %, the fifth group (36 years – 40 years) represents 20 %, the sixth group (42 years – 45 years) represents 4 %, the seventh group (48 years – 50 years) represents 9 %, the eighth group (52 years – 55 years) represents 4 % and the ninth and last group (56 years – 60 years) represents 4 % of respondents correspondingly.

Furthermore, 70 % families contain 1-5 members while the remaining 30 % family has 6-9 members. Among the borrowers' families, commonly a family has a husband, wife, son, daughter and some families have a father, mother, the spouse of a son, brother, sister, grandson, granddaughter, brother-in-law, nephew and niece respectively.

Fig-5.4: Age Group of 100 Borrowers Respondesnts



5.1.1 Slum wise Household Information of 100 Borrower Respondents:

(a) Gender:

In Korail slum, the largest portion, 53.33% borrowers' respondents are male, whereas 46.67% are female. In addition, In Jurain Slum, the percentage of male and female respondents are 31.42% and 68.58% correspondingly. Besides, in the WASA colony Slum, male respondent is 20% and female respondent is 80% respectively.

(b) Age Group:

In Korail slum, 40% borrowers are included in the age of between 15 years and 30 years. Another 40% borrowers have the age of between 31 years and 40 years. The remaining 20% borrowers have the age of between 50 years and 60 years. In addition, In Jurain slum, 51.42% borrowers has the age of between 18 years and 30 years. Besides, 31.42% borrowers have the age of between 32 years and 40 years. Finally, 8.57% borrowers have the age of between 45 years and 50 years and 8.57% borrowers have the age of between 52 years and 55 years. Likewise, In the WASA colony slum, 51.42% borrowers have the age of between 18 years and 30 years. In addition, 31.42% borrowers have the age of between 32 years and 40 years. Finally, 8.57% borrowers have the age of between 45 years and 50 years and 8.57% borrowers have the age of between 52 years and 55 years.

(c) Marital Status:

In the Korail slum, 68.88 % respondents are married, 17.77 % are unmarried and 8.88 % are widowed. Besides, 2.22 % of them are divorced and another 2.22 % are separated respectively. In addition, In Jurain slum, 94.28 % respondents are married and 5, 71 % are unmarried respectively. In WASA slum, 95 % respondents are married and 5 % are widowed respectively.

(d) Family Members:

In Korail slum, 68.88 % families contain 3-5 members while the remaining 26.66 % families have 6-7 members. Only 2.22 % family has 9 members in the family. Additionally, In the Jurain slum, 74.28 % families contain 3-5 members whereas the remaining 22.85 % family has 6-7 members. Only 2.85 % family has 9 members in the family. In the WASA slum, 65 % families contain 3-5 members while the remaining 35 % family has 6-7 members. Only 2.85 % family has 9 members in the family.

(e) Position in the Family:

Moreover, In the Korail slum, among 45 borrowers, 15.56 % women respondents are representing the family as the head, another 26.67 % women respondent is the wife of the head, and 4.45 % women respondents is the daughter of the head. On the other hand,

44.45 % is representing the family as husband and head and 9.90 % are the son of the head respectively.

Besides, in the Jurain slum, among 35 borrowers, 62.85 % women respondents are representing the family as the wife of the head and 5.71 % women respondents is the daughter of the head. However, 28.57 % is representing the family as husband and head and 2.85 % are the son of the head respectively.

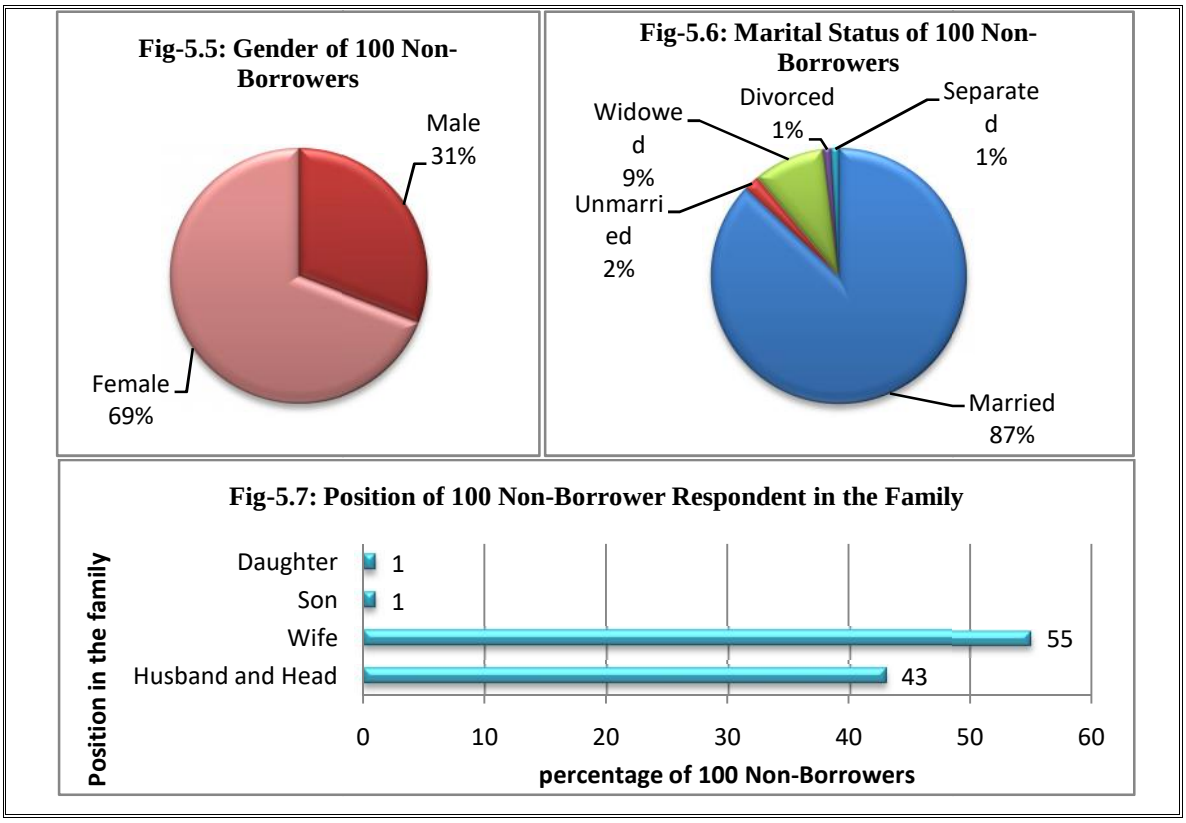
As well, In the WASA slum, among 20 borrowers, only 5 % women respondents is representing the family as head, another 70 % women respondents is the wife of the head. Conversely, 25 % is representing the family as husband and head.

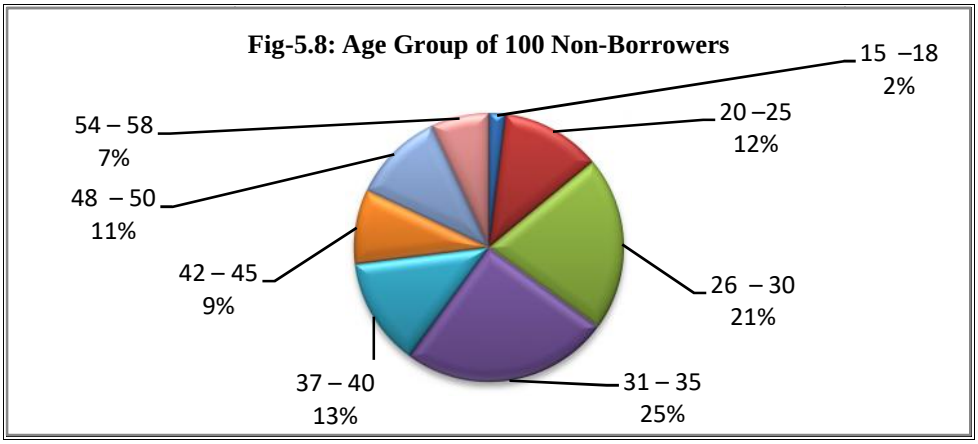
Among the borrowers' families, commonly a family have husband, wife, son, daughter and some families have fathers, mother, the spouse of a son, brother,sister,grandson, granddaughter, brother-in-law, nephew and niece respectively.

5.1.2 The Structure of Family/ Household Information of 100 Non-Borrower Respondents:

However, the figure-5.5, fig-5.6, fig-5.7 and fig-5.8 depict the household information of 100 non-borrowers. Among the 100 non-borrowers, 31 % are male and 69 % arefemale respondents. Besides, among the 100 non-borrowers, 43 % is representing the family as husband and head, 55 % is the wife of the head, 1 % is the son of the head and the remaining 1 % is the daughter of the head. Moreover, 87 % respondents are married, 2 % are unmarried, 9 % are widowed, 1 % of them are divorced and another 1 % is separated respectively.

In addition, The age groups of non-borrowers respondents are as follows: the first group (15 years –18 years) represents 2 %, the second group (20 years –25 years) represents 12 %, the third group (26 years – 30 years) represents 21 %, the fourth group (31 years – 35 years) represents 25 %, the fifth group (37 years – 40 years) represents 13 %, the sixth group (42 years – 45 years) represents 9 %, the seventh group (48 years – 50 years) represents 11 % and the eighth group (54 years – 58 years) represents 7 % of respondents correspondingly.





Among 100 non-borrowers families, 84% families contain 1-5 members while the remaining 16 % families have 6-9 members. Among the non-borrowers' families, commonly a family havea husband, wife, son, daughter and some families have father, mother, the spouse of a son, brother,sister, 83.33 % respondents are married and 6.67 % are widowed respectively. In addition, In Jurain slum, 77.14 % respondents are married followed by unmarried (5.71%), widowed (11.42%), divorced (2.85%) and separated (2.85%) respectively. In WASA slum, 90 % respondents are married and 10 % are widowed respectively.

5.1.3 Slum wise Household Information of 100 Non-Borrower Respondents:

(a) Gender:

In Korail slum, the largest portion, 33.33% non-borrowers respondents are male where 66.67% are female. In addition, In Jurain slum, the percentage of male and female respondents is 28.57% and 71.43% correspondingly. Besides, in WASA colony slums, male respondent is 30% and female respondent is 70% respectively.

(b) Age Group:

In Korail slum, 33.33% non-borrowers are included in the age of between 20 years and 30 years. Another 42.22% non-borrowers has the age of between 31 years and 40 years. The remaining 17.78% non-borrowers have the age of between 42 years and 50 years. Finally, 6.67% non-borrowers have the age of between 55 years and 56 years. In addition, In Jurain slum, 40% non-borrowers has the age of between 15 years and 30 years. 31.42% non-borrowers have the age of between 35 years and 38 years. The remaining 28.57% non-borrowers have the age of between 45 years and 54 years. Likewise, In WASA colony slum, 30% non-borrowers has the age of between 25 years and 30 years. 40% non-borrowers have the age of between 32 years and 40 years. Finally, 15% non-borrowers have the age of between 42 years and 50 years and another 15% non-borrowers has the age of between 55 years and 58 years.

(c) Marital Status:

Furthermore, In Korail slum, 93.33 % respondents are married and 6.67 % are widowed respectively. In addition, In Jurain slum, 77.14 % respondents are married followed by unmarried (5.71%), widowed (11.42%), divorced (2.85%) and separated (2.85%) respectively. In WASA slum, 90 % respondents are married and 10 % are widowed respectively.

(d) Family Members:

Moreover, In Korail slum, 80 % families contain 3-5 members while the remaining 17.78 % family have 6-7 members. Only 2.22 % families have 9 members in the family.

Additionally, In Jurain slum, 88.57 % families contain 3-5 members while the remaining 11.42 % family have 6-7 members. In WASA slum, 85 % families contain 2-5 members while the remaining 15 % family have 6-7 members respectively.

(e) Position in the Family:

Moreover, In Korail slum, among 45 borrowers, 43 % is representing the family as husband and head, 48 % is the wife of the head, 3 % is the son of the head and the remaining 6 % is the daughter of the head.

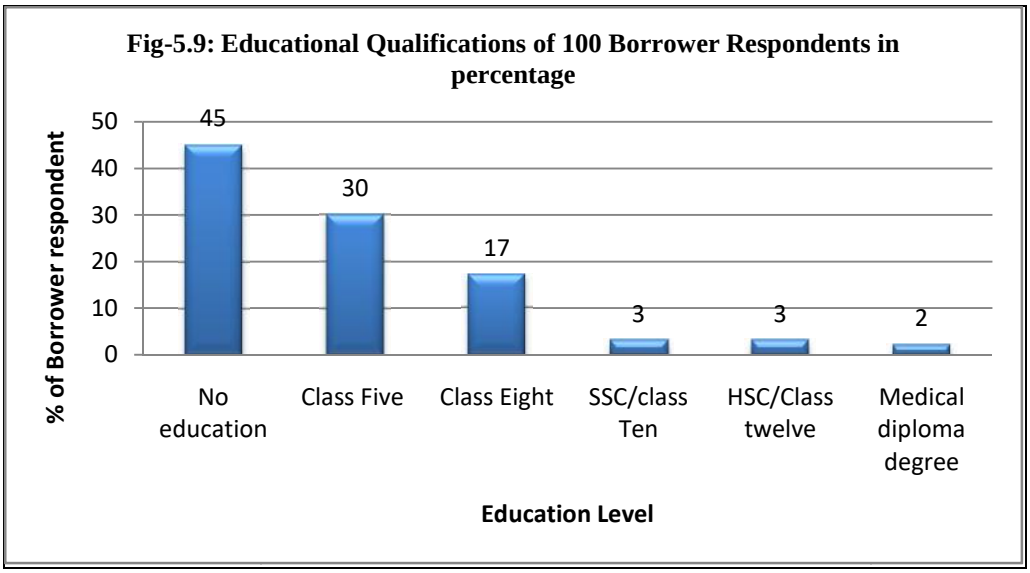
Among the non-borrowers' families, commonly a family have a husband, wife, son, daughter and some families have fathers, mother, the spouse of a son, brother, sister,grandson, granddaughter, brother-in-law, nephew and niece respectively.

5.1.4. Educational Qualifications of 100 Borrowers and 100 Non-Borrowers:

(a) Educational Qualifications of the 100 Borrower Family Members:

The figure 5.9 illustrates the Educational Qualificationsof 100 borrower respondents. The scenario of educational qualification of the borrower respondent (family member-1) is: 45 % respondents have no education while only 30 % completed their primary level (class five) education. In addition, the 17% respondents completed their junior school level (class eight) education. Besides, only 3% respondents completed school secondary certificate (SSC/equivalent to class ten) and 3% completed higher secondary level (HSC/equivalent to class twelve) level education accordingly. Moreover, only 2 % completed medical diploma degree. This is the summary of the respondents' education level.

The status of educational qualification of the second family member is: 43 % having no education while only 30 % completed their primary level (class five) education. In addition, the 19 %, 5 % and 3 % completed their junior school level (class eight), school secondary certificate (SSC/equivalent to class ten) and higher secondary level (HSC/equivalent to class twelve) level education accordingly.



The status of educational qualification of the third family member is: 31 % having no education while only 43 % completed their primary level (class five) education. In addition, the 16 %, 5 % and 4% completed their junior school level (class eight), school secondary certificate (SSC/ equivalent to class ten) and higher secondary level (HSC/ equivalent to class twelve) level education accordingly. It is the matter of great pleasure that, only 1 % are pursuingthe under-graduate level education.

The data illustrate that, seventy five families have four members of each. The status of educational qualification of the fourth family member is: 39 % having no education while only 35 % completed their primary level (class five) education. In addition, the 22 % and 4 % completed their junior school level (class eight) and school secondary certificate (SSC/ equivalent to class ten) level education accordingly.

The data demonstrate that, fifty three families have five members of each. The status of educational qualification of the fifth family member is: 45 % having no education while only 39 % completed their primary level (class five) education. In addition, the 6 %, 4 % and 6 % completed their junior school level (class eight), school secondary certificate (SSC/ equivalent toclass ten) and higher secondary level (HSC/ equivalent toclass twelve) level education accordingly.

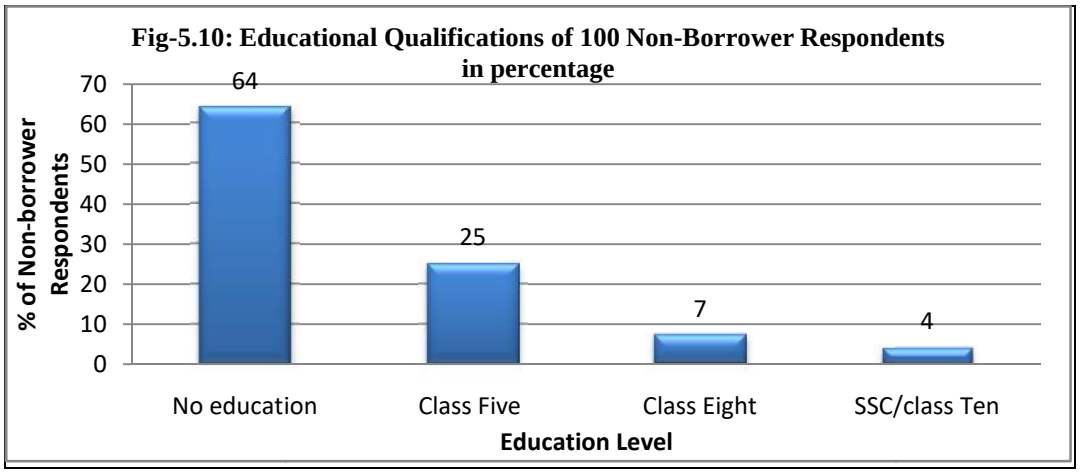
The data reveal that, thirty families have six members of each. The status of educational qualification of the sixth family member is: 53 % having no education while only 37 %

completed their primary level (class five) education. Unfortunately, none of them completed the junior school level (class eight) level education. Besides, 7 % and 3 % completed their school secondary certificate (SSC/ equivalent toclass ten) and higher secondary level (HSC/ equivalent toclass twelve) level education accordingly.

Moreover, the data disclose that, fourteen families have seven members of each. The status of educational qualification of the seventh family member is: 72 % having no education while only 14% completed their class two primary levels (class five) education. Unfortunately, none of them completed the primary level (class five) education. Besides, only 14 % completed their school secondary certificate (SSC/ equivalent toclass ten) level education. In addition, only four families have eight members of each and they have no education.

(b) Educational Qualifications of the 100 Non-Borrower Family Members:

The figure 5.10 illustrates the educational qualificationsof 100 non-borrower respondents. The scenario of educational qualification of the respondent (Family member-1) is: 64 % respondents have no education while only 25 % completed their primary level (class five) education. In addition, the 7 %respondent completed their junior school level (class eight) education. Besides, only 4 % respondent completed school secondary certificate (SSC/ equivalent toclass ten).



The status of educational qualification of the second family member is: 60 % have no education while only 29 % completed their primary level (class five) education. In addition, the 5 %, 4 % and 2 % completed their junior school level (class eight), school secondary certificate (SSC/ equivalent toclass ten) and higher secondary level (HSC/ equivalent toclass twelve) level education accordingly.

The status of educational qualification of the third family member is: 42 % have no education while only 51 % completed their primary level (class five) education. In addition, the 5 %, 2 % and 2 % completed their junior school level (class eight), school secondary certificate (SSC/ equivalent toclass ten) and higher secondary level (HSC/ equivalent toclass twelve) level education accordingly. It is the matter of great pleasure that, only 1 %is pursuing the undergraduate level education.

The data illustrate that, seventy three families have four members of each. The status of educational qualification of the fourth family member is: 51 % having no education while only 33 % completed their primary level (class five) education. In addition, the 8 % completed their junior school level (class eight) and another 8 % finished school secondary certificate (SSC/ equivalent toclass ten) level education accordingly.

The data demonstrate that, 37 families have five members of each. The status of educational qualification of the fifth family member is: 54 % having no education while only 34 % completed their primary level (class five) education. In addition, the 6 %, 3 % and 3 % completed their junior school level (class eight), school secondary certificate (SSC/ equivalent toclass ten) and higher secondary level (HSC/ equivalent toclass twelve) level education accordingly.

The data expose that, 16 families have six members of each. The status of educational qualification of the sixth family member is: 63 % having no education while only 37 % completed their primary level (class five) education.

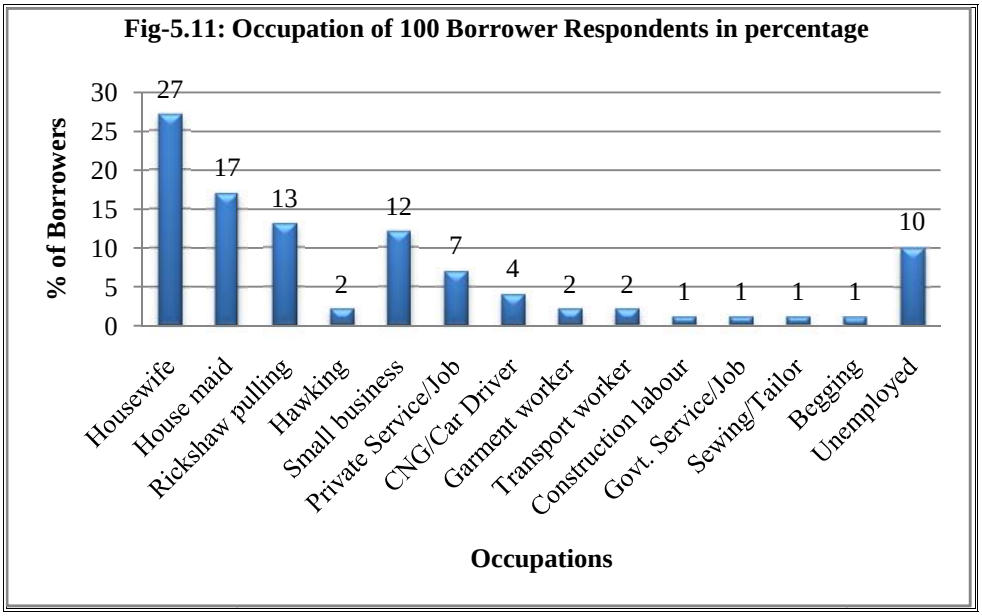
Moreover, the data reveal that, 9 families have seven members of each. The status of educational qualification of the seventh family member is: 78 % having no education while only 22 % completed their class primary levels (class five) education. In addition, only four families have eight members of each. Among them, 75 % have no education while only 25 % completed their class one level education.

5.1.5.The Occupational Status of the 100 the Borrowers and the 100 Non-Borrowers:

(a) Primary Occupations of the Borrower Family Members:

The figure 5.11 elucidates the occupational status of 100 borrower respondents. The scenario of primary occupation of the borrower respondent (family member-1) is, 27 %-the largest portion of respondents is the housewife who is engaged in domestic works. Besides, house maid (17%) secured the second largest occupation followed bythe rickshaw pulling (13%), small business (12%), private service/job (7%), CNG/car driver (4%),the garment worker (2%), transportation worker (2%), hawking (2%), construction labor (1%), Govt. service/job (1%), sewing/tailor (1%) and begging (1%) respectively. The most common forms of businesses are the small tea shop, grocery, cigarettes shop, and fruit business, scrap business, etc. However, 10% respondents are unemployed and they are students.

Fig-5.11: Occupation of 100 Borrower Respondents in percentage



The status of primary occupation of the second family member is, 31 %-the highest portionsare the housewife who is engaged in domestic works. Besides, small business (16%) secured the second largest occupation followed bythe rickshaw pulling (9%), house maid (5%), hawking (4%), transportation worker (3%), electrician (3%),

Thegarment worker (2%), private service/job (2%), day labor (2%), shoe making business (2%), machine repairing inthe workshop (2%), CNG/car driver (1%), van driver (1%) and Govt. service/job (1%) respectively. The most common forms of businesses are small tea shop, grocery, cigarettes shop, fruit business, scrap business, etc. However, 15% respondents are unemployed, among them 14% are students.

The status of primary occupation of the third family member is, 66 %-the largest portion is unemployed while another 13% are children. Among the unemployed, 86.36% are students. Besides, 5% are housewife who is engaged in domestic works. Besides, construction labor (3%) secured the second largest occupation followed by small business (2%), rickshaw pulling (2%), laundry service (2%), hawking (1%), and transportation worker (1%), electrician (1%),cleaner (1%), day labor (1%) and CNG/car driver (1%) respectively. The most common forms of businesses are small tea shop, grocery, cigarettes shop, fruit business, scrap business, etc.

Furthermore, it should be mentioned that, among the 100 borrowers, 74 families have 4 members in the family. The status of primary occupation of the fourth family member is, 58 %-the largest portion is unemployed while another 17% are children. Among the unemployed, 75.87% are students. Besides, 5% are engaged in small business. Besides, other major occupational status is house maid (3%),the garment worker (3%), housewife (3%), private service/job (3%),cleaner(3%), and CNG/car driver (3%), construction labor (1%) and industrial labor (1%) respectively.

It should be stated that, among the 100 borrowers, 54 families have 5 members in the family. The status of primary occupation of the fifth family member is, 52 %-the largest portion of respondents is unemployed while another 20% are children. Among the unemployed, 42.30% are students. Besides, 11% are housewife who is engaged in domestic works. Besides, other major occupational status is a garment worker (4%), van driver (4%), small business (3%), industrial labor (2%), private service/job (2%) and day labor (2%) respectively.

It should be mentioned that, among the 100 borrowers, 30 families have 6 members in the family. The status of primary occupation of the sixth family member is, 50 %-the largest

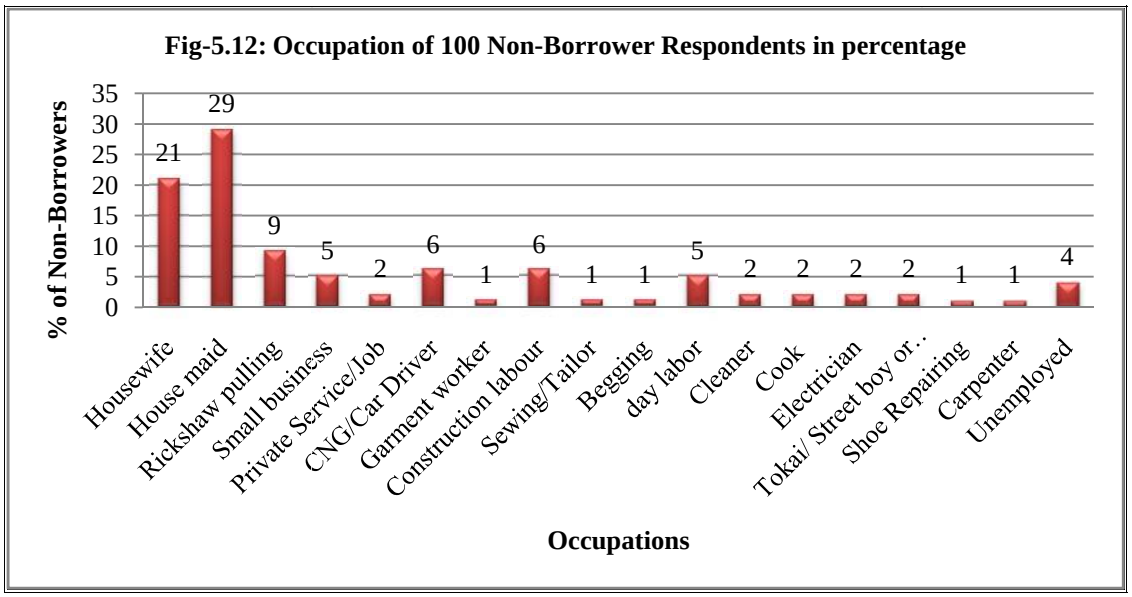
portion of respondents is unemployed while another 23% are children. Among the unemployed, 33.33% are students. Besides, 20% are housewife who is engaged in domestic works and another 7% are Housemaid.

Moreover, among the 100 borrowers, 14 families have 7 members in the family. The status of primary occupation of the seventh family member is, 72 %-the largest portion of respondents is unemployed while another 7% are children. Among the unemployed, 21.42% are students. Besides, the remaining 21% is van driver.

Finally, among the 100 borrowers, 4 families have 8 members in the family. The status of primary occupation of the eighth family member is, 75 %-the largest portion of respondents is unemployed while another 25% are children. This is the scenario of occupational status of borrowers' family.

(b) The Status of Primary Occupations of the Non-Borrower Family Members:

The figure 5.12 shows the occupational status of 100 non-borrower respondents. The scenario of primary occupation of the non-borrower respondent (family member-1) is, 29 %-the largest portion of respondents is house maid. Besides, housewife (21%) secured the second largest occupation followed bytherickshaw pulling (9%), construction labor (6%), CNG/car driver (6%), small business (5%), day labor (5%), private service/job (2%),cleaner(2%), cook (2%), electrician (2%),thetokai/garbage collecting Street boy (2%),thegarment worker (1%), shoe repairing (1%), carpenter (1%), sewing/tailor (1%) and begging (1%) respectively. The most common forms of businesses arethe small tea shop, grocery, cigarettes shop, and fruit business, scrap business, etc. However, 10% respondents are unemployed and they are students. Finally, 4% are unemployed and they are students.



The status of primary occupation of the second family member is, 19 %-the largest portion is the housewife who is engaged in domestic works. Besides, rickshaw pulling (14%), secured the second largest occupation followed by day labor (12%), house maid (8%), small business (8%), Security (6%), van driver (4%),thegarment worker (3%),cleaner(3%), transportation worker (2%), private service/job (2%), Hotel/Restaurant Worker (2%), box making business (paper, soil) (1%), Govt. service/job (1%), cook (1%), electrician (1%), imam of theMosque (1%) and sewing/tailor (1%) respectively. Finally, 6% are unemployed and they are students.

The status of primary occupation of the third family member is, out of 100 non-borrowers, 95 families have three family members. Among them, 35 %-the largest portion is unemployed and they are students. Besides, 28% are children. As well, 7% are housemaid who is engaged in domestic works of another family. Besides, housewife (5%) secured the second largest occupation followed by van driver (4%), small business (3%), rickshaw pulling (2%),thegarment worker (3%), day labor (2%), machine repairing intheworkshop (2%), hawking (1%), transportation worker (1%), construction labor (1%), private service/job (1%), and peon (1%) respectively.

Furthermore, it should be mentioned that, among the 100 borrowers, 73 families have 4 members in the family. The status of primary occupation of the fourth family member is, 30 %-the largest portion is unemployed and they are students. Besides, another 25% are

children. Besides, 4% are housemaid followed by housewife (3%), small business (3%),and private service/job (3%), machine repairing intheworkshop (1%), hawking (1%), and CNG/car driver (1%) respectively.

It should be pointed out that, among the 100 borrowers, 37 families have 5 members in the family. The status of primary occupation of the fifth family member is: 14 %- of respondents are unemployed while another 15% are children. Among the unemployed, 71.42% are students. Besides, 6% are housewife who is engaged in domestic works. Besides, other major occupational status is the transportation worker (1%) and construction labor (1%) respectively.

In addition, among the 100 borrowers, 16 families have 6 members in the family. The status of primary Occupation of the sixth Family member is: 5% % of respondents are unemployed while another 8% are children. Among the unemployed, 20% are students. Besides, 2% are housewife who is engaged in domestic works and another 1% is sewing/Tailor.

Moreover, among the 100 borrowers, only 9 families have 7 members in the family. The status of primary Occupation of the seventh Family member is: 4 % of respondents are unemployed while another 5% are children. Among the unemployed, 25% are students.

Finally, among the 100 borrowers, 4 families have 8 members in the family. The status of primary Occupation of the eighth Family member is: 2 % of respondents are unemployed while another 2% are children. Among the unemployed, 50% are students. This is the scenario of occupational status of non-borrowers' family.

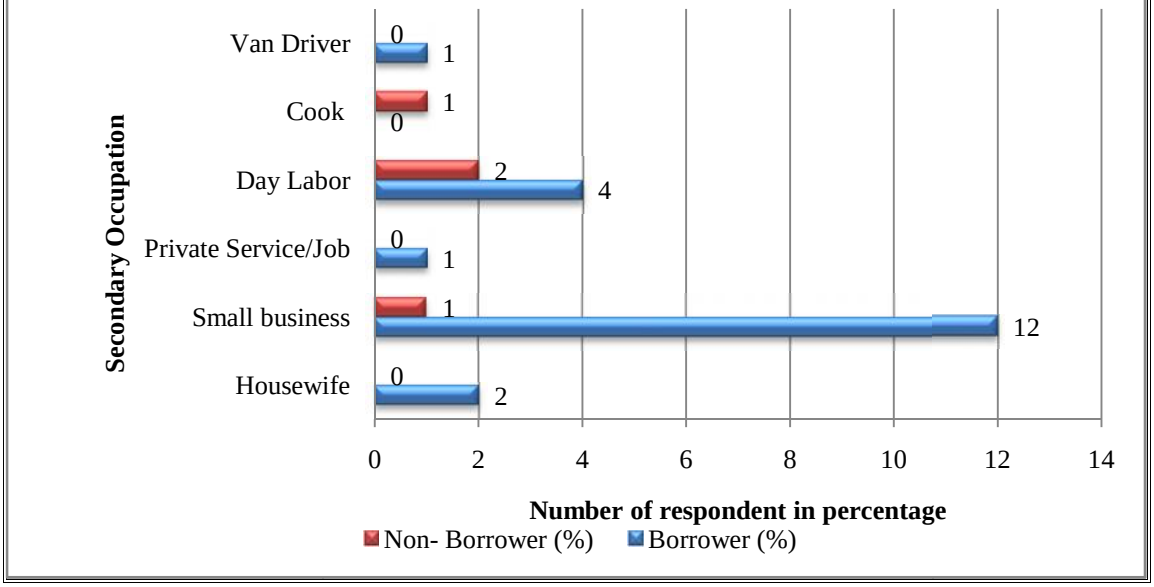
(c) Status of Secondary Occupation and Change in the Occupation:

The figure 5.13 demonstrates the status of secondary occupation ofthe borrower and the non-borrower respondents (In percentage) between 2010 and 2015 Periods.

Furthermore,80 % respondent borrowers have no secondary occupation. Only 12% havethe small business as a secondary occupation followed by day labor (4%), housewife (2%), van driver (1%) and private service/job (1%) respectively.

On the contrary, out of 100 non-borrower respondent, 96 % respondents have no secondary occupation. The remaining 4% have secondary occupation, among them, only 2% are day labor followed by day small business (1%), and cook (1%) respectively.

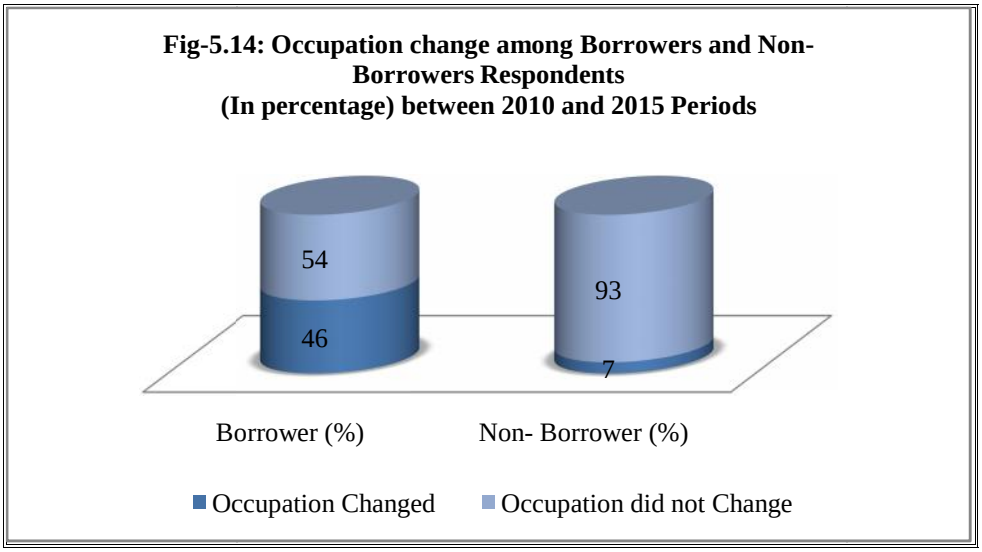
Fig-5.13.: Secondary Occupation among Borrower and Non-Borrower Respondents (In percentage) between 2010 and 2015 Periods



(d) Change in the Occupation:

The figure 5.14, figure 5.15 and figure 5.16 clarifies the status and reasonsfor changing theoccupation of the borrower and the non-borrower respondents (In percentage) between 2010 and 2015 periods.

Fig-5.14: Occupation change among Borrowers and Non-Borrowers Respondents (In percentage) between 2010 and 2015 Periods



Furthermore, during 2010-2015 periods, the occupation did not change for 54% borrower respondents, whereas it changed for only 46% respondents. The main reason of changing occupation is the investment from Microcredit (87%) andthe new job (13%) respectively. Conversely, among 100 non-borrowers, the occupation did not change for 93% respondents, whereas it is changed for only 7% respondents. Among the 7%, the main cause of changing occupation is the joining in new job (3%) followed by investment funded by relatives (2%), training in workshop (1%) and in education level upgrades (1%) respectively.

Fig-5.15: Causes of Occupation Change among 100 Borrower (%) between 2010 and 2015

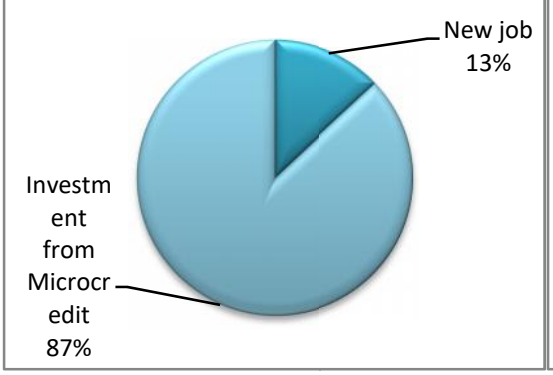
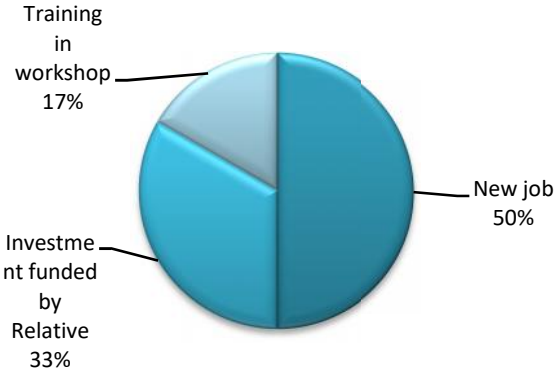
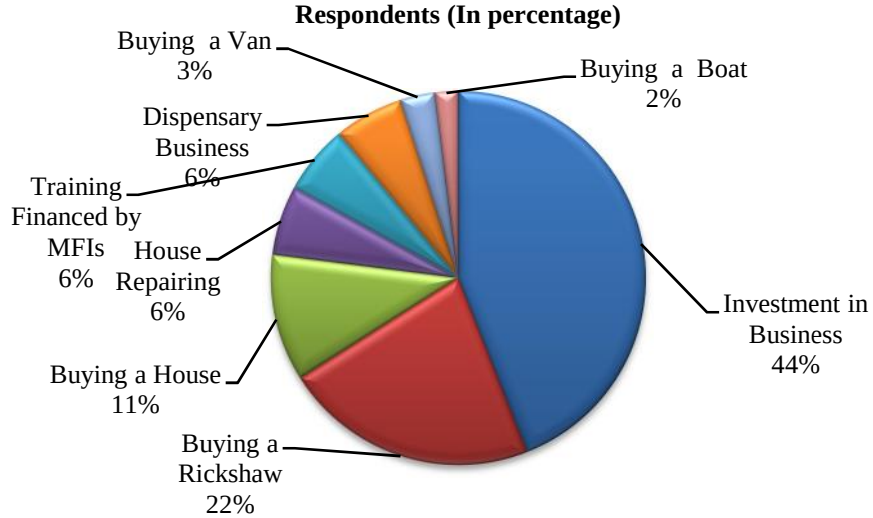


Fig-5.16: Causes of Occupation Change among 100 Non- Borrower (%) between 2010 and 2015



(e) Employment/Uses of Microcredit by the 100 Borrower Respondents (In percentage)

Fig-5.17: Employment/Uses of Microcredit among 100 Borrower Respondents (In percentage)

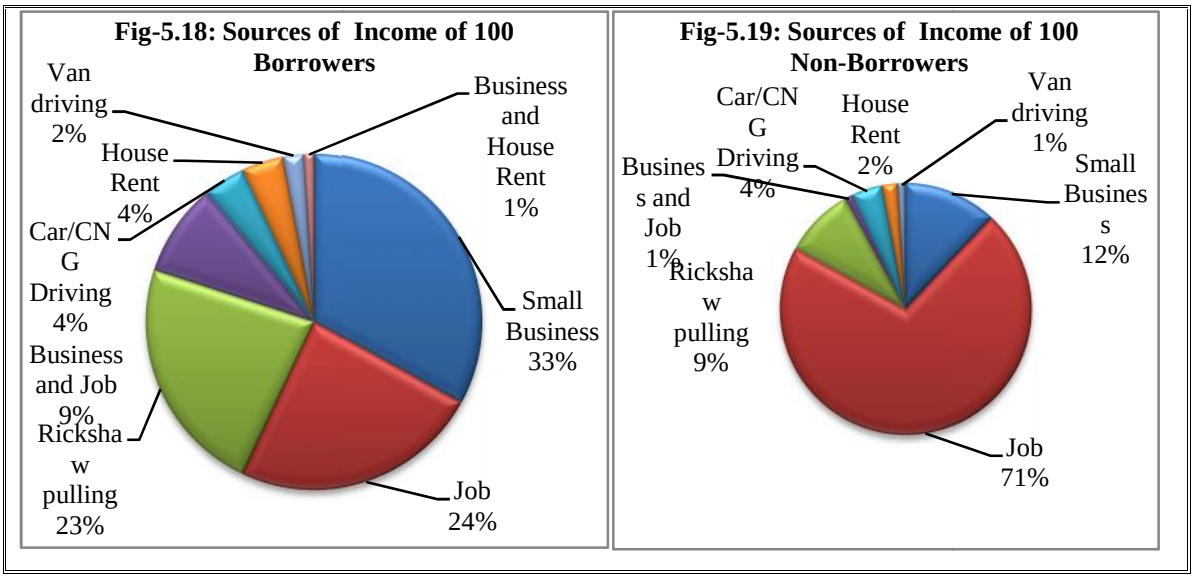


The figure 5.17 exhibits the employment of Microfinance by the borrowers. The 100 borrowers use the Microfinancecredit for following purposes- investment in the business (44%), buying a rickshaw (22%), buying a house (11%), house repairing (6%), training financed by MFIs (6%), dispensary business (6%), buying a van (3%), and buying a boat (2%) correspondingly.

5.1.5 Income Patterns of the 100 Borrowers and the 100 Non-Borrowers:

a) Sources of Income:

The figure-5.18 and figure-5.19 present the sources of Income of 100 borrowers and 100 non-borrowers respectively. Basically, among the 100 borrowers, the single source of income is the small business (33%) followed by job (24%), rickshaw pulling (23%), car/CNG driving (4%), house rent (4%) and van driving (2%) respectively. Conversely, 45% families have dual sources of income that is business and job jointly (9%) and the business and house rent jointly (1%) simultaneously.



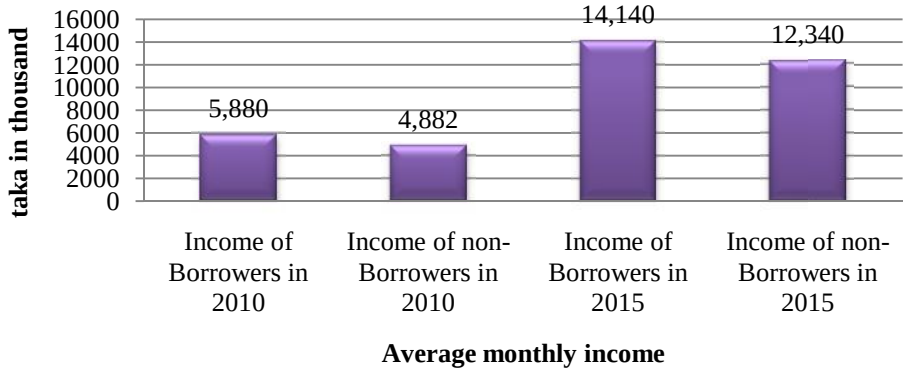
Conversely, among the 100 non-borrowers, the single source of income is job (71%) followed by small business (12%), rickshaw pulling (9%), car/CNG driving (4%), house rent (2%) and van driving (1%) respectively. Conversely, 1% family has dual sources of income that is business and job simultaneously.

b) Increasing Rate of Income and the Status of Poverty Line:

However, among the 100 borrowers, average monthly current income increased for 100% borrower and 99% non-borrower families positively. The fig-5.5 shows that, between 2010 and 2015, in aggregates, average monthly income of borrowers' increased by 140.47 %, whereas it was 152.76% for non-borrowers.

Unfortunately, average monthly current income decreases for 1% non-borrower family because of incapability to work due to illness. On the contrary, income of non-borrowers was16.97% lower than the income of borrower in 2010 and it is still 12.72% lower than the income of the borrower in 2015. Figure-5.20 described this situation.

Fig-5.20 : Comparison of the Average monthly income of Borrower and non-borrower between 2010 and 2015



The key point is that, during the last five years, the income of non-borrowers rises more than the income of borrowers. But currently, the incomes of the non-borrowers are tk.1, 800 lower than the income of borrowers.

Income Trends in the Three Slums:

In Korail slum, the current average monthly income of borrowers is tk.12, 088.89 while at 5 years ago, it was tk.4, 955.56 per month. In contrast, currently average monthly Income of non-borrowers is tk. 12,044.44 while at 5 years ago, it was tk.4, 326.67 per month.

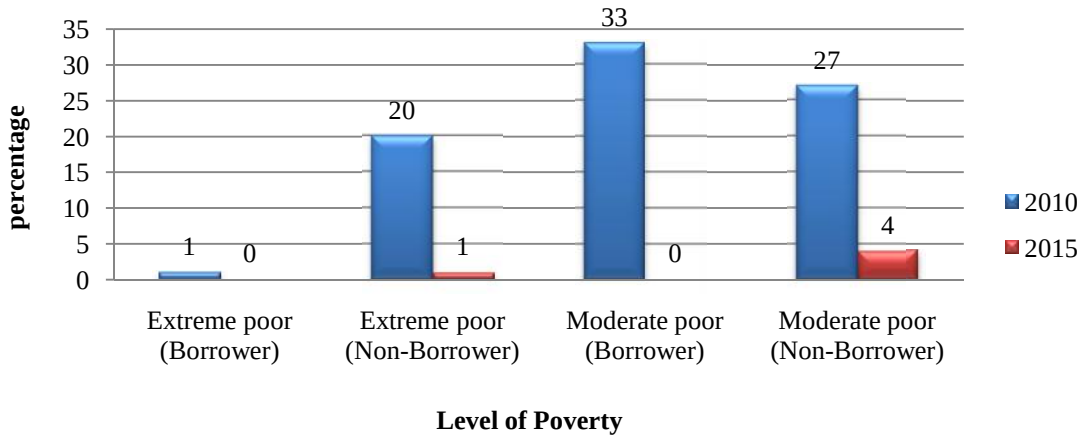
In Jurain slum, the current average monthly income of borrowers is tk.13, 828.57 while at 5 years ago, it was tk.5, 857.15 per month. In contrast, currently average monthly Income of non-borrowers are tk.11, 514.28 while at 5 years ago, it was tk.4, 871.42 per month.

In WASA colony slum, the current average monthly income of borrowers is tk.19, 300 while at 5 years ago, it was tk.8, 000 per month. In contrast, the current average monthly income of non-borrowers are tk.14, 450 while at 5 years ago, it was tk.6, 150 per month.

c) Income of the Respondents below Poverty Line:

Moreover, figure 5.21 depicts income poverty of borrowers and non-borrowers. The data for five years ago illustrates that, among 100 borrowers, only 1% borrower was extremely poor who had less than $1.25 income per day (less than tk. 2,937.68 per month in Bangladesh at 2015 price) and another 33% people were moderately poor who had less than $2 income per day (less than tk. 4,700 per month in Bangladesh at 2015 price). It was an alarming situation. Conversely, presently, no families are found below the poverty line. In addition, at the five years ago, 84% borrower family's income was less than tk.10, 000 incomes per month. On the other hand, currently, this number declined to 22%.

Fig-5.21: Poverty Rate among Borrowers and Non-Borrowers between 2010 and 2015



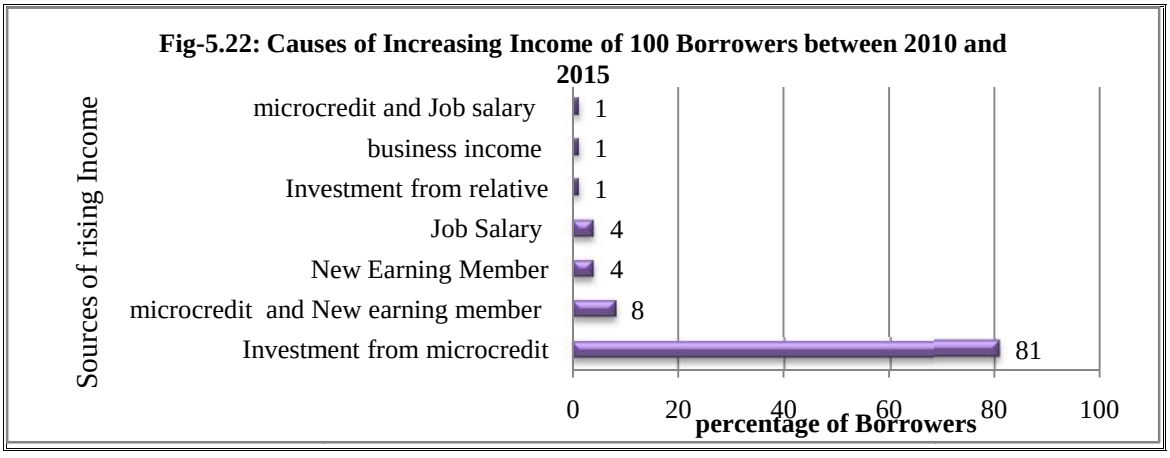
In addition, at the five years ago, only 16% borrowers' income was between tk.10, 000 and tk.15, 000. Besides, no family's income had over tk.15000. In contrast, currently, 78% borrowers' income is between tk.10, 000 and tk. 35,000. Presently, 31% people

have incomesof tk. 7,000 to tk.10, 000 per month. Besides, 58% have incomesof tk.11, 000 to tk.20, 000 and 8% have tk.22, 000 to tk.30, 000 per month. Only 3% people have income more than tk.30, 000 and the range is tk.31, 000 to tk.35, 000 per month.

On the contrary, among 100 non-borrowers, at five years ago, 20% people were extremely poor who had less than $1.25 income per day (less than tk. 2,937.68 per month in Bangladesh at 2015 price) and another 27% people were moderately poor who had less than $2 income per day (less than tk. 4,700 per month in Bangladesh at 2015 price). It was an alarming situation. Conversely, at present, the number of extremely poor families declined to 1% from 20% and moderately poor families declined to 4% from 27%. Moreover, according to the world bank approved new global poverty line (less than $1.90 income per day or less than tk. 4,465.28 per month in Bangladesh at 2015 price)), only 5% non-borrowers stay below this poverty line. In addition, at the five years ago, 97% non-borrower family's income was less than tk.10000 income per month. On the other hand, currently, this number declined to 37%.

In addition, at the five years ago, only 13% non-borrowers' income was between tk.10, 000 and tk.15, 000. Besides, no family's income had over tk.15, 000. In contrast, currently, 62% non-borrowers' income is between tk.10, 000 and tk. 15,000. In addition, currently, 15% non-borrowers' income is between tk.18, 000 and tk. 40,000.

d) Causes of Income Increases:

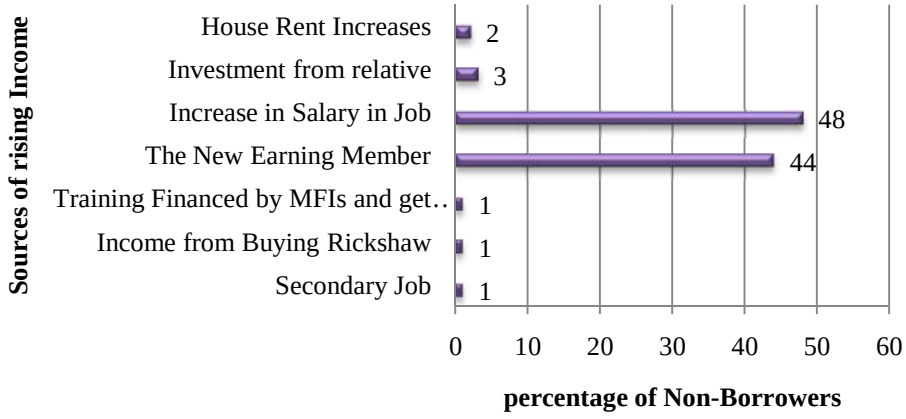


In response to the question about the causes of rising income, among 100 borrowers, maximum 81% reported that, their income increased due to Investment financed by Microcredit.In addition, 5% stated that, their income increases due to rising salary or income from a job or Business. Besides, 4% specified that, their income increases due tothe new earning member of the family (see Fig-5.22).

Moreover, the borrower's income increases due to increased investment income from relatives (1%). Moreover, 8% reported that, their income increases by the investment from Microcredit in business and new earning membersimultaneously. Finally, another 1% stated that, their income increases by investment from Microcredit in business and my salary increases in job simultaneously.

Contrariwise, among the 100 non-borrowers, maximum 48% stated that, their income increases due to the rising salary or income from a job or business. Besides, 44% stated that, their income increases due tothe new earning member of the family. In addition, non-borrowers income increases due to increased investment income from relatives (3%), house rent increases (2%), secondary job (1%), buyinga rickshaw (1%) and training financed by MFIs and get new job (1%) respectively. (See Fig-5.23).

Fig-5.23: Causes of Increasing Income of 100 Non-Borrowers between 2010 and 2015



5.1.6. Expenditure and Its Categories of the 100 Borrowers and the 100 Non-Borrowers:

a) Expenditure Trends of 100 Borrowers and Non-Borrowers:

The expenditure trend shows the same patterns as income trends of both the borrowers and the non-borrowers. The figure 5.24 and figure 5.25 illustrates the expenditure trends of 100 borrowers while figure 5.26 and figure 5.27 explains the expenditure trends of 100 non-borrowers.

As well, currently, 99% borrowers spend all income except a very small amount saving that varies from tk.80 to tk.500. Exceptionally, only 1% borrowers save tk. 1000 per month and another 1% have no savings. Similarly, among 100 non-borrowers, 84% non-borrowers spend all of the income. Only 16% non-borrowers have a very small amount of saving that varies between tk.100 and tk.500.

In addition to savings, average monthly current expenditure of 100 borrowers varies fromtk.7, 700 to tk. 31,700 whereas at five years ago, itvaried from tk.2, 000 to tk. 15,000 respectively. Furthermore, in the same way, average monthly current expenditure of 100 non-borrowers varyfrom tk.2, 000 to tk. 35,000 whereas at five years ago, itvaried from tk.1, 000 to tk. 15,000.

Fig-5.24 : Percentage of Category wise Expenditure of 100 Borrowers in Dhaka Slum in 2010

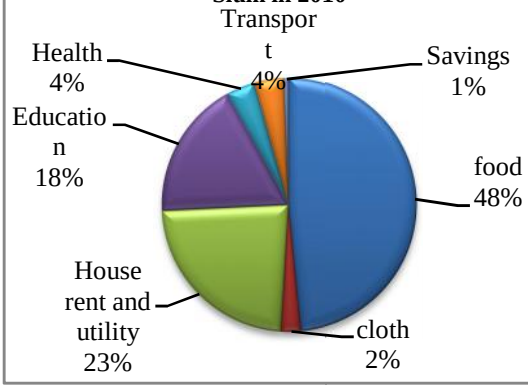
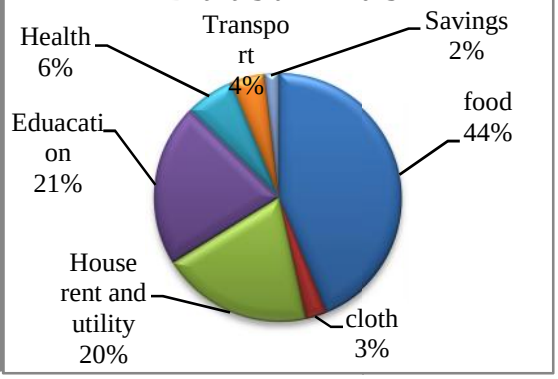
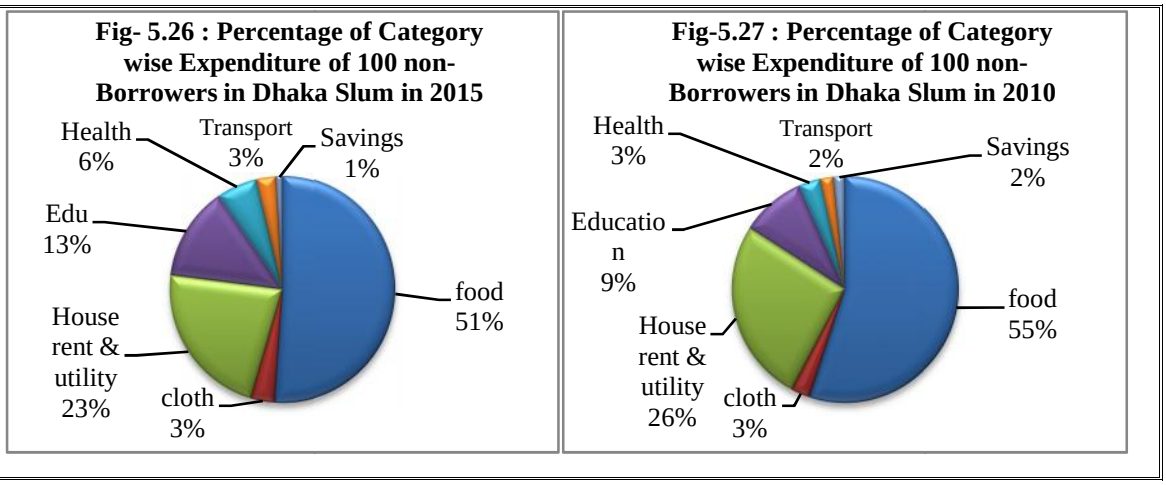


Fig-5.25 : Percentage of Category wise Expenditure of 100 Borrowers in Dhaka Slum in 2015



More precisely, currently, among the 100 borrowers, maximum families spend the largest portion of income on food (44%) followed by education (21%), house rent, gas and utilities (20%), health (6%), transportation (3%), cloth (3%) and savings (2%) respectively. Similarly, at the five years ago, they spent the largest portion of income on food (48%) followed by house rent, gas and utilities (23%), education (18%), health (4%), transportation (4%), cloth (2%) and savings (1%) respectively.

Similarly, currently, the non-borrower families spend the largest portion of income on food (51%) followed by house rent, gas and utilities (23%), education (13%), health (6%), transportation (3%), cloth (3%) and savings (1%) respectively. Similarly, at the five years ago, they spent the largest portion of income on food (55%) followed by house rent, gas and utilities (26%), education (9%), health (3%), cloth (3%), transportation (2%), and savings (2%) respectively



Expenditure Trends in Three Slums:

More precisely, In Korail slum, the current average monthly expenditure of borrowers is tk.11, 752.89 per month while at 5 years ago, it was tk.4, 955.56 per month. In contrast, the current average monthly expenditure of non-borrowers are tk.11, 802.22 per month while at 5 years ago, it was tk.4, 215.56 per month.

In Jurain slum**,** thecurrent average monthly expenditure of borrowers is tk.13, 629.71 while at 5 years ago, it was tk. 5,485.71 per month. In contrast, the current average monthly expenditure of non-borrowers are tk.11, 442.85 per month while at 5 years ago, it was tk.4, 900 per month.

In WASA colony slum,the current average monthly expenditure of borrowers is tk.19, 003 while at 5 years ago, it was tk. 8,084.5 per month. In contrast, the current average monthly expenditure of non-borrowers is tk.14, 210 per month while at 5 years ago, it was tk.6, 150 per month.

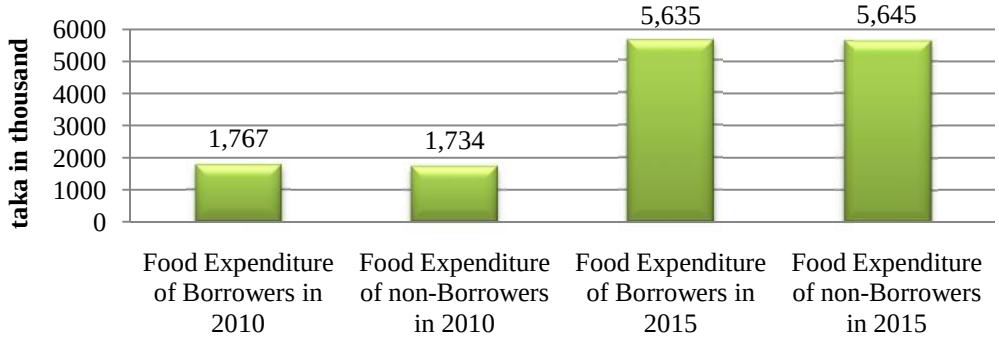
b) Food Expenditure:

At present, food expenditure varies between 25 to 92 % of the 100 borrowers whereas it is recorded as 31 to 92 % for 100 non-borrowers.

More specifically, at present, among 100 borrowers, 38 % families spend 25% to 40%, 60% families spend 41% to 79% and 2% families spend 81% to 83% of their income on food consumption. Similarly, presently, out of 100 non-borrowers, 36% families spend 31% to 50%, and 59% families spend 53% to 79% of their income on food consumption. Only 5% families spend 81% to 92% of their income on food consumption.

On the other hand, at the five years ago, among the borrowers, 46% families spent 19% to 50% and 42% families spend 51% to 78% of their income on food consumption. The remaining 3% families spend 81% to 92% of their income on food consumption. In the same way, among 100 non-borrowers, 24% families spent 27% to 49%, 63% families spend 50% to 78% and 12% families spend 81% to 90% of their income on food consumption. Only 1% families spend 99% of their income on food consumption.

Fig-5.28 : Comparison of the Average monthly Food Expenditure of Borrowers and non-borrowers between 2010 and 2015



More watchfully,the fig-5.28 displays that, between 2010 and 2015, average monthly Food Expenditure of borrowers' increased by 218.90 %, whereas it was recorded as 225.54% for non-borrowers. Besides, food expenditure of non-borrowers was 1.8% lower than that of borrower in 2010 and it is now 0.18% higher for non-borrowers than the food expenditure of the borrower in 2015.

The concluding point is that, during the last five years, food expenditure of non-borrowers rises more than the Food Expenditure of borrowers. That is 0.18% or tk.10 higher for non-borrowers.

More specifically,

In theKorail slum,thecurrent average food expenditure of borrowers is tk.4, 788.89 per month while at 5 years ago, it was tk.1, 777.78 per month. In contrast, currently average food expenditure of non-borrowers are tk.5, 755.56 per month while at 5 years ago, it was tk.1, 764.44 per month.

In theJurain slum,the current average food expenditure of borrowers is tk. 5,228.57 per month while at 5 years ago, it was tk.1, 562.85 per month. In contrast, currently average food expenditure of non-borrowers are tk.5, 014.28 per month while at 5 years ago, it was tk.1, 648.57 per month.

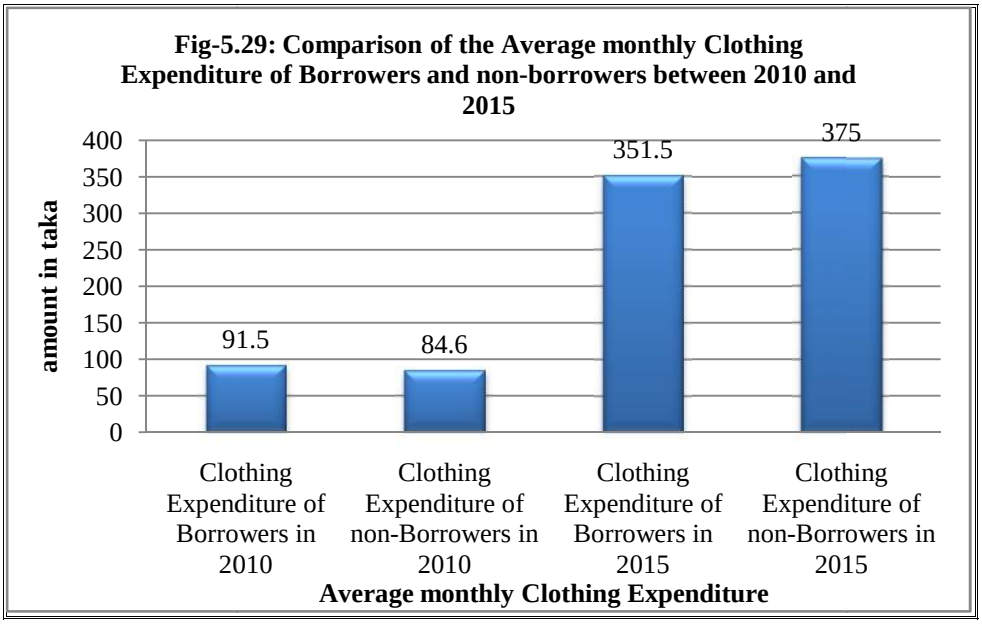
In theWASA colony slum,thecurrent average food expenditure of borrowers is tk. 8,250 per month while at 5 years ago, it was tk.2, 100 per month. In contrast, currently average food expenditure of non-borrowers is tk.6, 500 per month while at 5 years ago, it was tk.1, 815 per month.

c) Cloth Expenditure:

Currently, cloth expenditure varies from 1%to 9 % of the 100 borrowers, whereas this figure varies from 1%to 9 % for 97% non-borrowers. Besides, 3% non-borrowers have no clothing expenditure and 1% non-borrower has 15% cloth expenditures.

Similarly, at 5 years ago, cloth expenditure varied from 1% and 6 % among 100 borrowers; whereas this figure varies from 1%to 9 % for 95% non-borrowers and 3% non-borrowers had no clothing expenditure. Exceptionally, 1% non-borrower had 15% cloth expenditures.

Furthermore, the fig-5.29 reveals that, between 2010 and 2015, average monthly clothing expenditure of the borrowers' increased by 284.15%, whereas it risen by 343.66% for the non-borrowers. In addition, clothing expenditure of the non-borrowers was 7.5% lower than the clothing expenditure of borrower in 2010 but it is now 6.26% higher for the non-borrowers than that of borrower in 2015.



The finishing point is that, during the last five years, clothing expenditure of non-borrowers rises more than the clothing expenditure of borrowers. That is 6.26% or tk.23.5 higher for non-borrowers.

In theKorail slum,thecurrent average cloth expenditure of borrowers is tk.295.56 per month while at 5 years ago, it was tk.113.11 per month. In contrast, currently average cloth expenditure of non-borrowers are tk.380 per month while at 5 years ago, it was tk.98.89 per month.

In the Jurain slum,the current average cloth expenditure of borrowers is tk.331.42 per month while at 5 years ago, it was tk.68.85 per month. In contrast, currently average cloth expenditure of non-borrowers are tk.365.71 per month while at 5 years ago, it was tk.69.42 per month.

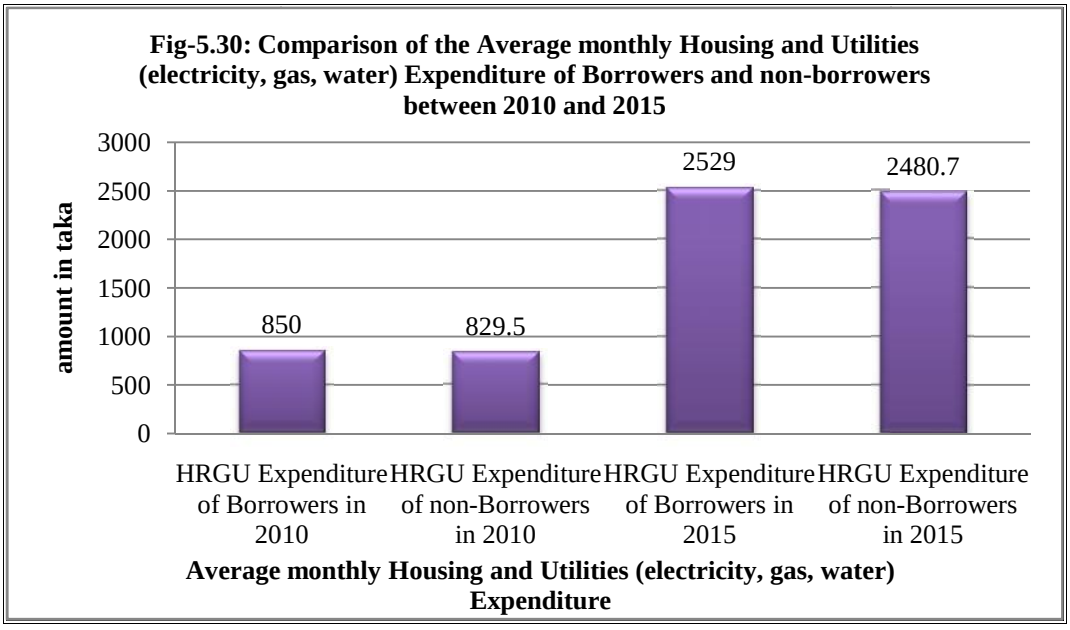
In the WASA colony slum,the current average cloth expenditure of borrowers is tk.512.5 per month while at 5 years ago, it was tk.82.5 per month. In contrast, currently average cloth expenditure of non-borrowers are tk.380 per month while at 5 years ago, it was tk.79 per month.

d) Housing and UtilityExpenditure:

Currently, housing and utility expenditure varies from 2% to 45 % of the 100 borrowers, whereas this figure varies from 3%to 49 % for 99% non-borrowers. Only 1% non-borrower has no housing expenditure, but he has utility expenditure.

In addition, currently, among 100 borrowers, 78% families spend 2% to 30% and the remaining 22% families spend 33% to 45% of their income on housing and utility purposes. Similarly, currently, among 100 non-borrowers, 77% families spend 3% to 30% and the remaining 22% families spend 31% to 49% of their income on housing and utility purposes. Only 1% has no housing expenditure, but they have utility expenditure.

Conversely, while at 5 years ago, among 100 borrowers, 53% families spend 2% to 30% of their income on housing and utility purposes. Besides, 38% families spend 31% to 57% of their income on housing and utility purposes. In addition, 10% families have no house rent, but they have utility bill only. Similarly, among the 100 non-borrowers, at 5 years ago, 49% families spent 2% to 30% of their income on housing and utility purposes. Besides, 59% families spent 31% to 57% of their income on housing and utility purposes. Finally, 1% Familyhas no house rent, but they have utility bill only.



Moreover, fig-5.30 discloses that, between 2010 and 2015, average monthly housing, and utilities (electricity, gas, water) expenditure of the borrowers' raised by 197.52% whereas it was 199.05% for the non-borrowers. Besides, housing, and utilities (electricity, gas, water) expenditure of the non-borrowers were 2.41% lower than the housing and utilities (electricity, gas, water) expenditure of borrower in 2010 and it is still 1.90% lower for the non-borrowers than that of the borrower in 2015.

The ending point is that, during the last five years, Housing, and utilities (electricity, gas, water) Expenditure of non-borrowers increases more than thatof the borrowers. But it is now 1.90% or tk.48.3 lower for non-borrowers.

In Korail slum, thecurrent average housing, and utilities (electricity, gas, water) expenditure of borrowers is tk.2, 480 per month while at 5 years ago, it was tk.948.89 per month. In contrast, the current average housing, and utilities (electricity, gas, water) expenditure of non-borrowers is tk.2, 677.78 per month while at 5 years ago, it was tk.880 per month.

In Jurain slum,the current average housing, and utilities (electricity, gas, water) expenditure of borrowers is tk.2, 065.71 per month while at 5 years ago, it was tk.600 per month. In contrast, the current average housing, and utilities (electricity, gas, water) expenditure of non-borrowers is tk.1, 856.28 per month while at 5 years ago, it was tk.627.15 per month.

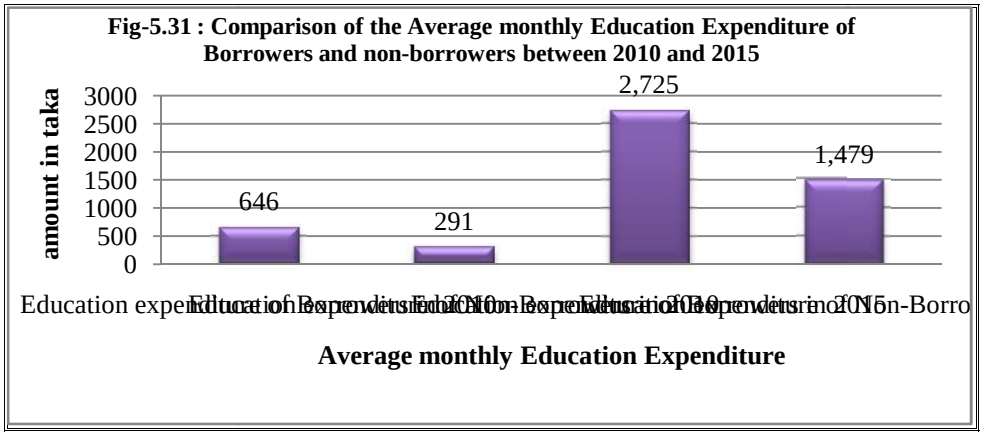
In WASA colony slum,the current average housing, and utilities (electricity, gas, water) expenditure of borrowers is tk.3, 500 per month while at 5 years ago, it was tk.1, 065 per month. In contrast, the current average housing, and utilities (electricity, gas, water) expenditure of non-borrowers is tk.3130 per month while at 5 years ago, it was tk.1, 070 per month.

e) Educational Expenditure:

Presently, educational expenditure of 73% borrowers varies from 5% to 54 %. Moreover, 27% borrower families have no educational expenditure. In contrast, this figure varies from 2%to 50 % for 53% non-borrowers. Unfortunately, 47% non-borrowers spend none of income on education.

Besides, it is the matter of great hope that, among 100 borrowers, currently 40% families spend 5% to 25% and 32% families spends 26% to 49% of their income on education. Besides, only 1% borrowers spend more than 50% (that is 54%) of income on education. Similarly, among 100 non-borrowers, currently 45% families spend 3% to 30% and 8% families spends 34% to 50% of their income on education.

Conversely, at 5 years ago, 10% families spent 2% to 36% and 28% families spent 17% to 30% of their income on education. Besides, 11% families spent 32% to 45% and 3% families spent 54% to 58% of their income on education. In addition, 47% families had no education expenditure. Contrariwise, at 5 years ago, 77% non-borrowers had no education expenditure. In addition, 15% families spent 9% to 26% and 8% families spent 34% to 56% of their income on education.



Furthermore,the fig-5.31 reveals that, between 2010 and 2015, average monthly educationalexpenditure of borrowers' risen by 321.82% whereas it was 408.24% for non-borrowers. Besides, educational expenditure of the non-borrowers was 54.95% lower than the educationalexpenditure of the borrower in 2010 and it is still 45.72% lower than the educationalexpenditure of the borrower in 2015.

The finding is that, during the last five years, educationalexpenditure of the non-borrowers increases more than thatof the borrowers. But it is now 45.72% or tk.1246 lower for the non-borrowers.

The ending point is that, between 2010 and 2015, educational expenditure rises for 20% borrowers who had no education expenditures at 5 years ago whereas this was 30% for the non-borrowers.

In the Korail slum,thecurrent average educational expenditure of borrowers is tk.2, 844.44 per month while at 5 years ago, it was tk.633.33 per month. In contrast, currently average education expenditure of non-borrowers is tk.1, 522.22 per month while at 5 years ago, it was tk.317.8 per month.

In theJurain slum,the current average educational expenditure of borrowers is tk.2, 014.28 per month while at 5 years ago, it was tk.331.42 per month. In contrast, currently average education expenditure of non-borrowers is tk.1, 148.57 per month while at 5 years ago, it was tk.165.71 per month.

In theWASA colony slum,the current average educational expenditure of borrowers is tk.3, 700 per month while at 5 years ago, it was tk.900 per month. In contrast, currently average education expenditure of non-borrowers is tk.1, 960 per month while at 5 years ago, it was tk.450 per month.

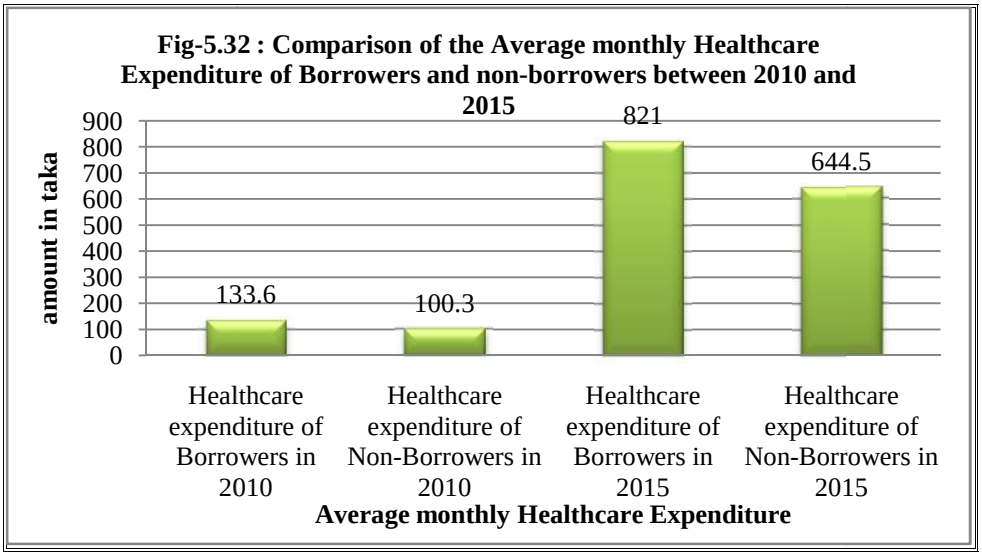
f) **HealthcareExpenditure:**

At present, the healthcare expenditures vary of 99% borrowersfrom1% to 25 %. Besides, 1% borrower families have no healthcare expenditure. In contrast, this percentage varies from 1%to 25 % for 100% non-borrowers.

Also, among 100 borrowers, 55% families spend 1% to 5%, 29% families spend 6 % to 10% and 12% families spend 11% to 18% of their income on health care cost. Besides, only 2% borrowers spend more than 20% (that is 23 to 25%) of income on health care. Similarly, currently, among 100 non-borrowers, health care cost varies from 1% and 11 % of the 89 % non-borrowers whereas 11% non-borrowers had 12 to 25% expenditure on health care.

On the contrary, at 5 years ago, among 100 borrowers, health care cost varied from 1%to 21 % of the 97% non-borrowers and 3% borrower families have no healthcare expenditure. On the contrary, at 5 years ago, health care cost varied from 1 to 11 % of the 93 % non-borrowers while the 2% non-borrowers had 15% to 21% expenditure on healthcare. In addition, only 5% non-borrowers had no expenditure on health care.

More closely, the fig-5.32 discloses that, between 2010 and 2015, the average monthly healthcare expenditure of borrowers' risen by 514.52%, whereas it was 542.51% for non-borrowers. Besides, healthcare expenditure of thenon-borrower was 24.92% lower than the healthcare expenditure of borrower in 2010 and it is still 21.49% lower for the non-borrowers than the healthcare expenditure of the borrower in 2015.



The finding is that, during the last five years, healthcare expenditure of the non-borrowers rises more than thatof the borrowers. But it is now 21.49% or tk.623.5 lower for non-borrowers the borrowers.

In theKorail slum,thecurrent average healthcare expenditure of borrowers is tk.777.78 per month while at 5 years ago, it was tk.187.55 per month. In contrast, currently average healthcare expenditure of non-borrowers is tk.520 per month while at 5 years ago, it was tk.105.33 per month.

In theJurain slum,the current average healthcare expenditure of borrowers is tk.670 per month while at 5 years ago, it was tk.90 per month. In contrast, currently average healthcare expenditure of non-borrowers is tk.612.85 per month while at 5 years ago, it was tk.76 per month.

In the WASA colony slum, thecurrent average healthcare expenditure of borrowers is tk.1, 182.5 per month while at 5 years ago, it was tk.88.5 per month. In contrast, currently average healthcare expenditure of non-borrowers is tk.980 per month while at 5 years ago, it was tk.131.5 per month.

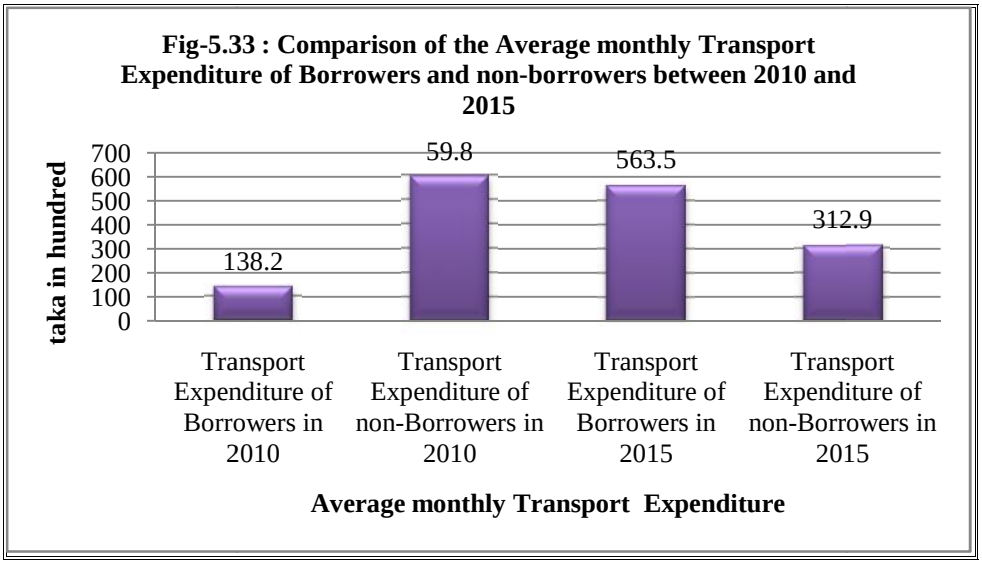
g) Transportation Expenditure:

At present, transportation expenditure varies from1%to 14 % of the 100 borrowers whereas it was 1% to 7 % for 100 non-borrowers.

More specifically, at present, among 100 borrowers, 79% families spend 1% to 5% and 20% families spend 6 % to 10% of their income on transportation purposes. Besides, only 1% borrowers spend more than 10% (that is 14%) of income on transportationpurposes. Moreover, 100 non-borrowers spend 1% to 7% of their income on transportationpurposes.

On the contrary, at 5 years ago, transportation expenditure varied from 1% and 10 % of the 99 % recipients. Only 1% recipients had 21% expenditure on transportation facilities. Similarly, at 5 years ago, transportation expenses of 100 non-borrowers varied from1% to 6 %.

More explicitly, the fig-5.33 exhibits that, between 2010 and 2015, average monthly transportation expenditure of the borrowers' rose by 307.74%, whereas it was 423.24% for the non-borrowers. On the contrary, transportation expenditure of the borrowers was 56.72% higher than that of the non-borrower in 2010. Currently, it is still 44.47% lower for the non-borrowers than the transportation expenses of borrower in 2015.



The ending result is that, during the last five years, transportation expenses of the non-borrowers increased more than the borrowers. In contrast, currently, it is 44.47% or tk.250.6 lower for the non-borrowers than the borrower.

In the Korail slum,the current average transportation expenditure of borrowers is tk.633.33 per month while at 5 years ago, it was tk.172.22 per month. In contrast, the current average transportation expenditure of non-borrowers is tk.305.33 per month while at 5 years ago, it was tk.65.11 per month.

In theJurain slum,the current average transportation expenditure of borrowers is tk.505.71 per month while at 5 years ago, it was tk.124.28 per month. In contrast, the current average transportation expenditure of non-borrowers is tk.328.57 per month while at 5 years ago, it was tk.56.57 per month.

In theWASA colony slum,the current average transportation expenditure of borrowers is tk.507.5 per month while at 5 years ago, it was tk.86 per month. In contrast, the current average transportation expenditure of non-borrowers is tk.302.5 per month while at 5 years ago, it was tk.53.5 per month.

5.1.8 Causes of Increasing MonthlyAverage Expenditures of the 100 Borrowers and the 100 Non-Borrowers:

The figure 5.34 and figure 5.35 illustrates that, the monthly average expenditure of 100 borrower and non-borrower families rises for almost some common reasons.

The monthly average expenditure of 100 borrower families increases for four reasons. The major reasons are, increasing child education cost (51%) followed by price hike (23%), new member enrolled in education (10%), new born member of the family (10%), both education and health care cost increases (4%) and the new job (2%) respectively.

However, the monthly average expenditure of the 100 non-borrower families increases for six reasons. The scenario is that, maximum 32% families reported that, their monthly average expenditure increases because of price hike followed by increasing child education cost (31%). In addition, expenditure increases because of newborn members of the family (23%), increasing illness or sickness (9%), new member enrolled in education (3%) and both education and health care cost increases (2%) correspondingly.

Fig-5.34: Causes of Increasing Expenditure of 100 Borrowers between 2010 and 2015

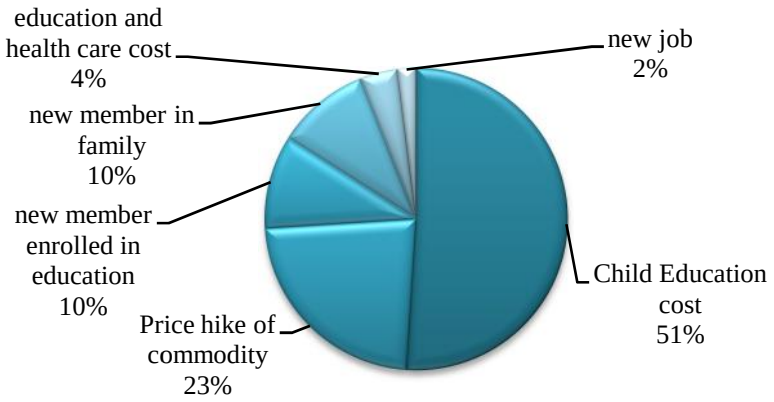
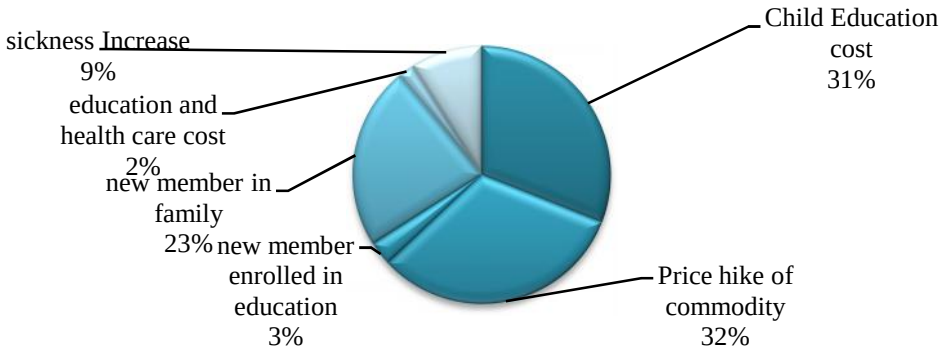


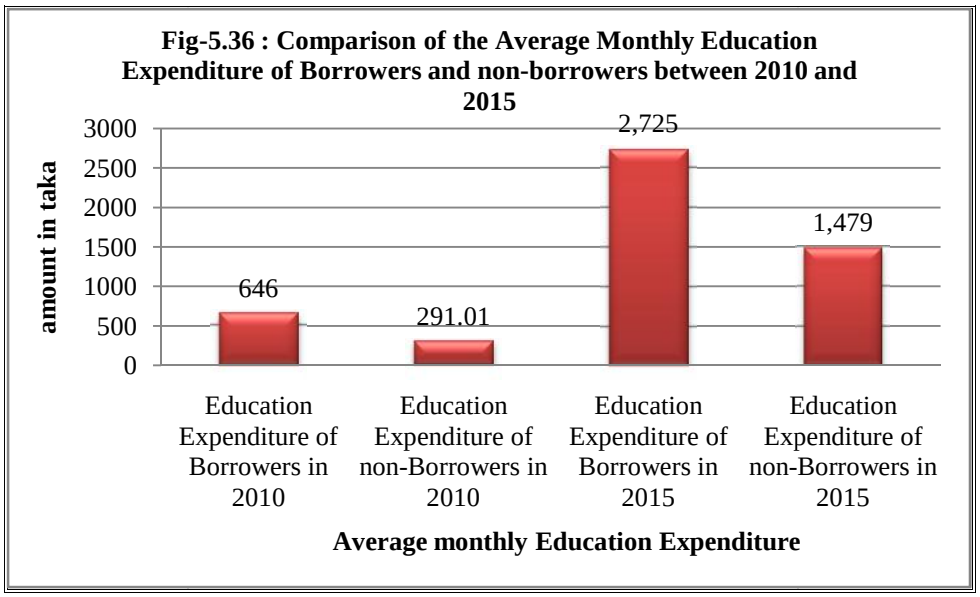
Fig-5.35: Causes of Increasing Expenditure of 100 Non-Borrowers between 2010 and 2015



a) Educational Expenses:

The fig-5.36 demonstrates that, the monthly average educationalexpensesof the borrowers' and the non-borrowers rose positively during 2010 to 2015 periods. During 2010 to 2015 periods, average monthly educationalexpenditure of borrowers' increased by 445.90% whereas it was 408.07% for the non-borrowers. Furthermore, in 2010,educationalexpenditure of the non-borrowers was 54.95% lower than that of the borrower and it is still 45.52% lower for the non-borrowers than the educationalexpenditure of the borrower in 2015.

The key message of the figure-5.36 is that, during the last five years, educationalspending of the borrowers' increased more than thatof the borrowers. It is 45.52% or tk.1236 lower ofthe non-borrowers.



In addition, among the 100 borrowers, 32 % families have no member enrolled in education. Hence, they have no educational cost. The other major reasons of rising educational expenses are, increasing in the education level of student members (37%) and new member enrolled in education (31%). Among the families who enrolled in education, 98% borrowers bear the all educational expenses from their family income. Only 2% family gets education finance from MFIs.

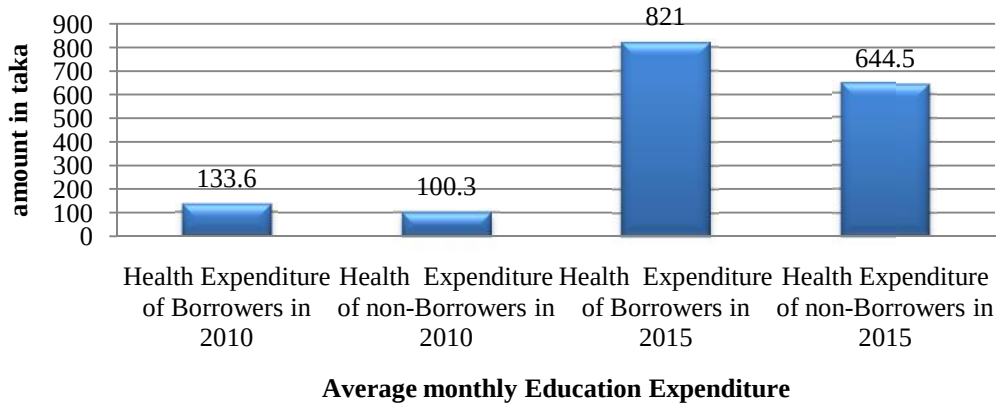
In the same way, among the 100 non-borrowers, 49 % families have no member enrolled in education. So, they have no educational cost. Likewise, 34% family's educational cost increases, because new member enrolled in education. The other major reasons of rising educational expenses are, increasing in the education level of student members (15%) and school fee (2%). It should be noted that, the non-borrowers bear the all educational expenses from their family income.

b) Healthcare Cost:

During 2010 to 2015 periods, the monthly average healthcare expenditure of the borrowers' and the non-borrowers increased positively. The fig-5.37 demonstrates it clearly. Between 2010 and 2015, average monthly healthcare spendingof borrowers' rose by 514.52%, whereas it was 542.57% of the non-borrowers. On the contrary, healthcare expenditure of the non-borrowers was 24.92% lower than the healthcare expenses of

borrower in 2010 and it is still 21.50% lower than the healthcare expenditure of the borrower in 2015.

Fig-5.37 : Comparison of the Average monthly Health Expenditure of Borrowers and non-borrowers between 2010 and 2015



The finding is that, during the last five years, healthcare expenditure of the non-borrowers rises more than thatof the borrowers. But now', it is 21.50% or tk.176.5 lower for the non-borrowers.

Furthermore, among the 100 borrowers, the largest portion, 51% families stated that, health care cost increases because of increasing sickness. Besides, the other major reasons of rising healthcare expenses are medicine price rises (37%), new born members (11%) and rising doctor's visit (1%) respectively.

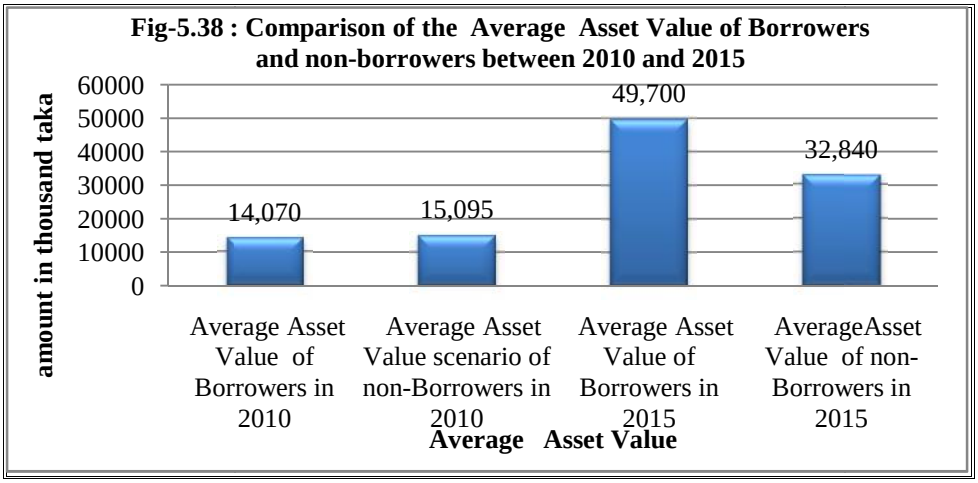
Similarly, out of 100 non-borrowers, the major causes of rising healthcare expenses are increasing sickness (49%), medicine price rises (31%), new born members (11%) and new born members in family (20%) respectively.

Finally, it should be pointed out that, both the borrowers and the non-borrowers bear the all health care cost from their family income. Regrettably, No free medicine or free treatment is received from any MFIs or any organizations.

5.1.9. The Asset Value of the 100 Borrowers and the 100 Non-Borrowers:

The data on the asset building of the 100 borrowers and 100 non-borrowers reveal that, between 2010 and 2015, asset value of 100 borrowers raised by 253.24%. On the other hand, asset value of 100 non-borrowers increased by 117.55% for the same period. On the contrary, theaverage asset value of non-borrowers was 6.80% higher than the average

asset value ofthe borrowersin 2010. But in 2015, it is 33.93% lower for the non-borrower than the average asset value ofthe borrower. The figure 5.38 exposes thisscenario.



Moreover, the reasons of increasing asset of the non-borrowers are -buying a new asset (99%) and increase in the price of previous asset (1%) respectively.

Currently, among 100 Borrowers, the asset value varies form tk.5, 000 to tk. 5, 90,000. Besides, maximum 21% families have the asset of tk.20, 000 followed by 13% have the asset of tk.30, 000 and 11% have the asset of tk.25, 000 respectively. More specifically, 73% borrowers have the asset of tk.5, 000 to tk.30, 000. In addition, 9% borrowers have the asset of tk.35, 000 to tk.60, 000. Besides, 5% borrowers have the asset of tk.65, 000 to tk.80, 000. Also, 2% borrowers have the asset of tk.80, 000 to tk.1, 00000. Moreover, 3% borrowers have the asset of tk.1, 10,000 to tk.1, 20,000. Furthermore, 2% borrowers have the asset of tk.1, 70,000 to tk.1, 85, 0000. Among the remaining 4%, 1% of each has the asset of tk.2, 40,000, tk.4, 00000, tk.5, 65, 0000 and tk.5, 90,000 respectively.

Similarly, currently, the asset value of 100 non-borrowers variesfrom tk.3, 000 and tk. 5, 15,000. Besides, maximum 15% families have the asset of tk.5, 000 and 12% have the asset of tk.20, 000 and 14% have the asset of tk.8, 000 to tk.10, 000 respectively. More precisely, 90% non-borrowers have the asset of tk.3, 000 to tk.30, 000. Also, 4% non-borrowers have the asset of tk.60, 000 to tk.80, 000. In addition, 3% non-borrowers have the asset of tk.1, 10,000 to tk. 1, 65,000. Among the remaining 3%, 1% of each has the asset of tk.4, 05,000, tk.5, 07,000 and tk.5, 15,000 respectively.

The conclusion is that, during the last five years, the average asset value ofthe borrowers rises more than thatof the non-borrowers. Currently, it is 33.93% or tk.16, 860 higher for the borrowers than the non-borrowers.

At five years ago,

On the other hand, at 5 years ago, the asset value of the 100 borrowers varied from tk.1, 000 to tk. 3, 00000. Besides, maximum 30% families had the asset of tk.5000 and 13% had the asset of tk.10, 000 respectively. More exactly, 82% borrowers had the asset of tk.1, 000 to tk.30, 000. 7% borrowers had the asset of tk.35, 000 to tk.60, 000. Only 1% borrowers had the asset of tk.30, 000.

Similarly, at 5 years ago, the asset value of the 100 non-borrowers varied from tk.500 to tk. 5, 00500. Besides, maximum 24% families had the asset of tk.2, 000 followed by 15% had the asset of tk.5000 respectively. More closely, 96% non-borrowers had the asset of tk.500 to tk.30, 000. Besides, 2% borrowers had the asset of tk.60, 000 to tk.80, 000. Among the remaining 2% non-borrowers, Only 1 non-borrowers had the asset of tk. 3, 02,000 and another 1 non-borrowers had tk. 5, 00500.

5.1.10 The Asset Value in the Three Slums:

In Korail slum,among 45 borrowers,currentasset price varies from tk.7, 000 to tk.65, 000 whereas at 5 years ago, it varied from tk.5, 000 to tk.20, 000. Buyingthe new asset is the main cause of increasing new asset. Out of 45 borrowers, none of the borrowers have farm lands or homestead land. The price of business machinery varies from tk.5, 000 to tk.50, 000 and the price of durable consumer product varies from tk.3, 000 to tk.30, 000 respectively.Among borrowers, the durable consumer product includes radio, refrigerator, wall clock, television, fans, kitchen items & crockery, mobileand furniture.

However,among 45 non-borrowers,currentasset price varies from tk.3, 000 to tk.1, 20,000 whereas at 5 years ago, it varied from tk.1, 000 to tk.20, 000. The main reason of increasing new asset is the buying new asset. Out of 45 non-borrowers, none of the non-borrowers have farm lands or homestead land. The price of business machinery varies

from tk.1, 000 to tk.70, 000 and the price of durable consumer product varies from tk.3, 000 to tk.30, 000 respectively.

Among the non-borrowers, the durable consumer products include refrigerator, wall clock, television, fans, kitchen items & crockery, mobileand furniture.

In Jurain slum,among 35 borrowers,currentasset price varies from tk.5000 to tk.590000 whereas at 5 years ago, it varied from tk.1, 000 to tk.3, 00000. The main reason of increasing new asset is the buying new asset. Out of 35 borrowers, only 2 borrowers have farm lands that vary from 1 to 10 decimals. The land price varies from tk.37, 000 to tk.5, 00000. The lands are located in Barisal and Gaibanda district in Bangladesh. Besides, only 2 of each borrower have 5 decimal the homestead lands. The land price is tk.50, 000. The lands aresituated in Barisal region of Bangladesh. Moreover, the price of business machinery varies from tk.1, 000 to tk. 80,000and the prices of durable consumer product vary from tk.3, 000 to tk.50, 000 respectively.

Among the borrowers, the durable consumer product includes refrigerator, wall clock, television, fans, kitchen items & crockery, mobileand furniture.

Conversely,among 35 non-borrowers,currentasset price varies from tk.3, 000 to tk.5, 15,000 whereas at 5 years ago, it varied from tk.500 to tk.5, 00500. The main reason of increasing new asset is the buying new asset (3%) and due to raisingthe price of previous asset (1%). Out of 35 non-borrowers, only 1 non- borrowers have 20 decimal homestead lands. The land priceis tk.1, 04,000. The land is located in the Brahmanbaria district in Bangladesh. In addition, the price of business machinery varies from tk.500 to tk. 30,000 and the prices of durable consumer product vary from tk.2, 000 to tk.24, 000 respectively.

Among the non-borrowers, the durable consumer productsinclude refrigerator, lamps, wall clock, television, fans,kitchen items & crockery, mobileand furniture.

In WASA colony slum, among 20 borrowers, currentasset price varies from tk.10, 000 to tk.2, 40,000 whereas at 5 years ago, it varied from tk.3, 000 to tk.60, 000. The main reason of increasing new asset is the buying new asset. Out of 20 borrowers, only 8 borrowers have farm lands that vary from 2 to 10 decimals. The land price varies from

tk.75, 000 to tk.2, 00000. The lands are located in Madaripur, Mymenshing,Shariatpur and Gopalgonj district of Bangladesh. Moreover, the price of business machinery varies from tk.2, 000 to tk.55, 000and the prices of the durable consumer product vary from tk.3, 000 to tk.30, 000correspondingly.

Among the borrowers, the durable consumer product includes radio, refrigerator, wall clock, television, fans, kitchen items & crockery, mobile, furniture and sewing machine.

On the other hand,among 20 non-borrowers,currentasset price varies from tk.5, 000 to tk.5, 07,000 whereas at 5 years ago, it varied from tk.2, 000 to tk.3, 02,000. The main reason of increasing new asset is the buying new asset. Out of 20 non-borrowers, only 2 non-borrowers have the farmlands that vary from 4 decimals to 10 decimals and the land price varies from tk.1, 60,000 to tk.50, 000. The land is located in Shariatpur and Comilla district of Bangladesh. Furthermore, theprice of business machinery varies from tk.1, 000 to tk.40, 000 and the prices ofthe durable consumer product vary from tk.4, 000 to tk.25, 000 respectively.

Among the non-borrowers, durable consumer products includethe refrigerator, and wall clock, television, fans, furniture, kitchen items & crockery, mobile, and sewing machine.

5.1.11 Kinds of Assets andthe Status of the Land Ownership:

The borrowers informed that, they bought new asset during the last five years. The common types of assets are farm land, business machineries such as rickshaws, van, house repairing materials, sewing machine, house for rent and small shop, and durable consumer products such as fans, furniture, kitchen items& crockery, mobile, radio, television, refrigerator, wall clock and sewing machineconsequently. It should be mentioned that, the price of business machineries varies from tk.1, 000 to tk. 80,000 whereas the price ofthe durable Consumer products varies from tk.3, 000 to tk. 50,000.

Similarly, the non-borrowers reported that, they bought new asset during the last five years. The common types of assets are farm land, business machineries such as rickshaws, van, house repairing materials, sewing machine, house for rent and small

shop, and the durable consumer products such as fans, furniture, kitchen items& crockery, mobile, radio, television, refrigerator, wall clock and sewing machineconsequently. It should be revealed that, the price of business machineries varies from tk.500 to tk. 70,000 whereas the price ofthe durable consumer products varies from tk.2, 000 to tk. 30,000.

In addition, in status of land ownership shows that, 90% borrowers are landless while the remaining 10% have 1 to 10 decimal farm lands. The farm lands are situated in Rangpur, Chandpur, Barisal, Madaripur, Mymenshing, Shariatpur, Gopalgonj and Gaibanda districts accordingly. The price offarmlands varies from tk.37, 000 to tk. 5,50,0000. Besides, only 2% borrowers bought homestead land.

Furthermore, 97% non-borrowers are landless while the remaining 2% have 4 to 10 decimal farmlands and 1% has10 decimal homestead lands. These lands are situated in Barisal, Shariatpur, Comilla and Brahmanbaria districts consequently. The price offarmland varies from tk.1, 60,000 to tk. 5, 00000. In addition, only 1% non-borrower has homestead land of tk. 1, 04,000.

5.1.12 Recipients of Remittance among 100 Borrowers and 100 Non-Borrowers:

It is the matter of disappointing that, both the 100 borrowers and 100 non- borrowers did not receive any kind of remittance, because they have no expatriate family members.

5.1.13 Recipients of Charity, Zakat and Donation program among 100 Borrowers and 100 Non-Borrowers:

The scenario of receiving charity, zakat or donation of the borrowers and the non-borrowers are very poor. The figure 5.39 and figure 5.40 exposes this information. Out of 100 borrowers, only 25 borrowers and out of 100 non-borrowers, only 20 non- borrowers received one kind of charity either in cash or kinds during the last five years.

Moreover, the charity in cash varies from tk. 500 to tk. 15, 000. Out of 100 borrowers, 12 borrowers received tk.12, 000. Moreover, 4 borrowers of each received tk. 14,000 and tk.10,000. Similarly, 2 of each borrowers received tk. 1,000 and tk. 15,000 respectively. Finally, only 1 borrower received tk. 500 respectively.

Similarly, among the non-borrowers, the charity in cash varies from tk. 200 to tk.14, 000. Out of 100 non-borrowers, maximum13 non-borrowers received tk. 500 and 3 non-borrowers received tk.12, 000. Besides, 4 of each non-borrower received tk. 200, tk. 10, 000, tk.13, 000 and tk.140, 00 separately.

Fig-5.39: Recipients of Charity, Zakat and Donation among Borrowers and Non-Borrowers

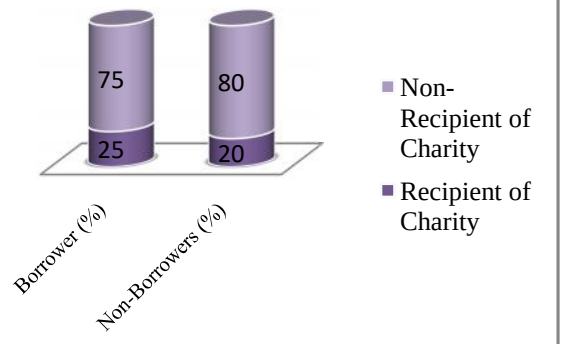
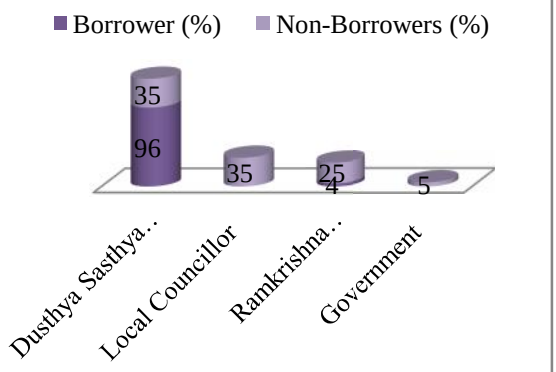


Fig-5.40: Charity Provider among Borrowers and Non-Borrowers



However, among the borrowers, Dusthya Sasthya Kendra (DSK) donates maximum 96 % charity while Ramkrisna Mission provides the remaining 4% charity. As well, among non-borrowers, Dusthya Sasthya Kendra (DSK) provides maximum 35 % charity that varies from tk. 12000 to tk.140000. In addition, local councilor provides 35 % charity that is in cash tk.500 for each. Besides, Ramkrishna Mission provides 25 % charity that is in cash tk.500 for each. Also, the Government provides the remaining 5 % charity that is in cash tk.200 for each.

Box-1: Case Study-1: Impact of Microfinance on Mrs.Rina's Family

Mrs. Rina, a 30 year old borrower of Microfinance at the Korail slum. Mrs. Rina has 3 family members, husband, her son and herself. She is a housewife and her husband is a rickshaw driver. She finds Microfinance as beneficial for herself. The Microfinance program helped her family to make at least double their income, expenditure, Food, cloth, healthcare, transportation, education expenditure and house rent and utility expenditure. The story is that, at the 5 years ago, her husband used to drive the rickshaw of other individuals. But currently, he has own Rickshaw. Mrs. Rina took loan tk. 20,000 from Shakti- a prominent MFI and bought a rickshaw for her husband. The output is that, their income became doubled (from tk. 3000 (2010) to tk. 7000 (2015)) during this period. In addition, she bought some Quail birds and now sells the egg of Quail birds. So, along with her husband, she also contributed to the family earnings. Besides, they currently save tk. 200 per month, on the contrary, they had no savings at 5 years ago. Furthermore, they also bought a mobile set to communicate with other relatives. She admitted her son in class one in this year (2015) in the government primary school.

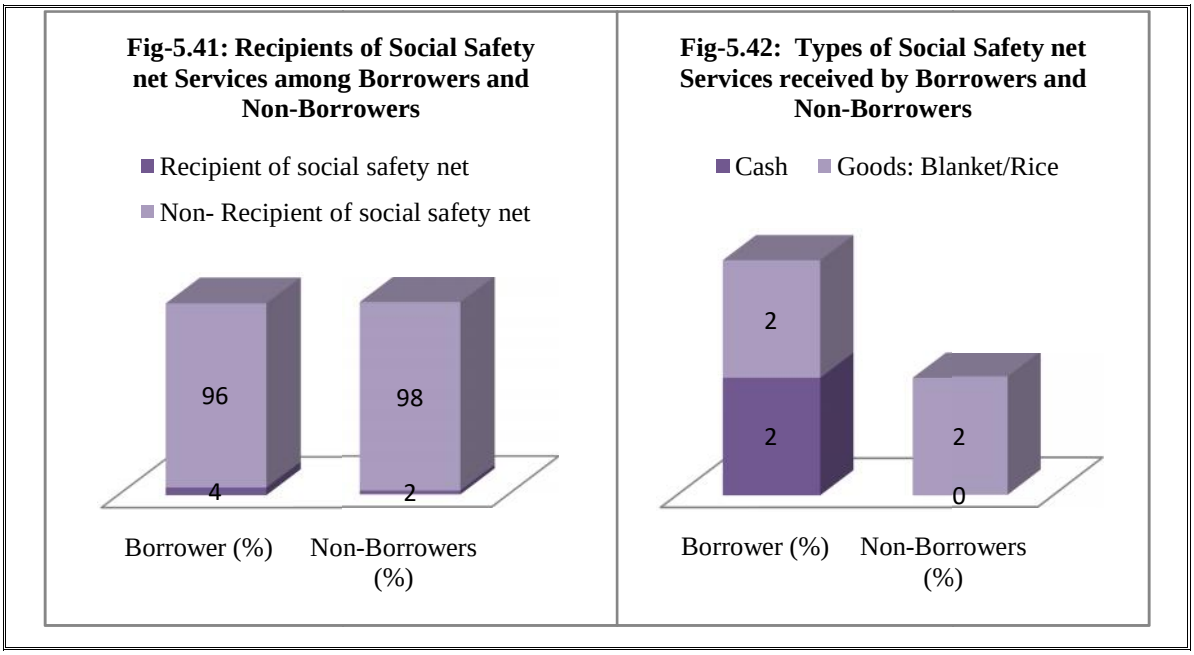
She also placidly reported that, their housing and utility and Water and sanitation conditions improved during the last 5 years. The main ground is that, another renowned MFI DSK installed a Deep Water Tube well and they paid money jointly with another resident of the korail slum. Finally, in the last and open comment section, she commented that, she finds Microfinance as helpful but interest rate should be reduced. And expressed hope that, if MFIs provide any training program, she will participate there.

5.1.14Recipients of Social Safety Net Program among 100 Borrowers and 100 Non-Borrowers:

The coverage of social safety net program in the slum is quite dissatisfactory. The figure 5.41 and figure 5.42 unveil the information. Out of 100 borrowers, only 4 borrowers and out of 100 non-borrowers, only 2 non- borrowers received the benefits of social safety net programs.

Among the 4 borrowers, 2 borrowers received social safety net products in cash that is tk. 3,000 and tk. 25,000. Another 2 borrowers received social safety net products in the form of blanket. The code of social safety net products were -allowance for the financially insolvent disabled, stipend for primary, secondary and higher secondary/female, drop out students (MOPMED) and relief (blanket). Similarly, the 2 non-borrowers received social safety net products in form of relief that is rice of tk. 200 and a blanket of worth tk. 300 accordingly.

However, the remaining the 96 borrowers complained that, there is no coverage of social safety net program in their living area. Likewise, 85 non-borrowers complained that, there was no coverage of social safety net program in this area or they do not know about this program. The remaining 13 non-borrowers criticized that, the selection was not proper.



5.1.15Recipients of Charity, Zakat and Donation Program in Three Slums:

In Korail slum, out of 45 borrowers,only 22 borrowers receive charity from Dusthya Shastha Kendra (DSK) that varies from tk.10, 000 to tk.15, 000. Among them, 2 borrowers of each received cash tk. 14, 000 as relief. Besides, 43 borrowers received none of social safety net services and they stated that, no program in this area.

However, out of 45 non-borrowers, only 7 non-borrowers received charity. The amount of charity varies from tk. 500 to tk.14, 000. In addition, among them 6 non-borrowers received from Dusthya Shastha Kendra (DSK) that varies from tk.12, 000 to tk.14, 000 and another 1 received tk. 500 from the local councilor respectively. Besides, 1 non-borrower received the rice of worth tk. 200 under relief program of social safety net program.

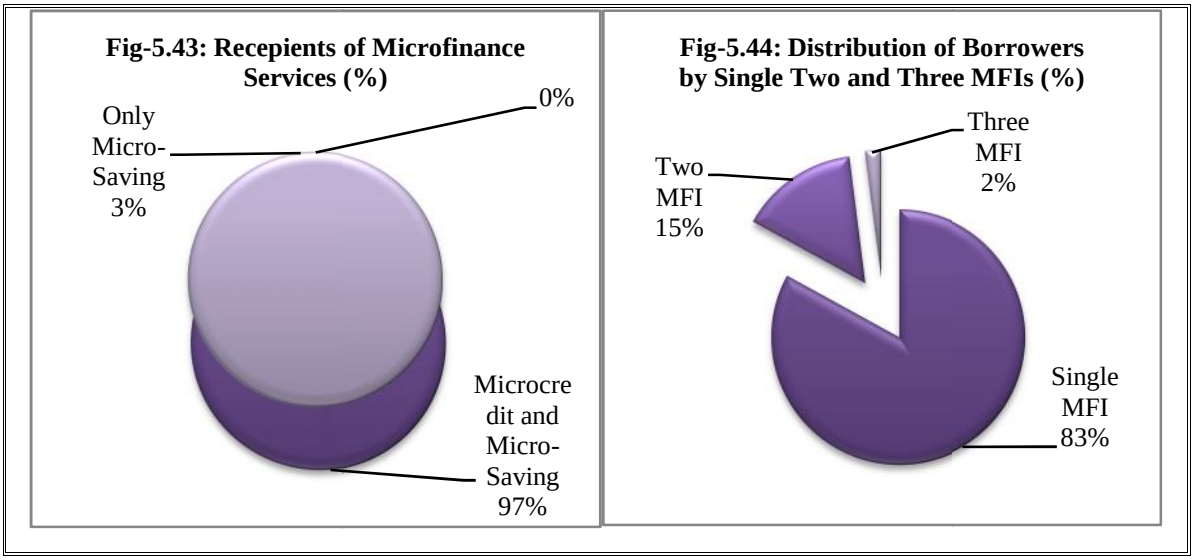
In Jurain slum,out of 35 borrowers,only three borrowers receive charity. Among them 2 borrowers of each received cash tk.1, 000 from Dusthya Shastha Kendra (DSK) and another 1 received tk. 500 from Ramkrshna mission respectively. Besides, no borrowers received any social safety net service and they stated that, no program in this area.

However, out of 35 non-borrowers,only 7 non-borrowers received charity. The amount of charity varies from tk. 200 to tk. 500. In addition, among them 1 non-borrowers received from Dusthya Shastha Kendra (DSK) and another 6 received from Ramakrishna mission respectively. Besides, 1 non-borrower received a blanket of worth tk. 300 under relief program of social safety net services.

In WASA colony slum, out of 20 borrowers and 20 non-borrowers,none received any charity and social safety net services. The main reason is that, there is no coverage of social safety net program in this area.

5.1.16Microfinance: the Status of the Borrowers

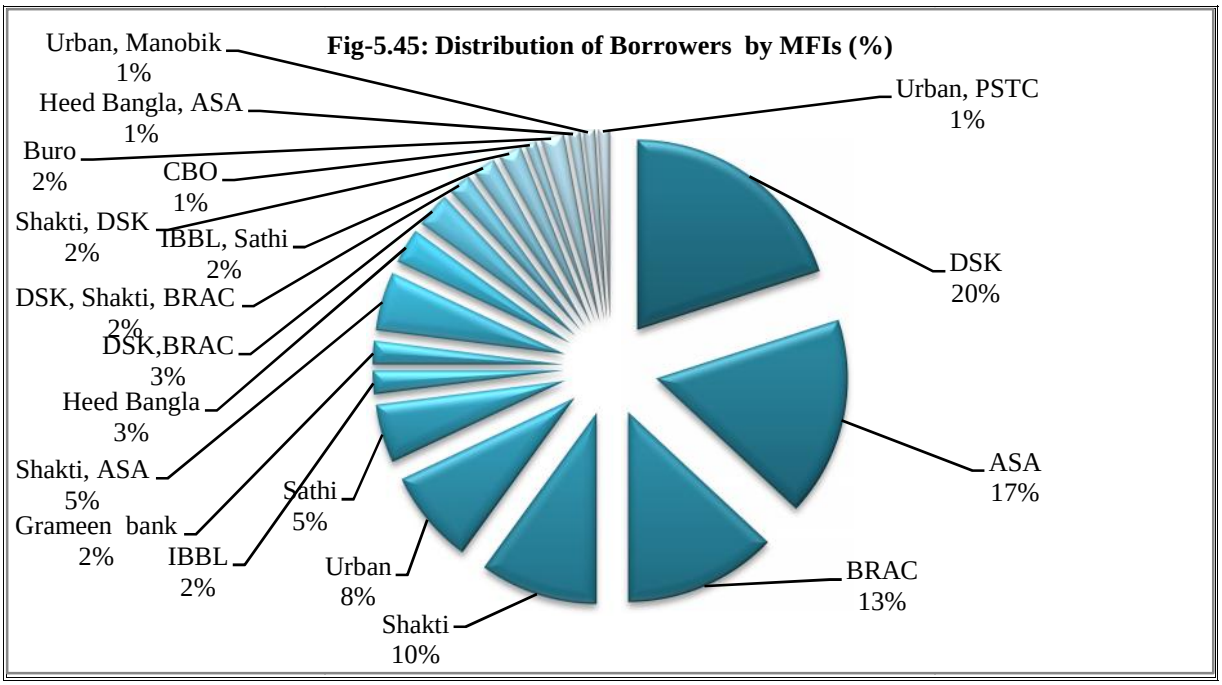
Among the three slums, the most common Microfinance products received by the borrowers are Microcredit, Micro-Saving, financial support and scholarship for education and training program respectively. More specifically, 97% borrowers are actively running Microcredit and Micro-Saving whereas only 3% are actively running only Micro-Saving product, that is shown in figure-5.43.



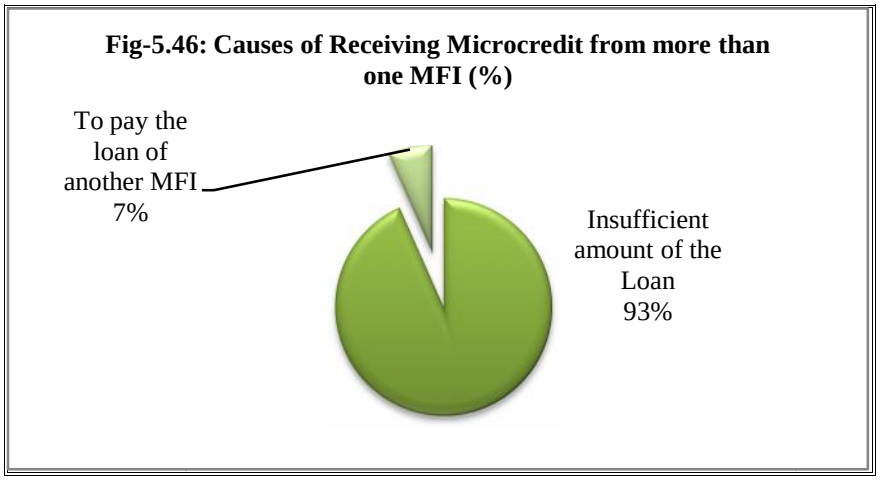
Furthermore, twelve MFIs have been providing their services among three slums during the last five years. The names of MFIs by acronyms are DSK, Shakti, BRAC, Buro, Arban, Manobik, ASA, Heed Bangla, Sathi, Grameen Bank, CBO, Urban and PSTC. One of the commercial banks provides Microfinance among slum dweller that is Islami Bank Bangladesh Limited (IBBL). More precisely, 85% borrowers have been receiving services from a single MFI. On the other hand, 15% and 2%receives services from two and three MFIs jointly (see Figure-5.44).

Likewise, figure-5.45 displays the distribution of borrowers by different MFIs. The Majority percent of the borrowers are receiving the services from DSK (20%) followed by ASA (17%), BRAC (13%), Shakti (10%), Urban (8%), Sathi (5%), Heed Bangla (3%), IBBL (2%), Grameen Bank (2%), Buro (2%) and CBO (1%) respectively.

In addition, the remaining 17% borrowers are getting the Microfinance services jointly. That is Shakti, ASA (5%) followed by DSK, BRAC (3%), DSK, Shakti, BRAC (2%), IBBL, Sathi (2%), Shakti, DSK (2%), Urban, Manobik (1%), Urban, PSTC (1%) and Heed Bangla, ASA (1%) respectively.



Besides, 93.33% borrower took the credits from more than one MFI because of insufficient amount of the loan and the remaining 6.67% took the loan to pay the loan of another MFI. The figure-5.46 explained this phenomenon.



Furthermore, 97% borrowers do not know about the membership fee of MFIs whereas only 3% paid tk.50, tk.100 and tk.1000 as membership fee. In addition, 96% borrowers do not know about the membership condition of MFIs whereas only 4% borrowers have information on the membership condition of MFIs, that is 'presence in weekly meeting is mandatory'.

5.1.17. Microcredit: Duration of Receiving Credit, Amount of the First and Current Loan:

The figure-5.47 illustrates the duration of receiving Microfinance among the 100 borrowers. Among the 100 borrowers, 42% borrowers have been received Microfinance services for 5 years. Among the remaining 58%, 15% has been received Microfinance services for 4 years and another 15% received for 3 years. Besides, 24% has been received Microfinance services for 2 years while only 4% for 1 year.

Fig-5.47: Duration of Receiving Microfinance of 100 Borrowers

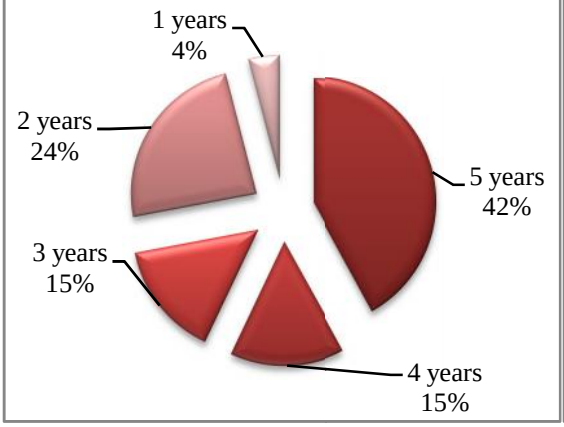
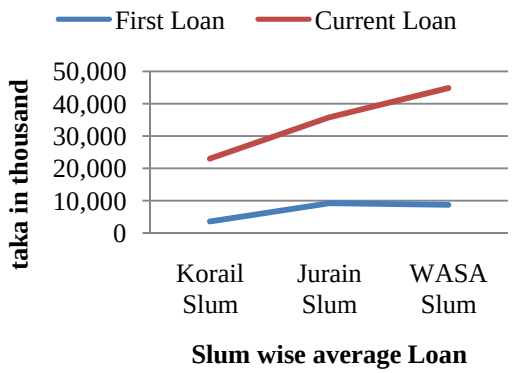


Fig-5.48: Amount of First and Current Loan (Average)



In case of the amount of loans, the amount of current loan is 281% higher than the first loan of the slum borrowers. The amount of the first loan varied from tk. 2,000 to tk. 25,000 while the current loan varied from tk.5, 000 to tk. 70,000.

More specifically, at the five years ago, maximum 27.63% borrowers got tk.10, 000 as their first loan followed by 23.68% got tk.5, 000 and 14.47% got tk.3, 000 respectively. Only 2.63% borrower got tk.25, 000 as their first loan.

Conversely, as the current loans, maximum 28% borrowers got tk.20, 000 followed by 14% got tk.30, 000 and 12% got tk.15, 000 as their current loan. More precisely, 78.57% borrowers got loan of tk.5, 000 to tk.30, 000 and the remaining 21.43% got the loan of tk.36, 000 to tk. 70, 000 respectively.

More precisely, the figure-5.48 demonstrates the amount of the first and current loan (average) of the slum dwellers of three slums. The amount of the first loan (average) was higher among Jurain slum (tk. 9,257.15) followed by WASA slum (tk. 8,800) and Korail Slum (tk. 3,586.67) respectively. Conversely, the current loan is higher among WASA slum (tk. 36,050) followed by the Jurain slum (tk. 26,514.29) and the Korail Slum (tk. 19,355) correspondingly.

5.1.18 Microcredit: Duration of Receiving and Amount of First and Current Loan in Three Slums:

In the korail slum, among 45 borrowers, 10 (22.22%) borrowers have been received Microfinance services for 5 years. 9 (20%) borrowers have been received Microfinance services for 4 years and another 10 (22.22%) borrower received for 3 years. Besides, 14 (31.11%) borrowers have been received Microfinance services for 2 years while only 2 borrowers for 1 (4.44%) year.

Additionally, out of 45 borrowers in the korail slum, 18 borrowers did not mention their amount ofthe first loan while for remaining 27 borrowers, it varies from tk.2200 to tk.15000. In contrast, the amount of the current loan varies from tk.5, 000 to tk.40, 000.

In Jurain Slum, among 35 borrowers, 15 (42.85%) borrowers have been received Microfinance services for 5 years. 6 (17.14%) borrowers have been received Microfinance services for 4 years and another 5 (14.28%) borrower received for 3 years. Besides, 9 (25.71%) borrowers have been received Microfinance services for 2 years.

Furthermore, out of 35 borrowers in Jurain slum, only 6 borrowers did not mention their amount of thefirst loan while for remaining 29 borrowers, it varies from tk. 2, 000 to tk.25, 000. In contrast, the amount of the current loan varies from tk.8, 000 to tk.70, 000.

In the WASA colony Slum, among 20 borrowers, 17 (85%) borrowers have been received Microfinance services for 5 years. Another 1 (5%) borrower received for 2 years and another 2 (10%) borrower has been receivingMicrofinance services for 1 year.

Furthermore, out of 20 borrowers in the WASA colony slum, the amount of the first loan varies from tk.2, 000 to tk.20, 000 whereas the amount of the current loan varies from tk.6, 000 to tk.70, 000.

5.1.19. Microcredit Interest Rate and Payment Periods:

The figure 5.49 depicts that, the interest rate in Microcredit varies from 10% to 38% as reported by the recipients.The charging interest rate of different MFIs are BRAC (20% to 36%),Grameen Bank (10% to 38%), ASA (11% to 30%),Urban (20%), PSTC (20%), CBO (17%), Buro (15%), DSK (14% to 23%), Heed Bangla (15%), Sathi (12% to 38%), Manobik (11%)and IBBL (12% Profit rate) respectively.

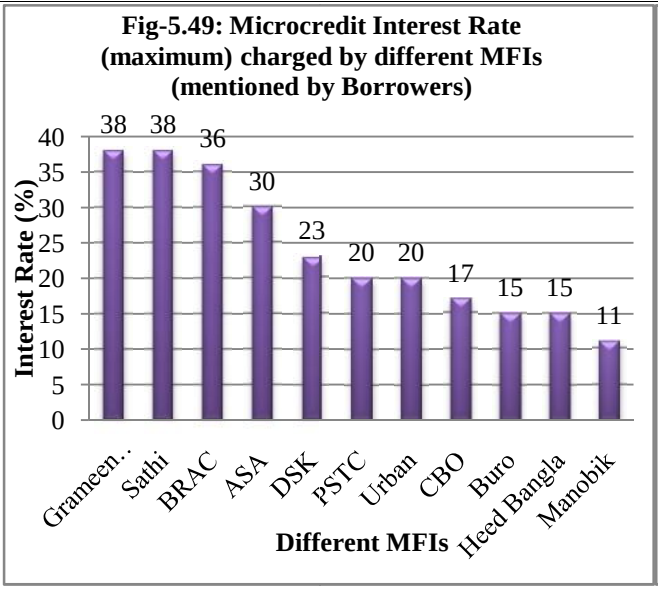


Fig-5.49: Microcredit Interest Rate (maximum) charged by different MFIs (mentioned by Borrowers)

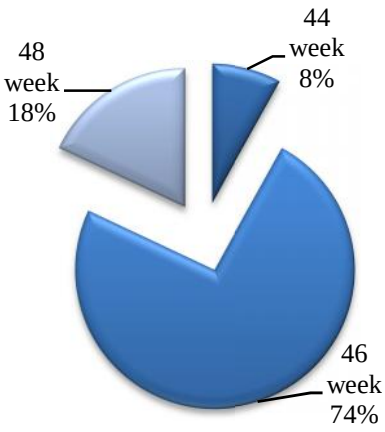


Fig-5.50: Payment Period (Week) in %age offered by different MFIs

Moreover, the figure 5.50 depicts the scenario of interest rate charging by different MFIs. Most of the MFIs offer 46 weeks as the payment period except BRAC offers 48 weeks as payment period. Moreover, about 74 % borrowers get 46 weeks for repaying the loan, whereas 18 % get 48 weeks and 8 % get 44 weeks respectively.

5.1.20 Microcredit Interest Rate and Payment Periods in Three Slums:

In Korail slum, 4 MFIs provides their services. These are by acronyms and market share are: DSK (44.44%), BRAC (22.22%), Shakti (13.33%), Buro (4.44%), DSK and BRAC jointly (6.67%), DSK, Shakti and BRAC jointly (4.44%) and Shakti and DSK (4.44%) jointly. The charging annual interestrates on Microcredit are: Shakti (29% to 32%) BRAC (20% to 28), DSK (14% to 23%), and Buro (15%) respectively. In addition, DSK and Buro allocate 46 week payment periods,excluding BRAC (48 weeks) and Shakti (44 weeks).

Moreover, inthe korail slum, 11.11% borrowers took credits from 2 MFIs simultaneously due to insufficient amount of the loan. In addition, 4.44% borrowers took loans from 3 MFIs simultaneously to repay the loan of other MFIs.

In the Jurain slum**,** 11 MFIs provide their services. These are ASA (22.85%), Arban (22.85%), Sathi (14.28%), Shakti (5.71%), BRAC (5.71%), Grameen Bank (5.71%), IBBL (5.71%), Heed Bangla (2.85%) and CBO (2.85%). Moreover, Arban and Manobik (2.85%), Arban and PSTC (2.85%) and IBBL and Sathi (5.71%) jointly.

The yearly interest rates on Microcredit are: ASA (11% to 27%), BRAC (25%), Grameen Bank (10% to 38%), CBO (17%), Sathi (15% to 38%), Arban (20%), IBBL (12% profit rate), Arban and Manobik (11%), Arban and PSTC (20%), IBBL and Sathi (12%), Heed Bangla (10%), and Shakti (10%) respectively. In addition, all MFIs offer 46 weeks payment periods except BRAC (48 weeks).

Furthermore, inJurain slum, 8.57% borrowers borrowed money from 2 MFIs simultaneously due to insufficient amount of the loan. In addition, 2.85% borrowers took credits from 3 MFIs simultaneously to repay the loan of other MFIs.

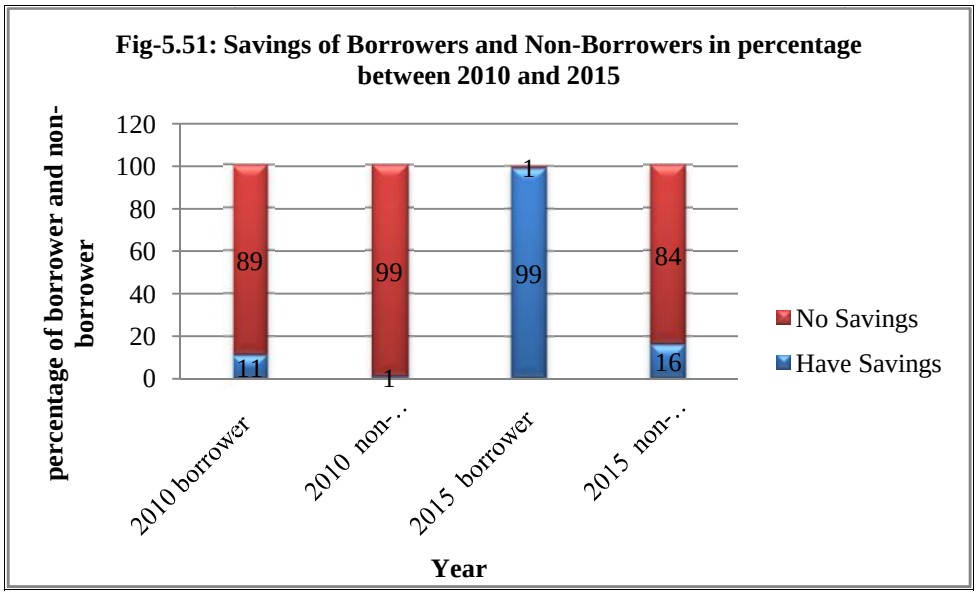
In the WASA slum, 4 MFIs provides their services. These are ASA (45%), Shakti (10%), Heed Bangla (10%), Shakti and ASA (25%), Heed Bangla and ASA (5%), and BRAC (5%).

The annual interest rates on Microcredit are: BRAC (36%), ASA (15% to 30%), Heed Bangla and Shakti (15%). In addition, three MFIs offer 46 weeks payment periods except BRAC (48 weeks).Besides, inthe WASA slum, 20% borrowers took credits from 2 MFIs simultaneously due to insufficient amount of the loan.

5.1.21 Micro-Saving: Status of the Borrowers and the Non-borrowers:

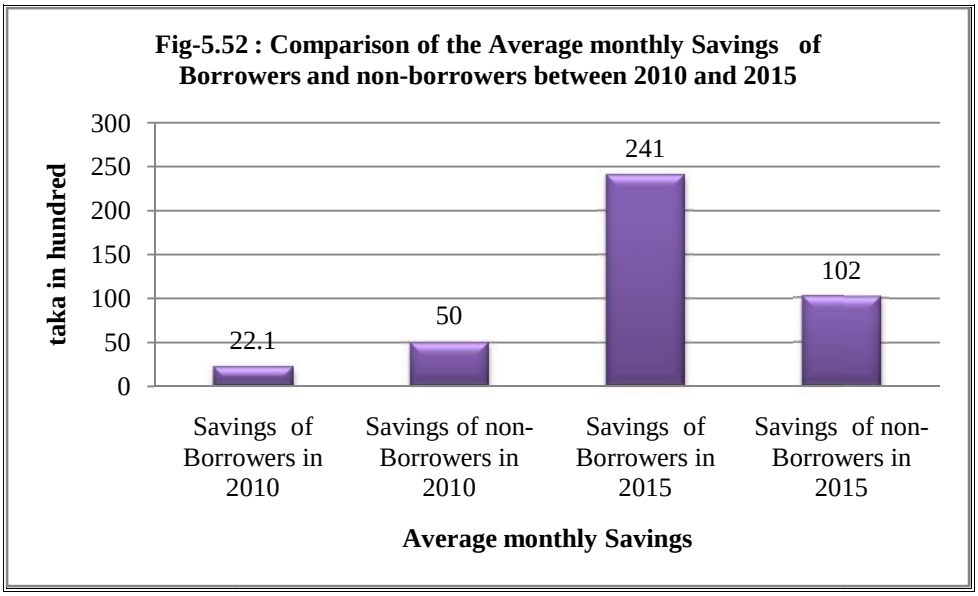
The amount and percentage age of savings both increased ofthe borrowers and the non-borrowers during the last 5 years. The figure 5.51 depicts the information. It showed that, at 5 years ago, 89% borrowers had no saving while only 11% borrower had a very small amount of saving. The saving varied from tk.50 to tk.200 for 99 borrowers. Only 1 borrower would save tk.1, 000 per month.

In contrast, currently, out of 100 borrowers, 99% borrowers have micro saving while only 1 borrower has no saving. The amount of micro-saving varies from tk.80 to tk.1, 000. Maximum, 56% borrowers save tk.200 monthly followed by 17% saves tk.400 per month. Only 1% borrower saves tk.1, 000 per month.



Furthermore, It is the matter of great regret that, currently, 84% non- borrowers have no saving while only 16% non-borrower have a very small amount of saving that varies from tk.100 to tk.5,000. On the other hand, at 5 years ago, 99% non- borrowers had no saving. Only 1% non-borrower had a big amount saving that is tk.5, 000. In addition, currently, the maximum 37.5% non-borrowers added tk. 200 monthly in their savings. Besides, 31.25 % non-borrowers added tk.500 per month as savings. Moreover, only 1% non-borrowers added tk. 1,000 and tk.5, 000 to monthly saving separately.

However, the fig-5.52 summarizes the above analysis and explains that, between 2010 and 2015, the average monthly saving of borrowers' increased by 990.49% whereas it was 104% for the non-borrowers. On the contrary, at 5 years ago, amount of saving of non-borrowers ware 55.8% higher than the saving ofthe borrower. But in 2015, the saving of borrower is 57.67% higher than the Non-borrower.



Besides, the 100 borrowers mention that, the micro-saving in MFIs as the main cause behind the increased saving amount. Similarly, out of 100 non-borrowers, 10 non-borrowers mentioned that, the leadingreason behind the increased saving is rising salary in the job or business. Besides, other causes of rising savings of borrowers are new earning members in the family (2), micro-saving in MFIs (3). It is the matter of the great concerns that, 84% non- borrowers have no saving. Inability or low income is the main reason of not having the savings of 1% borrower.

The ending point is that, during the last five years, amount of saving ofthe borrowers rises more than thatof non-borrowers. It is 57.67% or tk.139 lower for non-borrowers.

Box-2: Case Study-2: Impact of Microfinance on Mrs. Taslima's Family

Mrs. Taslima, a 25 year old borrower of Microfinance at Jurain slum. Taslima has 5 family members, husband, Son, Daughter and Spouse of Son and herself. She is a housewife and her husband runs a business with herself, son and Spouse of son jointly. She firmly said that, she finds Microfinance as beneficial for herself. The Microfinance program helped her family to make at least double their income, expenditure, Food, cloth, healthcare, transportation, education expenditure and house rent and utility expenditure. The successful story behind is that, at the 5 years ago, her husband was unemployed. But currently, he has own a small business that is buying and selling coconut husk. Mrs.

Taslima borrowed tk. 5, 000 and tk. 25,000 from Urban and Manobik - two well-known Local MFIs in Jurain area.

Mrs. Taslima financed the coconut husk business and other family member engaged in this business. The result is that, their income became doubled (from tk. 5000 (2010) to tk.10,000 (2015)) during this period. As well, currently she is saving. 200 per month, in contrast, she had no savings at 5 years ago. In addition, they also bought television, fans and mobile set. The Daughter in law of Mrs. Taslima completed her higher secondary or intermediate level education. She told that, coconut husk business is fine with her and it is difficult for her to do the job of house maid. She stated that, if MFIs provide any training program, she will participate there.

Mrs. Taslima also mildly informed that, their housing and utility and Water and sanitation conditions improved during the last 5 years. The main ground is that, WASA increases Water supplies in the Jurain Railgate area and she paid money jointly with another resident of the Jurain slum. Finally, in the last and open comment section, she commented that, she finds Microfinance as helpful but interest rate should be reduced.

5.1.22 Status of Savings of Borrowers and Non-borrowers in Three slums:

In korail slum, currently, among 45 borrowers, all borrowers have thesavings that varies from tk.100to tk.400 per month. On the other hand, at 5 years ago, they had no savings. However, among 45 non-borrowers, only 9 non-borrowers have savings that vary from tk.100 to tk. 500 per month. However, at the 5 years ago, no non-borrowers had savings. The main grounds of the savings of the non-borrowers are Micro savings, new earning members and increased income. The main saving institutions are MFIs, banks and localshamabay.

In Jurain Slum, currently, among 35 borrowers, all borrowers havethe savings that varyfrom tk.80 to tk.500 per month. On the other hand, at 5 years ago, 34 borrowers had no savings while only one borrower had tk.1, 000 saving. However, among 35 non-borrowers, only 4 non-borrowers have savings that vary from tk.100 totk. 1,000 per

month. However, at the 5 years ago, only one non-borrower had savings that was tk.500. The majorreasons of the savings of the non-borrowers are Micro savings, new earning members and increased income. The main savings institution is banks.

In the WASA colony slum, currently, among the 20 borrowers, 19 borrowers have the savings that varyfrom tk.150 to tk.600 per month. On the other hand, at 5 years ago, 10 borrowers had the savings that varyfrom tk.50 to tk.200 per month. While 10 non-borrowers had no savings. However, among 20 non-borrowers, only 3 non-borrowers have savings that vary from tk.300 to tk. 500 per month. But at the 5 years ago, no non-borrowers had savings. The main cause of savings among non-borrowers is the increased income. The main saving institutions are banks and localshamabay.

In sum, it can be said that, among three slums Korail, Jurain and WASA colony, amount of saving is higher among the borrower in the WASA colony Slum.

5.1.23 Saving Interest Rate:

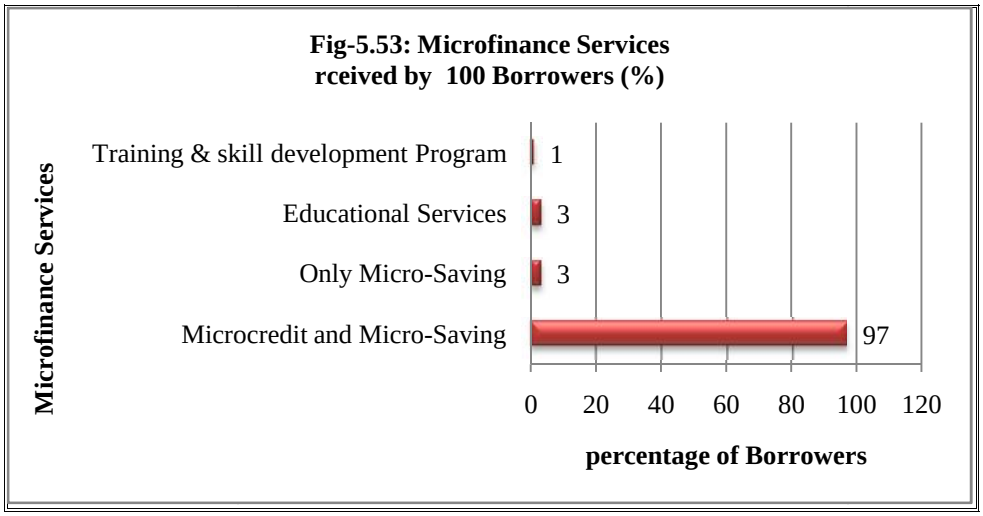
Alarmingly, MFIs do not disclose the saving interest rate among borrowers. In addition, 94% recipients said that, they do not know about the saving interest rate while only 6% know the saving interest rate that is 8% for BRAC.

In the korail slum, out of 45 borrowers, only 4 borrowers know about saving interest rate, In Jurain slum, among 35 borrowers, only 1 borrower knows about saving interest rate. Similarly, In WASA colony slum, out of 20 borrowers, only 1 borrower knows about saving interest rate.

5.1.24 Recipients of other Microfinance Products and service (other than Microcredit):

The figure-5.53 exposes that, except Microcredit and Micro-savings services, MFIs have very poor coverage of other services among the three slums of Dhakacity. Among 100 borrowers, 97% borrowers receive the both Microcredit and Micro-savings services. Furthermore, only 3% borrowers got educational services along with Microcredit and Micro-savings services. Besides, only 1% borrower participated in training and skill

development program along with Microcredit and Micro-savings services. In contrast, 3% borrowers receive only Micro-savings services, but none of other services.



a) Education:

The data illustrate that, unfortunately, among 100 borrowers, only 3 borrowers got educational services from MFIs. Among them, 2 borrowers got tk.5, 000 as scholarship and 1 borrower got education materials of worth tk.1, 000.

b) Training & skill development:

Among 100 borrowers, only 1 borrower participated in a training program of beauty parlors. Population services and training Centre (PSTC) provided tk.3, 000 as training fees.

c) Health care &Micro-insurance services

It is the matter of great regret that, 100 borrowers did not get any health care or micro-insurance services from MFIs.

d) **Recipients of other MicrofinanceProducts andService (other than Microcredit) in the three slums:**

In Korail slum, there are no available educational services, training & skill development programs and health care &Micro-insurance services of MFIs for the borrowers.

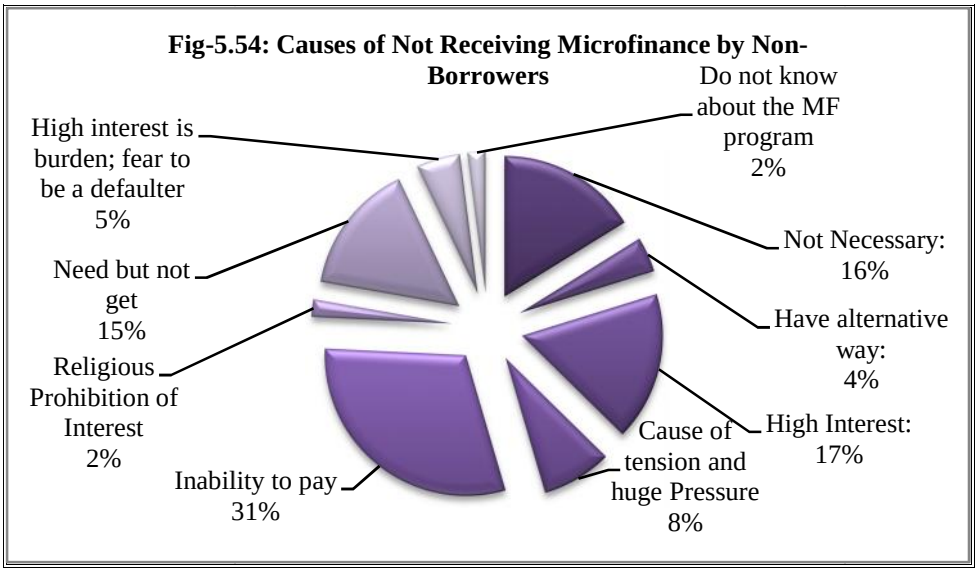
In Jurain slum, only 3 borrowers received educational services from MFIs. Moreover, 1borrower received tk.5000 as scholarship and another 1 received educational materials of tk.1, 000. Moreover, no borrowers received any health care and Micro-insurance services from any MFIs. In addition, only one borrower received training services of tk.3, 000

In WASA colony slum, like as Korail slum, there are no available educational services, training & skill development programs and health care &Micro-insurance services of MFIs for the borrowers.

5.1.25 Causes of Not Receiving Microfinance by 100 Non-Borrowers:

The 100 non-borrower respondents clarified the reasons of not receiving Microfinance services. The figure-5.54 depicts that, the maximum 31% non-borrowers did not participate in Microfinance program due to inability to repay loan. As well, 17% mark the high interest rate as the main impediments of not being recipients of Microfinance program. Also, 16% said that, Microfinance is not necessary for them while 15% complained that, they need the loan but MFIs did not provide loans. On the contrary, only 4% reported that, they havethe alternative way to get the loan.

Fig-5.54: Causes of Not Receiving Microfinance by Non-Borrowers



Moreover, 8% non-borrowers considered it as the cause of tension and huge pressure imposed by MFIs. Similarly, another 5% believed that, high interest on loans is a serious

problem like as the burden and risk that may force a borrower to be a defaulter. Besides, 2% considered that, interest is strictly prohibited in religion. Hence, they did not participate in Microfinance program. Finally, only 2% non-borrower said that, they do not know about the MF program.

5.1.26 Causes of Not Receiving Microfinance by Non-Borrowers in three Slums:

In Korail slum, the 45 non-borrower respondents explained the causes of not receiving Microfinance. The maximum 13% non-borrowers did not participate in Microfinance program due to inability to repay loan. In addition, other coregrounds of not receiving Microfinance are: high interest rate (20%), they need the loan, but MFIs did not provide loan (13.33%), high interest rate is a burden and fear to be a defaulter (11.11%), Microfinance is not necessary for them (8.89%), they have the alternative way to get loans (6.67%), Cause of tension and huge Pressure (6.67%) and interest is strictly prohibited in religion (4.44%), respectively.

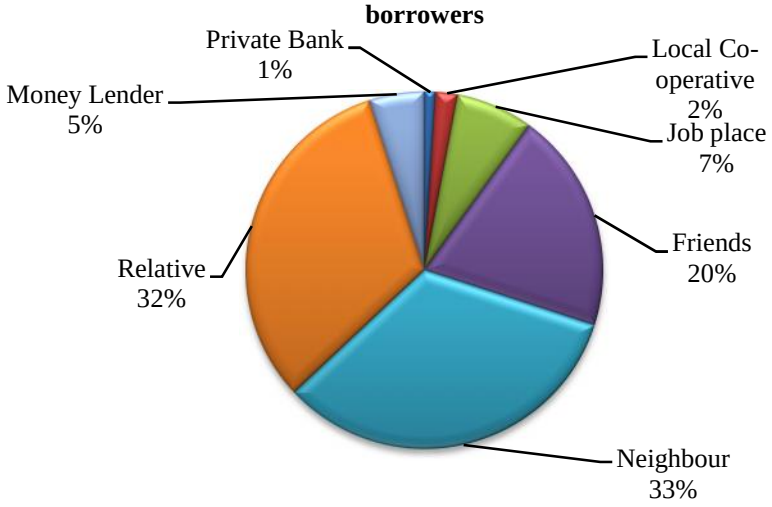
In Jurain slum, the 35 non-borrower respondents explained the causes of not receiving Microfinance. The maximum 34.28% non-borrowers did not participate in Microfinance program due to inability to repay loan. Besides, other core grounds of not receiving Microfinance are: they need the loan, but MFIs did not provide loan (25.71%), high interest rate (17.15%), Microfinance is not necessary for them (14.28%), cause of tension and huge pressure (4.44%), interest is strictly prohibited in Religion (4.44%) and they have the alternative way to get the loan (2.22%) respectively.

In WASA colony slum, the 20 non-borrower respondents explained the causes of not receiving Microfinance. The maximum 25% non-borrowers did not participate in Microfinance program due to inability to repay loan. As well, other core grounds of not receiving Microfinance are: Microfinance is not necessary for them (35%), Cause of tension and huge Pressure (15%), high interest rate (10%), do not know about Microfinance program (10%) and they have the alternative way to get the loan (5%) respectively.

5.1.27 The Alternative Sources of Finance of 100 Non-borrowers:

The figure-5.55 discloses the alternative sources of finance of 100 non-borrowers. The prime sources of finance of 100 non-borrowers are neighbor (33%) followed by relatives (32%), friends (20%), job place (7%), money lender (5%), local co-operative (2%) and private bank (1%) correspondingly.

Fig-5.55: The Alternative Sources of Finance of 100 Non-borrowers



However, on the loans from these sources, the interest rate varies from 5% to 30% per month. Maximum 72% reported that, they borrowed money at 10% interest rate per month. Besides, among 100 non-borrowers, only 34% people took loan from alternative sources. The loan amount varies from tk.500 to tk.40, 000. Maximum 41.18% received tk.1, 000 in the last year.

Moreover, 100 non-borrowers reported that, the repayment system of loan in the alternative sources is monthly installments (96%) and weekly installments (4%) respectively.

However, among 100 non-borrowers, only 4% are found who discontinued from the Microfinance program. They marked the high interest as the cause behind leaving the Microfinance program.

5.1.28 The Alternative Sources of Finance of 100 Non-borrowers in Three Slums:

In Korail slum,the alternative sources of finance of the non-borrowers are as follows: borrowing from job place (36.67%), friends (15.56%), neighbors (15%), relatives (16%) and money lender (8.89%) respectively. The amount of alternative borrowing varies from tk.500 to tk.40, 000.The interest rate varies from 10% to 32% per month. Moreover, 4 non-borrowers discontinued from Microfinance services because of high interest rate.

In Jurain slum,the alternative sources of finance are as follows: borrowing from neighbors (31.42%), friends (28.57%), relatives (22.85%), job place (6.67%), local co-operative (4.44%) and private bank (2.22%) respectively. The amount of alternative borrowing varies from tk.1, 000 to tk.10, 000. The Interest rate varies from 5% to 30% per month

In WASA colony slum,the alternative sources of finance are as follows: borrowing from relatives (40%), neighbors (35%), friends (15%), job place (5%) and money lender (5%) respectively.

5.1.29Trends in Housing and Utility Condition of Borrowers and non-Borrowers during 2010-2015 periods:

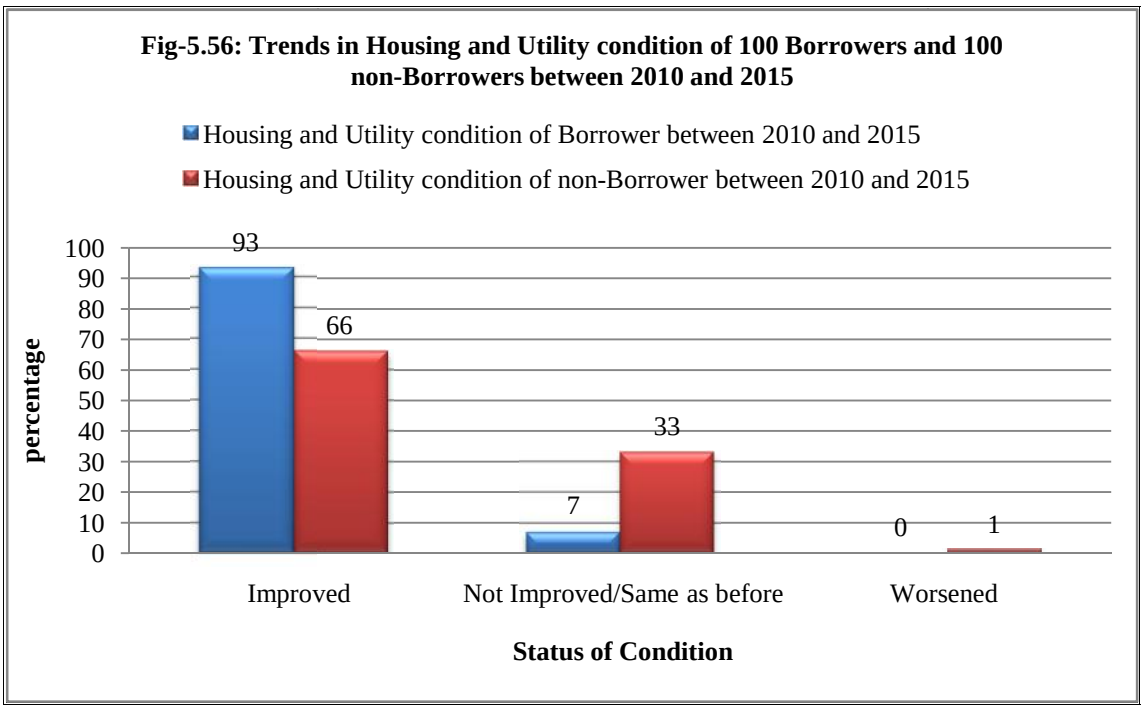


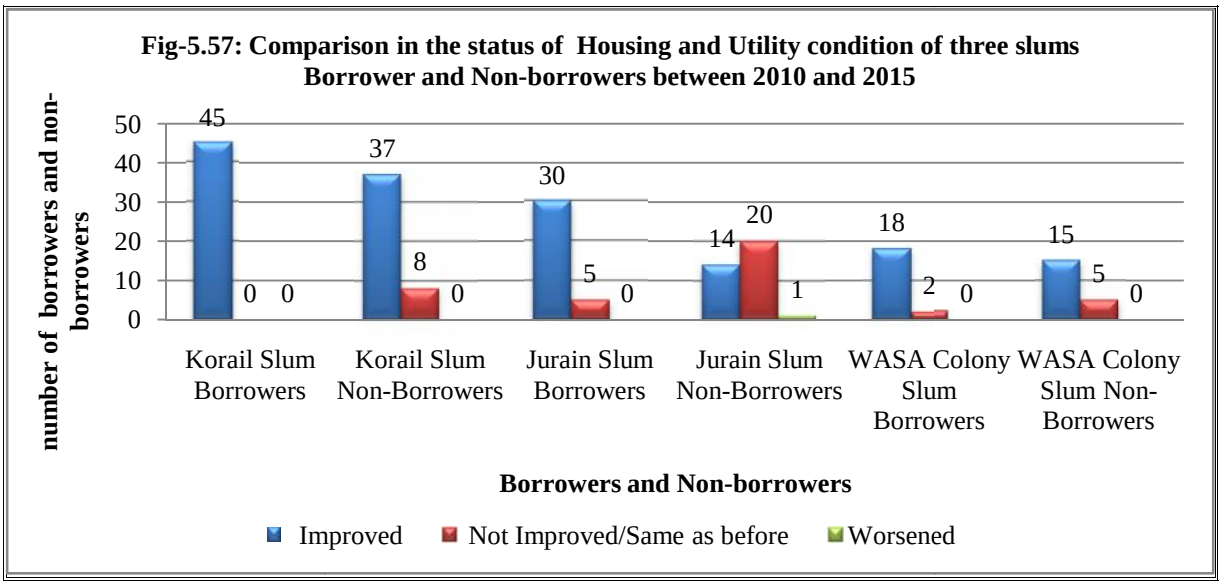
Fig-5.56: Trends in Housing and Utility condition of 100 Borrowers and 100 non-Borrowers between 2010 and 2015

The fig-5.56 demonstrates that, the 93% borrowers and 66% non- borrowers stated that, their housing and utilities (gas, electricity) conditions improved between 2010 and 2015. The improvement rate is 29.03% higher for borrowers than that of non-borrowers.

On the other hand, only 7% borrowers and 33% non-borrowers said that, their housing and utilities (gas, electricity) conditions did not improve over the last 5 years. Still now, it is same as before. This rate is 371.42% higher for non-borrowers than that of the borrowers.

As well, only 1% non- borrowersspecified that, his housing and utilities (gas, electricity) conditions worsened because of illness accompanied by low income during the last 5 years.

The finding is that, housing and utilities (gas, electricity) conditions improved for the 93% borrowers and 66% non- borrowers during the last 5 years and worsened for only 1% non- borrowers.



Moreover, figure 5.57 illustrates the specific information regarding housing condition of each slum. The housing condition of all borrowers of korail slum improved during the last 5 years while it improved for 82.22% non-borrower of korail slum. In contrast, 17.78% non-borrower's condition did not improve for the same periods.

Furthermore, in Jurain slum, 85.71% borrowers' housing condition improved whereas it did not improve for 14.29% borrower. In addition, among non-borrower of Jurail slum, housing condition improved only for 40%, whereas it did not improve for 57.14% non-borrower. Unfortunately, the housing condition of 1% non-borrower worsened during the last 5 years.

As well, in the WASA colony slum, housing condition improved for 90 % borrower while it did not improve for 10% borrower. Conversely, it improved for 75% non-borrower and not improved for 25% non-borrower.

Finally, from the above discussion, it can be said that, the housing condition of borrowers improved more than that of the non-borrower during the last 5 years

5.1.30Trends in the Water and Sanitation Condition of Borrowers and non-Borrowers during 2010-2015 periods:

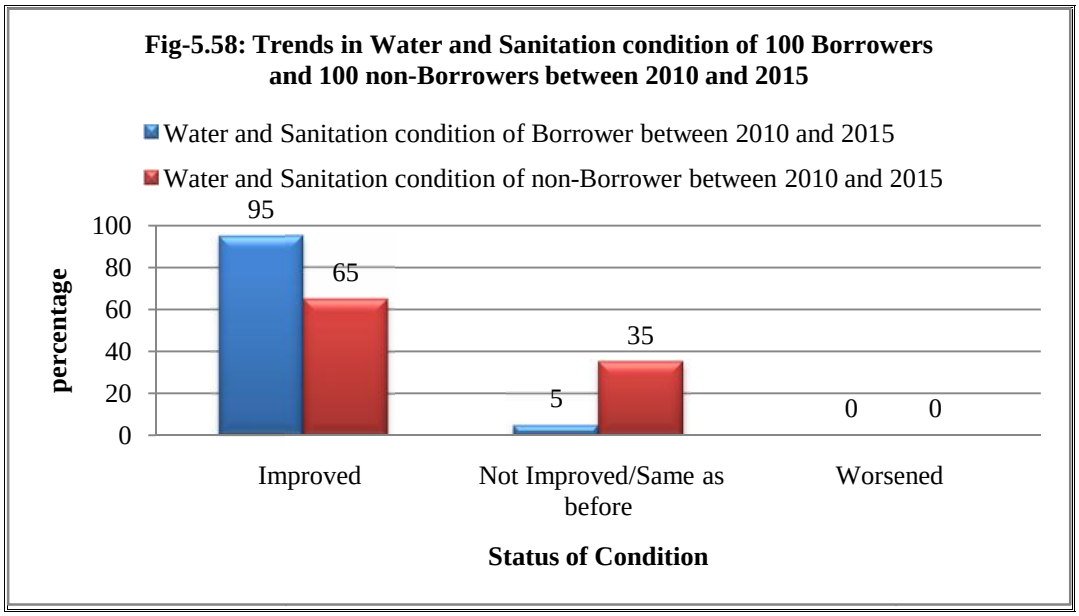
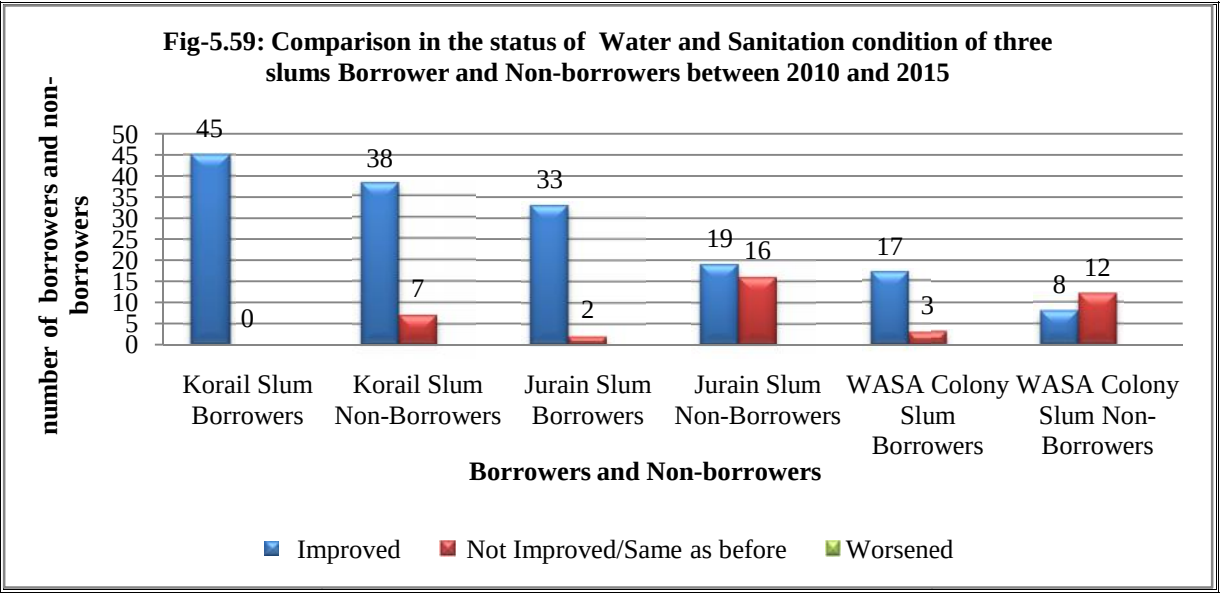


Fig-5.58 reveals that, the 95% borrowers and 65% non- borrowers stated that, their water and sanitation conditions improved between 2010 and 2015. The improvement rate is 31.57% higher for borrowers than that of non-borrowers.

On the contrary,water and sanitation conditions did not improve for 5% borrowers and 35% non-borrowers during the last 5 years. Still now, it is same as before. The improvement rate is 600% higher for non-borrowers than that of the borrowers.

The finding is that, water and sanitation conditions improved more for the 95% borrowers and 65% non- borrowers during the last 5 years.



More precisely, figure 5.59 illustrates the specific information regarding water and sanitation condition of each slum. The water and sanitation condition of all borrowers of the korail slum improved during the last 5 years while it improved for 84.44% non-borrower of the korail slum. On the contrary, 15.56% non-borrower's condition did not improve for the same periods.

Furthermore, in Jurain slum, 94.28% borrowers' water and sanitation condition improved whereas it did not improve for 5.72% borrower. In addition, among non-borrower of Jurail slum, water and sanitation condition improved only for 54.28% and not improved for 45.72% non-borrower during the last 5 years.

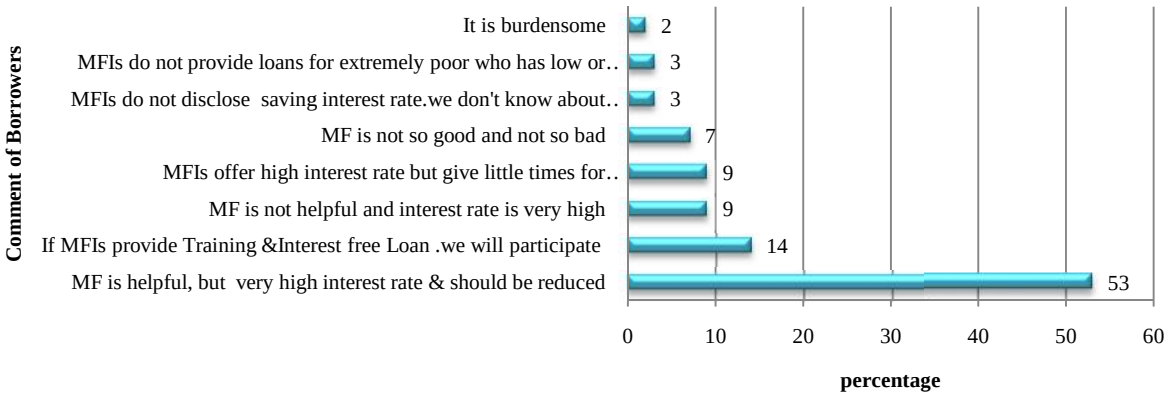
As well, in the WASA colony slum, water and sanitation condition improved for 85% borrower while it is not improved for 15% borrower. Contrariwise, it improved for only 40% non-borrower and unfortunately, not improved for 60% non-borrower.

Finally, from the above discussion, it can be said that, the water and sanitation condition of borrowers improved than that of no borrower during the last 5 years

5.1.31 Any Comment Regarding Microcredit, Livelihood Strategies, Expenses in Education and Healthcare, etc. (Open Remarks)

(a) Open Comments of 100 Borrowers about Microfinance and MFIs:

Fig-5.60: Comment of Borrowers about Microfinance and MFIs (%)



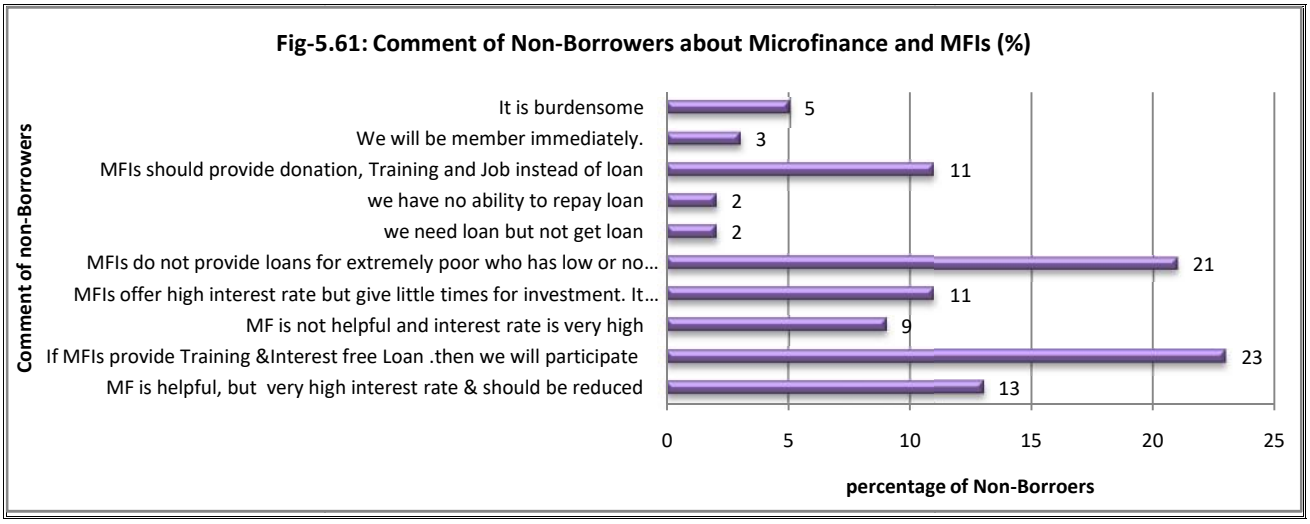
Finally, in the last section of the questionnaire, it was asked to the both borrower and non-borrower respondents about their opinion on Microfinance. The Fig-5.60 displays the findings. In response, maximum 53% borrower said that, the Microfinance is helpful, but the interest rate is very high and it should be reduced. Conversely, 9 % complained that, it is not helpful and the interest rate is very high. Besides, 2% considered it as burdensome while another 7% commented that, MF is not so good and not so bad. In addition, 9 % borrowers complained about many problems of MFIs. These are high interest rate, few or almost no times for investment and continuous installment of payment immediately just after receiving loans.

They proposed that, amount of money (to be paid) should be reduced in each installment or number of installment should be increased. They said if these problems are solved, then they will participate more spontaneously.

In addition, 14% borrowers stated their opinion that, MFIs should provide training and interest free loan for poor people. Then they will participate more rigorously. Furthermore, 3% borrower complained that, MFIs do not provide loans for extremely poor people-this is a bad rule. Also, MFIs do not provide loan regularly because of low or not having tenure Security.

Finally, 3% borrower criticized that, MFIs do not disclose the relevant information about saving interest rate. So, we do not know about our saving income.

(b) Open Comments of 100 Non-Borrowers about Microfinance and MFIs:



The figure-5.61 reveals the comment of Non-Borrowers about Microfinance and MFIs. Among the non-borrowers, maximum 23% respondents urged through their opinion that, MFIs should provide training and interest free loans for poor people. Then, they will participate more spontaneously. Furthermore, 2% non-borrowers complained that, they need a loan but not get a loan and another 2% reported that, they have no ability to repay the loan. Besides, 11% think that, they need donation, training and job instead of a loan. In addition, 3% said that, they will be a member of MFIs immediately.

As well, 21% non-borrowers complained that, MFIs do not provide loans for extremely poor people-this is a bad rule. Also, MFIs do not provide the loan to the people who have low tenure security or not having tenure security.

In contrast, 13% reported that, the Microfinance is helpful, but the interest rate is very high and it should be reduced. If MFIs reduce interest rate, then they will participate in this program immediately.

Furthermore, 11 % respondents complained about the problems of MFIs. These are high interest rate, little or no times for investment, and continuous installment of payment immediately just after receiving loans. They proposed that, amount of money (to be paid) should be reduced in each installment or number of installments should be increased. They urged that, installments should be set monthly instead of weekly. Also, they expect to participate more spontaneously if these problems are solved.

Moreover, 9 % said, it is not helpful and the interest rate is very high, whereas 5% considered it as burdensome.

Box-3: Case Study-3: Impact of Microfinance on Mrs. Zahura's Family

Mrs. Zahura, a 30 year old borrower of Microfinance at the WASA slum. Mrs. Zahura has 4 family members, husband, her son, daughter and herself. She is a housewife and her husband is a rickshaw driver. She finds Microfinance as beneficial for herself. The Microfinance program helped her family to make at least double their income, expenditure, Food, cloth, healthcare, transportation, education expenditure and house rent and utility expenditure. The stimulus behind the success story is that, at the 5 years ago, she and her husband was a garment worker with a very small amount of salary of tk. 2,000 and tk. 3,000 respectively. But currently, She has own business in the WASA slum. The story is that, Mrs. Zahura quit the job and borrowed tk. 6,000 from ASA- a prominent MFI and started the fruit business with her husband. The outcome is that, their income became tripled (from tk. 5,000 (2010) to tk. 15,000 (2015)) during this period. In this way, along with her husband, she also contributed to the family earnings. Besides, they currently save tk. 400 per month, on the contrary, they had no savings at 5 years ago. Furthermore, they bought a refrigerator, fan and furniture (chair, table).

She is pleased with Microfinance and informed that, their housing and utility and Water and sanitation conditions improved during the last 5 years. The main ground is that, they borrowed house repairing money from MFIs and WASA increases Water supplies in the WASA slum and she paid money jointly with another resident of the WASA slum. Finally, in the last and open comment section, she commented that, she finds Microfinance as helpful and MFIs should publish the saving interest rate.

5.2. Instrumental Variable (IV) Estimated Results

(a) Instrumental Variable (IV) Estimated Results for the Income model

Table 5.1 discloses the result of OLS regression and instrumental variable (IV) regression for the income model respectively. The result of OLS regression shows that the borrowing of microfinance loan (*borrowed*) has no the significant impact to the income of the borrowers. In contrast; the result of instrumental variable (IV) regression depicts that *borrowed* (borrowing of microfinance loan) variable significantly (at 5% level of significance, P =0.042) contributes to the income of the borrowers. A 1 taka new microfinance loan increases the .181 taka in the income of the borrowers. And the income of borrowers is estimated to be .181 taka higher than the non-borrowers.

Table: 5.1: Results of OLS regression and Instrumental Variable (IV) Regression for the Income Model

Dependent Variable: Lyincome : Log(Yearly income)				
Explanatory Variables	OLS Regression results		IV Regression results	
	Coefficient and Robust Standard Error	P Value	Coefficient and Robust Standard Error	P Value
Constant	11.02987(.1387174)***	0.000	0.99152(.1359134)***	0.000
	-.1805113 (.1147975)	0.117	-.1918592 (.1212072)	0.113
	-.1334236(.0541524)**	0.015	-.1313813 (.0543268) **	0.016
	.2571584(.1125921) **	0.023	.2779574 (.120282)*	0.021
	.1451709(.0197288)*	0.000	.1394939 (.0194514)***	0.000
	.1352984(.0416863) **	0.001	.1428385 (.0533982) ***	0.007
	.0175587(.0067036)**	0.010	.0142788 (.0071285)**	0.045
	.068397 (.0523705)	0.193	.1812086 (.0889802)**	0.042
Observations	200		200	
R-Squared	.315		.30	

Value in parenthesis is a value of Robust standard errors and ***, **, * indicate the 1 %, 5% and 10% level of statistical significance.

Finally it can be said that Microcredit has statistically positive impact on the income of the married and employed borrower with some education and having family member three and above.

(b) Instrumental Variable (IV) Estimated Results for the Food Consumption Expenditure model

Table 5.2 reveals that in both the OLS regression and instrumental variable (IV) regression; the borrowing of microfinance loan (*borrowed*) has no significant impact to the food consumption expenditures of the borrowers.So there is no significance difference in the food consumption expenditures of borrowers and non-borrowers.

Table: 5.2: Results of OLS regression and Instrumental Variable (IV) Regression for the Food Consumption Expenditure Model

Dependent Variable: LFoodexp : Log(Food Expenditure)				
Explanatory Variables	OLS Regression results		IV Regression results	
	Coefficient and Robust Standard Error	P Value	Coefficient and Robust Standard Error	P Value
Constant	10.60465(.1745535)***	0.000	10.53127 (.170188)***	0.000
	-.0114977 (.1089663)	0.916	-.0332095 (.1164968)	0.776
	-.0825329 (.0630994)	0.192	-.0786254 (.0638324)	0.218
	.0132289 (.0940202)	0.888	.0530234 (.1061424)	0.617
	.0992585 (.024613) ***	0.000	.0883966 (.0251231)***	0.000
	.0542876 (.0587345)	0.356	.0687139 (.0743144)	0.355
	-.0006555(.0079925)	0.935	-.0069309 (.0087991)	0.431
	-.0510669 (.0613052)	0.406	.1647739 (.1216977)	0.176
Observations	200		200	
R-Squared	.12		.12	

Value in parenthesis is a value of Robust standard errors and ***, **, * indicate the 1 %, 5% and 10% level of statistical significance.

(c) Instrumental Variable (IV) Estimated Results for the Non-Food Consumption Expenditure model

Table 5.3 discloses that in both the OLS regression and instrumental variable (IV) regression; the borrowing of microfinance loan (*borrowed*) has the significant impact to the non-food consumption expenditures of the borrowers.The result of OLS regression demonstrates that the borrowing of microfinance loan (*borrowed*) has the significant impact (at 5% level of significance, P =0.027) to the non-food consumption expenditures of the borrowers. A 1 taka new microfinance loan increases the .157 taka in the non-food consumption expenditures of the borrowers. And the non-food consumption expenditures of borrowers are estimated to be .157 taka higher than the non-borrowers.

Table: 5.3: Results of OLS regression and Instrumental Variable (IV) Regression for the Non-Food Consumption Expenditure Model

Dependent Variable: LnFoodexp : Log (Non-Food Expenditure)				
Explanatory Variables	OLS Regression results		IV Regression results	
	Coefficient and Robust Standard Error	P Value	Coefficient and Robust Standard Error	P Value
Constant	11.02987(.1387174)***	0.000	9.959082(.1786354)***	0.000
	-.4022997 (.227451)*	0.079	-.407396 (.226909)*	0.073
	-.1781326 (.0713286)**	0.013	-.1770324 (.0702955)**	0.012
	.6488107 (.236945) ***	0.007	.6580861 (.2358228) ***	0.005
	.1955204 (.0233622) ***	0.000	.1930344 (.0229496)***	0.000
	.0942047 (.0611189)	0.125	.0974879 (.0653951)	0.136
	.0343336(.0092819)***	0.000	.0329733 (.0093965) ***	0.000
	.1574878 (.0705641)**	0.027	.2054383 (.1076502)*	0.056
Observations	199		199	
R-Squared	.35		.35	

Value in parenthesis is a value of Robust standard errors and ***, **, * indicate the 1 %, 5% and 10% level of statistical significance.

Similarly; the result of instrumental variable (IV) regression illustrates that *borrowed* (borrowing of microfinance loan) variable significantly (at 10% level of significance, P =0.056) contributes to the non-food consumption expenditures of the borrowers. A 1 taka new microfinance loan increases the .205 taka in the non-food consumption expenditures of the borrowers. And the non-food consumption expenditures of borrowers are estimated to be .205 taka higher than the non-borrowers.

Finally; it can be said that Microcredit has statistically positive impact on the non-food consumption expenditures of the married borrower with some education and having family member three and above.

The summary of above analysis states that the microfinance borrowing has significant positive impact on the income (at 5% level of significance, P =0.042) the borrowers. And the income of borrowers is estimated to be .181 taka higher than the non-borrowers. Besides; the borrowing of microfinance loan (*borrowed*) has the significant impact (at 10% level of significance, P =0.056) on the non-food consumption expenditures of the borrowers. A 1 taka new microfinance loan increases the .205 taka in the non-food consumption expendituresof the borrowers. And the non-food consumption expendituresof borrowers are estimated to be .205 taka higher than the non-borrowers. On the contrary; microfinance loan has no significant impact on the food consumption expenditures of the borrowers.

5.3. Probit Model Estimated Results

The probit model tested the impact of age, female, married, borrower type, some educational qualification, age of respondent between 30 and 50 years, age of respondent above 50 years, receiving charity, and assets in 5 years ago and positive savings at 5 years ago on the changing occupations of the respondent. 'Probability of changing occupations' is the dependent variable. It is a binary variable where yes=1 and no=0. The Probit Equation specifies this process:

$$\begin{aligned}\text{Occhngr} = {} & \beta_0 + \beta_1\,\text{age}_i + \beta_2\,\text{female}_i + \beta_3\,\text{married}_i + \beta_4\,\text{borw\_type}_i + \beta_5\,\text{edursome}_i \\ & + \beta_6\,\text{agerb30and50}_i + \beta_7\,\text{agera50}_i + \beta_8\,\text{charityyravg}_i \\ & + \beta_9\,\text{lnasset5yrago}_i + \beta_{10}\,\text{positsaving5yrago}_i + e_i\end{aligned}$$

Finally, probit results illustrate that, the probability of the changing occupations of the respondent who received Microfinance is statistically significantly higher compared to the case of the non-borrower respondent. This finding is statistically significant at the 1% level of significance. Moreover, the Microfinance borrower with some charity has statistically significantly higher probability of changing their occupations compared to the case of the non-borrower respondent. This finding is statistically significant at the 1% level of significance. Table-5.4 presents the detailed results.

Table-5.4: Probit Regression Results

Probit regression Log pseudolikelihood = -88.856238		Number of obs = 200 Wald chi2(10) = 49.10 Prob > chi2 = 0.000 Pseudo R2 = 0.232	
Occupation changes	**Coefficients**	**Robust Std. Err.**	**P>|z|**
age	-.032 *	.018	0.070
female	-.104	.251	0.677
married	-.0144	.332	0.965
borw_type	1.272 ***	.252	0.000
edursome	-.029	.229	0.900
agerb30and50	-.129	.254	0.612
agera50	.122	.598	0.838
charityyravg	.000 *	.000	0.079
lnasset5yrago	.026	.117	0.824
positsaving5yrago	.134	.352	0.705
Constant	-.505	1.086	0.642
R2	0.23		

Inference: *** p<0.01, ** p<0.05, * p<0.1

5.4. Difference in Differences Model Estimated Results

a) Difference in Differences Model Estimated Results for 100 Borrowers and 100 Non-borrowers in the Three slums

Table-5.5 presented the DID results. Difference in differences (DID) model has been estimated for 100 Borrowers and 100 Non-borrowers. More precisely, to examine the impact of the urban Microfinance program, nine models have been estimated through the Difference in differences (DID) technique for several categories such as income, expenditure, and asset value, savings, and housing and utility expenditure changes respectively. The results of these models have been presented in table 5.5 to 5.8.

The table-5.5 depicts that, among these models, difference in differences (DID) model estimated result was found significant for saving changes (at the 1% level of significance), educational expenditure (at the 5% level of significance) and transportation expenditure (at the 1% level of significance).

Table-5.5: Difference in Differences Model Estimated Results for 100 Borrowers and 100 Non-borrowers in the Three slums

Category	Baseline P>|t| Diff (T-C)	Follow up P>|t| Diff (T-C)	Diff-in-Diff P>|t|	R-square
Income	0.137	0.007***	0.397	0.42
Income with covariance	0.053*	0.006***	0.396	0.43
Expenditure (overall)	0.159	0.010***	0.403	0.42
Asset value	0.918	0.090*	0.203	0.04
Savings	0.291	0.000***	0.000***	0.41
Housing and utility expenditure	0.911	0.785	0.910	0.30
Food expenditure	0.902	0.970	0.910	0.52
Educational expenditure	0.163	0.000***	0.013**	0.22
Healthcare expenditure	0.672	0.025**	0.198	0.24
Transportation expenditure	0.069*	0.000***	0.005***	0.29

Inference: *** p<0.01, ** p<0.05, * p<0.1

However, it is found significant at the 1% level of significance for follow up periods for income, expenditure, saving changes, educational expenditure and transportation expenditure. Besides, it is found significant at the 5% and 10% level of significance for healthcare expenditure and asset value changes in follow up period. Conversely, for housing and utility expenditure changes and food expenditure, it is not found significance in any cases. R-square value has been shown in the right column of the table.

In sum, it can be said that, Microfinance has significant positive impact on changing the savings, educational expenditure and transportation expenditure of the 100 borrowers of the three slums in Dhaka city.

b) Difference in Differences Model Estimated Results for 45 Borrowers and 45 Non-borrowers in the Korail Slum

Table-5.6 showed the DID results of the Korail slum. Difference in differences (DID) model has been estimated for 45 Borrowers and 45 Non-borrowers.

Table-5.6: Difference in Differences Model Estimated Results for 45 Borrowers and 45 Non-borrowers in the Korail Slum

Category	Baseline P>|t| Diff (T-C)	Follow up P>|t| Diff (T-C)	Diff-in-Diff P>|t|	R-square
Income	0.404	0.953	0.583	0.53
Income with covariance	0.685	0.402	0.562	0.59
Expenditure (overall)	0.326	0.948	0.459	0.51
Asset value	0.354	0.005***	0.176	0.30
Savings	1.000	0.000***	0.000***	0.56
Housing and utility expenditure	0.766	0.394	0.416	0.37
Educational expenditure	0.172	0.000***	0.071*	0.27
Healthcare expenditure	0.428	0.014**	0.232	0.24
Transportation expenditure	0.011**	0.000***	0.000***	0.54

Inference: *** p<0.01, ** p<0.05, * p<0.1

Table-5.6 explains that, among these models, difference in differences (DID) model estimated result was found significant for savings changes (at the 1% level of significance), educational expenditure (at the 10% level of significance) and transportation expenditure (at the 1% level of significance). But it is not found significant for other categories such as income, expenditure, asset value, housing and utility expenditure changes and health care expenditure. However, it is found significant at the 1% level of significance for follow up periods for saving changes, asset value changes, and educational expenditure and transportation expenditure. Besides, it is found significant at the 5% level of significance for healthcare expenditure. And it is not found significant for other categories in follow up period.

In sum, it can be concluded that, Microfinance has significant positive impact on changing the savings, educational expenditure and transportation expenditure of the 45 borrowers of the Korail slum.

c) Difference in Differences Model Estimated Results for 35 Borrowers and 35 Non-borrowers in the Jurain Slum

Table-5.7 described the DID results of the Jurain slum. Difference in differences (DID) model has been estimated for 35 Borrowers and 35 Non-borrowers.

Table-5.7: Difference in Differences Model Estimated Results for 35 Borrowers and 35 Non-borrowers in the Jurain Slum

Category	Baseline P>|t| Diff (T-C)	Follow up P>|t| Diff (T-C)	Diff-in-Diff P>|t|	R-square
Income	0.351	0.030**	0.374	0.43
Income with covariance	0.204	0.028**	0.374	0.45
Expenditure (overall)	0.568	0.035**	0.271	0.44
Asset value	0.895	0.125	0.239	0.04
Savings	0.671	0.000***	0.001***	0.25
Housing and utility expenditure	0.917	0.479	0.566	0.28
Educational expenditure	0.650	0.019**	0.177	0.19
Healthcare expenditure	0.888	0.567	0.760	0.32
Transportation expenditure	0.528	0.100	0.471	0.14

Inference: *** p<0.01, ** p<0.05, * p<0.1

Table-5.7 demonstrates that, among these models, difference in differences (DID) model estimated result was found significant only for saving changes at the 1% level of significance. But it is not found significant for other categories such as income, expenditure, asset value, housing and utility expenditure changes, educational, healthcare expenditure and transportation expenditure. However, it is found significant at the 1% level of significance for follow up periods for saving changes and at the 5% level of significance of income, expenditure and educational expenditure changes. And it is not found significant in asset value, housing and utility expenditure change, educational expenditure and transportation expenditure in any of the cases.

Finally, it can be said that, Microfinance has significant positive impact only in changing the savings of 35 borrowers of the Jurain slum.

d) Difference in Differences Model Estimated Results for 35 Borrowers and 35 Non-borrowers of the WASA colony Slum

Table-5.8 revealed the DID results of the WASA colony slum. Difference in differences (DID) model has been estimated for 20 Borrowers and 20 Non-borrowers of the WASA slum.

Table-5.8: Difference in Differences Model Estimated Results for 20 Borrowers and 20 Non-borrowers in the WASA Colony Slum

Category	Baseline P>|t| Diff (T-C)	Follow up P>|t| Diff (T-C)	Diff-in-Diff P>|t|	R-square
Income	0.352	0.016**	0.287	0.42
Income with covariance	0.976	0.198	0.290	0.45
Expenditure (overall)	0.312	0.014**	0.291	0.43
Asset value	0.831	0.893	0.806	0.08
Savings	0.095*	0.000***	0.001***	0.51
Housing and utility expenditure	0.993	0.502	0.630	0.31
Educational expenditure	0.565	0.028**	0.245	0.21
Healthcare expenditure	0.866	0.429	0.498	0.28
Transportation expenditure	0.530	0.000***	0.021**	0.57

Inference: *** p<0.01, ** p<0.05, * p<0.1

Table-5.8 illustrates that, among these categories, difference in differences (DID) model estimated result was found significant only for saving changes (at the 1% level of significance) and transportation expenditure (at the 5% level of significance). But it is not found significant for other categories such as income, expenditure, asset value, housing and utility expenditure changes, educational and healthcare expenditure. However, it is found significant at the 1% level of significance for follow up periods for saving changes and transportation expenditure. Besides, it is significant at the 5% level of significance of income, expenditure changes and educational expenditure. And it is not found significant in asset value, housing and utility expenditure change, educational expenditure and health care expenditure.

Finally, it can be decided that, Microfinance has significant positive impact on changing the savings and transportation expenditure of 20 borrowers of the WASA slum.

5.5. Summary of Key Findings of the Study:

The selected key findings of the study are given below:

Empirical Findings:

i. The Instrumental variable (IV) regression model states that the microfinance borrowing has significant positive impact on the income (at 5% level of significance, P =0.042) the borrowers. And the income of borrowers is estimated to be .181 taka higher than the non-borrowers. Besides; the borrowing of microfinance loan (*borrowed*) has the significant impact (at 10% level of significance, P =0.056) on the non-food consumption expenditures of the borrowers. A 1 taka new microfinance loan increases the .205 taka in the income of the borrowers. And the income of borrowers is estimated to be .205 taka higher than the non-borrowers. On the contrary; microfinance loan has no significant impact on the food consumption expenditures of the borrowers.

ii. Probit results illustrate that, the probability of the changing occupations of the respondent who received Microfinance- is statistically significantly higher compared to the case of the non-borrower respondent. This finding is statistically significant at the 1% level of significance. Moreover, the Microfinance borrower with some charity has statistically significantly higher probability of changing their occupations compared to the case of the non-borrower respondent. This finding is statistically significant at the 1% level of significance.

iii. The main finding of the study (DID) is that, the urban Microfinance has significant positive impact on saving (at the 1% level of significance), educational expenditure (at the 5% level of significance) and transportation expenditure (at the 1% level of significance). Conversely, it has no significant impact on changing income, overall expenditure, housing and utility, healthcare expenditure, and asset value of the borrower of the three slums (Korail, Jurain and WASA) of Dhaka city.

Other Findings from Data:

iv. The difference between the borrowers and non-borrowers in different categories are as follows: the monthly average income (BDT 802), monthly average overall expenditure (BDT 776.9), monthly average housing and utility expenditure (BDT 27.8),monthly average educational expenditure (BDT 891), monthly average healthcare expenditure (BDT 143.2)and monthly average transportation expenditure (BDT 172),the monthly average savings (BDT 166.9),and average asset value (BDT 17,885)of borrower is higher than the non-borrower.

v. The monthly average food expenditure (BDT 43) and the monthly average cloth expenditure (BDT 30.4) of the borrower is less than the non-borrower.

vi. Microfinance has the positive impact on livelihood strategy by generating employment, it changes the occupation of 46 borrowers by funding in small business. Only 20% borrowers and 4% non-borrower respondent have secondary occupation.

vii. Microfinance improved the housing and utilities (gas, electricity) conditions of 93% borrowers and water and sanitation conditions of 95% Borrowers.

viii. Moreover, Microfinance borrower successfully crossed the poverty line and presently, no families are found below the poverty line. Before receiving Microfinance, 1% borrower was extremely poor (less than $1.25 income per day) and 33% borrower was moderately poor (less than $2 income per day). Conversely, presently, no families are found below the poverty line.

ix. Twelve MFIs have been providing their services among three slums during the last five years. The names of MFIs by the share of coverage and acronyms are DSK (20%) followed by ASA (17%), BRAC (13%), Shakti (10%), Urban (8%), Sathi (5%), Heed Bangla (3%), IBBL (2%), Grameen Bank (2%), Buro (2%), PSTC (1%) and CBO (1%) respectively.

x. In Korail slum, 4 MFIs provides their services. These are DSK, Shakti, Buro and BRAC. In Jurain slum, 11 MFIs provides their services. These are ASA, Urban, Sathi, Shakti, BRAC, Grameen Bank, IBBL, Heed Bangla, Manobik, PSTC, and CBO. In WASA colony slum, 4 MFIs provides their services. These are ASA, Shakti, Heed Bangla and BRAC.

xi. The 93.33% borrower took the credits from more than one MFI because of insufficient amount of the loan and the remaining 6.67% took the loan to pay the loan of another MFI.

xii. The Interest rate on Microcredit varies from 10% to 38% as reported by recipients. In contrast, MFIs do not disclose the saving interest rate among borrowers.

xiii. Most of the Microfinance funds are employed in investment in business (44%), buying a rickshaw (22%) and buying a house (11%) respectively.

xiv. The 97% borrowers receive the both Microcredit and Micro-savings services, only 3% borrowers got educational services, 1% borrower participated in training and skill development program and the 3% borrowers receive only Micro-savings services, but none of other services.

xv. The main reasons of not receiving Microfinance by the non-borrowers are- inability to repay loan (31%), high interest rate (16%), not necessary (16%) and need loan but MFIs did not provide loan (15%) respectively.

xvi. The major alternative sources of finance of 100 non-borrowers are neighbors (33%) followed by relatives (32%), friends (20%), and job places (7%), money lender (5%), local co-operative (2%) and private bank (1%) correspondingly.

xvii. None of the 100 borrowers and the 100 non- borrowers received any kind of remittance. Only 25% borrowers and 20% non- borrowers received at least one kind of charity.Only 4% borrowers and 2% non- borrowers received the benefits of social safety net programs.

ChapterSix:

Discussion Chapter: Consistency of the Findings of this Study with the Earlier Research Findings

6.1 Consistency withthe Earlier Research Findings:

The outcomes of this study are consistent with many previous or existing research findings (that is highlighted in Table 6.1).Instrumental Variable (IV) model illustrates that microfinance has significant impact on the income and non-food consumption expenditure of the borrowers. Besides; the income and non-food consumption expenditure of the borrowers is significantly higher than the non-borrowers.

This finding of significant impact of microfinance on income is consistent with the findings of Rahman, (2005),Mahjabeen (2008); Rabbani (2011),Imai & Azam (2012) and Khandker & Samad (2013). Rahman, (2005) found the 49.1 % difference while Rabbani (2011) found the 34.7 % difference in annual income between the borrowers and non-borrowers respectively. These studies were conducted under PKSF.Mahjabeen (2008) states that microcredit raises the income and consumption of borrowers. Imai & Azam (2012) also demonstrate the same positive impact of microfinance on income in their study for 1997 and 2004 periods data. Khandker & Samad (2013) state that the continuous recipients of microfinance earn more than the non-borrowers of Bangladesh.

The positive impact of non-food expenditure is also consistent with the earlier findings. Khandker, (1998) and Holder (1998) disclosed the 23.8 and 27.2 % difference in the expenditure between the borrowers and non-borrowers respectively. They conducted research under BRAC. This finding is also consistent with Muhumed (2016) and Khandker & Samad (2013) for non-food consumption expenditures. Schroeder, (2014) also demonstrates the significant impact of micreodretit on consumption of the borrowers of Bangladesh. Besides, It is consistent with the research findings of Priyanka (2016). She stated that microcredit increases the consumption expenditures of 35 women borrowers from the slum dwellers of the Sylhet division.

Table 6.1: Existing Research Findings on the Impact of Microfinance on Borrowers

Serial No	Source	Variables of the Model	Findings
1.	Priyanka (2016)	Expenditure, women empowerment	Positive impact
2.	Muhumed (2016)	Food and Non-food consumption	Positive impact
3.	Schroeder (2014)	household consumption	Positive impact
4.	Khandker & Samad (2013)	Earnings and consumption	Positive impact
5.	Imai & Azam (2012)	Income	Positive impact
6.	Bashar and Rashid (2012)	Expenditure, Livelihood	Mixed (Positive & Negative on several variables)
7.	Hossain (2012)	Cross the Poverty line	Positive impact
8.	Rabbani, (2011)	Annual Income, per household	34.7% Higher for borrowers than the non-borrowers
9.	Mahjabeen (2008)	Income; consumption	Positive impact
10.	Khan and Rahman (2007)	Living Standard, Investment	Positive impact
11.	Rahman, Atiur, (2005)	Annual Income, per household	49.1% Higher for borrowers than the non-borrowers
12.	Zahir et al (BIDS, 2001)	Income, ownership of wealth	Higher for borrowers than the non-borrowers
13.	Khandker, (1998)	Expenditure, per capita	23.8% Higher for borrowers than the non-borrowers
14.	Holder, (1998)	Expenditure, per capita	27.2% Higher for borrowers than the non-borrowers
15.	Morduch (1998)		no or little impact
16.	Rahman & Khandker (1994)	Emlployment	Positive impact
17.	Pitt (1999)	Poverty	Positive impact
18.	Zaman, (1999)	Poverty	Positive impact
19.	Khalily, 2011	Monthly Income, per household	17.0% Higher for borrowers than the non-borrowers
20.	Khandker, 2003	Expenditure, per capita	2.2% Higher for borrowers than the non-borrowers

Source: Compiled by the Author

This analysis of DID reveals that, the urban Microfinance has significant positive impact on saving,educational and transportation expenditure and has no significant impact on changing income,overall expenditure, housing and utility expenditure, healthcare expenditure, and asset value of the borrower in the three slums (Korail, Jurain and WASA) of Dhaka city. These results were discussed in chapterfive. Besides,table-6.2 depicts similar findings. These are, the difference in BDT (Bangladeshi Taka) is positive for 9 (out of 11) categories and negative for 2 (out of 11) categories ofthe borrower. But the growth rate in several categories of the borrower' is less than the non-borrower for 9 (out of 11) categories and greater than the non-borrower for 2 (out of 11) categories only.

Table-6.2: Impact of the Urban Microfinance on the Borrower

Categories	Difference Between the Borrower and Non-borrower (BDT)	Difference in Increasing rate (%)
Average monthly income	+802	-12.29
Average monthly overall expenditure	+776.9	-10.76
Average monthly food expenditure	-43	-6.64
Average monthly cloth expenditure	-30.4	-59.51
Average monthly housing and utility expenditure	+27.8	-1.53
Average monthly educationalexpenditure	+891	-86.42
Average monthly healthcareexpenditure	+143.2	-27.99
Average monthly transportation expenditure	+172	-115.50
Average monthly savings	+166.9	+886.49
Average asset value	+17885	+135.69

In contrast, Microfinance has positive impact in livelihood strategy by creating employment, improving housing and utilities (gas, electricity) conditions and water and sanitation conditions of Borrowers. The Probit analysis illustrates that the probability of changing occupations of the microfinance borrowers is statistically significantly (at the 1% level of significance) higher compared to the case of the non-microfinance borrowers.The table-6.3 illustrates that, the occupation changed for 46% borrowers, among them, 40% get funds from MFIs and invested in businesses. Besides, 12% borrowers have secondary job and small business (financed by MFIs).

Furthermore, housing and utilities (gas, electricity) conditions improved for 93% borrowers and water and sanitation conditions improved for 95% borrower. Besides, housing and utilities (gas, electricity) conditions improving rate are 29.03% and water and sanitation conditions improving rate is 31.57% higher for borrowers than the non-borrowers.

Table-6.3: Impact of Urban Microfinance on the Employment, Housing, Water and Sanitation Conditions of the Borrower

Category	Borrower (%)	Non-borrower (%)	Difference (%)
Occupation change	46	7	+39
Secondary occupation	12	4	+8
Improvement of the housing and utilities (gas, electricity) conditions	93	66	+27
Improvement of the water and sanitation conditions	95	65	+30

The above mentioned outcome is consistent with the research findings of Bashar and Rashid (2012). They conducted study in thirteen major cities on 1500 members, who has been involved with MFIs since 2005 or earlier and finds that, Microfinance cannot modify the condition of food, clothing, healthcare and utility services of the borrowers. But it may slightly improve the Housing condition. Moreover, MFIs improved the livelihood of the borrower by financing their business. It is also consistent with the findings of Morduch (1998). He concluded that, there was no or little impact of Microfinance(Flagship Programs) in Bangladesh.

In addition, the finding of employment creation is consistent to Khan and Rahman (2007). They studied on the borrowers who engage in Microfinance programs for at least two years in Chittagong district of Bangladesh and found that, Microfinance improved their living standard and made them capable financially to start the new small-scale businesses as well as in the expansion of old businesses. Likewise, this finding is also consistent with Rahman & Khandker (1994) study. They found that, Microfinance creates employment and stimulates productivity.

Also, this study finds that, Microfinance borrower successfully crossed the poverty line. Before receiving Microfinance, 1% borrower was extremely poor (less than $1.25 income per day) and 33% borrower was moderately poor (less than $2 income per day). Conversely, presently, no families are found below the poverty line. This result is consistent with the result of Hossain (2012). Hossain (2012) conducted research on 208 borrowers who attached to BRAC for at least three years and found the same results. In addition, this finding is also consistent with the research findings of Pitt (1999) (A Reply to Jonathan Morduch's) and Zaman, (1999). In separate research, they found that, Microfinance has a positive impact on the poor.

Furthermore, the finding is consistent with the research findings of Zahir et al (BIDS, 2001). Their study covered 13 regions of Bangladesh, including 91 villages spread over 23 sub-districts. They found that, the income and ownership of wealth (land and other resources) of borrower is higher than non-borrower. It is consistent with this study as shown in table-6.2. This study showed that, the asset value of the borrowers is higher than the non-borrowers.

The result of average monthly income is consistent with the research findings of Khalily (2011). Khalily (2011) showed that, average monthly income is higher of borrowers than the non-borrowers. Similarly, borrower monthly average expenditure is also higher than the non-borrower. This outcome is consistent with the research findings of Khandker (2003). On the contrary, monthly average food and cloth expenditure is lower for borrower than the non-borrower.

Finally, it can be pointed out that, the findings of this study areconsistent with the findings of earlier researches.

6.2. Scopefor FurtherResearch

Microfinance is a wide field in economics and Urban Microfinance is an important component Microfinance. Besides, Urban Microfinance is an extensive area of research. This study is a small scale research as an M.Phil.thesis that is funded by the author itself. Moreover, this study has been conducted over 200 borrowers and Non-borrower sample in the three slums of Dhaka city and only touched the livelihood strategies of borrower slum dwellers. Conversely, Census of slum areas and Floating Population, Bangladesh-2014, about 2.22 million peoples live slums in Bangladesh and among them, 1.06 million people live in slums in Dhaka city. Nevertheless, it should be mentioned that, by personally funding it is quite impossible to include more slum and sample in this study.

So, there areenormous scopes for further research that may include more slum, sample and overall impact. It may analyze the disbursing loan for extremely poor, offering more time for investment, charging high interest rate, interest rate issue in declining and flat methods, issues of providing other services such as micro-insurance, health and maternity care, education and training and so more.

However, this study is just an attempt to point out the current scenario of urban Microfinance on slum dwellers of Dhaka city. It may be helpful for conducting further research on slum dwellers of different cities of Bangladesh. Institutional effort and adequate funding may contribute and produce a deep research.

6.3. The Credibilityand Reliability of the Study

Credibility refers to the internal validity. Credibility in a research depends on the well-defined research method that has research question, objective, questionnaire and random sampling, triangulation (observation, focus groups and key informant interviews in data collection), comprehensive literature review, appropriate analysis, evidence based discussion, examination of previous research findings and peer scrutiny of the research by colleagues, expert and academician (Shenton, 2004). This research follows the all criteria of credibility.

Reliability or Dependability: Reliability or Dependability entails that, the result of the study should be consistent with the research findings of other research on similar context (Shenton, 2004). This study also fulfilled this condition. It is discussed in chapter six, section 6.1.

ChapterSeven: Policy Recommendations and Conclusion

7.1: Policy Recommendations

Based on the findings of the study, this paper recommends the following policies.

i. **Government Policy:**It is very difficult for MFIs to provide Microcredit to the extremely poor slum dwellers who have no tenure security. The Government should rehabilitate the slum dwellers in the government owned land by constructing buildings. Slum dwellers pay rent in the houses of slum owners. In the same way, they may pay rent to the government through the social welfare ministry.

ii. **Policies of MFIs for Extremely Poor People:** MFIs should revise their loan disbursing rules. In this study, 21% non-borrower complained that, MFIs do not provide loans for extremely poor people-this is a bad rule. It should be stated that, Microfinance is the only means for poor people to borrow money because they have no way to borrow money from other formal financial institution such as bank and non-bank financial institution. So MFIs should take different initiatives and policies to provide loans for extremely poor people by the group guarantyship. In group guaranty system, at first loan will be provided to the group leader, then to other group membersn by the rotation, if the group leader repays the loan.

iii. **Extensions of Coverage of MFIs:**The latest report of MRA (Microfinance Regulatory Authority) reveals that, 685 licensed MFIs are working in Bangladesh. But this study shows that, only 12 MFIs are working among the three slums Korail, Jurain and WASA slum. Among all slums in Dhaka city and Bangladesh, Korail is the largest slum in Bangladesh. So, other MFIs should increase their coverage in urban slums of Dhaka city.

iv. **Providing other services (other than Microcredit) of MFIs:** It is found in this study that, MFIs provides Microcredit, Micro-savings, education services (only 3%) and training program (1%) and safe drinking water and sanitation, installing deep tube wells, sanitary latrines respectively.

They should also arrange forMicro-insurance, healthcare services such as health &sanitary loans,interest free loan for emergency treatment, vaccination program, health centre, satellite clinics, community health workers, mini clinics and medical consultation etc.,women empowerment services such as legal aid and awareness, women's Centre, women entrepreneurship, nursing college etc.,innovation and technology such as computer training, cyber cafe service,trainingand counseling such as training on handicrafts, driving, tailoring, nursery, livestock and poultry rearing,entrepreneurship development/ Micro enterprise such as manufacturing , processing , distribution , retailing, handicrafts, cottage & small industries, transportation, small trade & business, food processing, timber business/carpentry, phone/fax, garments & tailoring, etc.,power and energysuch as electric worker and mechanic,social development service such as the rehabilitation for disabled, vulnerable and unemployed, housing, prevention of women and children trafficking,environment and disaster management, prevention of child marriage, HIV-AIDS, food & food processing, relief, human rights etc.

v. **Proving Adequate Time for Investment:** In this study, all the borrowers reported that, their repayment installment start after just one week later of receiving Microcredit. That means that, MFIs did not provide any times for investment. So MFIs should provide adequate time (e.g. at leat one month) for investment in a process, so that the borrower may invest money and can gain the profit.

vi. **Human Resource Development Program:**In this study, among 100 borrowers, only 3% borrowers got educational services (scholarship) and 1% got training facilities (Beauty Parlier). They urge that, they need education and training services. MFIs should provide educational services (scholarship, free education for children and elderly people), training and skill development program to make

slum dwellers self-dependent and capable to doa job or business. So that, they will not be always dependent on MFIs.

vii. **Interest Rate (Microcredit):**The 100 borrowers reported that,the Interest rate on Microcredit varies from 10% to 38%. Moreover, 53% borrowers and 13% non-borrowers stated that, the interest rate is very high and it should be reduced. In contrast, banking interest rate on lending money in Bangladesh varies from 13% to 20%. Compared to the formal sector, the Microcredit interest rate is very high and MFIs should reduce it. Moreover, MFIs may offer interest free loans or loan at the lowest rate of interest for poor people.Another point is that, though there are two types of Microcredit interest rate exists in the market entitled flat interest rate and declining interest rate. Most of the MFI s in Bangladesh applies flat interest rate.

viii. **Interest Rate (Savings):**It is alarming fact that, though MFIs publish the Microcredit interest rate, but they do not expose the saving interest rate. Only BRAC publishes the rate of saving interest rate. In addition, many recipients reported that, MFIs do not provide the savings related information. So MFIs should be transparent about savings of the borrowers.

ix. **Market for Informal Products:**The Government should establish and organize several markets for the informal sector (e.g. handi crafts, home made foods) in different areas of Dhaka city. Besides, Government and MFIs should finance informal sector and encourage slum dwellers.

x. **Social Safety Net Programs:**Out of 100 borrowers, only 4 borrowers and out of 100 non-borrowers, only 2 non- borrowers received the benefits of social safety net programs. It reflects that, there is very few and no coverage of social safety net programs among the slums of Dhaka city. So the Government should ensure the coverage of different services of the social safety net programs.

xi. **Participations of Rich Group (Higher income people) of People:**The Government and MFIs should encourage rich people and companies to participate in providing education, training and skill development program, charity and donation in the slums of Dhaka city and other cities of Bangladesh.

xii. **Participations of Religious Group of People:**In addition to rich people, the Government and MFIs may encourage different religious group or people and institutions to contribute in providing education, training and skill development program, charity and donation in the slums of Dhaka city and other cities of Bangladesh.Fo this purpose, government may make a policy by describing details instructions.

xiii. **Charity and Donations:**Besides Microcredit, MFIs should provide charity and donations. In Korail slum, among 45 borrowers and 45 Non-borrowers, only 22 borrowers and 7 non-borrowers receive charity from Dusthya Shastha Kendra (DSK).

In Jurain slum, among 35 borrowers and 35 Non-borrowers, only 3 borrowers and 7 non-borrowers receive charity from Dusthya Shastha Kendra (DSK). But in WASA slum, no borrower and non-borrower receive any kind of charity.

In contrast, the alarming fact is that, 12 MFIs are working in the three slums. Among these institutions, only DSK and Ramkrisna Mission provide charity. So other MFIs should provide charity and donations.

xiv. **Slum Development Program:** Since the donation or charity is not the permanent solution. So, specific development program or project should be taken for slum dwellers by the government and MFIs. Such as water and sanitation program, draining and sewerage system, electricity and gas providing program, rehabilitation program, child and women's development program, education

andtraining program, employment program under social safety net program and social awareness building program,

xv. **Research Grants by MRA and MFIs:**Microfinance regulatory authority (MRA) and MFIs should provide research grants (through call for research proposals) for Microfinance related survey, research, seminar and conferences.

7.2Conclusion

This report examined the impact of urban Microfinance on livelihood strategies of the 100 borrower slum dwellers of Dhaka City in Bangladesh. The data were collected from the 100 borrowers and the 100 non-borrowers of the three slums (Korail slum, WASA colony slum and Jurain slum) in Dhaka City. A well designed and structured questionnaire and key informant interview (KII) was the core process of data collection in this study. Econometric model –Instrumental variable (IV) regression model; 'difference in differences model' and Probit model was used to analyze the data.

Thekey findings of this study are: the results of Instrumental variable (IV) regression modelstates that urban Microfinance has significant positive impact on Income and non-food consumption expenditures but has no significant impact on the food consumption expenditures. In addition, probit analysis illustrates that, the probability of the changing occupations of the respondent who received Microfinance is statistically significantly higher compared to the case of the non-borrower respondent. This finding is statistically significant at the 1% level of significance. Besides, the results of 'difference in differences model disclose that urban Microfinance has significant positive impact on savings, educationalexpenditure and transportation expenditure. On the contrary, it has no significant impact on changing income,overall expenditure, housing and utility, healthcare expenditure, and asset value of the borrower of the three slums (Korail, Jurain and WASA) of Dhaka city. The data illustrates that the monthly average income,monthly

average overall expenditure, monthly average housing and utility expenditure, monthly average educational expenditure, monthly average healthcare expenditure and monthly average transportation expenditure, the monthly average savings and average asset value of the borrower is higher than the non-borrower. On the other hand, the monthly average food expenditure and the monthly average cloth expenditure of the borrower is less than the non-borrower. In addition, Microfinance has the positive impact on livelihood strategy by creating employment, improving housing and utilities (gas, electricity) conditions, and water and sanitation conditions of the borrowers. Moreover, Microfinance recipients successfully crossed the poverty line and presently, no families are found below the poverty line.

Furthermore, the findings of this study are consistent with the earlier research findings. The new finding is that, urban Microfinance has significant positive impact on saving,educational expenditure and transportation expenditure. Beside, this study fulfilled the credibility and reliability conditions of a research.

However, except Microcredit, the other services of MFIs are totally dissatisfactory. In the same way, most of the borrowers and the non-borrowers urge to provide education and training services. This paper recommends to take different steps and policies lead by the government and MFIs. For example, slum development program, rehabilitation program for slum dwellers, charity and donations, motivate the religious and business group to participate in the development of slum people, includes the slum under the coverage of social safety net programs, reduction of the lending interest rate and raising the saving interest rate, provide adequate time for investment and taking special policies for extremely poor people. Finally, it should be explained that, this research is prepared by the limited fund of the author. Moreover, to judge the impact of Microfinance more closely, large scale research funded by the Government and MFIs should be taken. And the recommendations of these studies should be implemented by competent authority. Otherwise, the research will go in vain.

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Appendix

Appendix-1: Tables

Table-1: The Grameen Family of Companies

Sl no	Name of Company (For profit) and Motto	Year of Founding
1.	Grameen Bank(Credit for the poor)	1983
2.	Gonoshasthaya Grameen Textile (Hand-loom fabric-processing plant)	1995
3.	Grameen Cybernet (Internet service provider)	1996
4.	GrameenPhone (National cellular telephone company) (Not for profit)	1996
5.	Grameen Trust (Technical and financial support for replication of Grameen approach worldwide)	1989
6.	Grameen Agricultural Foundation (To promote agricultural technology, improve yield, initiate diversification for export)	1991
7.	Grameen Uddog (Production, marketing and export of handwoven fabrics, i.e. Grameen Check)	1994
8.	Grameen Fund (A social venture fund for new entrepreneurs)	1994
9.	Grameen Fisheries Foundation (To bring idle ponds into high-yielding pisicuhure)	1994
10.	Grameen Telecom (Providing cellular phone and telecom)	1995
11.	Grameen Shamogree (Marketing of Grameen products)	1996
12.	Grameen Shakti (For research and marketing of solar and wind energy on a commercial basis)	1996
13.	Grameen Kalyan (Welfare program for Grameen members and staff)	1996
14.	Grameen Shikkha (Educational programmes)	1997
15.	Grameen Communications (Nationwide network for Internet, data-processing services)	1997
16.	Grameen Knitwear Ltd (Export-oriented knitwear factory)	1997
17.	Grameen Securities Management Ltd (A merchant banking, fund and portfolio management company)	1998

Table-2: Active Members of Top 50 MFIs as of December 2015

Posi-	Name & District	Number	Market

tion	of the Organisation	of Active Members	Share (in %)
1	Grameen Bank (GB), Dhaka	8,806,779	24.31
2	ASA, Dhaka	6,902,024	19.05
3	BRAC, Dhaka	5,377,951	14.84
4	Basic Unit for Resources and Opportunities of Bangladesh (BURO Bangladesh), Dhaka	1,305,378	3.60
5	Proshika Manobik Unnayan Kendra (PMUK), Dhaka	986,570	2.72
6	Thengamara Mohila Sobuj Sangha (TMSS), Dhaka	842,401	2.33
7	Society for Social service (SSS), Tangail	507,295	1.40
8	Shakti Foundation for Disadvantaged Women (SFDW), Dhaka	492,850	1.36
9	Jagorani Chakra Foundation (JCF), Jessore	447,722	1.24
10	United Development Initiative for Programmed Actions (UDDIPAN), Dhaka	444,721	1.23
11	Padakhep Manabik Unnayan Kendra (PMUK), Dhaka	313,829	0.87
12	RDRS Bangladesh, Dhaka	306,047	0.84
13	Christian service Society (CSS), Khulna	304,812	0.84
14	Dushtha Shasthya Kendra (DSK), Dhaka	203,391	0.56
15	Ad-din Welfare Centre (AWC), Jessore	192,940	0.53
16	People's Oriented Program Implementation (POPI),Dhaka	190,250	0.53
17	Palli Mongal Karmasuchi (PMK), Dhaka	189,536	0.52
18	Bangladesh Extension Education services (BEES), Dhaka	185,134	0.51
19	Integrated Development Foundation (IDF), Dhaka	179,520	0.50
20	Rural Reconstruction Foundation (RRF), Jessore	179,314	0.49
21	Sajida Foundation, Dhaka	174,471	0.48
22	Centre for Development Innovation and Practices (CDIP), Dhaka	166,119	0.46
23	Manabik Shahajya Sangstha (MSS), Dhaka	162,681	0.45
24	Resource Integration Centre (RIC), Dhaka	161,720	0.45
25	Gram Unnayan Karma (GUK), Bogra	158,407	0.44
26	Wave Foundation (WF), Chuadanga	144,155	0.40
27	SKS Foundation, Gaibandha	138,549	0.38
28	HEED Bangladesh, Dhaka	124,846	0.34
29	Eco-Social Development Organization (ESDO), Thakurgaon	124,432	0.34
30	Community Development Centre (CODEC), Chittagong	121,144	0.33
31	Page Development Centre (PDC), Comilla	106,675	0.29
32	PROTTYASHI, Chittagong	101,934	0.28
33	Society for Development Initiatives (SDI), Dhaka	98,517	0.27
34	Coastal Association for Social Transformation Trust (COAST Trust), Dhaka	96,424	0.27
35	Gram Bikash Kendra (GBK), Dinajpur	90,322	0.25
36	Village Education Resource Center (VERC), Dhaka	89,957	0.25
37	DESHA Shechsashebi Artho-Samajik Unnayan O	84,061	0.23

	Manobic Kallyan Sangstha, Kushtia		
38	Centre for Community Development Assistance (CCDA), Dhaka	83,428	0.23
39	Social Advancement Through Unity (SATU), Tangail	82,739	0.23
40	DAM Foundation for Economic Development (DFED), Dhaka	81,780	0.23
41	National Development Programme (NDP), Sirajgonj	80,430	0.22
42	Society Development Committee (SDC), Faridpur	75,322	0.21
43	Society for Family Happiness & Prosperity (SFHP), Kishoregonj	74,787	0.21
44	Gana Unnayan Kendra (GUK), Gaibandha	71,589	0.20
45	Palli Progoti Shahayak Samity (PPSS), Faridpur	70,678	0.20
46	JAKAS Foundation, Joypurhat	69,567	0.19
47	Development Initiative for Social Advancement (DISA), Dhaka	68,991	0.19
48	Nowabenki Gonomukhi Foundation (NGF), Satkhira	68,895	0.19
49	MAMATA, Chittagong	66,510	0.18
50	Shariatpur Development Society (SDS), Shariatpur	65,944	0.18
Total of Top 50 MFIs		31,463,538	86.84
Total of rest 456 MFIs		4,768,741	13.16
Grand Total		36,232,279	100.00

CDF Website - (2017), Credit Development Forum, 2017

Table-3: Microfinance Interest Calculation Methods: DecliningBalanceMethod and Flat Method

Table-3 (a):DecliningBalanceMethod

Loan amount: $ 300, Loan term: 3 months, Loan repayment period: every 2 weeks, annual interestrate:48percent

Period	Principal	Interest	Totalpayments	Outstandingbalance
0	-	-	-	300.00
1	47.56	6.00	53.56	252.44
2	48.51	5.05	53.56	203.93
3	49.48	4.08	53.56	154.45
4	50.47	3.09	53.56	103.99
5	51.48	2.08	53.56	52.51
6	52.51	1.05	53.56	0.00
Total	300.00	21.35	321.35	-

In this declining balance example, total payments by the borrower are 321.35.

Declining Balance Method: In the declining balance method, interest is calculated based on the remaining of the borrower. As successive instalments of principal are repaid, these balances decline. In this case, interest is not charged on the amount of the loan principal

that the borrower has already repaid. Consider the following example of a 3 month, $300 loan to be repaid in 6 equal monthly instalments, calculated on declining balances. The payment made each period (PMT) is $53.56. In the early periods when the outstanding balance is high, the contribution of interest to the PMT is relatively high and the contribution of principal repayment to the PMT is relatively low. As the principal balance declines, the contribution of interest payments to the PMT declines as well.

Table-3 (b):FlatMethod Calculations

Loanamount:$300,Loanterm:3months,Loanrepaymentperiod:every2weeks,Annualinterestrate:48percent

Period	Principal	Interest	Totalpayments	Outstandingbalance
0	-	-	-	300
1	50	6	56	250
2	50	6	56	200
3	50	6	56	150
4	50	6	56	100
5	50	6	56	50
6	50	6	56	0
Total	300	36	336	-

FlatMethod: When the flat method is employed, interest is computed based on the original face amount of the loan rather than on the declining balance. Computing interest using the flat method instead of the declining balance method has the effect of raising the payment made each period, and, therefore, increasing the “effective” interest rate to the borrower. This means that the loan is more costly to the borrower and, equivalently, that the loan generates more income for the lending institution.

Consider the same example as last time, except now interest is calculated using the flat method. In this case, the contribution of interest payments to the PMT is constant: in each period, the borrower repays $50 in principal and $6 in interest. Here, the payment made each period is $56, which is less than the PMT of $53.56 in the declining balances case. The total payments made by the borrower in the flat rate case are $336. Table 2: Flat Method

All else equal, total payments by the borrower when interest payments are calculated using the flat method are greater than total payments when interest payments are calculated using the declining balance method. Therefore, the flat method generates more revenue for the lending institution and imposes higher costs on borrowers. (Water field, Charles and Duval, Ann (1996 a)),

Table-4: List of Different Slum Survey and Census in Bangladesh (1974-2014 periods)

SL no	Title of Slum Survey and Census	Year	Area Coverage
1.	The survey of The slums and squatter population in Dhaka	1974	Dhaka
2.	The slum area census	1986	The three Statistical Metropolitan Areas (SMA), Chittagong, Dhaka and Khulna including 100 Paurashavas and 14 cities
3.	The slums survey in the Dhaka Metropolitan Area	1991	Dhaka
4.	The slums survey in the Dhaka Metropolitan Area	1996	Dhaka
5.	Census of slum areas and Floating Population, Bangladesh	1997	The three Statistical Metropolitan Areas (SMA), Chittagong, Dhaka and Khulna including 100 Paurashavas and 14 cities
6.	Slum of urban -Bangladesh, Mapping and Census,	2005*	Dhaka Mega city, Chittagong SMA, Khulna SMA, Rajshahi SMA, Barisal, Sylhet
7.	Census of slum areas and Floating Population, Bangladesh	2014	Dhaka Mega city, Chittagong SMA, Khulna SMA, Rajshahi SMA, Barisal, Sylhet, Rangpur, Comilla, Gazipur, Narayanganj, Other Urban

Table-5: List of Top 15 Slums in Dhaka City by Population

SL no	Name of Slum (In Bengali-bastee)	Area in acre	No of household	Household population	Mess population	Total population
1.	Korail Bastee, Gulshan lake Road, Karail (Part-1), Gulshan	90	14480	78800	1200	80000
2.	Kalabagan slum, Pora slum, Bauniabad tinshade colony, Block-ABCDE, Baonia Badh Bastee, Pallabi	16	8500	42500	0	42500
3.	Kunipara (Happy Homes bastee), Kuni Para, Tejgaon	30	5000	30000	0	30000
4.	Jurain Bastee, (Rail Liner Pase Shyampur	18	5000	25000	5000	30000

5.	Paris Road Bastee & Tejgoan Non Local Rilif camp, Lane-18,19,20, Sectiuon- 10, Mirpur, Section-10, Block-A, Pallabi	10.3	5550	27750	0	27750
6.	Middle Bagunbari Bastee/ Bou bazar Bastee, Lalmia Huzur goli, Begun Bari (Part-1 & 2), Tejgaon	11.5	3700	18500	1500	20000
7.	Arambagh bastee, Rupnagor, Pallabi	20	4275	17100	900	18000
8.	Sawapan's Bastee/ Anis Miar Tong Ghar, Hasim Khan road, Sultangonj (Part), Mohammadpur	3	2650	13250	650	13900
9.	5 No. Bastee (Kawser Mia-er Bari), Madrsha Road, Bhashan Tek, Kafrul	9	2700	13000	0	13000
10.	Duaripara bastee, Duaripara main road, Doari Para, Pallabi	20	2880	11520	1280	12800
11.	Shonivir Housing Bastee, Adabar-16, Baitul Aman Housing, Mohammadpur	22	2500	12000	500	12500
12.	Satter Mollah Bastee, Satter Mollah road (3), Pallabi, Part-1, Pallabi	12	2700	10800	1200	12000
13.	Bishil & Sarang Bari Bastee, Bishil Road, Uttar Bishil, Mirpur	15	2500	10000	0	10000
14.	Wasa- er Bastee (Behind the Wasa Colony), K.M.Das Lane, Shamibag, Sutrapur	3.83	1800	9000	0	9000
15.	Garu Mollah- er Bastee, Khett Par Bastee (Adarsho school Sanglagno), Paipe Rasta, Adarsho school Road, Par Gendaria, Demra	7	500	2500	500	3000

Source: UNC (2015),

Table-6: GrowthoftheUrbanPopulationinBangladesh (1901–2015 Periods)

Years	Total Urban Population (In million)	UrbanPopulation (as %oftotal Population), In million
1901	0.70	2.43
1911	0.80	2.54
1921	0.87	2.61
1931	1.07	3.01

1941	1.54	3.66
1951	1.83	4.34
1960	2.54	5.14
1961	2.68	5.28
1962	288	5.50
1963	3.08	5.73
1964	3.31	5.96
1965	3.55	6.21
1966	3.81	6.47
1967	4.10	6.73
1968	4.40	7.01
1969	4.72	7.30
1970	5.03	7.59
1971	5.34	7.90
1972	5.65	8.22
1973	5.96	8.55
1974	6.40	9.03
1975	7.10	9.84
1976	7.91	10.70
1977	8.82	11.63
1978	9.85	12.63
1979	10.99	13.70
1980	12.25	14.85
1981	13.39	15.80
1982	14.11	16.21
1983	14.86	16.63
1984	15.66	17.06
1985	16.49	17.50
1986	17.37	17.94
1987	18.29	18.40
1988	19.26	18.86
1989	20.25	19.33
1990	21.27	19.81
1991	22.26	20.26
1992	23.17	20.61
1993	24.08	20.97
1994	25.03	21.33
1995	26.00	21.69
1996	27.00	22.06
1997	28.03	22.44
1998	29.08	22.82
1999	30.15	23.20
2000	31.22	23.59
2001	32.46	24.10
2011	47.73	31.23

2012	49.48	31.99
2013	51.28	32.75
2015*	63	35.70

Source: Index mundi, 2015

Table-7: Category Wise Expenditure of 100 Borrowers in Dhaka Slum in 2015 (In Taka)

Income	Food	Cloth	HRGU*	Education	Healthcare	Transport	Savings
10000	3800	200	1000	3000	200	500	200
20000	5500	500	5000	6000	3500	1000	200
8000	5300	200	2500	0	300	300	400
8000	3800	200	200	4000	300	1000	80
7000	2900	100	3000	0	500	200	400
7000	4700	200	2500	1000	500	300	200
12000	4700	300	2200	4000	1000	1200	400
10000	3000	200	3000	1000	300	350	200
8000	3700	300	2500	0	500	200	120
20000	7000	500	4000	5000	1500	1000	200
12000	4000	100	2500	3000	1000	900	200
12000	4500	500	2000	2000	1000	500	200
12000	6600	400	2000	3000	1200	600	200
8000	4800	200	1800	1000	1000	300	400
15000	6000	400	600	6000	1000	1200	400
12000	4000	300	2500	0	200	300	200
12000	4500	500	1800	3000	250	700	200
10000	3000	200	4000	2000	300	600	200
12000	3000	100	2200	4000	100	500	200
15000	6000	200	1000	8000	100	1000	200
25000	10000	500	7000	6000	2000	1000	200
12000	5500	500	1000	2000	500	500	400
11000	3800	200	1000	3000	200	500	200
19000	5500	500	5000	6000	3500	1000	200
8500	5300	200	2500	0	300	300	400
8500	3800	200	200	4000	300	1000	80
7500	2900	100	3000	0	500	200	400
7500	4700	200	2500	1000	500	300	200
11000	4700	300	2200	4000	1000	1200	400
11000	3000	200	3000	1000	300	350	200
9000	3700	300	2500	0	500	200	120
18000	7000	500	4000	5000	1500	1000	200
13000	4000	100	2500	3000	1000	900	200
13000	4500	500	2000	2000	1000	500	200

13000	6600	400	2000	3000	1200	600	200
9000	4800	200	1800	1000	1000	300	400
14000	6000	400	600	6000	1000	1200	400
11000	4000	300	2500	0	200	300	200
12000	4500	500	1800	3000	250	700	200
11000	3000	200	4000	2000	300	600	200
11500	3000	100	2200	4000	100	500	200
16000	6000	200	1000	8000	100	1000	200
23000	10000	500	7000	6000	2000	1000	200
11500	5500	500	1000	2000	500	500	400
8000	2900	100	3000	0	500	200	400
10000	3500	100	3000	0	500	200	200
11000	4000	100	0	0	300	250	200
16000	6000	300	3000	5000	400	600	80
15000	5000	300	800	3000	2000	500	200
7000	3000	200	3000	0	100	150	200
10000	3500	300	400	0	200	150	80
10000	5000	300	1000	0	1500	300	200
15000	7000	500	1000	3000	1500	400	80
7000	2000	50	400	500	100	150	100
20000	5000	300	4000	3000	600	600	200
20000	5000	200	4000	5000	500	700	200
35000	15000	1000	1500	0	2000	800	200
15000	3500	100	3500	6000	500	300	320
15000	7000	200	5000	3000	500	300	320
13000	5000	500	3000	5000	600	500	200
12000	3000	300	2000	0	200	200	200
12000	5000	500	1000	0	2000	200	200
8000	5000	200	400	0	2000	200	100
10000	4000	300	1500	1000	1000	300	200
12000	5000	200	2500	4000	200	600	200
9000	4000	100	2000	2000	100	300	200
10000	6000	200	2500	500	200	150	200
8000	4000	100	2400	0	200	150	200
10000	5000	500	500	2000	500	600	500
35000	12000	2000	4000	10000	1000	5000	1000
18000	8000	400	4000	4000	500	600	500
16000	7000	200	3000	0	500	350	400
8000	2000	50	400	500	250	200	100
12000	5500	300	500	0	300	300	100
13000	4000	100	0	0	300	350	200

9000	4000	100	2000	2000	100	500	200
14000	3000	300	2000	0	200	200	200
22000	5000	300	4000	3000	600	300	200
14000	5000	500	3000	5000	500	700	200
13000	7000	500	1000	3000	1500	600	80
18000	8000	800	3000	0	300	400	120
8000	5000	200	3000	0	200	100	300
15000	5000	200	7000	3000	1000	600	220
8000	3000	200	3000	1000	50	300	200
18000	5000	500	2500	10000	100	500	0
30000	15000	500	7000	4000	2500	450	350
30000	12000	500	3500	12000	2000	1000	400
25000	10000	500	1000	4000	500	250	300
15000	10000	300	500	4000	500	550	200
30000	15000	1000	5500	5000	2000	800	200
15000	8000	1000	500	0	1000	300	300
15000	6000	500	5500	0	500	400	300
32000	10000	1000	4000	6000	5000	800	300
15000	6000	500	500	3000	1500	450	400
30000	10000	1000	4000	7000	4000	800	400
13000	6000	150	3000	4000	200	600	150
15000	15000	200	3500	2000	1000	300	200
19000	5000	500	4000	8000	300	1000	200
20000	5000	500	5000	0	500	250	200
15000	6000	200	3000	1000	500	300	200

*HRGU-House rent, gas and Utility

Table-8: Percentage of Category Wise Expenditure of 100 Borrowers in Dhaka Slum in 2015

Food	cloth	HRGU*	Education	Healthcare	Transport	Savings
43	2	11	34	2	6	2
25	2	23	28	16	5	1
59	2	28	0	3	3	5
40	2	2	42	3	10	1
41	1	42	0	7	3	6
50	2	27	11	5	3	2
34	2	16	29	7	9	3
37	3	37	12	4	4	3
50	4	34	0	7	3	2
36	3	21	26	8	5	3
34	1	21	26	8	8	2

42	4	19	19	9	5	2
47	3	14	21	9	4	2
50	2	19	11	11	3	4
38	3	4	38	6	8	3
53	4	33	0	3	4	3
41	5	17	27	2	6	2
29	2	39	19	3	6	2
30	1	22	39	1	5	2
36	1	6	49	1	6	1
37	2	26	22	8	4	1
53	5	9	19	5	5	4
43	2	11	34	2	6	2
25	2	23	28	16	5	1
40	2	2	42	3	10	1
41	1	42	0	7	3	6
50	2	27	11	5	3	2
34	2	16	29	7	9	3
37	3	37	12	4	4	3
50	4	34	0	7	3	2
36	3	21	26	8	5	1
34	1	21	26	8	8	2
42	4	19	19	9	5	2
47	3	14	21	9	4	2
50	2	19	11	11	3	4
38	3	4	38	6	8	3
53	4	33	0	3	4	3
41	5	17	27	2	6	2
29	2	39	19	3	6	2
30	1	22	39	1	5	2
36	1	6	49	1	6	1
37	2	26	22	8	4	1
53	5	9	19	5	5	4
41	1	42	0	7	3	6
46	1	40	0	7	3	3
83	2	0	0	6	5	4
39	2	19	32	3	4	1
42	3	7	25	17	4	2
45	3	45	0	2	2	3
76	6	9	0	4	3	2
60	4	12	0	18	4	2
52	4	7	22	11	3	1

61	1	12	15	3	5	3
37	2	29	22	4	4	2
32	1	26	32	3	5	1
73	5	7	0	10	4	1
25	1	25	42	3	2	2
43	1	31	18	3	2	2
34	4	20	34	4	3	1
51	5	34	0	4	3	3
56	6	11	0	23	2	2
63	3	5	0	25	3	1
48	4	18	12	12	4	2
39	1	20	31	2	5	2
46	1	23	23	1	4	2
62	2	26	5	2	1	2
57	1	34	0	3	2	3
52	5	5	21	5	7	5
34	6	11	29	3	14	3
45	2	22	22	3	3	3
61	2	26	0	4	3	4
57	1	12	14	7	6	3
79	4	7	0	4	4	2
81	2	0	0	6	7	4
45	1	23	22	1	6	2
51	5	34	0	4	3	3
37	2	30	22	5	2	2
34	3	20	34	3	4	1
51	4	7	22	11	4	1
64	6	24	0	2	3	1
57	2	34	0	2	1	4
29	1	41	18	6	4	1
39	2	39	13	1	4	2
27	3	13	54	0	3	0
50	2	24	13	8	2	1
38	2	11	38	7	3	1
60	3	6	24	3	2	2
62	2	3	25	3	4	1
51	3	18	17	7	3	1
72	9	4	0	9	3	3
45	4	42	0	4	3	2
37	4	15	22	18	3	1
49	4	4	24	12	4	3

37	3	15	26	15	3	1
43	1	21	28	2	4	1
68	1	16	9	4	1	1
26	3	21	42	2	5	1
44	4	44	0	4	2	2
53	2	27	9	4	3	2

*HRGU-House rent, gas and Utility

Table-9: Category Wise Expenditure of 100 Borrowers in Dhaka Slum in 2010 (In Taka)

SL no	Income	Food	cloth	HRGU*	Education	Healthcare	Transport	Savings
1.	5000	2000	50	400	800	50	100	0
2.	10000	2500	250	2000	2000	1000	300	0
3.	3000	2000	50	500	0	150	100	0
4.	4000	1500	100	50	1000	50	200	0
5.	3000	1000	50	1200	0	100	50	0
6.	3000	1200	100	1000	0	50	100	0
7.	5000	2000	100	800	1000	200	300	0
8.	4000	1000	100	1000	0	50	100	0
9.	3000	1500	100	800	0	100	50	0
10.	8000	3000	200	1300	2500	300	500	0
11.	4000	1500	50	1000	0	200	200	0
12.	7000	1500	200	1000	0	300	100	0
13.	4000	2500	200	1000	1200	400	150	0
14.	3000	1800	100	800	500	200	100	0
15.	5000	2000	200	200	1000	200	400	0
16.	5000	1500	100	1000	0	50	50	0
17.	5000	2000	100	500	1000	50	200	0
18.	5000	1000	100	1500	1000	100	250	0
19.	5000	1000	20	1000	1500	20	100	0
20.	5000	1000	50	300	2000	50	300	0
21.	10000	4000	200	3000	2000	500	100	0
22.	4000	2000	100	400	0	50	100	0
23.	5000	2000	50	400	800	50	100	0
24.	10000	2500	250	2000	2000	1000	300	0
25.	3000	2000	50	500	0	150	100	0
26.	4000	1500	100	50	1000	50	200	0
27.	3000	1000	50	1200	0	100	50	0
28.	3000	1200	100	1000	0	50	100	0
29.	5000	2000	100	800	1000	200	300	0

30.	4000	1000	100	1000	0	50	100	0
31.	3000	1500	100	800	0	100	50	0
32.	8000	3000	200	1300	2500	300	500	0
33.	4000	1500	50	1000	0	200	200	0
34.	7000	1500	200	1000	0	300	100	0
35.	4000	2500	200	1000	1200	400	150	0
36.	3000	1800	100	800	500	200	100	0
37.	5000	2000	200	200	1000	200	400	0
38.	5000	1500	100	1000	0	50	50	0
39.	5000	2000	100	500	1000	50	200	0
40.	5000	1000	100	1500	1000	100	250	0
41.	5000	1000	20	1000	1500	20	100	0
42.	5000	1000	50	300	2000	50	300	0
43.	10000	4000	200	3000	2000	500	100	0
44.	4000	2000	100	400	0	50	100	0
45.	3000	1000	50	1200	0	100	50	0
46.	5000	1500	20	500	0	50	50	0
47.	3000	1400	30	0	0	50	50	0
48.	5000	2000	100	1000	2000	50	80	0
49.	7000	1500	100	300	1000	500	80	0
50.	3000	1500	50	1200	0	20	30	0
51.	9000	1500	100	100	0	20	60	0
52.	5000	1200	50	200	0	50	50	0
53.	5000	1500	100	300	0	50	70	0
54.	3000	800	20	100	0	20	30	0
55.	10000	1500	50	1200	0	50	50	0
56.	6000	1500	50	1800	0	100	100	0
57.	15000	4000	100	300	0	200	100	0
58.	8000	1000	20	1000	1000	100	50	0
59.	10000	2000	50	1000	500	50	50	0
60.	5000	1500	100	1000	0	100	100	0
61.	5000	1000	50	500	0	50	50	0
62.	6000	1500	50	300	0	500	50	0
63.	3000	1800	50	100	0	100	50	0
64.	5000	1800	50	700	0	100	50	0
65.	5000	1500	50	1200	1000	50	100	0
66.	3000	1000	30	800	700	50	50	0
67.	4000	1500	50	500	0	50	50	0
68.	4000	1000	30	500	0	50	30	0
69.	4000	1500	50	100	700	100	200	0
70.	15000	3000	500	0	3000	200	2000	1000

71.	7000	3000	50	1500	1000	50	100	0
72.	6000	1500	30	800	0	50	50	0
73.	3000	800	20	100	0	20	50	0
74.	5000	1500	100	100	0	20	40	0
75.	3000	1400	30	0	0	50	100	0
76.	3000	1000	30	800	700	50	100	0
77.	5000	1000	50	500	0	50	30	0
78.	10000	1500	50	1200	0	50	50	0
79.	5000	1500	100	1000	0	100	150	0
80.	5000	1500	100	300	0	50	100	0
81.	8000	1500	100	1000	0	50	100	80
82.	2000	1500	50	1200	0	50	20	0
83.	6000	1500	50	2200	1000	50	100	80
84.	3000	1000	50	1500	0	20	50	0
85.	7000	1000	100	1000	3000	50	50	0
86.	10000	3000	100	2000	1000	100	100	50
87.	15000	2000	100	1000	3000	200	150	200
88.	10000	2000	50	200	0	50	50	100
89.	5000	2000	100	100	1000	50	100	200
90.	10000	2000	100	1500	1000	200	150	0
91.	7000	2000	100	100	0	200	50	100
92.	8000	2000	50	0	0	50	50	100
93.	10000	2000	100	1000	1500	200	100	100
94.	5000	2000	100	100	1000	100	100	0
95.	15000	3000	200	1500	2000	0	100	0
96.	8000	2000	50	1000	1000	50	100	0
97.	6000	6000	50	1500	500	100	50	0
98.	7000	2000	100	1800	2000	100	200	0
99.	10000	1500	50	1600	0	100	50	200
100.	8000	2000	50	1000	0	50	50	0

*HRGU-House rent, gas and Utility

Table-10: Percentages of Category Wise Expenditure of 100 Borrowers in Dhaka Slum in 2010

SL no	Income	Food	cloth	HRGU*	Education	Healthcare	Transport	Savings
1	5000	59	1	12	24	1	3	0
2	10000	31	3	25	25	12	4	0
3	3000	71	2	18	0	5	4	0
4	4000	52	3	2	34	2	7	0

5	3000	42	2	50	3	4	2	0
6	3000	49	4	41	2	0	4	0
7	5000	45	2	18	23	5	7	0
8	4000	44	5	44	0	2	5	0
9	3000	59	4	31	0	4	2	0
10	8000	38	3	17	32	4	6	0
11	4000	51	1	34	0	7	7	0
12	7000	48	7	32	0	10	3	0
13	4000	46	4	18	22	7	3	0
14	3000	51	3	23	14	6	3	0
15	5000	50	5	5	25	5	10	0
16	5000	55	4	37	0	2	2	0
17	5000	52	3	13	26	1	5	0
18	5000	25	3	38	25	3	6	0
19	5000	27	1	27	41	1	3	0
20	5000	27	2	8	54	1	8	0
21	10000	41	2	31	20	5	1	0
22	4000	75	4	15	2	4	0	0
23	5000	59	1	12	24	1	3	0
24	10000	31	3	25	25	12	4	0
25	3000	71	2	18	0	5	4	0
26	4000	52	3	2	34	2	7	0
27	3000	47	2	50	0	4	2	0
28	3000	49	4	41	2	0	4	0
29	5000	45	2	18	23	5	7	0
30	4000	44	5	44	0	2	5	0
31	3000	59	4	31	0	4	4	0
32	8000	38	3	17	32	4	6	0
33	4000	51	1	34	0	7	7	0
34	7000	48	7	32	0	10	3	0
35	4000	46	4	18	22	7	3	0
36	3000	51	3	23	14	6	6	0
37	5000	50	5	5	25	5	10	0
38	5000	55	4	37	0	2	2	0
39	5000	52	3	13	26	1	5	0
40	5000	25	3	38	25	3	6	0
41	5000	27	1	27	41	1	3	0
42	5000	27	2	8	54	1	8	0
43	10000	41	2	31	20	5	1	0
44	4000	75	4	15	2	4	0	0
45	3000	42	2	50	0	4	2	0

46	5000	71	1	24	0	2	2	0
47	3000	92	2	0	0	3	3	0
48	5000	38	2	19	38	1	2	0
49	7000	43	3	9	29	14	2	0
50	3000	53	2	43	0	1	1	0
51	9000	84	6	6	0	1	3	0
52	5000	78	3	13	0	3	3	0
53	5000	74	5	15	0	3	3	0
54	3000	83	2	10	0	2	3	0
55	10000	52	2	42	0	2	2	0
56	6000	42	1	51	0	3	3	0
57	15000	85	2	7	0	4	2	0
58	8000	31	1	31	32	3	2	0
59	10000	55	1	28	14	1	1	0
60	5000	53	3	36	0	4	4	0
61	5000	61	3	30	0	3	3	0
62	6000	62	2	13	0	21	2	0
63	3000	86	2	5	0	5	2	0
64	5000	66	2	26	0	4	2	0
65	5000	38	1	31	26	1	3	0
66	3000	38	1	30	27	2	2	0
67	4000	70	3	23	0	2	2	0
68	4000	62	2	31	0	3	2	0
69	4000	57	2	4	26	4	7	0
70	15000	31	5	0	31	2	21	10
71	7000	53	1	26	17	1	2	0
72	6000	62	1	33	0	2	2	0
73	3000	81	2	10	0	2	5	0
74	5000	85	6	6	0	1	2	0
75	3000	89	2	0	0	3	6	0
76	3000	37	1	30	26	2	4	0
77	5000	61	3	31	0	3	2	0
78	10000	52	2	42	0	2	2	0
79	5000	53	3	35	0	5	4	0
80	5000	73	5	15	0	2	5	0
81	8000	53	3	35	0	2	4	3
82	2000	53	2	42	0	2	1	0
83	6000	30	1	44	20	1	2	2
84	3000	38	2	57	0	1	2	0
85	7000	19	2	19	58	1	1	0
86	10000	47	1	31	16	2	2	1

87	15000	30	2	15	45	3	2	3
88	10000	89	2	0	0	2	2	5
89	5000	58	3	0	29	1	3	6
90	10000	41	2	30	20	4	3	0
91	7000	82	4	0	0	8	2	4
92	8000	89	2	0	0	2	2	5
93	10000	50	2	0	37	5	3	3
94	5000	61	3	0	30	3	3	0
95	15000	44	3	22	29	0	2	0
96	8000	48	1	24	24	1	2	0
97	6000	73	1	18	6	1	1	0
98	7000	32	2	29	32	2	3	0
99	10000	44	2	44	0	3	1	6
100	8000	63	1	32	0	2	2	0

*HRGU-House rent, gas and Utility

Table-11: Category Wise Expenditure of 100 Non-Borrowers in Dhaka Slum in 2015 (In Taka)

Income	Food	cloth	HRGU*	Education	Healthcare	Transport	Savings
12000	8000	500	2000	1000	300	300	0
14000	6500	500	2000	2000	2000	500	0
10000	6000	500	2000	0	1000	240	0
12000	5500	500	1000	2000	200	350	0
25000	10000	500	7000	6000	2000	650	0
10000	4800	200	3000	1000	200	300	500
22000	12000	1000	5000	3000	1000	400	0
22000	8000	3000	2500	4000	2000	500	200
20000	10000	1000	5500	3000	1000	350	500
10000	5000	100	2000	0	1000	150	500
18000	7000	200	2500	4000	200	600	0
20000	10000	300	2000	6000	2000	650	0
13000	5000	200	2500	0	300	260	0
15000	6000	200	1000	8000	100	850	0
18000	6000	200	2300	5000	100	500	200
12000	3000	100	2200	4000	100	300	200
10000	5000	200	2200	2000	100	360	200
10000	3000	100	2200	1500	100	300	0
12000	5500	100	2400	3000	100	600	100
15000	6000	100	2000	1000	1000	150	0
15000	7000	300	6000	2000	500	450	0
10000	6000	300	2000	0	500	250	0

13000	7000	500	3500	0	600	200	0
10000	4000	200	4500	0	300	250	0
13000	5000	300	4200	2000	200	300	0
7000	4000	200	1500	0	200	200	0
12000	6000	500	3000	1000	500	300	0
13000	6000	500	4000	0	500	350	0
8000	5000	300	1500	0	100	100	0
8000	5000	400	1500	0	300	150	0
9000	4000	250	3000	0	200	150	0
10000	6500	500	2700	500	800	200	0
7500	5000	200	1500	0	200	150	0
15000	9000	500	3500	0	700	300	0
15000	9000	600	4500	0	500	300	0
9000	4000	200	3300	500	200	150	0
2000	1000	50	500	0	300	50	0
3500	1200	0	500	1000	100	80	0
12000	5000	300	4000	3000	200	150	0
10000	6000	300	3000	0	300	300	0
6000	3000	200	2000	0	150	150	0
7000	4000	200	1500	0	250	100	0
9000	6000	200	2000	0	200	250	0
10000	6000	300	1500	0	500	200	500
8000	2000	300	2000	2000	300	350	0
7000	4000	200	500	500	200	150	0
10000	3500	300	120	0	500	100	200
10000	3000	500	1600	200	100	350	0
5000	3000	200	300	0	100	100	0
7000	3000	500	400	1500	550	250	0
3000	2000	100	450	0	100	80	0
12000	3000	200	1500	0	500	250	0
9000	3000	200	3300	3000	200	320	0
15000	5000	300	0	0	500	300	0
21000	9000	500	4200	0	2000	550	0
18000	8000	1000	3000	2000	500	650	0
15000	6000	500	4000	3000	500	850	0
20000	7000	500	500	3000	1000	250	0
3000	2000	0	200	0	500	100	0
15000	10000	200	3500	0	300	200	0
12000	6000	500	300	0	100	350	1000
15000	8000	500	400	0	500	400	0
10000	4000	200	4000	2000	2000	600	0

12000	5000	500	1000	0	2000	150	200
15000	5000	300	800	2000	400	500	0
8000	5000	200	400	0	2000	150	100
12000	5000	100	500	0	500	200	0
15000	4000	300	300	3000	500	600	0
10000	6000	200	3500	0	500	200	0
13000	4000	200	2000	6000	1000	800	0
12000	4000	200	2500	6000	500	700	0
4000	3000	200	200	0	200	100	0
12000	4000	1000	4000	2000	200	350	0
15000	7000	500	1500	0	500	300	0
10000	6000	500	3000	0	500	200	0
9000	5000	500	3000	0	500	150	0
12000	7000	500	3000	0	500	250	0
13000	4000	400	4000	4000	500	500	0
15000	7000	500	4000	2000	500	350	0
9000	5000	300	3000	0	500	150	0
10000	6000	200	2000	200	500	100	0
13000	7000	300	3000	0	1000	500	0
40000	10000	1000	10000	10000	2000	700	5000
8000	4000	100	3000	0	400	200	0
15000	7000	200	3500	1000	1000	150	0
20000	8000	500	5000	3000	3000	350	0
30000	13000	1000	10000	10000	2000	800	0
10000	4000	300	1500	1000	1000	200	0
20000	8000	500	3000	1000	1000	150	500
20000	8000	400	1000	0	3000	400	0
15000	7000	500	3000	4000	500	300	0
8000	4000	100	2000	0	500	150	300
10000	5000	200	3000	1000	400	200	0
6000	2000	500	1500	1500	100	300	0
15000	5000	500	3500	5000	300	500	0
6000	3000	200	3000	0	100	100	0
10000	7000	500	0	0	1500	250	0
10000	6000	500	3000	0	500	250	0
8000	6000	0	0	0	300	150	0
15000	10000	100	1600	1500	500	300	0

*HRGU-House rent, gas and Utility

Table-12: Category Wise Expenditure of 100 Non-Borrowers in Dhaka Slum in 2010

(In Taka)

Income	Food	Cloth	HRGU*	Education	Healthcare	Transport	Savings
5000	2500	100	500	0	50	100	0
4000	2000	200	800	1000	0	50	0
5000	2000	100	1000	0	200	80	0
4000	2000	100	400	0	30	100	0
10000	4000	200	3000	2000	500	100	0
5000	2000	100	1000	300	50	50	0
10000	4500	300	1000	1000	200	100	0
10000	2000	1000	1200	1500	1000	100	0
10000	4000	300	1000	1000	500	80	0
3000	1000	50	800	0	200	30	0
7000	3000	100	1000	1000	100	100	0
7000	3000	50	500	2000	200	100	0
6000	1000	50	700	0	20	60	0
5000	1000	50	300	2000	50	150	0
6000	1500	50	1000	0	20	50	0
5000	1000	20	1000	1500	20	50	0
5000	1500	50	1000	0	20	80	0
7000	1000	20	500	0	10	60	0
5000	1000	30	700	500	10	120	0
5000	2000	20	500	0	100	50	0
5000	3000	100	1500	0	100	80	0
4000	1000	50	800	0	50	50	0
5000	1000	100	1000	0	100	30	0
3000	1500	40	1000	0	50	50	0
3000	1500	50	1000	0	50	80	0
2000	1000	30	500	0	50	50	0
3000	1500	100	800	0	100	80	0
4000	2000	100	1000	0	100	80	0
2000	1000	50	500	0	20	20	0
1500	1500	100	600	0	50	30	0
3000	1000	50	900	0	50	50	0
4000	1800	50	800	1	50	50	0
2000	1600	50	500	0	50	30	0
6000	3000	100	1700	0	100	100	0
5000	3000	100	2000	0	100	100	0
3000	1500	50	1300	0	30	40	0
1000	1000	50	500	0	50	20	0
1000	500	0	200	0	30	20	0
3000	2000	100	1000	500	50	40	0
2000	1500	40	500	0	50	100	0

1000	1500	50	700	0	50	30	0
2000	1000	50	900	0	50	20	0
2200	1000	50	700	0	30	50	0
2000	1500	50	500	0	50	40	0
1000	500	50	800	0	50	80	0
3000	1200	50	100	0	50	20	0
5000	1500	50	50	0	50	20	0
5000	1500	100	500	0	20	50	0
2500	1000	50	100	0	0	30	0
3000	1000	100	100	300	100	50	0
1000	500	30	100	0	0	20	0
5000	1200	50	300	0	50	50	0
3000	1200	50	1200	0	0	80	0
5000	2000	50	500	0	100	50	0
8000	4000	100	2000	0	100	100	0
10000	3000	200	1000	0	50	100	0
8000	2000	50	1500	0	50	100	0
10000	2000	50	100	0	50	60	0
1000	600	0	100	0	50	20	0
5000	3000	50	1500	0	50	30	0
5000	2000	100	100	0	40	100	0
5000	2000	100	100	0	50	100	0
3000	1500	50	1600	0	100	50	0
6000	1500	50	300	0	500	30	0
5000	2000	50	200	0	50	30	0
3000	1800	50	100	0	100	30	0
5000	1500	50	100	0	50	50	0
7000	1500	50	100	500	100	100	0
3000	1500	50	600	0	100	30	0
15000	2000	100	1000	2000	100	100	5000
5000	1200	50	1000	2000	100	100	0
2000	1000	50	100	0	50	20	0
6000	1000	100	1000	500	50	50	0
5000	2000	100	500	0	100	80	0
3000	1500	100	1000	0	100	50	0
3000	1000	100	1000	0	100	20	0
3000	2000	100	1000	0	100	50	0
4000	1500	50	1200	500	50	70	0
5000	2000	100	1000	0	50	100	0
3000	1500	50	800	0	50	40	0
5000	1000	50	800	0	50	20	0

5000	2000	50	1200	0	100	50	0
15000	3000	300	3000	4000	500	100	0
4000	1500	30	800	0	100	60	0
7000	1500	50	1200	0	50	60	0
10000	2000	100	1500	500	500	80	0
15000	4000	200	3000	4000	200	100	0
5000	1800	50	700	0	100	30	0
10000	2000	100	1200	0	200	20	0
10000	1500	100	100	0	200	50	0
10000	2000	50	1000	0	50	50	0
2000	1500	50	800	0	50	20	0
3000	1000	50	1600	0	100	50	0
2000	800	50	500	500	50	50	0
5000	1500	100	1500	0	50	100	0
2000	1200	50	1000	0	30	20	0
2000	1500	100	0	0	100	60	0
3000	1500	50	1000	0	100	80	0
3000	2000	0	0	0	0	20	0
5000	3000	50	500	0	100	50	0

*HRGU-House rent, gas and Utility

Table-13: Percentage of Category Wise Expenditure of 100 Non-Borrowers in Dhaka Slum in 2015

Sl no	Income	Food	cloth	HRGU*	Education	Healthcare	Transport	Savings
1	12000	66	4	17	8	3	2	0
2	14000	48	3	15	15	15	4	0
3	10000	62	5	21	0	10	2	0
4	12000	58	5	10	21	2	4	0
5	25000	38	2	27	23	8	2	0
6	10000	48	2	30	10	2	3	5
7	22000	54	5	22	13	4	2	0
8	22000	40	15	12	20	10	2	1
9	20000	47	5	26	14	5	1	2
10	10000	57	1	23	0	11	2	6
11	18000	48	2	17	28	1	4	0
12	20000	48	1	9	29	10	3	0
13	13000	61	2	30	0	4	3	0
14	15000	37	1	6	50	1	5	0
15	18000	42	1	16	35	1	2	1
16	12000	30	1	22	41	1	3	2
17	10000	50	2	22	20	1	3	2

18	10000	42	1	31	21	1	4	0
19	12000	47	1	20	25	1	5	1
20	15000	59	1	19	10	10	1	0
21	15000	43	2	37	12	3	3	0
22	10000	66	3	22	0	6	3	0
23	13000	59	4	30	0	5	2	0
24	10000	43	2	49	0	3	3	0
25	13000	42	2	35	17	2	2	0
26	7000	66	3	25	0	3	3	0
27	12000	53	4	27	9	4	3	0
28	13000	55	5	35	0	4	3	0
29	8000	72	4	21	0	2	1	0
30	8000	68	6	20	4	2	0	0
31	9000	53	3	39	0	3	2	0
32	10000	58	5	24	4	7	2	0
33	7500	71	3	21	0	3	2	0
34	15000	64	4	25	0	5	2	0
35	15000	61	4	30	0	3	2	0
36	9000	48	2	40	6	2	2	0
37	2000	52	3	26	0	16	3	0
38	3500	42	0	17	35	3	3	0
39	12000	39	2	32	24	2	1	0
40	10000	61	3	30	0	3	3	0
41	6000	54	4	36	0	3	3	0
42	7000	66	3	25	0	4	2	0
43	9000	70	2	23	0	2	3	0
44	10000	67	3	17	0	5	2	6
45	8000	29	4	29	29	4	5	0
46	7000	72	3	9	9	4	3	0
47	10000	74	6	3	0	11	2	4
48	10000	52	9	28	3	2	6	0
49	5000	81	5	8	0	3	3	0
50	7000	48	8	7	24	9	4	0
51	3000	73	4	16	0	4	3	0
52	12000	55	4	27	0	9	5	0
53	9000	30	2	33	30	2	3	0
54	15000	82	5	0	0	8	5	0
55	21000	56	3	26	0	12	3	0
56	18000	53	7	20	13	3	4	0
57	15000	41	3	27	20	3	6	0
58	20000	57	4	4	25	8	2	0

59	3000	71	0	7	0	18	4	0
60	15000	71	1	25	0	2	1	0
61	12000	73	6	4	0	1	4	12
62	15000	82	5	4	0	5	4	0
63	10000	31	1	31	16	16	5	0
64	12000	56	6	11	0	23	2	2
65	15000	56	3	9	22	4	6	0
66	8000	64	3	5	0	25	2	1
67	12000	79	2	8	0	8	3	0
68	15000	46	3	3	35	6	7	0
69	10000	58	2	33	0	5	2	0
70	13000	29	1	14	43	7	6	0
71	12000	29	1	18	43	4	5	0
72	4000	81	6	5	0	5	3	0
73	12000	34	9	35	17	2	3	0
74	15000	72	5	15	0	5	3	0
75	10000	59	5	29	0	5	2	0
76	9000	55	5	33	0	2	5	0
77	12000	62	5	27	0	4	2	0
78	13000	30	3	30	30	3	4	0
79	15000	49	4	28	14	3	2	0
80	9000	56	3	33	0	6	2	0
81	10000	67	2	22	2	6	1	0
82	13000	59	3	25	0	9	4	0
83	40000	26	2	26	26	5	2	13
84	8000	52	1	39	0	5	3	0
85	15000	54	2	27	8	8	1	0
86	20000	40	3	25	15	15	2	0
87	30000	35	3	27	27	6	2	0
88	10000	50	4	19	12	12	3	0
89	20000	57	3	21	7	7	1	4
90	20000	63	3	8	0	23	3	0
91	15000	46	3	20	26	3	2	0
92	8000	57	2	28	0	7	2	4
93	10000	51	2	31	10	4	2	0
94	6000	34	9	25	25	2	5	0
95	15000	34	3	24	34	2	3	0
96	6000	47	3	47	0	2	1	0
97	10000	75	5	0	0	16	3	0
98	10000	59	5	29	0	5	2	0
99	8000	93	0	0	0	5	2	0

100	15000	71	1	11	11	4	2	0

*HRGU-House rent, gas and Utility

Table-14: Percentage of Category Wise Expenditure of 100 Non-Borrowers in Dhaka Slum in 2010

Sl no	Income	Food	cloth	HRGU*	Education	Healthcare	Transport	Savings
1	5000	77	3	15	0	2	3	0
2	4000	49	5	20	25	0	1	0
3	5000	59	3	30	0	6	2	0
4	4000	76	4	15	0	1	4	0
5	10000	41	2	31	20	5	1	0
6	5000	57	3	29	9	1	1	0
7	10000	63	4	14	14	3	2	0
8	10000	29	15	18	22	15	1	0
9	10000	58	4	15	15	7	1	0
10	3000	48	2	39	0	10	1	0
11	7000	56	2	19	19	2	2	0
12	7000	51	1	9	34	3	2	0
13	6000	55	3	38	0	1	3	0
14	5000	28	9	2	56	1	4	0
15	6000	57	2	38	0	1	2	0
16	5000	28	0	28	42	1	1	0
17	5000	56	2	38	0	1	3	0
18	7000	63	1	31	0	1	4	0
19	5000	42	1	30	21	1	5	0
20	5000	75	1	18	0	4	2	0
21	5000	63	3	31	0	2	2	0
22	4000	51	2	41	0	3	3	0
23	5000	45	5	45	0	4	1	0
24	3000	57	1	38	0	2	2	0
25	3000	66	2	37	0	2	3	0
26	2000	61	2	31	0	3	3	0
27	3000	58	4	31	0	4	3	0
28	4000	61	3	31	0	3	2	0
29	2000	63	3	32	0	1	1	0
30	1500	66	5	26	0	2	1	0
31	3000	49	3	44	0	2	2	0
32	4000	65	2	29	0	2	2	0
33	2000	72	2	23	0	2	1	0
34	6000	60	2	34	0	2	2	0
35	5000	56	2	38	0	2	2	0

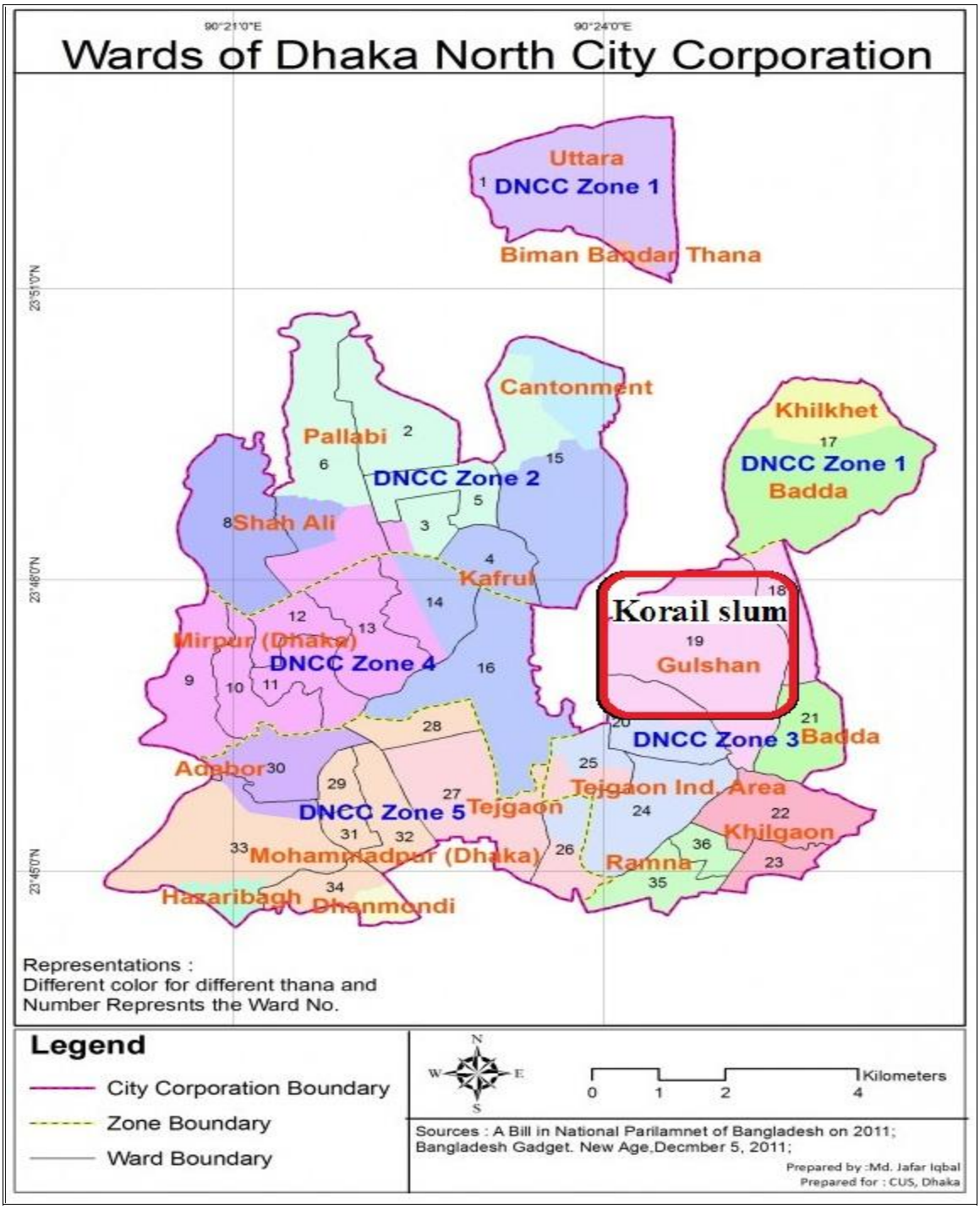
36	3000	51	2	45	0	1	1	0
37	1000	62	3	31	0	3	1	0
38	1000	67	0	27	0	4	2	0
39	3000	54	3	27	14	1	1	0
40	2000	68	2	23	0	2	5	0
41	1000	65	2	30	0	2	1	0
42	2000	50	2	45	0	2	1	0
43	2200	55	3	38	0	1	3	0
44	2000	70	2	24	0	2	2	0
45	1000	34	3	54	0	3	6	0
46	3000	84	4	7	0	4	1	0
47	5000	90	3	3	0	3	1	0
48	5000	69	5	23	0	1	2	0
49	2500	85	4	8	0	0	3	0
50	3000	61	6	6	18	6	3	0
51	1000	77	5	15	0	0	3	0
52	5000	73	3	18	0	3	3	0
53	3000	48	2	47	0	0	3	0
54	5000	74	2	18	0	4	2	0
55	8000	63	1	32	0	2	2	0
56	10000	69	5	23	0	1	2	0
57	8000	54	1	41	0	1	3	0
58	10000	89	2	4	0	2	3	0
59	1000	78	0	13	0	6	3	0
60	5000	65	1	32	0	1	1	0
61	5000	86	4	4	0	2	4	0
62	5000	85	5	4	0	2	4	0
63	3000	45	2	48	0	3	2	0
64	6000	63	2	13	0	21	1	0
65	5000	86	2	9	0	2	1	0
66	3000	87	2	5	0	5	1	0
67	5000	85	3	6	0	3	3	0
68	7000	64	2	4	22	4	4	0
69	3000	66	2	26	0	5	1	0
70	15000	34	2	17	34	2	2	9
71	5000	27	1	23	45	2	2	0
72	2000	82	4	8	0	4	2	0
73	6000	37	4	37	18	2	2	0
74	5000	72	3	18	0	4	3	0
75	3000	54	4	36	0	4	2	0
76	3000	45	4	45	0	5	1	0

77	3000	62	3	31	0	3	1	0
78	4000	45	1	36	15	1	2	0
79	5000	62	3	31	0	1	3	0
80	3000	61	2	33	0	2	2	0
81	5000	52	2	42	0	3	1	0
82	5000	59	2	35	0	3	1	0
83	15000	27	3	27	37	5	1	0
84	4000	60	1	32	0	4	3	0
85	7000	52	2	42	0	2	2	0
86	10000	43	2	32	10	11	2	0
87	15000	35	1	26	35	2	1	0
88	5000	67	2	26	0	4	1	0
89	10000	57	3	34	0	6	0	0
90	10000	77	5	5	0	10	3	0
91	10000	63	1	32	0	2	2	0
92	2000	62	2	33	45	2	1	0
93	3000	36	2	57	0	3	2	0
94	2000	41	2	26	26	2	3	0
95	5000	46	3	46	0	2	3	0
96	2000	52	2	44	0	1	1	0
97	2000	85	6	0	0	6	3	0
98	3000	55	2	36	0	4	3	0
99	3000	99	0	0	0	0	1	0
100	5000	81	1	14	0	3	1	0

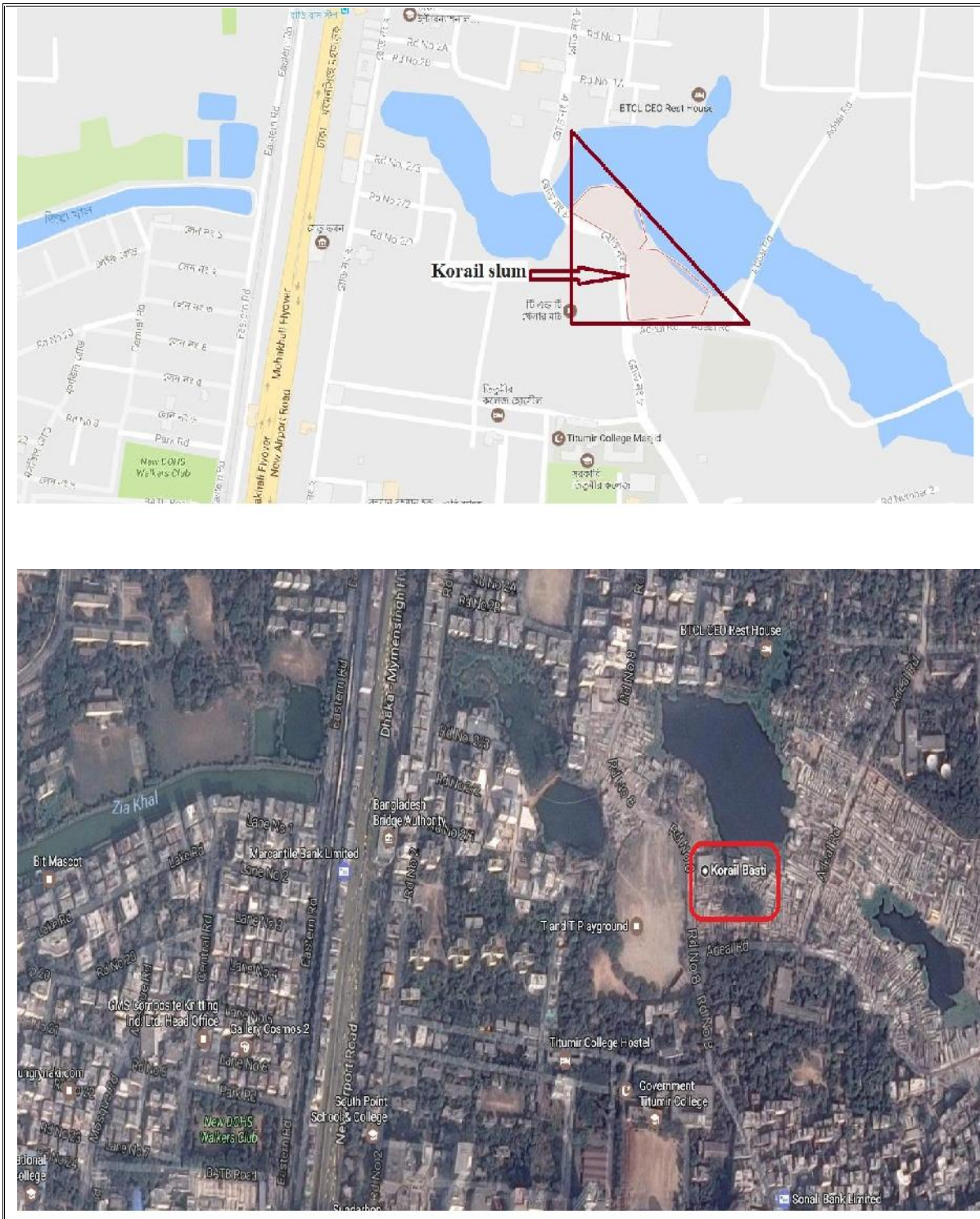
*HRGU-House rent, gas and Utility

Appendix-2: Maps

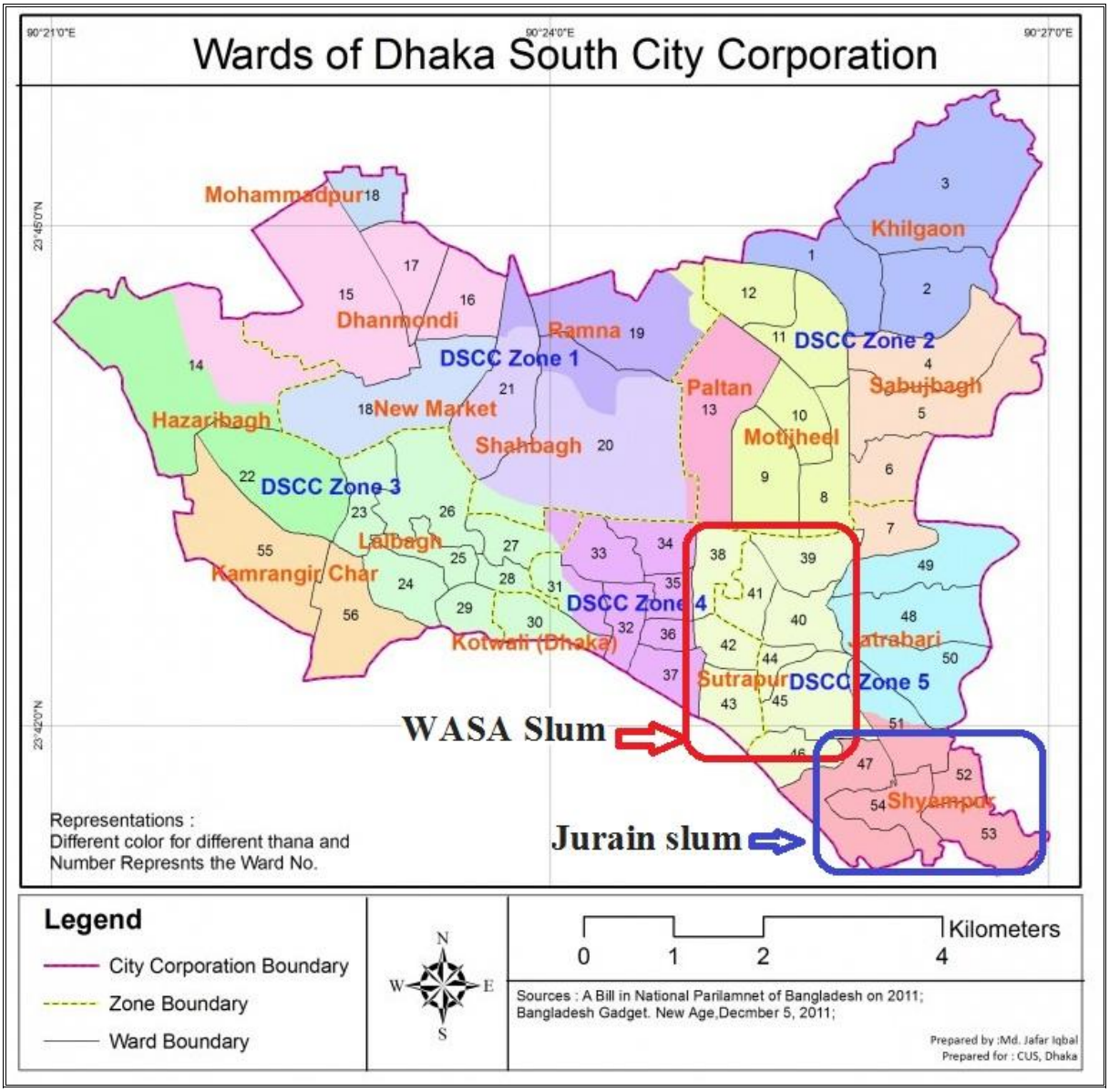
Map-1: Location of Korail in Dhaka North City Corporation (Korail slum indicated by red rectangle)



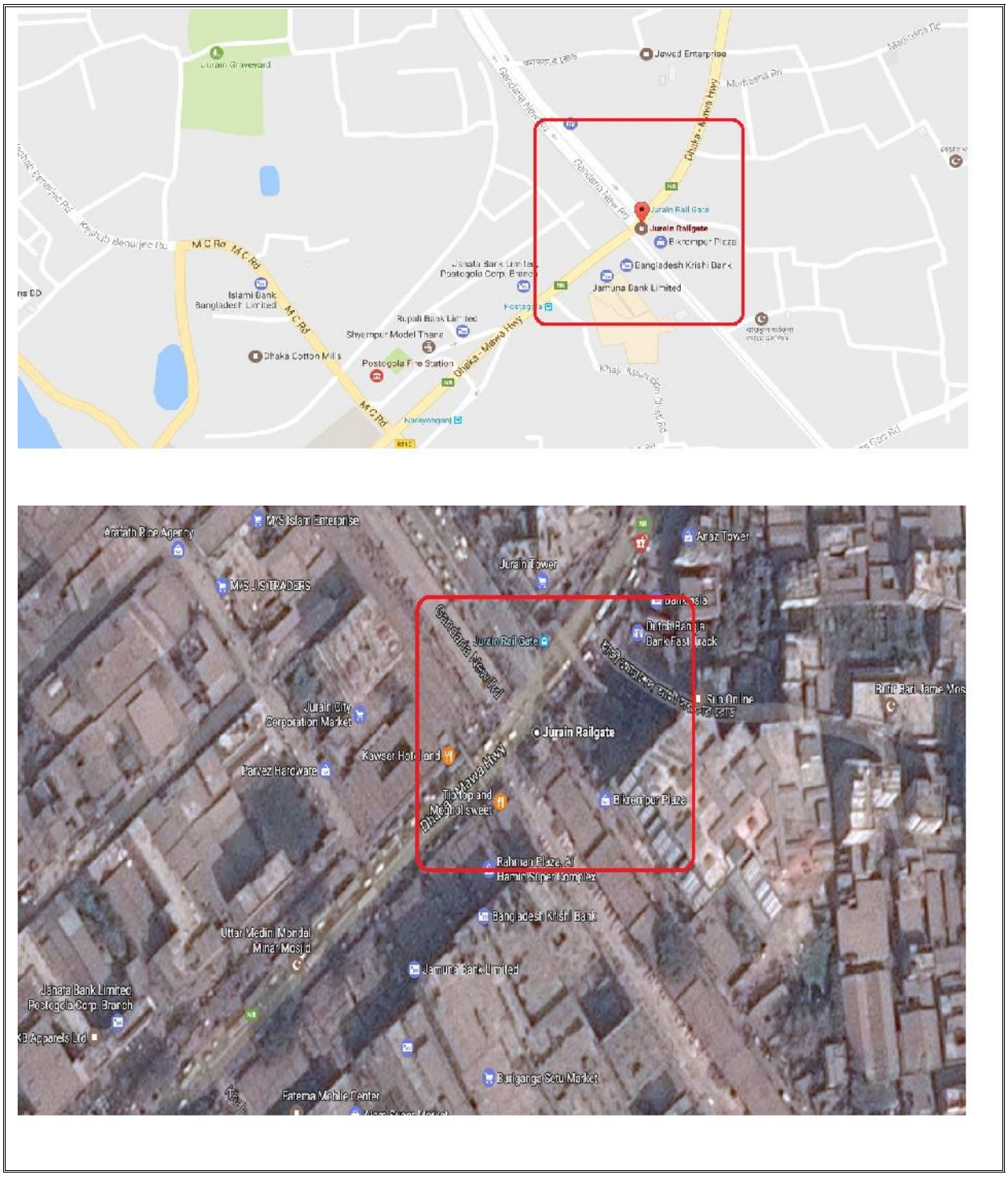
Map-2: Location of the Korail Slum in the Google Map (Korail slum indicated by Red triangle and rectangle)



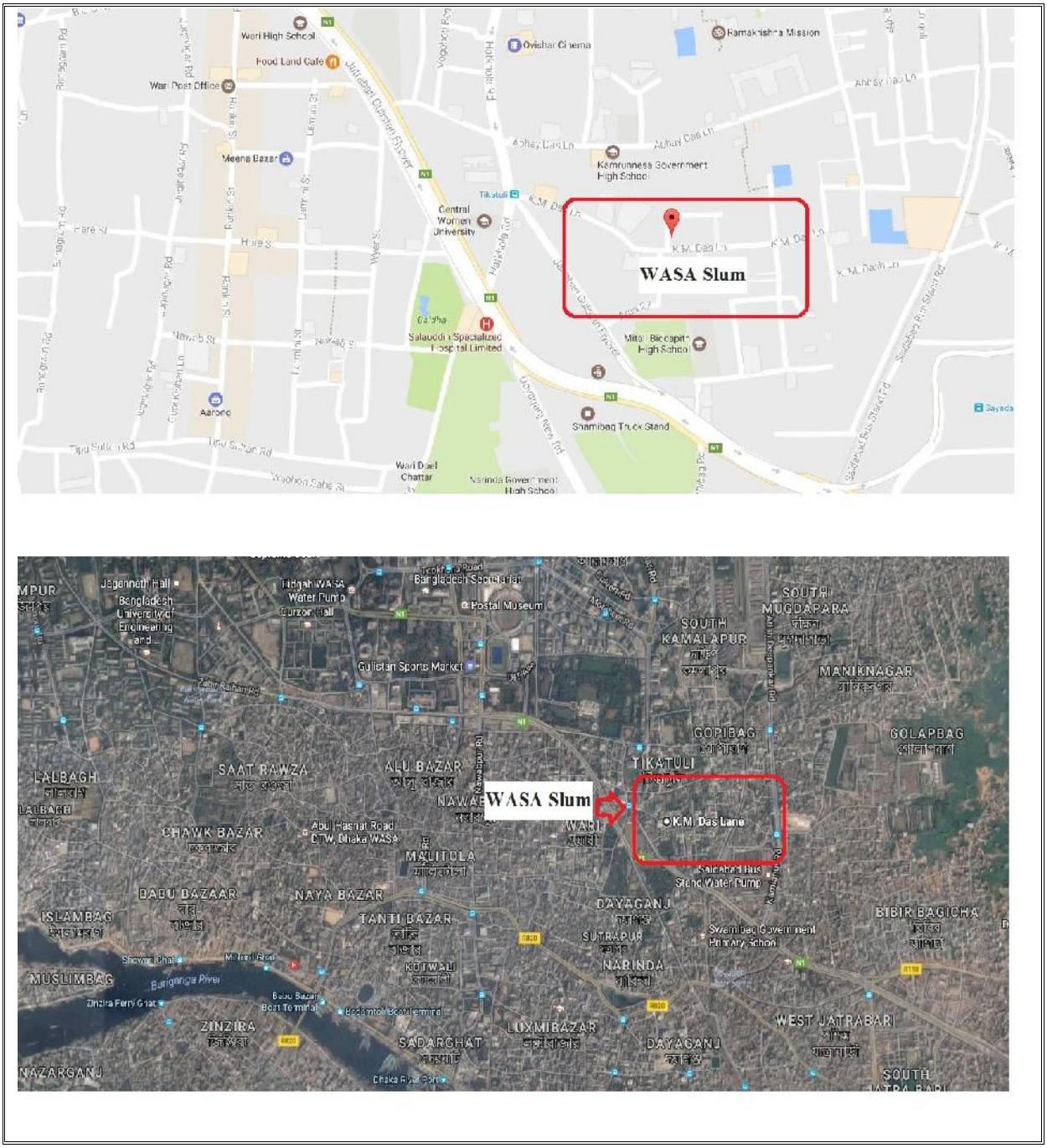
Map-3: Location of the Jurain and the WASA Slum in Dhaka South City Corporation (Jurain slum indicated by Blue rectangle and WASA slum indicated by Red rectangle)



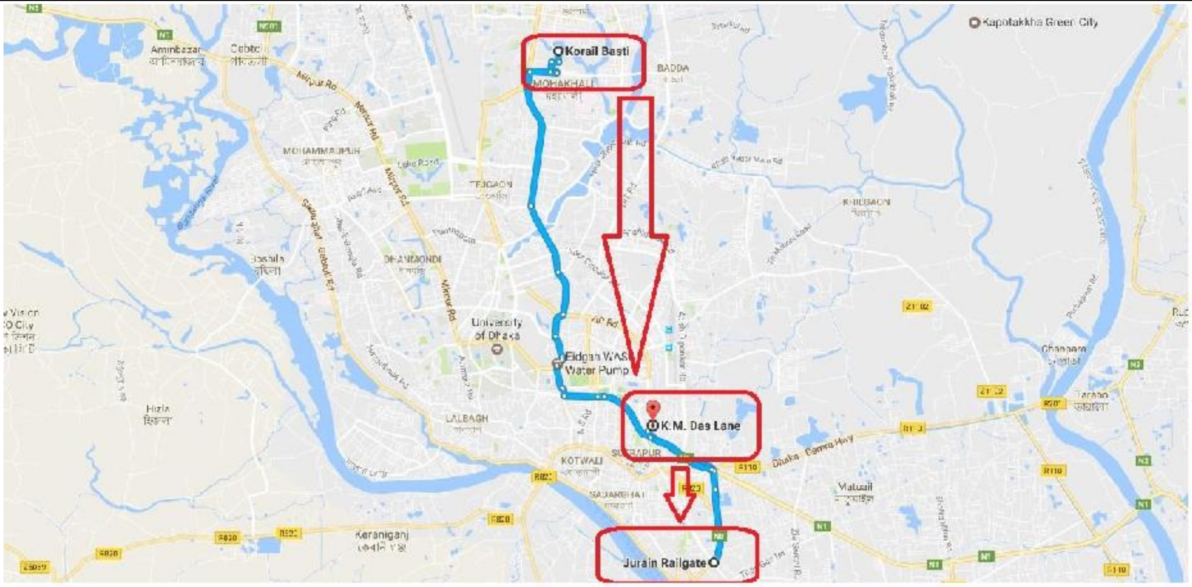
Map-4: Location of the Jurain slum in the Google Map (Jurain slum indicated by Red Rectangle)

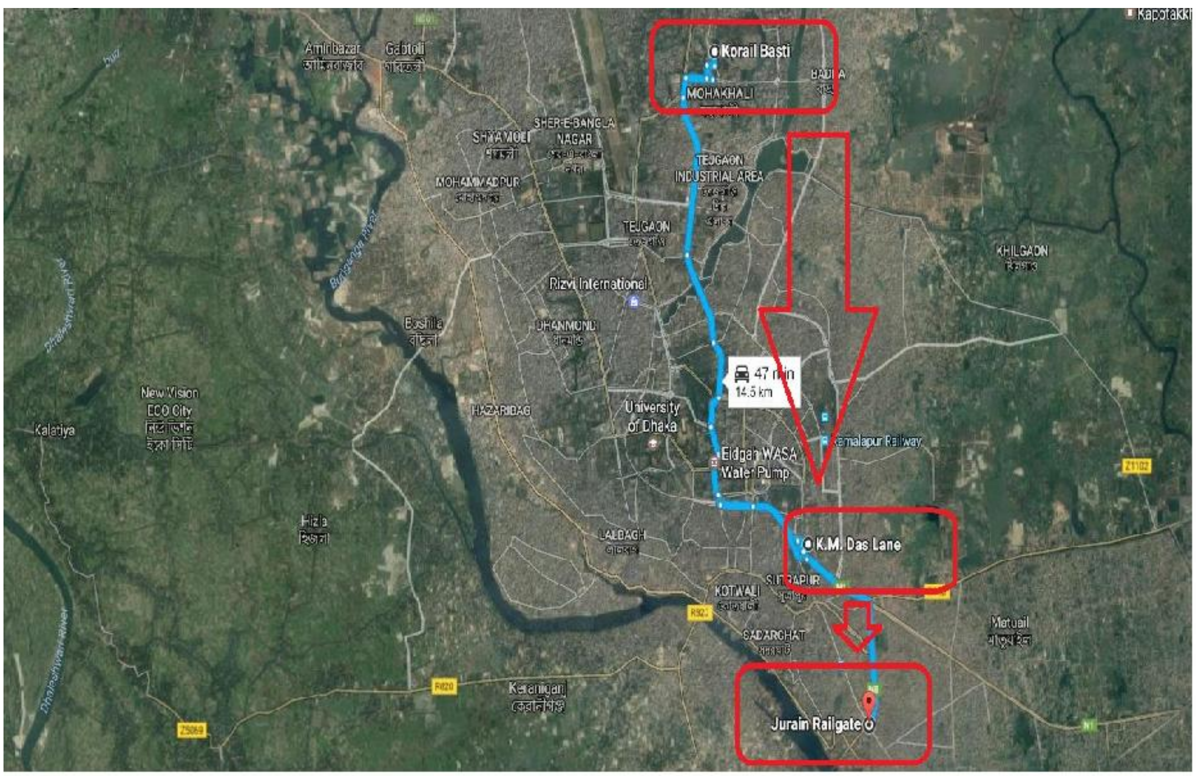


Map-5: Location of the WASA Slum in the Google Map (WASA slum indicated by Red Rectangle)



Map-6: Location of the Full Study Area (Korail slum to WASA slum to Jurain Slum) in the Google Map (slum area is indicated by Red Rectangle)


Korail Basti
MOHAKHALI
BADDA
Kapotakkha Green City
Aminbazar
MOHAMMADPUR
TEJGAON
KHILGAON
DHANMONDI
University of Dhaka
Eidgah WASA Water Pump
K.M. Das Lane
LALBAGH
KOTWALI
SUTRAPUR
SADARGHAT
Keraniganj
Matuail
Hizla
Jurain Railgate


Korail Basti
MOHAKHALI
Aminbazar
Gabtoli
SHER-E-BANGLA NAGAR
SHYAMOLI
MOHAMMADPUR
TEJGAON INDUSTRIAL AREA
TEJGAON
Rizvi International
DHANMONDI
KHILGAON
47 min
14.5 km
University of Dhaka
HAZARIBAG
Bashila
New Vision ECO City
Kalatiya
Kamalapur Railway
Eidgah WASA Water Pump
Hizla
LALBAGH
K.M. Das Lane
KOTWALI
SUTRAPUR
SADARGHAT
Matuail
Keraniganj
Jurain Railgate

Appendix-3: Photos

Photo-1: Identity cards Photo of the Survey Team Member

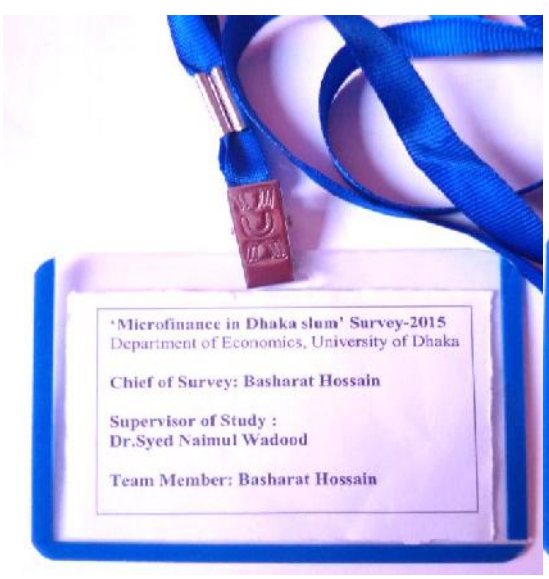


Photo-2: Photos of the Korail Slum:

Survey team Member Basharat Hossain and Shariful Islam Tareq with respondents of the Korail slum:

Survey team member Basharat Hossain, Shariful Islam Tareq and Zubaida Asma with the respondents of the Korail slum:

Housing condition of the Korail slum:


Kitchen room and the common bathroom in the Korail slum:

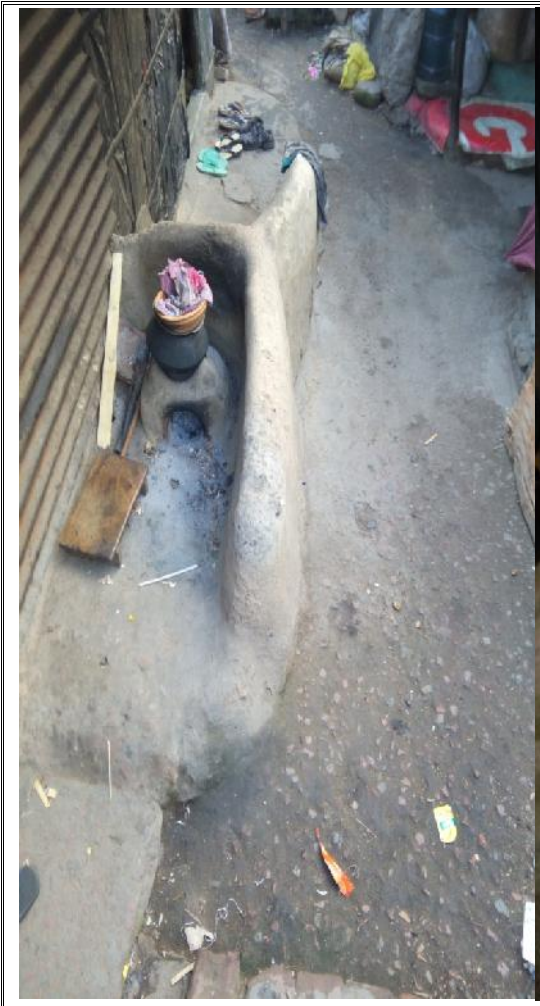
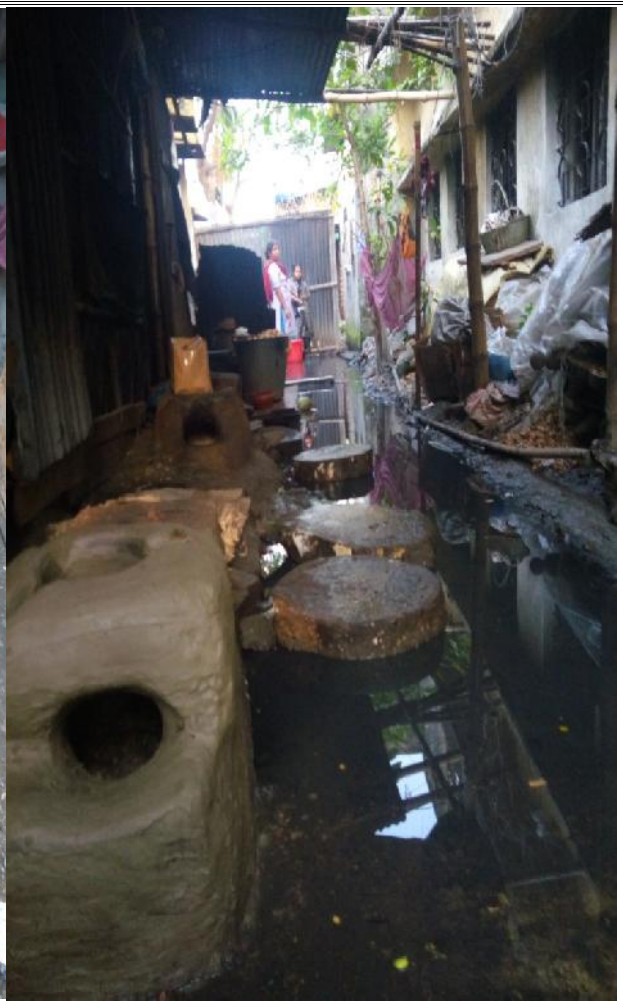

Common toilet in the Korail slum:

Photo-3: Photos of the Jurain slum:

Survey team Member Basharat Hossain with respondents of the Jurain slum:

Housing condition of the Jurain slum:

Common Kitchen room and common bath room in the Jurain slum:

Jurain slum along with Rail line:


Photo-4: Photos of the WASA slum:

Survey Team Member Basharat Hossain with respondents of the WASA slum:

Housing condition in the WASA slum:

Common Bathroom and Toilet in the WASA slum:

Appendix-4: Structured Questionnaire

1-Borrower
0-Non-Borrower

I ensured that, this survey data will be used only for academic Purposes; these are confidential and never be used for commercial Purposes. Respondents are safe and never face any difficulties with data.

QUESTIONNAIRE

Urban Slum Microfinance Survey, Dhaka-2015

Impact of Urban Microfinance on Livelihood Strategies of Borrower Slum Dwellers in Dhaka City

By- Basharat Hossain, M.Phil. Researcher, Department of Economics, University of Dhaka, Bangladesh

	Section-1: Household Information Roster, part-1									
	1.House Hold ID									
	1.1.Name of Respondent:									
	1.2.Gender of Respondent:		1. Men……. 2. Women……..							
	1.3.Age:(0 to 99)(Write) :									
	1.4.Marital status:		1. Married……2. Unmarried…….. 3. Widowed…… 4. Divorced…… 5.Separated……							
	1.5.List of Family Members **Numbers:**	**1.6.Relationship of respondent with the head of household** (insert0-if not applicable) 1.Head 2.Husband 3.wife 4.Son 5.Daughter 6.Spouseof Son 7.Father 8.Mother 9.Brother 10.Sister 11.Grand son 12.Grand daughter 13.Brother in Law 14.Nephew	**1.7.Education: Educational Code** 0-No education 1-class 1 2-class 2 3-class 3 4-class 4 5-class 5 6-class 6 7-class 7 8-class 8 9-class 9 10- SSC/Equivalent 12-HSC/Equivalent 13-undergrad/Honours 15-Gradute 20-Nursing 21-Vocational 23-Medical Diploma 22-Technical 30.Not applicable for this Family	**1.8.Primary Occupation** 0-Not applicable/children 1.unemployed 2.Hawking 3.Small business 4.Rickshaw pulling 5.Van Driver 6.House maid 7.Garments worker 8.Housewife 9.Construction labor 10.day Labour 11.Industrial Labor 12.Transport worker 13.Govt. Service/Job 14.Private service/Job 15.Cleaner 16.CNG/Car Driver 17.peon 18.sewing/Tailor 19.Security	20.Tokai/Garbage Collecting Street boy 21.Carpenter 22.Shoe Making Business 23.Shoe Repairing 24.Machine Repairing in Workshop 25.Electrician 26.Cook 27.Imam of Mosque 28.Begging 29.Hotel/Restaurant Worker 30.Box (Paper;Soil) Making Business 31.Laundry Service 40.Not applicable for this family	**1.9.Secondary Occupation** 0-none (insert0-if not applicable)	**1.10.Occupation before five years** (insert0-if not applicable) **Code are same as section 1.8**	**1.11. Occupation changed?** **1-Yes** **0-No** **1.12. IF YES, Why Occupation changed?** (insert0-if not applicable) 0.No change in Occupation 1.microcredit Loan 2.Education level increase 3.fund from Relative 4.fund from Friend: 5.Own Fund: 6.Technology 7.Training 8.New Job	**1.13.If Unemployed (Tick)** 0.Not applicable 1. Domestic Work 2. Housewife 3. Student 4. Too old 5. Retired 6. Children 7. Too young 8. Temporarily sick 9. Permanently sick 10. Disabled 11. looking for job/business 12. children (insert0-if not applicable)	**1.14.If current student, Which class?** (insert0-if not applicable) **Code are same as section 1.7**
1										
2										
3										
4										
5										
6										
7										
8										
9										

Section-2: Household Information Roster, part-2: Income, Expenditure and saving & Impact of Microfinance

2.1.Average current Income per month:…….
2.2. What was 5 years earlier?.....
2.3.Causes of Increase/decrease:

1. Investment from Microcredit (amount):…
2. New earning member:……
3. Increase in salary in job:……
4. Investment from Relative:…
5. Buying new asset (amount):…
6. House Rent Increases
7. Increased income in business
8. Secondary Job
9. Investment from microcredit in Business and New earning member
10. Investment from microcredit in business and my salary increases in job
11. New Job
12. Due to Sickness

3.2.a. Details causes behind Income increase:

1. House Repairing
2. Investment in Business
3. Dispensary Business
4. buying Rickshaw
5. buy a House
6. Salary/Income increases
7. Buy a shop
8. Buy a Van
9. buy a boat
10. New Earning member
11. house rent from House Repairing
12. Secondary Job
13. Training Financed by MFIs and get New Job
14. Low capacity to work due to illness

2.4.Sources of Income: (Tick & mention %)

1. Job
2. Small Business:
3. Shop:
4. Service:
5. Rickshaw:
6. Charity,zakat,fitraor other suchassistance:
7. House Rent
8. van driver
9. Business and Job Jointly
10. Business and House Rent Jointly
11. Car/CNG Driver

2.5. Average current Expenditure per month:
2.6. What was 5 years earlier?
2.7. Causes of Increase/decrease:

1. Price Increases
2. Causes of Illness/sickness
3. New member in family
4. Child Education cost increases
5. Investment from Microcredit
6. new job
7. New member in education
10. Both education and healthcare cost increases

2.8.categories of Expenditure: (amount) monthly

category	**a.Current**	**b.5 years Ago**
2.8.1 Food:		
2.8.2 Clothing:		
2.8.3 House Rent, Gas, Electricity		
2.8.4 House Rent		
2.8.5 Utilities (Gas, Electricity, Water):		
2.8.6 Education:		
2.8.7 Health care:		
2.8.10 Transport:		

2.9.Causes of Increase or Decrease in Education cost:

1. Increase in educational level……
2. Free NGO School……
3. New member in education…
4. School fee increases ……,
5. Free Madrasah/Orphanage…

2.9.1. How is it Financed? 0. Not Applicable 1.Personal Income 2.Ngo education finance scholarship

2.10.Causes of Increase or Decrease in Health care cost:

0. Not Applicable
1. Free treatment ……
2. Medicine price rises
3. Low cost/discount in treatment
4. Doctors Visit rises
5. New member in family
6. Increase sickness

2.10.1. How is it financed 0.Not Applicable 1.Personal Income 2.Ngo healthcare

2.11.Causes of Increase in Insurance cost:

0. Not Applicable
1. New policy Holder…….
2. High Returns rate
3. Encouraged by MFIs

2.11.1 How is it Financed?

0. Not Applicable
1. Personal Income

2.12. Average current addition to Saving per month…
2.13. What was 5 years earlier?
2.14.Causes of Increase decrease:

0. Not Applicable
1. Micro saving (amount):
2. New earning member:…
3. Income Increases
4. Inability/Low Income

2.15.Savings institutions:
(Tick on the option)

0. Not Applicable
1. Bank…
2. MFIs…
3. Relatives…
4. Local shomobay…

Section-3: Household Information Roster, part-3: Asset and other income of respondent & Impact of Microfinance

3.1.Value of Asset (Amount):

3.2. What was 5 years earlier?

3.3.Causes of Increase:

1. Buying new asset (amount):…
2. Increase in price of previous asset (amount):…
3. House rent

(insert0-if not)

3.4. List & value of Durable Asset (amount):
(insert0-if not applicable)

3.4.1 Farm Land: Decimal: 0-Not Applicable
3.4.2 Homestead Land: Decimal: 0-Not Applicable
3.4.3 Land Price/ value:0-Not Applicable
3.4.4 Location: 0-Not Applicable
3.4.5 Business machineries (Price):……
3.4.6 Others(Specify & write)……

3.5.Durable Consumer products(Price):

Product	Quantity
3.5.1 Refrigerator,	
3.5.2 Television	
3.5.3 Fans,	
3.5.4 VCR/VCP/DVD,	
3.5.5 Sewingmachine,	
3.5.6 Furniture,	
3.5.7 KitchenItems&Crockery-Price	
3.5.8 Wristwatch/Wallclock	
3.5.9 Mobile,	
3.5.10 Computer/	

(insert0-if not applicable)

3.6. Recipient of remittances?
1-Yes ….. 0-No…….

3.7. in Which country? …….. (insert0-if not applicable)

3.8. If recipient, how much in a year on an average? (Cash & Kinds) Total Taka-……(insert0-if not applicable)

3.9. Amount received in the last year: (insert0-if not applicable)

3.10. Recipient of charity, zakat, money from relatives?
1-Yes ….. 0-No…….

3.11. If recipient, how much in a year on an average? (Cash & Kinds) Total Taka-……(insert0-if not applicable)

3.12. Amount received in the last year: (insert0-if not applicable)

3.12.1. Name charity provider / Institutions

1. Dusthya Shastha Kendra (DSK)
2. Local City Councilor
3. Sathi NGO
4. Government
5. Local Councilor
6. Ramkrisna Mission

Code for Question- 3.14

1-AllowanceforWidowed,DesertedandDestitute
2-AllowancefortheFinanciallyInsolventDisabled
3-HonorariumforInsolventFreedomFighters
4-EmploymentGenerationforHard-corePoorin100days
5-StipendforPrimary, SecondaryandHigherSecondary/Female, dropoutStudents(MOPMED)
6-Vulnerablegroupdevelopment(VGD)
7-Vulnerablegroupfeeding(VGF)
8-OldageAllowance
9-Relief(Cash & kinds)
10-CashforWork
11-HousingSupport
12-MaternityallowanceProgram
13-Foodforwork(FFW)
14-Subsidyforopenmarketsales(OMS)
15-Others

3.13.Beneficiary ofany social safety nets programmeduring the last 5 years:
1-Yes …..
0-No…….

3.14. If Yes, Mention the Code of program:

3.15. If yes, whatwas received?
(insert0-if not applicable)

1. Rice……
2. Wheat……
3. Clothing……
4. Blanket
5. Other (specify) ……

3.16. If recipient, how much in a year on an average? (Cash & Kinds) Total Taka-
.....(insert0-if not applicable)

3.17. Amount received in the last year: (insert0-if not applicable)**…**

3.18. If No, then why? (Tick)

1. Didn'tKnowaboutit…
2. Notfitforthatprogram
3. Fitbutnotapply
4. shortnessofbudget
5. Selectionwasnotproper
6. Noprogramisthisarea
7. Others (Specify & write)

Section-4: Microfinance

4.1. Members of any microfinance Institution?
1-Yes …..
0-No…….
2-Previously/discontinued
3-Not any More……

4.2. If yes, Membership Fee…0-do Not know

4.3.Condition……0-do Not know

4.4. Recipient of microfinance?
1-Yes ….. 0-No…….

4.5.If yes, Name of MFIs:
1……2……
3……4……

4.6. From how many organizations?.....
(insert0-if not applicable)

4.7.If more than one, what are the reasons:(insert0-if not applicable)
1. Insufficient Loan amount…
2. Different HH in Different MFIs…
3. Insufficient Service…
4. One loan for another…
5. Others (write)

4.8. Type of microfinance product
1-if recipient 0-otherwise

Service	Offered by MFIs	Recipient
a. Microcredit		
b. saving scheme		
c. Insurance		
d. Healthcare		
e. education service		
f. Training		
g. Water & Sanitation		
h. Others		

4.9.Saving Scheme:(insert0-if not applicable)
4.9.1 Amount(Yearly): 920
4.9.2 Interest rate: (Yearly)
0-Don't know 1. 8%

4.10.Microcredit:(insert0-if not applicable)
4.10.1 How many Years
4.10.2 Starting Years
4.10.3 Amount of first loan:
4.10.4 Amount of current loan
4.10.5 Interest rate
4.10.6 Payment Period
4.10.7 Waiver Period:…… days

4.11.Education(amount)(insert0-if not applicable)
1.Free education (Level & cost):
2.Financial support: amount……
3.Scholarship: amount……
4.Reading materials: price:…
5.Others (Specify & write)…

4.12.HealthCare (amount) (insert0-if not applicable)
1.Free treatment(Level & cost):
2.Discount in treatment cost:…
3.Free medicine …….
4.Discount in medicine cost…
5.Others (Specify & write)

4.13.Skill & training (amount) :(insert0-if not applicable)
4.13.1 Name:
4.13.2 Cost/Fees:

4.14.Insurance (amount)(insert0-if not applicable)
4.14.1 Policy name
4.14.2 Premium:
4.14.3 Retrurns:(Yearly)

4.15.Others (insert0-if not applicable)

4.16. If Not microcredit, then why? (Specify & write)
0. Not Applicable
1. Not Necessary:
2. Have alternative way: …
3. High Interest: …
4. Cause of tension and huge Pressure
5. Inability to pay
6. Religious Prohibition of Interest
7. need but not get
8. High interest is burden; fear to be a defaulter
9. Do not know about the MF program …

4.17.what are the alternativesources of finance of non-borrowers:(insert0-if not applicable)
1. PrivateBank …
2. Govt.Bank……..
3. Local Co-operative ……..
4. Job place……..
5. Govt.Department
6. Friends……..
7. Neighbour ……
8. Relative
9. Money Lender……
10. Other:……

4.18.Inalternative sources: last One Year (amount) :(insert0-if not applicable)
4.18.1 Interest rates?...
4.18.2 Repayment system?

4.19.If discontinued from microcredit, then why? (tick) (insert0-if not applicable)
1. High interest ……
2. Need but not get
3. No coverage
4. Not Necessary:…
5. Others (Specify & write)……

Section-5: Living Condition& Impact of Microfinance

5.1. Trend of housing, utilities (gas, electricity) over the last 5 years?

1. Improved:
2. Not Improved/Same as before:
3. Worsened

5.2. How much of this is connected with microcredit loans and utilization?

1. House repairing money from MFIs
2. Increased income from business financed by MFIs
3. Increased income from Rickshaw financed by MFIs
4. house buying financed by MFIs
5. missing
6. Boat buying financed by MFIs
7. Increased income from Van financed by MFIs
8. Healthcare
9. Saving income Increases; hope for future Loan
10. Buying different consumer asset like as Fan
11. Buying a land
12. Training Financed by MFIs

5.3. If not recipient of microcredit, then from where?

0. Not Applicable
1. Monthly Income increases
2. Price level Increases
3. Financial aid from Ramkrisna mission
4. New earning member

5.4. Trend of water and sanitation over the last 5 years?

1. Improved:
2. Not Improved /Same as before:
3. Worsened

5.5. How much of this is connected with microcredit loans and utilization?

1. Water and sanitation services increases by WASA
2. House rent Increases through Microcredit Loan
3. Deep Water Tube well installed by DSK; And we paid money
4. Water Tube well and Sanitation installed byNGO; And we paid money

5.6. If not recipient of microcredit, then from where?

1. Water and sanitation services increases by WASA. and we paid money
2. Water tube well and sanitation Installed by NGO. and we paid money

5.7. Any comment regarding microcredit, livelihood strategies, expenses in education and health care, etc.? (Open Remarks)

1. Helpful
2. need but not get loan
3. if provide training;then I will participate
4. Not helpful: High Interest
5. Burden
6. no ability for loan
7. Not so good; Not so bad
8. Amount of Money (to be paid) should be reduced in each instalment. or Instalment should be increased
9. helpful but interest rate should be reduced
10. I need loan and I will be member immediately
11. if reduce interest ;the I will participate again
12. Few time for investment; high interest and continuous instalment if these solved; then I will take
13. MFIs should provide Training and Interest free Loan
14. MFIs do not provide loan for extremely poor people. this is bad rule
15. No tenure Security; hence no regular loan
16. Instalment should be done monthly instead of weekly
17. we need donation; Training and Job
18. we do not know Saving Interest rate

THE END