National Conference on

Microfinance and Development 2013

Conference Document

Institute of Microfinance (InM)

A Center of Excellence in Research, Training, and Knowledge Management

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Message from the Chairman

Institute of Microfinance (InM)

It is now well recognized that microfinance alone is of limited avail in the context of sustainable poverty reduction and beyond poverty development. But, it can play an important role as one element in an integrated approach involving education and health services, skill training, climate change and disaster risk reduction activities, access to assets and social capital, etc. The microfinance sector has expanded fast in Bangladesh, basically in terms of a single element thrust, and is now comprised of many institutions, mostly non-governmental. It certainly has helped people undertake income-generating activities and find both self and some wage employment, but they need to secure loans and other services on an annual basis to remain afloat. Clearly, sustainable poverty reduction has remained out of reach for the large majority of the receivers of microfinance services. Recognizing this reality, Palli Karma-Sahayak Foundtion (PKSF) has embarked upon promoting and facilitating an integrated, multidimensional programme of action, called ENRICH, for sustainable poverty reduction and beyond-poverty inclusive and equitable human development.

The Institute of Microfinance (InM) has been playing an important role in informing the formulation and implementation processes of microfinance, poverty reduction, and development interventions through its various research, training and knowledge creation activities over the last six years. It is now re-orientating its research and training activities to evaluate various prograqmmes that are ongoing, particularly newly promoted integrated programmes such as the ENRICH; generate data, information and analyses; and test new ideas in the context of strengthening sustainable poverty reduction and inclusive and equitable human development.

InM was established with the initial purpose to engage in evaluating the microfinance sector and its research focus was, therefore, initially on pure microfinance. It has in the

meantime started broadening its research and training activities in the perspective of equity and sustainability. It has studied issues like financial inclusion, vulnerability and risk minimisation, micro-health insurance, the causes of poverty, dynamics of poverty, and long-term dynamics of microcredit programmes in Bangladesh. In future, it will play important research and training functions in the context of sustainable poverty reduction and inclusive and equitable human development. In fact, its name may be changed from Institute of Microfinance to Institute of Inclusive Finance and Development.

More recently, InM has been expanding its research focus on aspects of environment and climate change. In fact, InM, jointly with IGES Japan, has embarked upon a research activity on vulnerability of the extreme poor, their coping strategies in relation to the impacts of natural disasters, and how microfinance and related activities can help them.

I am very happy that a Two-Day National Conference on 'Microfinance and Development' on 24-25 August 2013 is being organized by InM to present some of its research findings and emerging ideas relating to its work programme for critical review by experts, practitioners, researchers, academicians and policymakers with a view to taking on board criticisms, ideas, and suggestions offered by them in designing its future research and training programmes.

InM will also work closely with PKSF and other relevant institutions, which are or may become the consumers of its research and training outputs, in designing its future research and training activities. It would strengthen its research focus on such strategic areas as inclusive finance, rate of return on investment by microfinance participants vis-à-vis the rate of interest paid, exit strategy from microfinance and graduation into larger operations, performance of MFIs, indebtedness of microfinance participants, how education and health services can be more effectively provided, women empowerment, and enterprise development.

InM would take more effective measures to disseminate its research findings widely. It will, therefore, arrange more of such conferences and will publish more policy briefs based on its research findings and undertake other appropriate actions.

I gratefully acknowledge the support of the Government of Bangladesh to InM. I am thankful to InM Governing Body and General Body members for their contributions towards InM's management and development. I thank all staff members of InM and trust they will give their best to the process of reorienting and strengthening InM that we have embarked upon. I also wish to put on record my thanks to DFID and the PROSPER project for the continued support to InM.

Its my pleasure to welcome the speakers, presenters, chairs, panellists and participants to the seminar. Their valuable and insightful contributions will certainly ensure successful holding of the seminar. My thanks go to each one of them.

I wish the Two-Day National Conference all success.

Qazi Kholiquzzaman Ahmad
Chairman, Institute of Microfinance (InM)

Message from the Executive Director

Institute of Microfinance (InM)

Institute of Microfinance (InM) is now seven years old. Established with a vision to make it as a Center of Excellence in research, training and knowledge management, InM has progressed in a systematic manner. Today I will talk about developing InM as a center of excellence in research as we are going to have a two-day national conference on Microfinance and Development on August 24 and 25, 2013.

Developing a new institute as a center of excellence and creating confidence of the stakeholders is not easy; it requires commitment of young group of researchers. Over the past six years, the journey has not been smooth as silk but never has been the spirit of the young researchers shattered. They have remained focused and they have worked hard. Our visiting scholars and fellows have contributed to our development and capacity building.

Over the past seven years, InM has conducted quite a number of studies in the area of microfinance; it started with impact assessment in 2007 but now has become more diversified. Our research questions are driven partly by some current issues confronting the policymakers and critics and partly by the approach to poverty alleviation. The current issues confronting the policymakers and critics are: Does microfinance contribute to poverty alleviation? Is overlapping a signal of failure of microfinance or over-indebtedness? Why do micro credit borrowers drop out if they are benefited? From the perspective of the role of microfinance in development, critical questions are: Does microfinance contribute to agricultural production and food security? How does microfinance contribute to micro enterprise development? How can coping ability of the poor households be increased when faced with idiosyncratic and covariate shocks? Answers to these questions provide information on the changing role of microfinance and reinforce either the concerns or contradicts the concerns. But from the long run policy perspective, a critical question that crosses our mind is, who becomes poor and who crosses the poverty line? What makes a household over time to cross the poverty line? What makes poverty alleviation sustainable? Answers to these questions are central to a comprehensive poverty

alleviation strategy. The micro approach to poverty alleviation is one, but the macro approach to the role of finance in economic growth is another. From the perspective of maximizing role of finance in economic growth, the critical areas of concern is, how can financial inclusion be expanded? What is the role of microfinance in financial inclusion? All these questions have shaped our research agendas over the past six years.

Over the two-day conference on August 24 and 25, we will be disseminating our key findings. There will be six technical sessions. Each session will focus on each issue. In most cases, one keynote paper will be presented in each session, and this will be followed by a panel discussion. Panelists will focus on the session theme based on the findings of our study and discuss the way forward for a comprehensive policy set. This is our expectation that all these discussion will help us reshaping our future research. One thing that we want to achieve from this conference is your broad understanding of InM research. The last technical session will be a panel discussion on Climate Change, Vulnerability and Microfinance. The panel discussion is aimed at strengthening our joint research with Institute for Global Environmental Strategies (IGES), Japan. The discussion will also steer debates on the strategies to cope with adverse impact of climate change.

The two-day conference will focus on the demand side issues; but our research studies are not limited to these. We have our research focused on the supply side issues also – competition in micro credit market, efficiency and sustainability of microfinance institutions, regulation, etc. are some of the examples. We wanted to disseminate our research studies of the supply side issues in this conference but could not find out sufficient space. We plan to organize a daylong seminar sometime this year or early next year for this purpose.

In recent years, InM has built partnership with different institutions, and our researchers have been collaborating with internationally reputed researchers in foreign universities and institutions. It will be quite useful and befitting for InM to organize an international conference in near future. This will take InM to another level.

Our research studies have policy implications for the policymakers, microfinance institutions and regulatory institution. Quite a substantial number of MFIs will be represented at this conference. I hope, they will participate in the deliberations. Their observations will be useful for all of us. To make our research more effective, in near future, we plan to develop action research and policy network with selected number of MFIs in Bangladesh. They will be our partners in new knowledge creation and dissemination. The process will start soon after this conference with regional dialogue with the MFIs.

This portion of my note will acknowledge the contributors to this conference. Our heartfelt gratitude goes to Dr. Qazi Kholiquzzaman Ahmad, Chairman of InM, whose interest, encouragement and guidance has brought to the present structure of the conference to a more focused discussion on the issues. His continuous suggestions and active participation in the process has made it easy for us to organize this conference. We remain thankful to our Board members for their support and participation.

On behalf of the Institute of Microfinance, I would like to convey our gratitude to Mr. Abul Maal Abdul Muhith, the Honourable Finance Minister, Government of the People's Republic of Bangladesh, for accepting our invitation to grace the closing session as the Chief Guest. He has always responded to our request. His presence will enhance the image of this conference, and will make InM more known to everyone including to the government. We certainly would like to see that our research contributes to policy formulation of the government.

Our heartfelt thanks go to Dr. Atiur Rahman, Governor, Bangladesh Bank, and a friend of microfinance sector as well as a noted scholar for his continuous support and encouragement. He is aware of our activities. He has always responded to our invitation; I can not recall a single instance of his non-response to our invitation. He has always interacted about microfinance and

InM related issues whenever we have spoken, no matter how short that was. Thank you very much, Mr. Governor for gracing a session as the Chief Guest.

We have received enormous support and cooperation from our colleagues at PKSF. Support and contribution from Mr. M. A. Karim, Managing Director, PKSF, Mr. Fazlul Kader and Dr. Jashim Uddin, Deputy Managing Directors of PKSF are deeply acknowledged. Our thanks are also due to all the colleagues of PKSF who are actively involved in organizing and managing the conference.

I express my personal gratitude to the chairs, panelists and speakers of the sessions for their participation and constant encouragement. Their names are documented in this conference brochure. All of them are distinguished personalities; they have spared their valuable time for us. We hope, they will continue to support in building this institute in future.

Our special thanks are due to Ms. Pauline Tamesis, Country Director, UNDP Bangladesh, and Dr. Takao Toda, Chief Representative, JICA Bangladesh for accepting our invitation to grace the closing session as Special Guests. Their presence will increase image of our conference. I am confident, we will continue to receive their support in future as well. My deepest appreciation goes to Professor Hamanaka, Chairman, IGES, for flying all the way from Japan to be with us at this conference. His support and contribution will be deeply cherished. His presence will bolster our partnership with IGES.

Institute of Microfinance has been promoted by Palli Karma-Sahayak Foundation (PKSF) and established with financial support from UKaid-DFID under its PROSPER program. Ms. Shahnila Azher, Senior Policy Advisor, DFID and Dr. Reaz Islam, International Team Leader, PROSPER, have been instrumental in our growth and development with their policy support, monitoring, advices and encouragement. We deeply appreciate their continuous support for InM.

Finally, my heartfelt congratulations to all of my colleagues at InM for their hard work and ownership; they have made this conference successful. Senior officials – Dr. Md. Mosleh Uddin Sadeque, Director (Training and Operations), Dr. M. A. Latif, Director (Research and Knowledge Management), Mr. K. M. Tarek, Head (Finance and Administration), Mr. Touhid Uz Zaman and Mr. M. A. Hye Mridha, Senior Deputy Directors – have played key role in setting the stage for a successful conference. I am grateful to them for their leadership. The colleagues of Research and Knowledge Management division, in particular, Faria, Jabeer, and Kaium, have worked day and night during past few months. They have produced documents with supports from the colleagues of research and training divisions under the leadership of Dr. M. A. Latif. My heartfelt congratulation to Mr. Azhar Ali, Deputy Director (Finance) and his colleagues for their leadership and hard work. Administration cannot be left out; they are the persons behind the success. I am grateful to all of you. I wish, I could name each and every one of my colleagues in this acknowledgement. Due to space constraint, I have to say to all of you: thank you very much.

This note is already long. Let me thank all the participants from MFIs, donor communities, government bodies, international agencies, financial institutions, Bangladesh Bank, and academic institutions. Your interest in our conference reflect your interest in InM. Please continue to support us.

Wish this conference a grand success.

Professor M. A. Baqui Khalily
Executive Director
Institute of Microfinance (InM)

PROGRAM SCHEDULE

DAY ONE : 24 AUGUST 2013

09:15 am – 10:00 am: **Registration and Welcome Tea**

10:00 am – 10:30 am: **Inaugural Session**

Welcome Speech by: **Professor M. A. Baqui Khalily**
Executive Director, InM

Inauguration by: **Dr. Qazi Kholiquzzaman Ahmad**
Chairman, InM

SESSION ONE : FINANCIAL INCLUSION IN BANGLADESH

10:30 am - 12:00 noon

Chair: **Mr. Khondkar Ibrahim Khaled**
Former Chairman, Bangladesh Krishi Bank
Former Deputy Governor, Bangladesh Bank

Keynote Paper: **Access to Financial Services in Bangladesh**

Keynote Speaker: **Professor M. A. Baqui Khalily**
Executive Director, InM

Paper: Financial Inclusion in Char and Haor Areas of Bangladesh

Speaker: **Dr. Mahfuz Kabir**
Senior Research Fellow, BIISS

Short Presentation: **Mr. Amit Mittal**
Analyst (Asia and the Pacific), MIX Market

Panelists: **Dr. Hassan Zaman**
Chief Economist
Bangladesh Bank

Professor Mamun Rashid
Banker and Economic Analyst, and
Vice Chairman, Financial Excellence Ltd (FinExcel)

SESSION TWO: ACCESS TO FINANCE AND MICRO ENTERPRISE DEVELOPMENT

12:01 pm - 01:00 pm

Chair:	**Dr. Toufic Ahmad Choudhury** Director General Bangladesh Institute of Bank Management (BIBM)
Paper:	**Access to Finance and Enterprise Growth**
Speaker:	**Dr. Muhammad Abdul Latif** Director (Research and Knowledge Management), InM
Paper:	**Access to Finance and Enterprise Productivity: Is There Causality?**
Speaker:	**Md. Abdul Khaleque** University of Dhaka and InM
Panelist:	**Dr. Zaidi Sattar** Chairman Policy Research Institute (PRI)

LUNCH 01:00 pm – 02:00 pm

SESSION THREE: MICROFINANCE AND POVERTY

02:00 pm - 03:30 pm

Chair:	**Mr. Khandakar Muzharul Haque** Executive Vice Chairman Microcredit Regulatory Authority (MRA)
Chief Guest:	**Dr. Qazi Kholiquzzaman Ahmad** Chairman, InM
Keynote Speaker:	**Professor S. R. Osmani** Department of Economics University of Ulster, UK
Panelists:	**Dr. Quazi Mesbahuddin Ahmed** Former Managing Director Palli Karma-Sahayak Foundation (PKSF)
	Dr. Rushidan Islam Rahman Research Director Bangladesh Institute of Development Studies (BIDS)

TEA BREAK 03:30 pm – 03:45 pm

SESSION FOUR: RISK, VULNERABILITY AND MICRO INSURANCE

03:45 pm - 05:00 pm

Chair:	**Professor A. K. M. Nurun Nabi** Vice Chancellor Begum Rokeya University
Keynote Speaker:	**Professor Syed M. Ahsan** Department of Economics Concordia University, Canada
Panelist:	**Mr. Md. Fazlul Kader** Deputy Managing Director Palli Karma-Sahayak Foundation (PKSF)

DAY TWO : 25 AUGUST 2013

SESSION FIVE: OVERLAPPING AND DROP-OUT BEHAVIOR OF MICROFINANCE HOUSEHOLDS IN BANGLADESH

10:00 am - 11:30 am

Chair:	**Mr. Md. Abdul Karim** Managing Director Palli Karma-Sahayak Foundation (PKSF)
Chief Guest:	**Dr. Atiur Rahman** Governor Bangladesh Bank
Keynote Speaker:	**Professor M. A. Baqui Khalily** Executive Director, InM
Panelists:	**Dr. Jashim Uddin** Deputy Managing Director Palli Karma-Sahayak Foundation (PKSF)
	Professor M. M. Akash Department of Economics University of Dhaka

TEA BREAK 11:30 am – 11:45 am

SESSION SIX: MICROFINANCE AND FOOD SECURITY

11:45 am - 01:15 pm

Chair:	**Professor Dr. M. A. Sattar Mandal** Former Member, Agriculture, Water Resources & Rural Institutions Division Planning Commission, GoB and Former Vice Chancellor Bangladesh Agricultural University
Keynote Paper:	**Impact of Microcredit on Households Food Security in Bangladesh – Evidence from PRIME**
Keynote Speaker: (on behalf of Research Team)	**Professor M. A. Baqui Khalily** Executive Director, InM
Paper:	**Role of Microfinance in Agriculture in Bangladesh**
Speaker:	**Professor Md. Abdul Wadud** Department of Economics Rajshahi University
Panelists:	**Dr. Iffath Sharif** Senior Economist The World Bank
	Dr. Quazi Shahabuddin Professorial Fellow and Former Director General, Bangladesh Institute of Development Studies (BIDS)

LUNCH 01:15 pm – 02:15 pm

PANEL SESSION: CLIMATE CHANGE, VULNERABILITY AND MICRO FINANCE

02:15 pm - 04:00 pm

Chair:	**Professor Hironori Hamanaka** Chair, Board of Directors Institute for Global Environmental Strategies (IGES), Japan
Keynote Speaker:	**Dr. Qazi Kholiquzzaman Ahmad** Chairman, InM

Panelists:	**Dr. Henry Scheyvens** Director, National Resources Management Group, Institute for Global Environmental Strategies (IGES), Japan
	Dr. Rezaul Karim Environment Specialist and Vice Chairman, Bangladesh Unnayan Parishad (BUP)
	Dr. Mihir Kanti Majumder Former Secretary, GoB Member, General Body Palli Karma-Sahayak Foundation (PKSF)
	Dr. M. Asaduzzaman Professorial Research Director Bangladesh Institute of Development Studies (BIDS)
	Professor Dr. Ainun Nishat Vice Chancellor BRAC University

CLOSING SESSION: MICROFINANCE AND DEVELOPMENT: WAY FORWARD

04:00 pm - 05:30 pm

Chair:	**Dr. Qazi Kholiquzzaman Ahmad** Chairman, InM
Chief Guest:	**Mr. Abul Maal Abdul Muhith** Hon'ble Finance Minister, GoB
Special Guest:	**Ms. Pauline Tamesis** Country Director UNDP Bangladesh
Special Guest:	**Dr. Takao Toda** Chief Representative JICA Bangladesh
Special Remarks: (on behalf of DFID)	**Ms. Shahnila Tazreen Azher** Team Leader Growth & Private Sector Development, Senior Policy Advisor, DFID Bangladesh
Conference Report and Way Forward:	**Professor M. A. Baqui Khalily** Executive Director, InM

SPEAKERS

(in alphabetical order)

Dr. Qazi Kholiquzzaman Ahmad
Chairman
Institute of Microfinance (InM)

Dr. Qazi Kholiquzzaman Ahmad, a renowned socio-economic specialist and development thinker and practitioner of international repute, has been keenly promoting sustainable development in all its aspects. In a career spanning over four decades, Dr. Ahmad has extensively participated in research activities and dialogues, nationally and internationally, covering different social, political, economic, governance, and environmental aspects and issues of sustainable development as they relate to Bangladesh and other developing countries. He has to his credit a wide range of research works on policy planning, food and agriculture, environment and water resources, rural development, poverty alleviation, human development, technology and employment generation, women in development and gender issues, etc., including 35 books and over 200 learned articles. Dr. Ahmad is the current Chairman of the Institute of Microfinance (InM), Palli Karma-Sahayak Foundation (PKSF) and the founder Chairman of Bangladesh Unnayan Parishad (BUP) and Governing Council. He is also the Director of Dhaka School of Economics (DScE). He is the former President (2002-2010) of Bangladesh Economic Association (BEA), and a former Research Director at the Bangladesh Institute of Development Studies (BIDS). He was the president of the Kuala Lumpur-based Association of Development Research and Training Institutes of Asia and the Pacific (ADIPA) and was Vice President of the Rome-based Society for International Development (SID).

Dr. Quazi Mesbahuddin Ahmed
Former Managing Director
Palli Karma-Sahayak Foundation (PKSF)

Dr. Quazi Mesbahuddin Ahmed is the former Managing Director (MD) of Palli Karma-Sahayak Foundation (PKSF) from January 2008 to March 2013. Prior to this, Dr. Ahmed was a member of General Economics Division of the Bangladesh Planning Commission during September 2003 – January 2007. He led a core-drafting team for preparing Bangladesh's first Poverty Reduction Strategy Paper (PRSP). He was also simultaneously in-charge of the Industry and Energy Division of the Planning Commission. Before that, Dr. Ahmed was the Additional Secretary, Economic Relations Division (ERD), Ministry of Finance in 2003. He was the Economic Minister at the Bangladesh Embassy in Washington DC for six years during 1997-2002. He has earned a PhD degree in Economics from the University of Illinois at Urbana-Champaign, USA. His areas of specialization include development planning, development economics, macroeconomic analyses, national

income accounts, poverty discourse, fiscal and monetary policies and economics of foreign aid. He has to his credit numerous publications in local and international journals on these topics. Dr. Ahmed was a visiting fellow at the University of Western Australia during 1994. He worked as an independent expert for the SAARC Secretariat in 2007. He was a member of the 7th Bangladesh Pay Commission constituted in 2008. Dr. Ahmed worked as a member of the Advisory Committee for preparation of the Perspective Plan of Bangladesh, 2010-2021. He has traveled widely and represented the Bangladesh government in many international aid-consortium meetings and forums.

Professor Syed M. Ahsan
Department of Economics
Concordia University, Canada

Dr. Syed M. Ahsan is a Professor of Economics at Concordia University. He is also the team leader of a Flagship Research Project entitled "Microinsurance, Poverty and Vulnerability" at the Institute of Microfinance (InM). He completed his MA in Economics (1971) at the University of Essex in England and a PhD (1974) at McMaster University in Hamilton, Ontario, Canada. His doctoral thesis was judged as the best in the field of Economics in the 1974-75 country-wide competition under the auspices of the Canada Council. He has taught at the University of Western Ontario (1974-77) and at Concordia University (since 1977 to date). Over his academic career Professor Ahsan has served as a visiting professor at many prestigious universities in many countries including Bangladesh, Belgium, Czech Republic, Finland, Germany, Italy, Japan, Netherlands, Norway and Sweden. He has also done advising/ consulting work for the Asian Development Bank (ADB), UNDP, and the World Bank. During 2005-2007, he was also the World Bank Resident Economic Advisor at the Central Bank of Bangladesh.

Professor M. M. Akash
Department of Economics
University of Dhaka

Dr. M. M. Akash is a Professor of the Department of Economics, University of Dhaka. He has been teaching there since 1982. He had done his PhD in the field of Agricultural Economics from the Social Science Division of the International Rice Research Institute, Philippines and Dhaka University jointly. His special area of interest is political economy of poverty, agriculture and governance. He had served in different capacities to many national bodies. He was a member of the "Task Force" on "The Role of the Political Parties in the Process of Development", commissioned by the Planning Minister of the interim government of the People's Republic of Bangladesh led by President Justice Shahabuddin Ahmed in 1990. He had also served as an academic adviser to the National Defense College

(NDC) for two terms. He has been nominated to be a representative from the Academic Circle in the board of directors of the Micro Credit Regulatory Authority (MRA). He has also been nominated as a senior fellow of the Bangladesh Institute of Development Studies (BIDS). He has written extensively in both Bangla and English on subjects like, poverty, agriculture, governance and microfinance.

Dr. M. Asaduzzaman
Professorial Research Director
Bangladesh Institute of Development Studies (BIDS)

Dr. M. Asaduzzaman has retired from service since 2012 as Research Director in Bangladesh Institute of Development Studies (BIDS). Recently the BIDS has made him a Professorial Fellow in the Institute. He had been educated in University of Dhaka, London School of Economics and Sussex University, England. His long research career spanned several sectors and issues including technological change in agriculture and efficiency in agro-processing industry, rural development, local governance and resource mobilization, water resource development, environment and climate change, energy development including renewable energy, and green house gas emission in agricultural value chain. He had been the vice chair of the International Commission on Sustainable Agriculture under Climate Change under the CGIAR. Over the last few years, he has been a member of the Bangladesh delegation to climate change talks and also a past Chair and member of the Consultative Group of Experts under the SBI/UNFCCC.

Ms. Shahnila Tazreen Azher
Team Leader, Growth & Private Sector Development
Senior Policy Advisor, DFID Bangladesh

Ms. Shahnila Azher is the Team Leader of Growth & Private Sector Development Team in DFID Bangladesh and is responsible for overseeing a portfolio of £140 million. She has worked in DFID for the last 8 years, specializing particularly in financial sector, market development and investment climate programs. She has an MBA degree from Columbia University in New York.

Dr. Toufic Ahmad Choudhury
Director General
Bangladesh Institute of Bank Management (BIBM)

Dr. Toufic Ahmad Choudhury is the Director General (DG) of Bangladesh Institute of Bank Management (BIBM). He graduated in Economics from Jahangirnagar University in 1979 and joined the Planning Academy in the same year. He joined BIBM as Lecturer in 1981. He obtained his PhD in Financial Economics from Himachal Pradesh University, Shimla in 1990. He is the General Secretary of Bangladesh Economic Association. He has to his credit more than 50 published research articles in professional journals.

Professor Hironori Hamanaka
Chair, Board of Directors
Institute for Global Environmental Strategies (IGES), Japan

Professor Hironori Hamanaka is the Chair of IGES Board of Directors. When he took up his current position at IGES, he was teaching at Keio University as a Professor, and previously served as the Vice-Minister for Global Environmental Affairs as well as other important positions at the Ministry of the Environment. While serving with the Government of Japan, he devoted his administrative career to intergovernmental negotiations in areas including: the Kyoto Protocol and its implementing rules; major agreements in the field of sustainable development, such as the Johannesburg Plan of Implementation agreed at the World Summit on Sustainable Development in 2002; and the development of national policies to implement international agreements, most notably the Kyoto Protocol. Based on his professional career, he served as a Co-chair of the Compliance Committee under the Kyoto Protocol and the Chair of its Facilitative Branch from 2006 to 2008. He gained a B.A. in Engineering from the University of Tokyo in 1967.

Mr. Khandakar Muzharul Haque
Executive Vice-Chairman
Microcredit Regulatory Authority (MRA)

Mr. Khandakar Muzharul Haque is the Executive Vice Chairman of Microcredit Regulatory Authority (MRA), the national regulator for the microfinance sector of the country, since 2010. A career central banker, Mr. Haque was the Executive Director of Bangladesh Bank prior to his present appointment, a position which he held from January 2002 to December 2009. As the Executive Director of Bangladesh Bank his portfolio included Credit Information Bureau (CIB), Foreign Exchange, Govt. Debt Management, Bank Inspection, Anti Money Laundering, Financial Institutions, Currency Management & Payment Systems etc. During this time he also acted as member secretary of the National Steering Committee constituted by the Govt. for Microfinance sector. A Master degree obtained from the University of Dhaka Mr. Haque also studied Banking and Finance at the Economic Institute, Boulders, Colorado, U.S.A.

Dr. Mahfuz Kabir
Senior Research Fellow
Bangladesh Institute of International and Strategic Studies (BIISS)

Dr. Mahfuz Kabir is currently a Senior Research Fellow at Bangladesh Institute of International and Strategic Studies (BIISS), Dhaka. He is a part-time faculty at Institute of Business Administration at Jahangirnagar University and Institute of Disaster Management and Vulnerability Studies at University of Dhaka. He holds PhD in Economics from School of Economics and Finance, Curtin University, Australia. He was a key researcher of External Sector and National Security components of background studies of the Sixth Five Year Plan (2011-2015) of the Government of Bangladesh. His areas of contribution and interest include international trade and regional integration, budget, microfinance, disaster and climate change, household survey, time series and panel data econometrics, stochastic frontier analysis, partial and computable general equilibrium modeling. He is also a columnist in top national dailies in Bangladesh.

Mr. Md. Fazlul Kader
Deputy Managing Director
Palli Karma-Sahayak Foundation (PKSF)

Mr. Md. Fazlul Kader is the Deputy Managing Director (Operations) of Palli Karma-Sahayak Foundation (PKSF). He has been working in PKSF for the last 13 years. He did his B.S.S. (Honors in Economics) from University of Dhaka in 1986 and MBA (Major in Finance) from Institute of Business Administration (IBA), University of Dhaka in 1988. In 2000, he received a training on Financial Institutions for Private Enterprise Development from the Harvard University, USA. Mr. Kader has keen interests in formulating policies related with employment generation and disaster management through microfinance and micro-insurance programs. He played a lead role in formulating 'Community Based Climate Change Project' under 'Bangladesh Climate Change Resilience Fund' and the World Bank. He has experience working in Pakistan, India, Sri Lanka, Saudi Arabia, Bahrain, Jordan, Morocco, South Africa, and Zimbabwe as microfinance consultant.

Mr. Md. Abdul Karim
Managing Director
Palli Karma-Sahayak Foundation (PKSF)

Mr. Md. Abdul Karim, the former Principal Secretary to the Government of the People`s Republic of Bangladesh, is the Managing Director of PKSF. Earlier Mr. Karim served as the Secretary in Ministry of Fisheries and Livestock, Ministry of Commerce, Ministry of Home Affairs, and Bridges Division of the Ministry of Communications. He served as the Secretary of Internal Resource Division and Chairman of National Board

of Revenue. He also served as the Economic Counselor of Bangladesh Embassy in Belgium. He obtained his Master of Science degree in Chemistry from University of Chittagong, Bangladesh in 1974. Later, he obtained a Postgraduate Diploma and Master of Social Science degree in Development Administration from the University of Birmingham, UK. He took part in many professional training programs in home and abroad. Presently, he is the President of Bangladesh Scouts and Bangladesh Table Tennis Federation. Besides, he is involved with many other organizations.

Dr. Rezaul Karim
Environment Specialist and
Vice Chairman, Bangladesh Unnayan Parishad (BUP)

Dr. Rezaul Karim did his Ph.D. in Civil Engineering (Hydrology) from the Colorado State University, Colorado, USA in 1968 and Master of Engineering in Hydraulics, Asian Institute of Technology (AIT), Bangkok, Thailand in 1965. He did his B.Sc. in Civil Engineering from BUET in 1961. He worked with the World Meteorological Organization in Geneva as a Project Manager for establishing flood forecasting and warning system in Bangladesh. Among other institutions, he worked with United Nations ESCAP in Bangkok as the Chief of the Environment Unit and with United Nations Convention to Combat Desertification at Bonn, Germany as the Coordinator for Asia Unit. He was also involved with Harvard University Centre for Population Studies, Cambridge, Massachusetts, USA as a Research Associate and with Hydro-Quebec in Montreal, Canada as water resources and environment expert. He also worked in different private sector consulting organizations in Canada and the United States, and water resources planning in EPWAPDA. Presently, he is involved with the climate change negotiating team of Bangladesh.

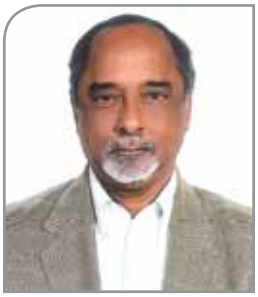
Mr. Khondkar Ibrahim Khaled
Former Chairman, Bangladesh Krishi Bank
Former Deputy Governor, Bangladesh Bank

Khondkar Ibrahim Khaled is the Chairman of Bangladesh Krishi Bank. He secured M.B.A. degree from the Institute of Business Administration (IBA), University of Dhaka. He has a very admirable career in both commercial and central banking sector which began in 1963 and was stretched over 35 years. He served as the Managing Director of Bangladesh Krishi Bank from 1994 to 1995, Agrani Bank in 1996, Sonali Bank in 1997 and Pubali Bank Limited from 2000 to 2006. From 1998-2000 he served in Bangladesh Bank as its Deputy Governor. He was the first General Manager (Operation) of PKSF. He was the first Faculty Member of Bangladesh Institute of Bank Management (BIBM). He was awarded 'Khan Bahadur Ahsanullah Gold Medal in 2009', 'Mercantile Bank Award in 2012', 'Khan Bahadur Nawab Ali Choudhury National

Award in 2013', and 'Special Award of Bishya Kabita Parishad'. He is the Honorable Fellow of Bangla Academy, Fellow of Institute of Bankers, Bangladesh, Emeritus Fellow of Shamunnoy, Life Member of Bangladesh Economic Association, and Asiatic Societies of Bangladesh. He was the Chairman of Trade Union Reform Committee (1997) and Chairman of Stock Market Investigation Commission of 2011. He has been engaged in different professional organizations as Chairman, member of Board of Directors and member of the Governing Body. He has many research works and publications. He is also a regular column writer in different financial papers and journals.

Md. Abdul Khaleque
Lecturer, Department of Development Studies
University of Dhaka

Mr. Md. Abdul Khaleque is the lecturer of Department of Development Studies of University of Dhaka. He was Senior Research Associate at Institute of Microfinance (InM) up to July, 2013. He has completed his B.S.S (Honors) and M.S.S in Economics from University of Dhaka. Since the inception of his career, he played crucial role in evaluating various programs in microfinance sector of Bangladesh. Currently he is associated with three important research projects of InM – PRIME (Programme Initiatives for Monga Eradication), Access to Financial Services; and Assessing Risks, resilience, and adaptation strategies in Chittagong Hill Tracts in the lens of Microfinance. He has contributed in the research on social safety nets, role of microfinance on self-employment creation, role of MRA in reducing cost efficiency of microfinance sector in Bangladesh, and many more. Broadly, his research interests include various development issues, impact evaluation, enterprise development and their constraints, and so on.



Professor M. A. Baqui Khalily
Executive Director
Institute of Microfinance (InM)

Professor M. A. Baqui Khalily is the first regular Executive Director (ED) of the Institute of Microfinance (InM) from November 2006 to January 2010 and he recommenced as its ED on 1 October 2012. He retired as Professor from the Department of Finance, University of Dhaka on 30 September 2012 after working there for 37 years. He was the Chairman of the Department of Finance, University of Dhaka during 2000–2003. He has keen interest in corporate governance and is the current Chairman of the 'Center for Corporate Governance and Finance Studies' at the University of Dhaka. Besides, he was the Director of Dhaka Stock Exchange for the period 2000–2009. He was also the Pro-Vice Chancellor and the Acting Vice Chancellor of Presidency University from July 2004 to September 2005. He was the Visiting Scholar in the

Department of Agricultural Economics and Rural Sociology of the Ohio State University during December 1993–January 1994. He is renowned nationally and internationally for his expertise and knowledge in rural finance, particularly in microfinance. His current research interest areas are: Rural Credit Market, Sustainability and Regulation of Microfinance Institutions, Impact Assessment and Micro Enterprise Development.

Dr. Muhammad Abdul Latif
Director (Research and Knowledge Management)
Institute of Microfinance (InM)

Dr. Muhammad Abdul Latif is the Research Director at the Institute of Microfinance (InM). He worked as Research Fellow in the Industry and Physical Infrastructure Division at the Bangladesh Institute of Development Studies (BIDS). He was previously a Lecturer in the Department of Economics, university of Dhaka in 1975. He obtained his B.A. (Hons) and M.A. degrees in Economics from the same University in 1973 and 1974 respectively, his M.Sc. degree from the London School of Economics and Political Science, London in 1976, and his Ph.D. degree from Jawaharlal Nehru University, New Delhi in 1986. He has worked as a consultant for such agencies/organizations as ADB, BRAC, Tariff Commission, UNDP, USAID, ILO, and the World Bank. He has more than a dozen publications including BIDS Research Monographs, Research Reports, and Journal Articles of international standard.

Dr. Mihir Kanti Majumder
Retired Secretary, GoB
Member, General Body
Palli Karma-Sahayak Foundation (PKSF)

Dr. Mihir Kanti Majumder, a retired Civil Servant, served the Government in different capacities in the Ministry as well as in the Field Administration. Prior to his retirement he worked in Rural Development and Cooperative Division, Ministry of LGRD & Cooperatives, Ministry of Environment and Forest and IMED, Ministry of Planning as Secretary. He got the opportunity to promote Microsavings and Microfinance activities through cooperatives including the cooperatives of “Ekti Bari Ekti Khamar” Project. He has initiated developing cooperatives to conserve Forest, Haor and Natural Resource which has created much enthusiasm among community people. Dr Majumder is associated with different social organizations including the Scout Movement. He has been awarded “Silver Tiger”, the Highest Award of Bangladesh Scouts and “Silver Hawk”, the Highest Award of Scout Association of Japan for promoting Community Development, Environment and Health through Scouting. Dr. Majumder is now working in IUCN (International Union for Conservation of Nature) as an Adviser.

Professor Dr. M. A. Sattar Mandal
Former Member
Agriculture, Water Resources & Rural Institutions Division, Planning Commission and
Former Vice-Chancellor
Bangladesh Agricultural University, Mymensingh

Professor Dr. M. A. Sattar Mandal is the former Member of the Agriculture, Water Resources & Rural Institutions Division of the Bangladesh Planning Commission. Prior to his joining the Planning Commission for the second time, Professor Mandal served as the Vice-Chancellor of Bangladesh Agricultural University, Mymensingh, where he has been teaching since 1973. An internationally reputed agricultural economist, Professor Mandal had his education at BAU, University of London and Oxford. He worked as a Visiting Professor in many universities abroad and also represented Bangladesh in numerous international academic and policy fora. Professor Mandal contributed as a lead expert to the preparation of important national policy documents including Economics of Jute Production (2010), Bangladesh Country Position Paper on Food Security for the SAARC Region (2007), Synthesis of Agricultural Policies (2006), Bangladesh Fishery Research Vision-2015 (2006), Poverty Reduction Strategy Paper (2005), National Agriculture Policy (1999), Flood Action Plan 12 & 13 (1991), and Agricultural Sector Review (1988). He worked in many national and international committees in various capacities. He has to his credit a large number of published papers, books, and monographs.

Amit Mittal
Analyst (Asia and the Pacific)
MIX Market

As a seasoned analyst for the South Asia Region, Mr. Amit Mittal is responsible for collecting data, managing relationships, and producing market intelligence on the microfinance sector, primarily for India and Bangladesh. He oversees the quality and timeliness of MIX's social and financial performance datasets, and is helping to spearhead the India Microfinance Platform and the India Map of Financial Inclusion, two online business information platforms. He leads the production of fresh, relevant analysis for Bangladesh and India, ensuring timely, accurate data is available to users of MIX Market. He liaises closely with MIX regional partners, MFIN, ACCESS and SIDBI. He comes to MIX with experience from Thomson Reuters as a market analyst and the State Bank of India in credit appraisal. He is a University Rank holder in his Bachelor's and is recipient of MBA in finance. Mr. Mittal speaks Bihari, Hindi, English and Bengali.

Mr. Abul Maal Abdul Muhith
Honorable Finance Minister
Ministry of Finance, Government of People's Republic of Bangladesh

The Honorable Finance Minister Mr. Abul Maal Abdul Muhith, is a renowned economist, diplomat, freedom fighter, and language veteran, was born in a respected Muslim family of Sylhet in 1934. He was very brilliant throughout his student life. He secured first place in Intermediate examination in the province in 1951 from Sylhet MC College. He stood first class first in B.A. (Hons.) in English Literature in 1954 from Dhaka University and passed his M.A. with credit from the same university in 1955. During his service period, he studied in Oxford University in 1957-58 and received MPA degree from Harvard University in 1964. Mr. Muhith has earned outstanding reputation in economic diplomacy. He has been a recognized figure in World Bank, IMF, IDB, and acted as consultant in different UN organizations and Ford Foundation, IFAD and other organizations. He became Finance and Planning Minister from March 1982 to December 1983. He took oath as the Finance Minister of Bangladesh Government for second time on 6 January 2009. He was a Visiting Fellow of W. Wilson School at Princeton University in 1984 and 1985. He is a pioneer of Bangladesh Environment Movement and was also the founder President of BAPA as well as its predecessor Porosh.

Professor Dr. A. K. M. Nurun Nabi
Vice Chancellor, Begum Rokeya University

Dr. A. K. M Nurun Nabi, a Canadian Commonwealth Scholar and former Professors of Sociology and Population Sciences of University of Dhaka, is currently the Vice-Chancellor of Begum Rokeya University, Rangpur. He has an outstanding academic background and has demonstrated his abilities in scholarship, research, administration and leadership with prudence. After earning his Honours and Master Degree in Sociology, and a second Master Degree in Demography from the University of Dhaka. Prof. Nabi has obtained his PhD Degree in Demography form the University of Alberta, Canada, under the Canadian Commonwealth Scholarship. Prof. Nabi has published and co-edited books with National and International Scholars and authored a large number of research articles in reputed National and International Journals and books. He has organized, participated and presented researches in numerous workshops, seminars, conferences, and learned society meetings held in different countries of the world. In addition to being the Member of Bangladesh National Population Council, Member of the Governing and General Bodies of the Palli Karma Shahayak Foundation (PKSF) and Institute of Microfinance (InM), he holds positions in many professional bodies. Prof. Nabi has conducted independent researches and served as a consultant in many projects and agencies such as UNICEF, UNFPA, UNDP, USAID, DANIDA, Population Council, EngenderHealth, HelpAge International, Partnership in Population and Development (PPD), JSI/ DELIVER Bangladesh, Planning Commission, and different Ministries of the Government of Bangladesh. The monumental work done for the Nation, by Prof. Nabi, is the creation of the Department of Population Sciences at the University of Dhaka in 1998.

Professor Dr. Ainun Nishat
Vice Chancellor, BRAC University

Professor Dr. Ainun Nishat is the Vice Chancellor of BRAC University, Dhaka, Bangladesh since July 2010. He was the Country Representative of IUCN, International Union for Conservation of Nature in Bangladesh from 1998-2009 and Senior Advisor on Climate Change for the Asia Region of IUCN till June 2010. Earlier, Dr. Nishat worked as an academic with Bangladesh University of Engineering and Technology (1972-1998) and was a Professor of Water Resources Engineering. He has guided over 50 theses at doctoral and masters level. He has to his credit a huge number of books, proceedings, research papers and technical reports. He has been working as a catalyst, advocate, educator and facilitator, championing the wise use of natural resources and sustainable development in Bangladesh for decades. His arena of work and interests include water resource development and management, environment management, biodiversity conservation, coastal zone and wetland conservation and management, disaster management, adaptation to climate change and climate variability and related policy advocacy.

Professor S. R. Osmani
Department of Economics, University of Ulster, UK

S. R. Osmani is Professor of Economics at the University of Ulster, United Kingdom and a Visiting Scholar at the Institute of Microfinance (InM) in Dhaka. He obtained PhD in economics from the London School of Economics and then worked at the Bangladesh Institute of Development Studies (BIDS), Dhaka and at the World Institute for Development Economics Research, Helsinki before joining the University of Ulster. He is currently the editor of the Journal of Human Development and Capabilities. He has published widely on issues related to poverty, inequality, hunger, famine, nutrition, rights-based approach to development, and development problems in general.

Dr. Atiur Rahman
Governor, Bangladesh Bank

Dr. Atiur Rahman is a renowned economist in his varied roles as a University Professor, researcher, banker and a leader in pro-poor, environment-friendly and gender-sensitive development paradigm. He took the helm of the Central Bank of Bangladesh for four year tenure on May 1, 2009 as the 10th Governor of Bangladesh Bank, which has been extended for another term up to 2nd August, 2016. Prior to this, he was a Professor of Economics in the Department of Development Studies (2006-2009), University of Dhaka, and Chairman of the Board of Trustees of Shamunnay, a centre for excellence in development research in Bangladesh. He also served as the Chairman of the Board of Directors of Unnayan Shamannay, a non-profit organization for research, development and cultural learning. His previous roles also include Director of Sonali Bank, the largest commercial bank in Bangladesh,

Chairman of the Board of Directors of Janata Bank, the second largest commercial bank in the country and a long tenure as a Senior Research Fellow at the Bangladesh Institute of Development Studies (BIDS). He conducted various research works on economic development and published extensively on the micro-finance revolution in Bangladesh. For many years, Dr. Rahman also steered the Credit Development Forum (CDF) in Bangladesh as Chairman. He has been a known public face advocating for more humane development including pro-poor participatory budgeting. He is considered an authority on matters related to the fiscal budget in Bangladesh.

Dr. Rushidan Islam Rahman
Research Director, Bangladesh Institute of Development Studies (BIDS)

Dr. Rushidan Islam Rahman obtained her M.A. in Development Economics from the University of Sussex and Ph.D. from the Australian National University. Currently she is holding the position of Research Director of BIDS. She has published a large number of books, research monographs and articles in national and international journals and edited volumes. Her research interests include education, unemployment and labor market, poverty, food security, rural non-farm activities and microfinance. She has produces background papers and working papers for the World Bank, ILO, UN-ESCAP and ADB. Her important publication include: Poverty Alleviation and Empowerment through Microfinance: Two Decades of Experience in Bangladesh (RM, BIDS); Labor Market in Bangladesh: Changes, Inequities and Challenges; Employment Route to Poverty Reduction in Bangladesh (Discussion Paper, ILO). She has been involved as member of many national policy making bodies and advisory committees.

Professor Mamun Rashid
Banker and Economic Analyst
Vice Chairman, Financial Excellence Ltd (FinExcel)

Professor Mamun Rashid has all round knowledge about the wholesale banking that includes Treasury, Global Markets, Corporate Banking, Commercial Banking, Investment Banking, Financial Institutions, and Public Sector Financing. He also has proven expertise in corporate re-structuring, re-engineering, and in risk management. He has done macro audits, portfolio reviews in several countries in Asia, Europe, and Africa. He has been teaching in various business for last 20 years as an adjunct faculty, adjunct professor and full time professor. He authored 7 books on contemporary business and economic issues. His interests lie with entrepreneurship in financial sector including capital markets, life insurance, SME and infra-structure financing and pharmaceuticals. Presently he is the Chairman of the Audit committee at Asia Pacific General Insurance Co Ltd. and the Banking Commission at the International Chamber of Commerce Bangladesh. He is also the Vice Chairman of BD Venture Limited and Financial Excellence Limited. He is also the Board Member of several merchant bank, general insurance, micro-credit and health sector NGOs.

Dr. Zaidi Sattar
Chairman
Policy Research Institute (PRI)

Dr. Zaidi Sattar started his career as a Lecturer in Economics, Dhaka University in 1968. He joined the Civil Service of Pakistan in 1969 and served in various positions in the districts and the Ministries of Bangladesh since 1971. After completing his Ph.D. in Economics from Boston University in 1984 he taught at the Catholic University of America, Washington D.C., in the Department of Economics and Business until 1992. He served as World Bank Advisor on tariffs and customs reform at the National Board of Revenue (1992-95) and later as UNDP consultant Macroeconomist at the Planning Commission (1995-96). He joined the World Bank in 1996 as Senior Economist, South Asia Region, where he served until September 2007. He was the Vice-Chancellor of the Millennium University, Dhaka from October 2007 to December 2008. He has around 40 publications in international and national journals and numerous papers presented on trade policy, private sector development, and growth issues at national and international conferences. He is recognized as a leading expert on trade policy issues in Bangladesh. He is the founder Chairman of the Policy Research Institute (PRI) and member, Board of Directors of Southeast Bank Ltd., Industrial and Infrastructure Development Finance Company (IIDFC), Venture Investment Partners Bangladesh Ltd. (VIPB), Asia Insurance Ltd., and Chittagong Stock Exchange Ltd. He is a life member of Bangladesh Economic Association.

Dr. Henry Scheyvens
Director, Natural Resources Management Group
Institute for Global Environmental Strategies (IGES)

Dr. Henry Scheyvens completed his Doctorate in Political Science at Monash University, and has served at IGES since 2004. He is the Director of the Natural Resources Management Group. At IGES, he is leading research on initiatives to mitigate climate change through sustainable forest management and he has also launched a research project on the links between climate change adaptation and microfinance. Poverty alleviation and community rights are common concerns in his approach to these research topics.

Dr. Quazi Shahabuddin
Professorial Fellow and Former Director General
Bangladesh Institute of Development Studies (BIDS)

Dr. Quazi Shahabuddin obtained his M.A. in Economics from Dhaka University in 1967, M.Sc. at the London School of Economics in 1975, and PhD from McMaster University in 1982. He conducted extensive research in the fields of growth performance and risk management in agriculture, management of water resources, food policy analysis and chronic poverty in Bangladesh. He published extensively in various national and international economic journals, contributed to edited volumes, and co-edited several books. Dr. Shahabuddin served as the Director General of BIDS from January 2003 to March 2009. He is currently a Professorial Fellow in the Institute.

Dr. Iffath Sharif
Senior Economist
The World Bank

Dr. Iffath Sharif is a Senior Economist who has been working with the World Bank Head Quarters in Washington DC in the South Asia Social Protection Unit since 2008. She has worked primarily on Sri Lanka, Nepal and Bangladesh. Prior to joining the World Bank, Dr. Sharif taught Econometrics and Economics of Microfinance at the Department of Economics, North South University. She also worked for the Centre for Policy Dialogue as a visiting fellow and the microfinance NGO, Proshika. Her work with Proshika led to the publication of two books, "Who Needs Credit? Poverty and Microfinance in Bangladesh" and "Challenges of Second Generation Microfinance: Regulation, Supervision and Resource Mobilization," published by Zed Books UK and University Press Ltd. Her work on the evaluation of a microfinance and safety net program in Sri Lanka was published in the Journal of Development Economics. Dr. Sharif has a Masters in Economics and Public Policy from Princeton University and a PhD in Development Economics from the London School of Economics.

Ms. Pauline Tamesis
Country Director
UNDP Bangladesh

Ms. Tamesis is currently serving as Country Director, UNDP Bangladesh, since February 2013. She has 21 years in international development assistance, with 19 years of diverse experience in policy advisory and management, capacity development, partnership building, resource mobilization, human resources and financial management, and knowledge networking. Her overall thematic expertise is in democratic governance, with specialization in political analysis, accountability, transparency, anti-corruption, civil society engagement, gender and women's political empowerment. Prior to arriving in Bangladesh, Pauline was the regional Democratic Governance Practice Leader for the UNDP Asia Pacific Regional Center (2008-2013), in which capacity she provided overall policy advisory services to over 35 UNDP country offices in Asia and the Pacific. Her previous assignments include, from 2006-2008, serving as Democratic Governance Practice Manager of the Bureau for Development Policy in UNDP Headquarters. She also served as the Policy Adviser on Anti-Corruption, Accountability and Transparency of the UNDP Bureau for Development Policy/Democratic Governance Group in New York. For almost a decade, she has led UNDP's efforts in providing policy and technical advise to partner countries in developing capacity to strengthen accountability and transparency in governance, as well as fight corruption. Pauline holds an MBA (1991) from Georgetown University in Washington, D.C., and her background also includes work with management of public financial institutions and investment banking in the Philippines.

Dr. Takao Toda
Chief Representative
JICA Bangladesh

Dr. Takao Toda did his LL.B. in Kyoto University, Master's degree in the Graduate School of Frontier Science of Tokyo University, and PhD in the Graduate School of International Development of Nagoya University in Japan. He started his professional career in JICA (Japan International Cooperation Agency) since 1984. Now he has been committing himself to the betterment of people of Bangladesh as well as to the socio-economic development of this country with his affluent experience as an aid practitioner. Both his academic insight and his empirical wisdom originated his first-hand experience working with people and stakeholders in various developing countries to resonate each other to play a leading role as Chief Representative of JICA Bangladesh. His action principle as a professional is principally based on the concept of Human Security, whose major framework consists of protecting people and empowering people, always putting "people" in the centre of various development issues. He regards Bangladesh as a marvelously complex country both with enormous challenges and opportunities, He believes that Bangladesh and Japan have a common ethos and that there are plenty of rooms for both to learn and support each other.

Dr. Jashim Uddin
Deputy Managing Director
Palli Karma-Sahayak Foundation (PKSF)

Dr. Jashim Uddin is the Deputy Managing Director (Admin. & Finance) of Palli Karma-Sahayak Foundation (PKSF). He obtained his PhD degree in Economics from Moscow Management Institute, Moscow, USSR in 1990. He did M.Sc. in Mechanical Engineering from People's Friendship University, Moscow, USSR, in 1987. He worked as a Bangladesh counterpart and local Microcredit Consultant with Uzbek study team in Dhaka, Bangladesh sponsored by ILO, Dhaka. He also worked as a member of project formulation mission on Capacity Enhancement of PKSF and its Partner Organizations and worked as a Microfinance System Advisor for establishing South Africa Microfinance Apex Fund (SAMAF) in South Africa, sponsored by UNDP. He is the Life Member of Bangladesh Economic Association (BEA) and Bangladesh Project Management Institute (BPMI).

Professor Md Abdul Wadud
Department of Economics
Rajshahi University

Professor Md Abdul Wadud teaches in the Department of Economics at Rajshahi University. He obtained first classes with first positions in both B.S.S. (Honours) and M.S.S. in Economics Examinations from the Rajshahi University. In 1999 he obtained a PhD from the University of Newcastle upon Tyne, United Kingdom in Economics. He is experienced in the use of advanced qualitative and quantitative research methodologies. He has to his credit a wide range of research works and papers that have been published in Applied Economics, Journal of Developing Areas, Indian Economic Review, Pakistan Journal of Applied Economics, Journal of Bangladesh Studies (USA), Economics Bulletin (USA), Bangladesh Economic Studies, The Empirical Economics Letters, Journal of the Institute of Bangladesh Studies, Bangladesh Journal of Political Economy, etc. He has been serving as the Managing Editor of The Empirical Economics Letters, a monthly international journal of economics, since 2002. His main research interests include, agricultural economics, microcredit and food security, inclusive growth and development, efficiency and productivity analysis, microeconometrics, and time series economics. He led many research projects funded by RDRS, DFID, SANDEE, IFC, Institute of Microfinance and The World Bank. He presented research papers in various national and international conferences and workshops at home and abroad. He is a member of various national and international professional associations of economics.

Dr. Hassan Zaman
Chief Economist
Bangladesh Bank

Dr. Hassan Zaman is the Chief Economist of Bangladesh Bank (Central Bank of Bangladesh). Prior to this role he worked as a Senior Advisor to the Governor. He is part of the Senior Management team, has overall responsibility for analytical work at the Central Bank and close involvement with monetary policy issues. Before joining Bangladesh Bank he worked at the World Bank for 13 years in various capacities, starting as a Young Professional in 1998 and most recently as a Lead Economist in Washington DC. Prior to joining the World Bank, Hassan worked for BRAC in Bangladesh for three years. He has numerous publications in peer reviewed journals and contributions to books on various issues related to economic development. He has a PhD in Economics from the University of Sussex and an MSc and BSc in Economics from the London School of Economics.

ACCESS TO FINANCIAL SERVICES IN BANGLADESH

(Abridged version)

M. A. Baqui Khalily; M. A. Khaleque[1]

Bangladesh is one of the leading countries in South Asia that has higher intensity of access to financial services. MFIs have played a key role in such spectacular achievement for its characteristics and functional approach. Banks provide large loans and MFIs provide small loans. Informal finance continues to play a dominating role. In order to expand financial inclusion, partnership between MFIs and banks will be one of the significant steps.

Introduction

There are two reasons for recent interest in access to financial services. First, there is a strong causality between economic growth and access to finance. Second, access to finance creates opportunities for the enterprising potential borrowers. In the former case, strategic emphasis is placed upon mobilization of financial resources for on-lending to the potential borrowers through intermediation. In the later case, policy hindrances are removed to expand financial services to those who demand for financial services. This is well documented in the literature that finance matters in development. This is true for both macro and micro level development. The research of past forty years amply demonstrates that finance influences growth and development through financial market and capital market (Beck, Levine, and Loayza 2000; Levine 2005). A poor financial system restricts mobilization and uses of resources. Therefore, a developed and efficient financial system is a necessary condition for growth and development (Gurley and Shaw 1955, Patrick 1966, McKinnon 1973, Shaw 1973). A financial system that creates opportunities for all savers to save with financial institutions and for all potential borrowers to borrow for investment purposes is termed as developed financial system. Expansion of banking network and financial service is one of the indicators of developed and efficient financial system. An efficient financial system is one where transaction cost of lending and borrowing converges. The wider the banking network, lower is the transaction cost of saving with and borrowing from banks.

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[1] We wanted to provide a short summary of the paper for inclusion in the Conference Brochure. Given the nature of information and its wider implications, we decided to prepare an abridged version without any technical details. It was not easy as the main report was large. This paper is drawn from our main report. Thanks to Dr. Meherun Ahmed, Dr. Sayema H. Bidisha, Farhanaz Sharmin and M. Rajib-Ur-Rahman for their contribution to the preparation of the study report. We deeply acknowledge the contribution of Dr. S. R. Osmani, Visiting Fellow at The Institute of Microfinance in conducting the study effectively. He guided us in designing, and provided intellectual inputs whenever we needed. Dr. Shahidur R. Khandker, Lead Economist at The World Bank, provided intellectual inputs in designing the questionnaire and conceptualization of the study. We are grateful to him. Dr. Rashid Faruqee, Visiting Fellow and Research Advisor at the InM has shown keen interest in the study. His motivation, guidance and intellectual advice made us conducting the study effectively. We are grateful to him. The management of InM, in particular Dr. Md. Mosleh Uddin Sadeque, Director (Training and Operations) and Dr. M. A. Latif, Director (Research & KnM) extended their hands of cooperation which made our life simple. We deeply acknowledge their support.

We express our deepest thanks to Dr. Wahiduddin Mahmud, former Chairman, InM, for his intellectual advice. We also express our heartiest thank to Dr. Quazi Mesbahuddin Ahmed, ex-Managing Director, PKSF, for his inputs and comments during the early stage of this study. We are grateful to the participants, at the InM seminar on the project, for their comments. As a Team Leader, I take this privilege to recognize their contribution. Our research associates, in particular Shishir and Rajib, contributed enormously. Their inputs cannot be forgotten. Under pressure, they have worked with patience and high degree of commitment.

Finally, this study was conducted with financial support under PROSPER Program of DFID through the Institute of Microfinance (InM). We express our gratitude to Ms. Shahnila Azher, Senior Policy Advisor, DFID and Dr. Reaz Islam, International Team Leader, PROSPER, DFID, for their support.

A developed financial system can ensure higher access to financial services. Effects are found in economic growth, income redistribution, up-scaling of firms, poverty alleviation, and diversification of economic activities and innovation in production technology. This is well stated in the World Bank Development Report 2000-01 of the World Bank. To quote:

"Access to financial markets is important for poor people. Like all economic agents, low-income households and micro enterprises can benefit from credit, savings, and insurance services. Such services help to manage risk and to smooth consumption … and allow people to take advantage of profitable business opportunities and increase their earnings potential."

"But financial markets, because of their special features, often serve poor people badly.… Since poor people often have insufficient traditional forms of collateral (such as physical assets) to offer, they are often excluded from traditional financial markets.… Transaction costs are often high relative to the small loans typically demanded by poor people. And in areas where population density is low, physical access to banking services can be very difficult", (World Development Report, 2000-2001).

In Bangladesh, until micro finance institutions expanded its network and provided financial services, financial deepening was low, outreach of banks was limited, scope of lending was also limited because of limited outreach and significant portion of population, institutions and firms were left out of the financial services. With the emergence of micro finance institutions, financial deepening has increased. Rural financial markets are stronger than before. Urban financial markets feature high concentration of formal banks and institutions.

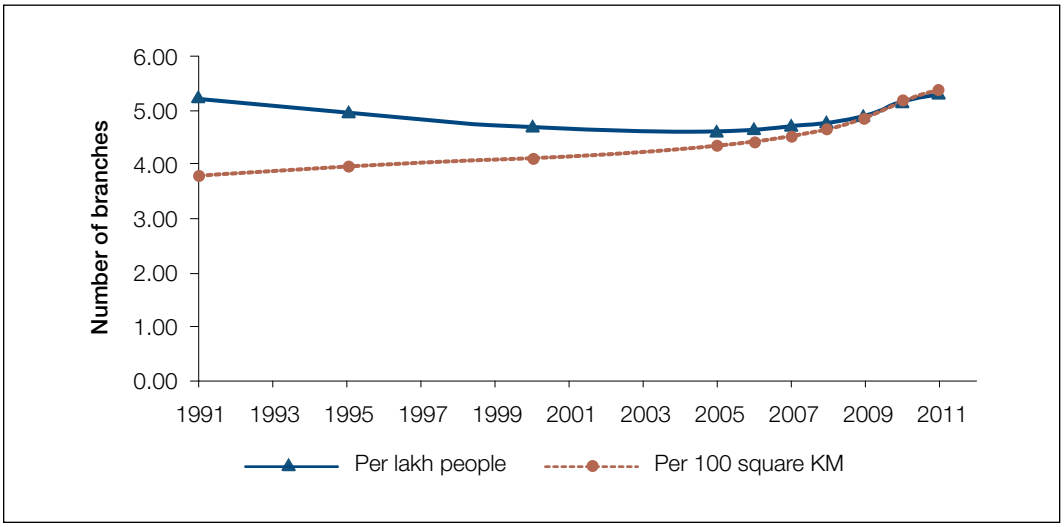
The Bangladesh banking sector comprises of 52 banks including 30 private commercial banks (PCBs), four nationalized commercial banks (NCBs), four specialized development banks (SDBs), nine foreign commercial banks (FCBs) and seven sariah based commercial banks (SCBs) with a branch network of 7,961 branches by the end of 2011. Although during the past 20 years, the number of branches has increased substantially from 5642 in 1991 to 7961 in 2011, the share of rural bank branches in total has essentially decreased systematically although the number of rural bank branches increased from 3717 in 1991 to 4551 in 2011. It is largely due to higher growth in the urban bank branches. Relative stagnancy or marginal increase in the number of branches per 100 square kilometer suggests that access to bank financial services has been limited. It is particularly true for the rural households (Figure-1).

Quasi-formal financial institutions (micro finance institutions) have emerged because of the failure of formal market to provide financial services to the poor and low income households. One of the reasons that the poor HHs could not access formal credit was lack of collateral. The production technology of micro finance institutions enables the poor HHs and individuals to access collateral free micro credit. Small amount of credit, other things remaining same, can create opportunities for the poor HHs, and contribute to gradually move out of poverty.

Microfinance sector in Bangladesh has grown over time in outreach. Outreach includes number of MFIs-NGOs, branches and active members. Until 2006, the MFIs had no regulatory framework. In 2006, the GoB established Microcredit regulatory authority (MRA) to bring the MFI operations under their net. By the end of 2012, over 639 MFIs were granted licenses. Based on the reported information of the MFIs, by the end of 2011, the sector had some 695 MFIs operating with a network of over 17,800 branches and some 33.06 million members. But such number has to be used with caution because of inclusion of overlapping and drop-out members. Khalily and Faridi

(2011) estimated overlapping memberships to be around 42 percent. If adjusted for overlapping rate, it is presumed that actual unique individual number of members will not exceed 20 million.

Figure 1: Depth of bank branches, 1991-2011



Source: Different publications of Bangladesh Bank.

The analysis of aggregate financial statistics of formal and micro finance sector from the perspective of accessibility suggest that during the past 20 years, both operating and financial outreach have increased. Banks are more concentrated in urban areas in terms of loans disbursement. But micro finance sector has wider outreach in rural areas. If we assume that most of the loans disbursed by the MFIs are rural, then aggregate rural loans advances or disbursements have expanded enormously. But it is largely due to micro credit.

Households do not only have access to formal and quasi-formal credit market only; they also have access to informal credit market. Informal credit market continues to exist despite wide expansion of formal and quasi-formal market network. It exists because of some unique features and product diversification. We have always looked at informal finance from the perspective of exploitation, but have never positively examined its role in development and expanding financial services (Rahman 1992).

Several studies were conducted during the period 1986-2001. The Rahman's study estimated it to be 41.5 percent of the households, and it was estimated at around 46 percent of the farm households (Khalily et. al. 2002). Over forty percent of the households borrow from informal credit market. The study by Hossain and Bayes (2008) reports a decline in the percentage of households having access to informal credit.

Considering the earlier evidences, we can perhaps suggest that the informal credit market has significant presence in both rural and urban areas in Bangladesh. These findings may not hold for several reasons in 2010 when the present national survey was conducted: first, neither of the earlier studies including the Rahman's study was a national survey; second, after 1986, the micro finance network has expanded enormously in the country. We expect the size of informal credit to be lower. This is an issue that we intend to examine in the later part of the paper.

Table 1: Sources of Credit to Rural Households

Sources	Hossain (1988)	Rahman (1992)[1]	Khalily (1995)[2]	Khalily (2002)[3]	Hossain (2008)
Formal Sources	12.8	13.4	25.03	38.21	38.2
Informal sources	31.5	41.5	30.18	46.28	9.5
Non-borrowing households (%)	55.7	36.3	51.8	27.05	55.2

Source: 1. Based on the households surveyed in three areas – Bogra, Noakhali and Barisal.
2. Based on the households surveyed in 70 villages of six districts in 1995.
3. Based on the number of farm households in Bangladesh.

Objectives of the Study

The aggregate information on access to finance in formal and quasi-formal markets do not provide information on the extent of financial inclusion in Bangladesh. In order to expand financial inclusion, we need to gather information about the households who have or have not access to finance in formal and quasi-formal (microfinance) markets in particular. The critical questions are: (i) what percentage of the households has access to credit, savings and insurance? (ii) Who are excluded from the financial markets and why? (iii) Which financial markets play dominating role in financial inclusion? Answer to all these questions can be gathered from the household level survey, and can contribute to policy formulation.

Data and Household Characteristics

The Access to Financial Services (A2FS) survey is a comprehensive national level household survey of all the main financial (savings, credit, and insurance), needs, and usage among consumers, in both the formal and informal sectors. The survey was conducted between October 2009 and April 2010.

We followed the sampling design of Household Income-Expenditure Survey of Bangladesh Bureau of Statistics (BBS). The sampling design of the survey was stratified. The samples were selected in two stages using the sampling frame developed from the community series of population census 2001. The survey covers both rural and urban areas of the country. We selected 300 primary sampling units (villages and wards) from 63 districts, and randomly selected 30 households from each primary sampling unit (PSU). Total sample size for the survey was 8936 households (Rural: 6636 and Urban: 2300). Sampling weight was imposed to estimate the figures.

Our statistics show that literacy of the people (calculated based on the population with age of 7 or more and formal education) is 65.69 percent. As expected, some differences exist in the level of literacy by region and poverty status. The literacy rate among the poor is around 55 percent. The average family size is 4.64 persons in Bangladesh. Average family size of the poor households was calculated at 5.15 compared to 4.43 among the non-poor.

Service is the dominant occupation in urban areas. It constituted about 46.5 percent of the employment. Self-employment is relatively high in rural areas, around 47.14 percent whereas it is 34.37 percent in urban areas. Similarly, day labor among the poor households accounted for around 46.4 percent compared to 23.6 percent among the non-poor households. At the national level, self

employment is the dominant occupation. It accounts for 44.54 percent of the employment. On the one hand, it may reflect higher entrepreneurial activities.

Around 50 percent of the households have telephone/mobile. Around three-fourth of the urban households have mobile/telephone whereas about 44.5 percent or rural households have possessed them. However, divergence exists between the poor and the non-poor households. Over 59.9 percent of the non-poor households have mobile/telephones compared to 27.47 percent of the poor households.

Only 7.62 percent of the HHs are under the social safety net and protection programs. As expected, the poor have more access – over 12 percent of the poor HHs have access to VGD/VGF and other safety net programs, and more than 8.60 percent of the rural HHs are under the government safety net and protection programs.

There were about 7.06 percent of the households, which had at least one international migrant member. About 6.02 percent of the households had at least one local migrant member. The rate of international and local migration was low among urban households. The rate of international migration was high among the non-poor households, and the rate of local migration was high among the poor households. About 58.6 percent of the households had electricity connection. About 82 percent of the households owned a home either inherited or earned. In urban areas, about 47.4 percent households lived in rented houses.

All households don't have access to electricity. Only around 59 percent of the households have electricity but it varies by region and poverty status. About 76 percent of the urban and about 42 percent of the rural households have electricity. But it is low among the poor households. Only 35 percent of the poor households compared to around 57.5 percent of the non-poor households have access to electricity.

The characteristics do vary by region and poverty status. As such, access to different financial services, savings, insurance, and credit, can be explained by the differential HH characteristics among other variables

State of Access to Financial Services in Bangladesh

We have defined access to financial services based on three major indicators – credit, savings and insurance. The access to credit is defined based on past five years' transaction information of the households for institutional loans and one year transaction profile of informal credit.

Bangladesh is one of the leading countries in South Asia in ensuring higher access to financial services. In Table 2, we provide information on access to any financial services in any market. We find that around 77 percent of the households have access to any financial services – savings, credit, insurance, and payment services. This means that about 23 percent of the households are excluded from the financial services, in contrast to about 40 percent in Pakistan. Excluding insurance service, if we focus on financial services offered in credit and savings markets, aggregate access to financial service is around 73 percent.

Since our interest is to expand financial services through formal and quasi-formal markets, we also estimated access to any financial services of formal and quasi-formal markets. The access of the households to any financial services in formal and quasi-formal markets decreases to 65.69 percent. Expectedly, the non-poor households (over 79 percent) and the urban households (about

82 percent) have higher access to any financial services. Nevertheless, the access to any financial services in rural areas and of the poor households is not far off. It is due to quasi-formal financial services. Aggregate access to quasi-formal finance (financial services in quasi-formal market) is higher than the other two markets. A little over 43 percent of the households have access to quasi-formal financial services, compared to 37 percent in formal finance. We find that about 37 percent of the households have access to formal financial services as compared with 14 percent in Pakistan, 48 percent in India, 59 percent in Sri Lanka (World Bank 2008c).

Access to financial services varies by division. Quasi-formal finance is dominating in Barisal and Rajshahi divisions, while formal finance is dominating relatively in Dhaka and Chittagong divisions. Despite high access to quasi-formal and formal finance, the access to informal market is quite large. More than 26 percent of the households have access to any informal finance.

Table 2: Distribution of different forms of Access to any financial services

Division, Region and Poverty Status	Access to any financial services in any market	Access to any financial services (excluding insurance)	Access to formal and quasi-formal finance	Access to quasi-formal finance	Access to formal finance	Access to informal finance
National	76.77	73.34	65.69	43.23	37.02	26.19
Division						
Barisal	80.63	77.18	71.10	53.30	37.91	29.25
Chittagong	78.61	75.09	63.82	36.14	41.65	33.59
Dhaka	78.85	76.06	69.53	41.42	41.05	22.17
Khulna	63.84	56.5	53.78	35.35	36.64	12.03
Rajshahi	79.74	77.08	69.37	56.17	28.70	32.11
Sylhet	70.3	68.71	52.39	24.70	35.52	30.57
Poverty Status						
Non-poor	79.39	75.96	68.37	39.67	44.42	27.69
Poor	70.57	67.14	59.32	51.70	19.43	22.63
Region						
Rural	75.52	71.89	64.02	46.39	32.8	27.35
Urban	81.68	79.02	72.21	30.88	53.53	21.66

Source: Access to Financial Services (InM, 2010)

The poor and the rural households have higher access to quasi-formal finance than the non-poor and the urban households who have higher access to formal finance than rural households. This is quite expected because micro finance institutions provide services mostly in rural areas and among the poor. Although about 52 percent of the poor households have access to quasi-formal finance, the quasi-formal market has quite significant presence among the non-poor. About 40

percent of the non-poor have access to quasi-formal finance. This may be induced by two factors: (i) graduation of substantial number of poor households, and (ii) mis-targeting – lateral entry of the non-poor households.

Credit and Savings are two leading financial services:

Disaggregating the financial services into credit, savings and insurance, we found that over 57 percent of the households have access to savings, around 54 percent have access to credit in any of the financial markets (Table 3), whereas about 55 percent of Pakistani had access to savings services, and about 35 percent had access to credit or loan services in 2008.In a study conducted jointly by GoB, WB, and ADB in 1996, it was shown that around 44 percent of the households had borrowed in Bangladesh. Relatively higher access to savings services is quite expected because of the intermediating role of the financial institutions. Around 11 percent of the households have access to insurance services, which is only 2 percent in Pakistan. Insurance service is quite limited.

Table 3: Distribution of access to credit, savings and insurance by division, region and poverty status

Division, Region and Poverty Status	Access to credit	Access to formal and quasi-formal credit	Access to Savings	Access to formal and quasi-formal savings	Access to Insurance
National	54.12	42.75	56.54	54.00	11.10
Division					
Barisal	66.37	59.69	42.51	40.69	14.4
Chittagong	48.16	29.68	60.43	56.04	13.25
Dhaka	50.63	40.12	60.77	58.41	10.34
Khulna	41.14	38.84	35.5	33.64	15.74
Rajshahi	68.47	56.66	63.98	62.05	8.1
Sylhet	45.42	26.88	47.84	44.95	8.46
Region					
Urban	46.10	35.37	66.71	64.56	11.87
Rural	56.17	44.64	53.93	51.30	10.90
Poverty Status					
Non-poor	52.08	49.22	60.54	57.91	12.69
Poor	58.97	42.75	47.01	44.71	7.3

Source: Access to Financial Services (InM, 2010)

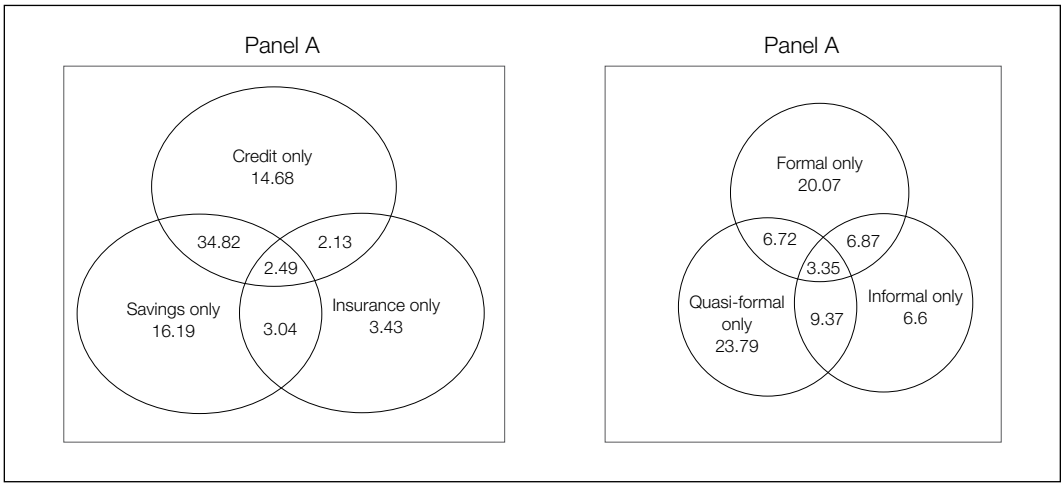
The poor households have higher access to credit (around 59 percent) than the non-poor households who have more access to savings (about 61 percent) and insurance (about 12.7 percent) compared to the poor households. The urban households are mostly (about 67 percent) savers and the rural households are mostly borrowers (over 56 percent). Such pattern is essentially,

as shown above, due to higher presence of formal market in urban areas and quasi-formal market in rural areas. Expansion of micro finance institutions and their poverty-targeted program have contributed to higher access of the poor and the rural households to any financial services. Relatively, access to savings is higher in Dhaka, Chittagong and Rajshahi divisions, and access to credit is higher in Barisal and Rajshahi divisions.

Financial Product Mix and Market Overlapping of Financial Services:

Not all households have access to single product and single market. Some households do have access to mix of financial products – credit, savings and insurance – and mix of markets – formal, quasi-formal and informal. This is reflected in Figure-2. Access to either insurance only or combination of insurance and other financial products is quite limited.

Figure 2: Financial Service and Market Overlapping



Source: Access to Financial Services (InM, 2010)

Note: Panel A exhibits the Venn Diagram of Financial Services, and panel B of financial markets.

The aggregate scenario based on the entire financial markets – formal, quasi-formal and informal markets – may portray high level of access to financial services. Since the informal lenders are not registered to provide financial services, we have focused on the financial services provided by the formal and quasi-formal service providers.

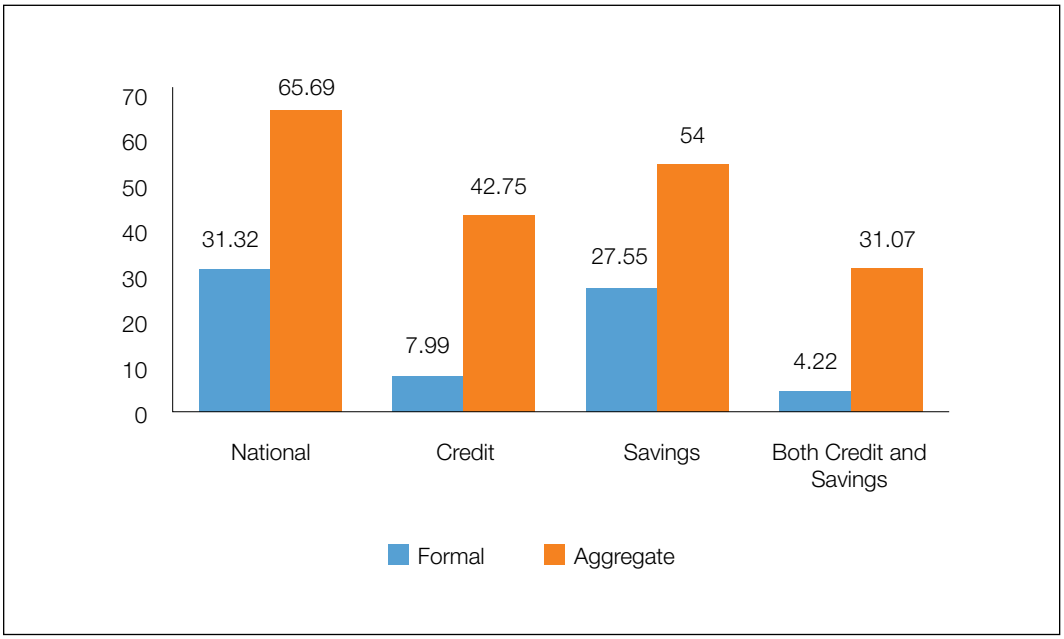
How important is Quasi-formal Market in aggregate Access?

We assess here the relative position of the quasi-formal market compared to deepening of formal financial market. Therefore, in order to clearly understand the depth of financial markets, we need to evaluate depth with and without the role of micro finance institutions. This will enable us to evaluate performance of both formal financial and micro finance institutions.

Critics are often unable to understand the role of micro finance institutions. They evaluate the role in terms of impact of micro credit on poverty alleviation. From the perspective of financial system development, MFIs have been playing a greater role. With this wider network, MFIs have been contributing to resource mobilization and use of resources through lending. Large financial inclusion occurs due to MFIs in Bangladesh.

We have shown that compared to formal market, quasi-financial institutions have been offering more financial services to both the poor and the non-poor households. This does not truly help us understanding the important role that the MFIs are playing in the financial system. A better understanding can take only when we relate access to formal financial market with the aggregate access to formal and quasi-formal markets. The following provides a comparative picture of the comparative access of the households to these two markets - formal and quasi-formal market.

Figure 3: Aggregate access to financial services in formal and quasi-formal markets



Source: Access to Financial Services, (InM, 2010)

In this bar graph, we demonstrate access to formal market compared to aggregate access in formal and quasi-formal markets. The difference between the two bars is the contribution of micro finance sector. MFIs have been playing the dominating role in the financial system. Examining the bar diagram, it will be vividly clear that quasi-formal (micro) market has the dominant presence in deposit/savings mobilization and credit. Of the aggregate access to credit (42.8 percent), only 8 percentage points have access to formal credit. Similarly, almost 43 percent of the households having deposits or save with MFIs. The more dominating presence is realized for the MFIs when we consider access to both savings and credit. A little over 31 percent of the households have access to both savings and credit in both formal and quasi-formal markets. Of them, only a little over four percentage points have access to both deposits and credit in formal financial market. These results amply demonstrate that the depth of the financial markets would have been very shallow had there been no presence of MFIs. These institutions have emerged because of the market failure of formal and informal markets.

While we deeply recognize the nature of financial services that the MFIs have been offering, low level of access to financial services without the micro finance provides a gloomy picture about formal financial institutions. These institutions provide a very limited service mostly in urban financial market. Without micro finance, the poor and the rural households would have excluded from the financial market, traditional market failure on the part of formal institutions.

Informal Credit: Omnipresent in the financial market

Informal credit market is century old. Credit market started with informal market. Its size has been reducing over time with the expansion of financial services by banks and MFIs. A little over 26 percent of the households still access informal market. Informal credit market continues to exist in Bangladesh despite wide expansion of financial services. It may be attributed to flexibility and product differentiation. Informal lenders provide services whenever the borrowers will need. Relatively, it is more dominating in rural areas than in urban areas. However, it continues to provide credit services to both the poor and the non-poor households.

We have always focused on informal credit but we have hardly focused on informal savings. We found that around 6.60 percent of the households have access to informal savings. The common mode is ROSCA (Rotating Savings and Credit Associations). The access to informal savings arrangements exists only when formal and micro finance services are neither available nor do they offer flexibility these savers need.

Table 4: Access to informal market

	Savings	Credit	Aggregate
National	6.6	21.78	26.19
Barisal	2.59	27.05	29.25
Chittagong	8.69	27.81	33.59
Dhaka	6.57	17.32	22.17
Khulna	4.2	8.7	12.03
Rajshahi	7.92	27.95	32.11
Sylhet	4.2	27.19	30.57
Rural	6.68	23.05	27.35
Urban	6.32	16.83	21.66
Poor	4.77	20.6	23.61
Non-poor	7.47	22.34	27.4

Source: Access to Financial Services, (InM, 2010)

Strand of Access to Credit and Stylized Facts

We asked two basic questions to our respondents in order to assess access to credit. They are: (i) "Did you borrow during the past five years?" and (ii) "Have you borrowed this year?". Answers to the first question enable us to assess effective access to credit. It is possible, as we argued earlier, that some of the borrowers may have accessed credit in the past but not now. As such, assessing access based on survey year information will perhaps be underestimated. This is actually the case. We found that based on the survey year borrowing, only around 38 percent of the households had access, while it was around 54 percent based on the information of borrowing during the past five years.

We have reported earlier that a little over 54 percent of the households have access to at least one credit market, which was around 44 percent in 1996[2].Thelevel of access was evaluated based on access to credit anytime during the past five years. But based on the transactions during the past one year, the access to credit was around 38.6 percent. Households do have access to credit in

[2] Bangladesh Rural Finance, Agriculture and Natural Resources Division, World Bank. The estimates were drawn based on the two year borrowing profile.

one or more credit markets. Here we provide an analysis of the access to different credit markets based on credit transaction profile of last five years for institutional credit and one year for informal credit. The basic results of access to credit services are reported in Table 6.

Table 5: Two measures of access to credit

Financial Services	Within 5 years	Within 1 year
Access to Formal Credit	7.99	3.14
Access to Quasi-formal Credit	36.64	27.6
Access to Informal Credit	21.78	14.52
Aggregate Access to Credit	54.12	38.57
Don't Access to Credit	45.88	61.43
Total (N)	8936	8936

Table 6: Distribution of access to credit services

Division, Region and Poverty Status	Access to credit in any credit market	Access to Quasi-formal credit market	Access to credit in formal market	Access to informal credit	No access to any market
National	54.12	36.64	7.99	21.78	45.88
Division					
Barisal	66.37	50.34	16.73	27.05	33.63
Chittagong	48.16	24.74	6.51	27.81	51.84
Dhaka	50.63	33.35	8.09	17.32	49.37
Khulna	41.14	31.24	9.38	8.70	58.86
Rajshahi	68.47	51.51	6.96	27.95	31.53
Sylhet	45.42	23.69	3.91	27.19	54.58
Poverty Status					
Non-poor	52.08	32.94	9.06	22.59	47.92
Poor	58.97	45.42	5.44	19.86	41.03
Region					
Rural	56.17	39.10	7.59	23.05	43.83
Urban	46.10	27.00	9.56	16.83	53.90

Source: Access to Financial Services (InM, 2010)

Households have very limited access to formal credit: Only around 8 percent of the households have access to formal credit. Limited access to formal credit is also evident both in urban and rural markets. Only around 9.56 percent of the urban households and around 7.59 percent of the rural households have access to formal credit.

Microfinance Institutions are leading supplier of credit:

Reasonably higher access to credit is largely due to quasi-formal credit market. The market includes micro finance institutions and cooperatives. The presence of quasi-formal finance is dominating both in urban and rural areas. In rural areas, it accounts for a little over 39 percent compared to around 27 percent in urban areas. Often it is argued that quasi-formal credit has little penetration among the non-poor. Our results do not support this notion. In fact, quasi-formal credit has overwhelming presence in both urban and rural market, and among the poor and the non-poor. Over 45 percent of the poor households and around 33 percent of the non-poor have access to quasi-formal credit. This does not necessarily imply that it is due to mis-targeting. The dominating presence of quasi-formal credit equally holds at the division level. More than 50 percent of the households in Barisal and Rajshahi divisions have access to quasi-formal credit. Interestingly, lowest access is noted in Chittagong and Sylhet divisions.

Informal credit is still influential:

Despite wide expansion of formal and quasi-formal network, its importance has not significantly declined. In fact, the role of informal finance cannot be undermined because of its nature and features. In our study, we found that around 21.78 percent of the households have access to informal credit. It is present among the poor and non-poor, rural and urban households. About19.86 percent of the poor and 22.59 percent of the non-poor households have access to informal credit but it is more pronounced in rural areas than in urban areas. About 23.05 percent of the rural households have access to informal credit compared to around 16.83 percent in urban areas.

We have provided information on access to credit to different credit markets in terms of percentage of households. We reported that households have more access to quasi-formal credit and informal credit market.

Which lending institutions do the households have access to?

Financial services or credit services can be extended or expanded through increasing network of financial institutions - banks and/or quasi-formal financial institutions. This is a policy question. This policy question will be,how and where would credit service be expanded? It can be answered only when we understand the structure of credit market by institution.

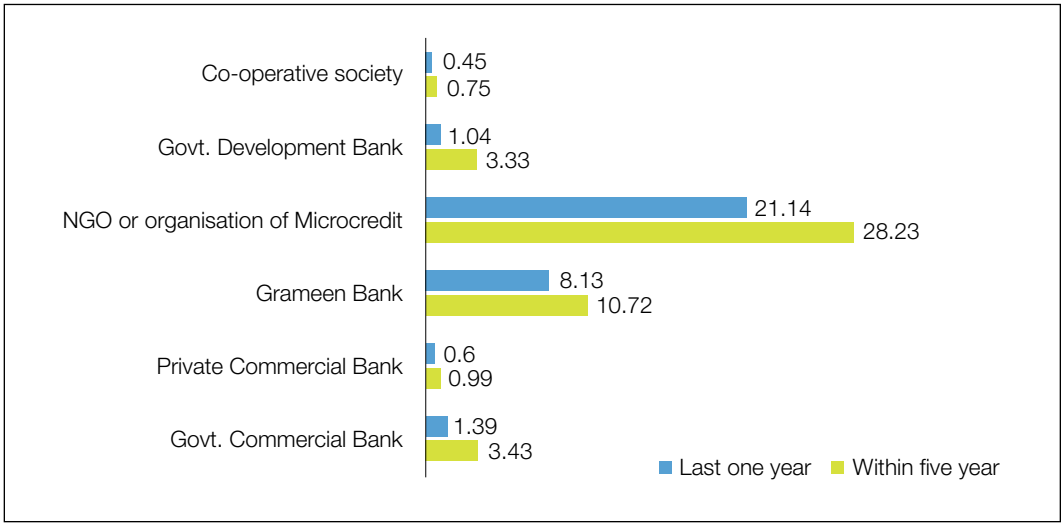
Banks involve public and private sector commercial banks,public sector development banks includingKrishi banks. Quasi-formal institutions include Grameen Bank and other micro finance institutions (MFIs). We have already shown that informal finance has significant presence in the credit market. But it requires expansion of formal and quasi-formal institutions for higher credit deepening. Expansion of credit through informal finance is not a policy option. Therefore, we focus only on formal and quasi-formal financial institutions in this section.

We present access to credit by type of institutions in Figure 4. Micro finance institutions dominate the credit market. Excluding informal credit markets, around 45.8 percent of the households have access to formal and quasi-formal micro credit markets, based on the transaction during the past five years. It is only around 33 percent of the households when determined based on the transactions of the past one year. This implies that some of the households or firms did not borrow now but borrowed sometime in past five years.

Small Share of Government Banks:

Government banks have a share of around seven percent, almost equally divided between development banks and commercial banks. Only around 3.43 percent of the households have access to public sector commercial bank credit (Figure 4). Despite large number of private banks, surprisingly, less than one percent of the households had access to private bank credit.

Figure 4: Percentage Of households having Access to Credit by institutions



Source: Access to Financial Services (InM, 2010)

Although the number of private banks is quite large but its number of branches is quite limited. Generally observed, private commercial banks prefer to operate in urban areas. Based on the transactional information of last five years, quasi-formal credit market dominates in expanding credit services to the households. Around 39 percent of the households have access to quasi-formal credit market including 11 percent of the households to Grameen Bank (Figure 4). Cooperatives have a very limited role in terms of coverage. It accounts for less than one percent of the households.

Share of different credit markets in total loan disbursement:

Although quasi-formal institutions have lion share in the number of borrowers, its share in total supply of loans is small. Table 7 reports share of different types of lenders in the total supply of loans. Striking findings are derived when access to credit is defined in terms of loan size. First, both formal and informal credit has larger share in loans supplied than the percentage of households having access to each type of credit. Second, formal credit has higher share (around 42 percent) in urban credit market than that (over 13 percent) in rural credit market. Third, informal credit has the largest share in rural credit market. Fourth, quasi-formal market, despite its expansion of services to large number of households, has a moderate share. In rural areas, it had a share of around 41 percent compared to around 28 percent in urban credit market.

Table 7: Percentage Share in total loan by different credit market and region

Different credit Market	Aggregate	Rural areas	Urban areas	Hossain & Bayes	
				1988	2008
Access to Quasi-formal credit	36.61	40.67	28.60	6.70	37.4
Access to Formal credit	23.88	13.58	41.94	20.70	21.0
Access to Informal credit	39.82	45.75	29.46	72.60	41.6
Total	100.00	100.00	100.00		

Source: Access to Financial Services (InM, 2010)

Note: This table is constructed based on one year information of credit history of each market. MahbubHossain (1988, 2008) (2010)

These results are quite interesting. Informal credit is dominating in rural areas. Formal banks are dominating in urban areas. Quasi-formal institutions have moderate presence in both urban and rural areas. Despite lion share of borrowers, the share of micro credit is still lower than the informal credit at the national level as well as in rural areas. It is because of small average loan size.

Access to Credit Services by Poverty Status

One of the underlying objectives of borrowing is to relax liquidity constraint and thereby attain the ultimate goal of income enhancement. Poverty can be alleviated through adopting short run and long run strategy. Long run strategy includes education and skill development, while short run strategies may include for the poor HHs access to credit and external support. We have provided earlier information on access to credit by poor and non-poor but we did not provide information on the access to credit by poverty type – extreme poor, moderate poor and non-poor. Extreme poor households also need access to credit. In the recent years, micro finance

Table 8: Access to credit services by poverty status

Poverty Status	Don't have access	Formal credit	Quasi formal credit	Informal credit	Access to any credit	Access to any rural credit	Access to any urban credit
Extreme Poor	43.23	5.26	44.52	17.17	56.77	56.55	58.36
Moderate Poor	36.55	5.82	47.25	25.35	63.45	64.28	58.79
Non Poor	47.92	9.06	32.94	22.59	52.08	54.8	43.18
Total	45.88	7.99	36.64	21.78	54.12	56.17	46.1

Source: Access to Financial Services (InM, 2010)

Note: Sum of no access and access to different credit market may exceed 100 percent due to existence of market overlapping.

institutions have been extending credit to both extreme poor and moderate poor. Often it is alleged that MFIs do not reach the extreme poor. Considering all these dimensions, we have attempted to assess access to credit by poverty type. HHs are classified by poverty status into three - extreme poor, moderate poor and non-poor. Extreme poor HHs is the HHs below the lower poverty line. The moderate poor HHs is between upper and lower poverty lines. The non-poor HHs are above the upper poverty line. We found a clear relationship between access to credit and poverty status of the HHs. The non-poor HHs have more access to formal credit. The extreme poor HHs has the

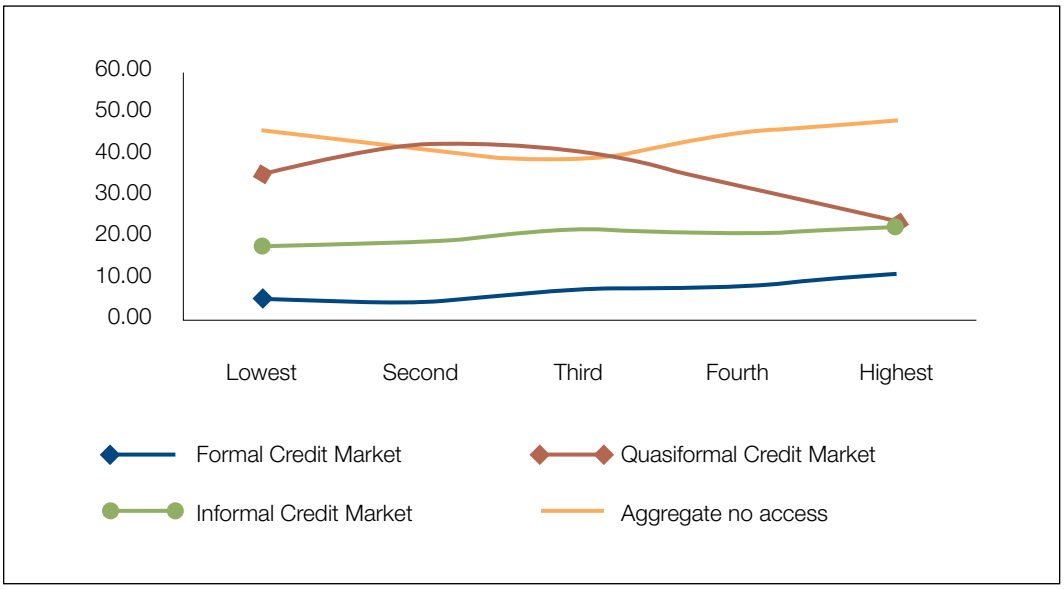
least access in formal market (around 5.26 percent) and informal market (around 17.17 percent). About 44 percent of the extreme and moderate poor HHs has access to quasi-formal credit. But it is equally true that of the three groups of HHs by poverty status, the extreme poor HHs has less access to credit. Almost 43 percent of the extreme HHs did not access any credit.

Who Have or Have No Access to Credit?

In this section, we portray 'credit inclusion' and 'credit exclusion' groups in terms of five basic parameters: income, education, occupation, poverty status and landholding. The borrower-households in different credit markets do have some distinct characteristics.

Income: Figure 5 shows the distribution of households having access to credit and no access at all by income group. Several findings emerge from the figure. First, percentage of households having no access to credit increases with increase in income. Households in top two income quintiles are less likely to borrow. This is quite expected as they are more likely to finance their economic activities by their own income.

Figure 5: Access to credit by income group



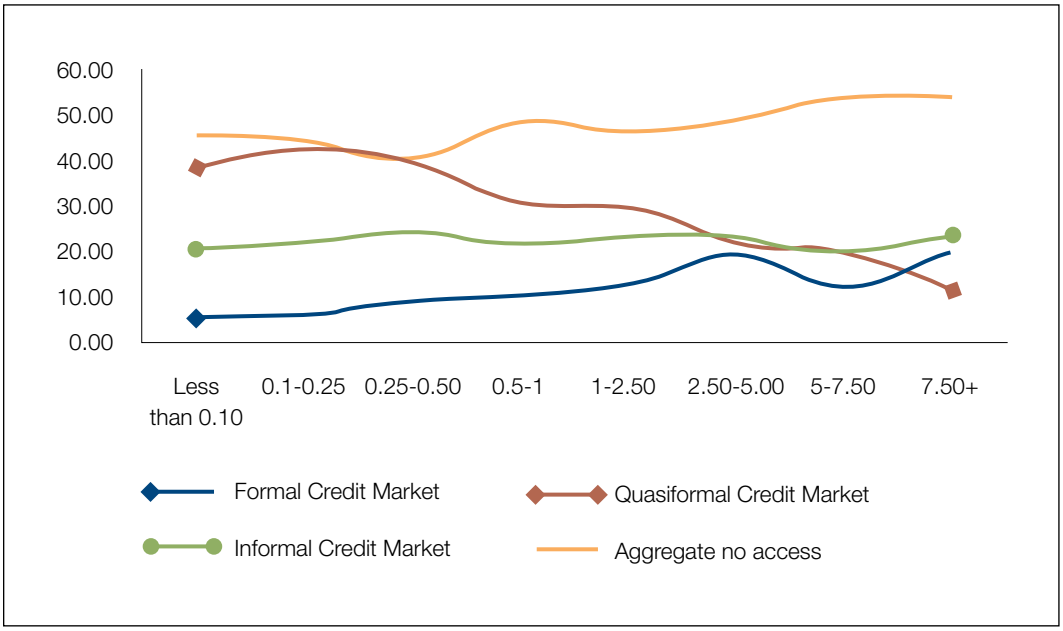
Source: Access to Financial Services (InM, 2010)

Second, over forty percent of the households in all income groups do not have access to credit at all. The percentage of no access to credit decrease first and then it tends to increase with an increase in income. More than fifty percent of the households in the highest income quintile have no access to credit. Third, households in bottom three income quintiles have more access to quasi-formal credit. It decreases for the households in top two income quintiles. Fourth, access to formal credit gradually increases with increase in households' income. Over 12 percent of the households in highest income quintile have access to formal credit. Fifth, access to informal credit increases marginally with increase in household income. These results suggest that access to no credit is essentially u-shaped. This is low for the lowest quintile group because the lowest income

quintile group is excluded from the credit market and then it tends to decrease as the MFIs and the other financial institutions covers relatively better off households. However, the households of the 4th and 5th quintiles are mostly self-excluded and so no access tends to increase.

Land size: We have tried to identify the households in terms of land size for two reasons. First, quasi-formal institutions are likely to target the households with land size of up to 50 decimal, and second, formal lenders are likely to target the households with large land because these households will be able to offer land as collateral. Access to different of the households by land size is presented in Figure 6. Several findings can be emerged from the figure. First, households having large land size have less access to credit than the households in lower land size groups. No access decreases for the households with land of up to 50 decimal land and then increases for the households with land of above 50 decimal. Second, access to quasi-formal credit is high for the households with land of upto 50 decimal. Around forty percent of the households with land between 25 and 50 decimals had access to quasi-formal credit and the similar percentage of the households in the same group had no access to credit. Third, access to informal credit is higher than that to formal credit.

Figure 6: Access to credit by landholding



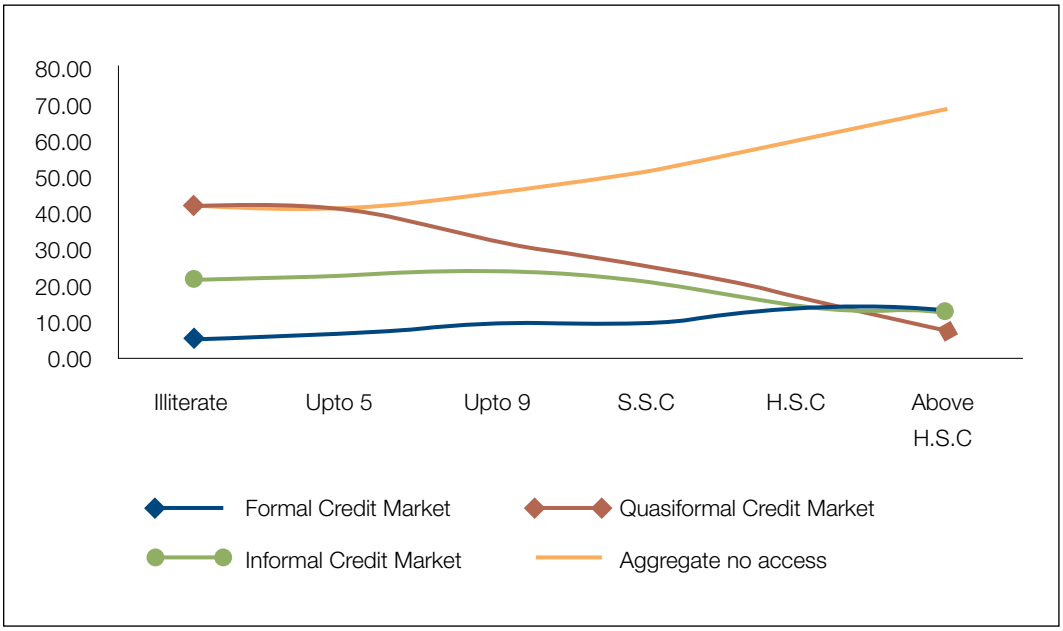
Source: Access to Financial Services (InM, 2010)

These results suggest that land resource-rich households have low level of access to credit compared to the land-poor households.

Education: Education of the household head matters in access to credit to different credit markets. We find a clear causality between access to different credit market and education of the household head (Figure 7). There is a sharp decline in access to quasi-formal credit for the household heads with education of more than class five. Inverse is true for these households having no access to credit. Educated households have less access to credit. It is probable that there is a positive

causality between education and income. The results suggest that the households with heads having education of up to class five are the targeted households of quasi-formal credit market although such targeting has never been defined. However, it is plausible that land targeting is perhaps correlated with education of up to class five.

Figure 7: Access to credit by education of the household head



Source: Access to Financial Services (InM, 2010)

We have derived several findings from the descriptive analysis of the characteristics of the households having access to different credit markets. First, female headed households have the lowest access to formal credit market, and relatively high in informal credit market. Second, educated people have high access to formal credit. Third, households with day labor as head have more access to quasi-formal credit markets than in the formal and informal credit market. Fourth, relatively young headed households have more access to quasi-formal credit market. Fifth, although extreme poor households have higher access to quasi-formal market, they have low level of access to formal and informal credit markets. These descriptive findings were validated by econometric analysis.

Credit constrained households in Bangladesh

Quite a substantial percentage of households do not have access to credit. Not all of them will require credit. But question is, will these households have access when needed? Do they consider themselves as credit constrained based on available information about market? Our results showed that about fifty percent of the households considered themselves as constrained. The rate is marginally lower in urban areas than the rural households. Non-poor households are marginally more constrained than the poor (Table 9).

Therefore, credit as a major intervention for poverty alleviation and for economic growth becomes questionable if they are truly constrained. This is something that the lenders need to think about.

Table 9: Percentage distribution of credit constraint by region and poverty status

Demand side constrained Households	National	Urban	Rural	Non-poor	Poor
Unconstrained HH[1]	49.08	54.62	47.79	47.90	52.33
Constrained HH[2]	50.92	45.38	52.21	52.10	47.67
N	3,907	957	2,950	2,864	1,043

Source: Access to Financial Services (InM, 2010)

Role of Transaction Cost in Access Decision

Access to credit is determined both by demand and supply side factors. Other things remaining the same, transaction cost of borrowing contributes to the choice of a credit market that a borrower chooses to borrow from. If firms or individuals have access to different credit markets, they will compare average cost of borrowing for each credit before making any decision to access the market.

Transaction cost of credit markets is different. First, non-interest cost is high in formal credit market but average nominal interest rate is low. Second, micro credit market is featured by low transaction cost but high interest rate compared to that in formal market. Third, average lending interest rate is high in informal credit market but explicit non-interest cost is between the cost of formal and micro credit markets.

We find that non-interest cost as percentage of average total transaction cost is the highest in formal credit market. This is over 16 percent. Informal credit market has the lowest non-interest cost compared to its average lending interest rate. It was estimated to be around 6.41 percent. It was around 9.20 percent in quasi-formal credit market. The critical question is, why average explicit non-interest cost is high in formal credit market? Answer to this question can be derived from Table 10.

Cost of bribing is the important element in high non-interest transaction cost. More than fifty percent of the non-interest cost in formal market is bribing, while it is very negligible in quasi-formal credit market. This is an average scenario.

Transaction cost does affect access decision of the households. We delved into this issue by showing an association between percentage of households accessing credit market and the village level conveyance cost to nearby credit market. There is an inverse relationship – lower percentage of households access credit when conveyance cost is high.

[1] Unconstrained households are those who have not applied for loan in the past and think that they will receive loans if apply.

[2] Constrained households are those who did not apply for loans in the past but thought that they would not receive loans if they apply.

Table 10: Transaction cost of borrowing in different credit markets

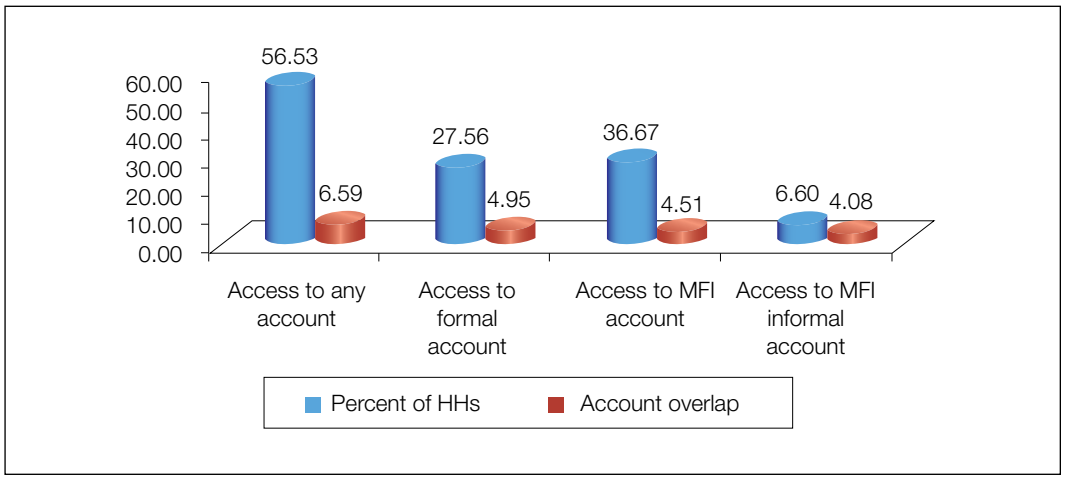
Borrowing Costs (Per Taka 100)	Credit Market		
	Formal Creditmarket	Quasi-formal credit market	Informal Credit market
Conveyance cost	0.61	0.62	1.57
Cost of Loan fees	0.52	0.69	..
Cost for Bribe	1.2	0.03	..
Total non interest transaction cost	2.33	1.34	1.57
Interest cost	12.14	13.07	22.94
Total borrowing cost (Interest + Non-interest cost)	14.47	14.41	24.51
Non-interest cost as % of total transaction cost	16.10	9.20	6.41

Source: Access to Financial Services (InM, 2010)

Access to Account Services

From the survey it is found that nationally 56.53 percent of the households have access to any form of savings (formal, quasi-formal and/or informal). But the quasi-formal savings services is the largest among the three types, followed by 27.56 percent for formal market. About 6.59 households have multiple accounts in different markets (Formal, Quasi-formal and Informal). The account overlapping tendency among households of different market is almost equivalent – 4.95 among formal account holders, 4.51 percent among microfinance clients and 4.08 among the club members respectively.

Figure 8: Access to Account Services



Source: Access to Financial Services (InM, 2010)

Table 11 shows the access to account services at division level. It is found that the access to any kind of savings is the highest in Rajshahi and the least in Khulna. As expected, access to formal savings is the highest in Dhaka then followed by Chittagong. The access to formal account services in other divisions is almost equivalent.

The informal account is relatively high in Chittagong, Rajshahi and Dhaka compared to other three divisions.

About 53.92 percent of rural households and about 66.74 percent of urban households have access to any kind of account services in any market. The formal financial institutions have covered 22.72 percent of rural households. The urban scenario is almost opposite to rural scenario. In urban area, 46.52 percent of the households receive account services from formal financial institutions.

From the policy perspective, it is important to find out the access to account services at rural and urban level. It is almost analogously crucial to identify the portion of poor and non-poor excluding from the formal account services. Poor households have low access to formal savings compared to non-poor households. The access of non-poor households to formal savings is almost three times higher than that of the poor households. Poor households have comparatively more better access to quasi formal savings market.

Table 11: Access to Different Savings Markets by Division (in Percent)

	Access to Any Savings	Access to Formal Savings	Access to Informal Savings
National	56.53	27.55	6.6
Barisal	42.51	20.59	2.59
Chittagong	60.43	32.13	8.69
Dhaka	60.77	33.19	6.57
Khulna	35.5	20.65	4.2
Rajshahi	63.98	21.52	7.92
Sylhet	47.84	29.33	4.2
Rural	53.92	22.72	6.68
Urban	66.74	46.52	6.32
Poor	47.01	10.13	4.77
Non-poor	60.54	34.89	7.47

Source: Access to Financial Services (InM, 2010)

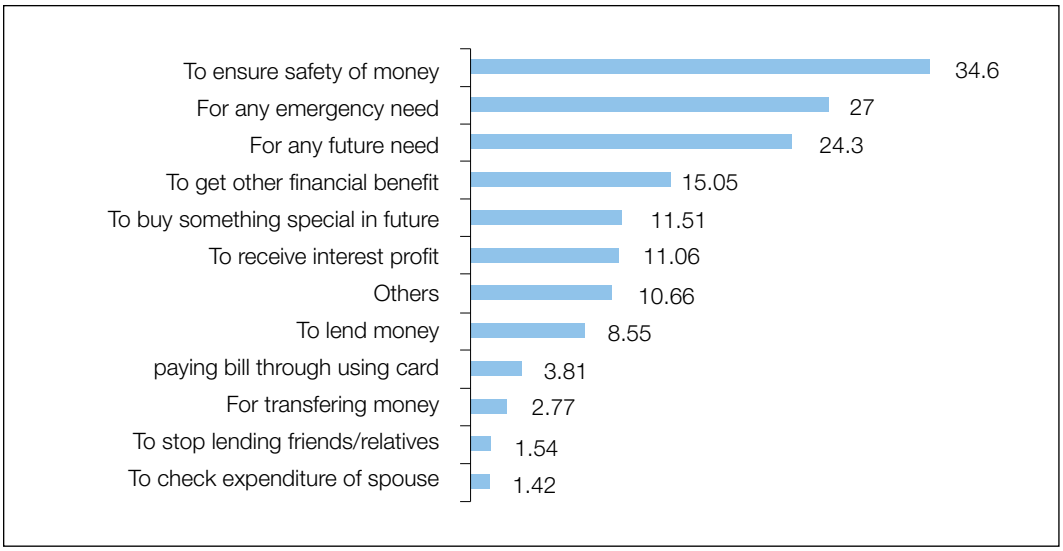
Reasons of Account Service

So far, we have discovered the role of formal and quasi-formal institutions to bring the households under the financial inclusion. Now, we need to show the behavioral economics of savings, that is, people save money in saving institutions like bank, post office, NGOs, etc. People have other motives of holding cash in different forms. People keep money at hand to meet up the transaction and precautionary costs in their life. Such saving is considered as the very liquid savings because

the households can spend it at any time. The tendencies of deposit to other person such kith and kin, neighbors are present. People also save in deposit instruments such as saving certificates, prize bonds, etc.

Among account holders, about 34.6 percent household stated that they deposited money in account to ensure the safety of their money and the second most reason of why they saved money in account is the precaution of emergencies, then followed by future need (24.3 percent).

Figure 9: Reasons of keeping account



Source: Access to Financial Services (InM, 2010)

To get the entire scenario while the other variables are being controlled, we need the econometric analysis. The synopsis of the econometric findings is presented in the following table.

The econometric results show that, and increase in per capita income increases the probability of financial inclusion, and increases deepening of financial services (Table 12). The per capita deposit and age exhibits a hump-shape relationship, distance plays a negative role in financial inclusion, that is, the households living far distance from bank have less chance of having access to account service, whereas interest rate offered for deposit has significant positive impact of both financial inclusion and financial deepening. The reduction of transaction cost which can be done through reduction of distance of financial institutions (branch expansion policy) or through increasing the interest rate on deposit (interest rate policy) increases financial inclusion as well as financial deepening. Both financial inclusion and deepening are high in the village where there is higher concentration of MFIs.

Table 12: Determinants of financial inclusion and financial deepening

Selective Explanatory Variables	Financial Inclusion (Account)		Financial Deepening (Deposit)	
	ME	se	Coefficient	Se
Log of age of household head	1.911***	0.361	17.569***	3.971
Square of log of age of household head	-0.261***	0.049	-2.529***	0.538
Years of schooling of household head	0.010***	0.002	0.099***	0.018
Gender of household head	0.051**	0.023	0.605**	0.249
Any member migrates? (No=0, Yes=1)	0.132***	0.019	0.880***	0.211
Howfar is the bank from this area	-0.008***	0.001	-0.007	0.016
Number of MFIs working in the village	0.020***	0.002	0.094***	0.022
Log of per capita income	0.139***	0.013	2.020***	0.141
Log of average interest rate on deposit	0.320***	0.046	5.564***	0.462
Number of observations	6,487		6,487	
chi2	860.165		804.004	
Log-Likelihood	-4,061.27		-13,746.42	
Pseudo R2	0.096		0.028	

Source: Access to Financial Services (InM, 2010)

Note: *** p<0.01, ** p<0.05, * p<0.1.

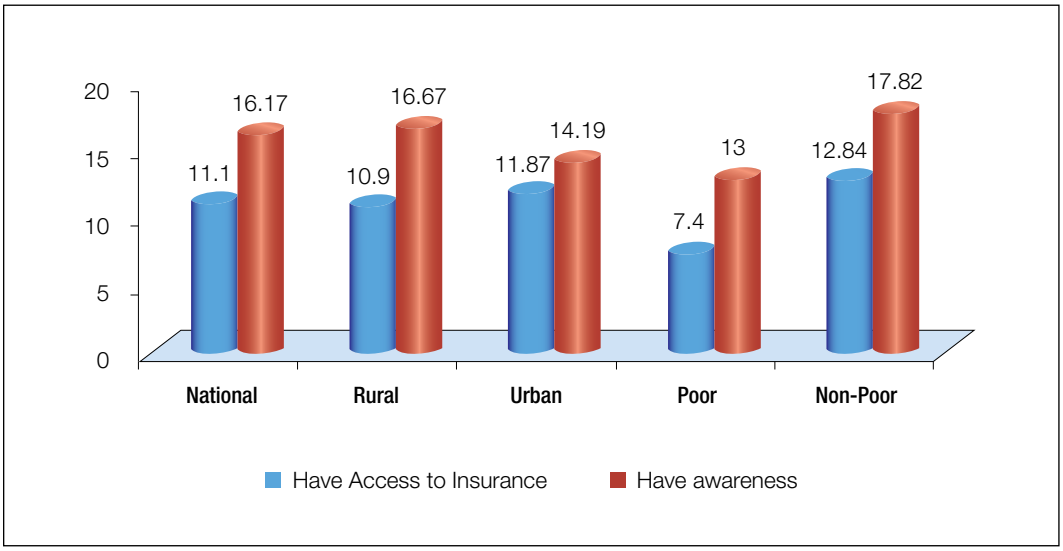
This model includes other control variables such as access to electricity, per decimal value of land, divisional dummies and risk factor (shock dummy). To model, the financial inclusion, the Probit model is used as the dependent variable is dummy in nature (Have account? Yes=1, No=0). The marginal effect of Probit model is reported. To model the financial deepening, the Tobit model is used.

Access to Insurance Service

Vulnerability is a common phenomenon for individual, household, firm or in general for any economic agent. An individual may be vulnerable to risks like injury or fatal diseases, a household may face unexpected income shock due to covariate or idiosyncratic shocks. Firm may be affected by unrecoverable economic loss due to fire or other major sources. In a nutshell, as economic agent everyone has a chance to face vulnerability in its span of life. Insurance which is one of the basic components of financial services can provide assistances to recover the risks of individuals, households or firms.

Only around 11 percent of the households have access to formal insurance services. Low level of access to insurance is due to low level of awareness. Typically, insurance is divided into two broad categories: Life insurance and General insurance. Life insurance is the most popular among the insurance services. Of the surveyed households, about 10.59 percent have life insurance.

Figure 10: Access and Awareness of Insurance



Source: Access to Financial Services (InM, 2010)

Although there are fewer insurance policies taken by the households, there is huge latent demand for insurance.

Nationally, more than 75 percent of the households expressed their desire to purchase an insurance policy for protection when the merits of insurance were communicated to the households. It is also strong among the households of Sylhet division (92.46 percent). Among other districts, the desire to have insurance service is also high in urban areas (85 percent). Risk mitigation appears to be the main reason for desire to have insurance. Willingness to guard against risk and vulnerability is cited by poor and non-poor almost equally (78.76 percent in case of poor and 77.53 percent in case of non-poor).

Microfinance is the Vehicle of Exapanding Financial Inclusion

With the growing evidence of positive impact of access to financial services on different household and firm level outcomes, a policy consensus exists among the professionals and international agencies that economic opportunities and growth are undermined if expanded financial services are not available to those who need them. The critical questions are, therefore, can we extend financial inclusion beyond the formal banking framework? In past decades, access to financial services has increased exponentially in Bangladesh.

Given the quasi-formal nature of microfinance institutions, transaction costs of microfinance can be lower than bank loans. Informal credit market has advantages over quasi-formal. Again, quasi-formal credit market has two advantages over formal. First, the less formal the market is, the lower is the transaction cost. Second, the less formal the market is, the low is the cost of asymmetric information. Quasi-formal market can play role in expanding financial inclusion through relaxing credit constraints and bringing new clientele groups or households under the net of financial inclusion.

Role of Micro Credit in Relaxing Credit Constraints

We want to explore the impact of credit size of MFI on several outcomes. Finding such kind of impact involves three issues. First, the conceptual issue of credit constraint (Patrick, 2005) is mostly important in the perspective of expanding financial inclusion. To identify credit constrained households, we have incorporated credit modules in our survey questionnaire. Second, to assess the impact of credit on selective outcomes, we need exogenous variation in loan size. This states the problem of endogeneity which can be delved into two parts – first, credit size determination and second, determination of the probability of credit constraint. Both credit size and probability of credit constraint are determined by a set of unobserved factors. To address the endogeneity issue, we have used instrumental variable technique.

Third, the analysis involves with the problem of selection bias. This is because a household is found to be credit constrained if and only if she applies for credit. To address the selection problem, we have used Heckman two-step model. From the first step, we compute inverse mills ratio, and use it in the second step. To cope with endogeneity problem, we use the instrumental variable technique. We have used the number of population and number of MFIs in the village as instruments. It is postulated that the average MFI loan size will be inversely related to the population size in the village, and positively related to number of MFIs operating in the villages.

Table 13: Role of Micro Credit in Relaxing Credit Constraint

Explanatory variables	Marginal Effect
Gender of head	-0.013
Age of household head	0.001
Square of household head	0.000
Schooling of household	0.002
Square of schooling of household head	0.001
Head is day labor	0.003
Log of adult	-0.035
Square of log of adult	0.014
Log of asset	0.002
Square of log of asset	0.001
Log of number of MFIs in the village (A)	-0.032b
Bank distance: 3-5 (B)	0.063b
Bank distance: over 5 (C)	0.076b
Interaction: A*B	0.028b
Interaction: A*C	-0.038b
Rural dummy	0.036b

To identify the impact of extending credit through microfinance on credit constraint and financial inclusion, we have used Probit model. The estimation technique includes a set of explanatory variables for the identifying the determinants of outcome variables (credit constraint, access to financial services) in addition to the non-selection hazard ratio (inverse mills ratio) and predicted amount of credit. The determinants are characteristics of household head (age, education, occupation, and gender), characteristics of the household (number of adults in the household and asset value), regional or spatial factor such as rural dummy as well as divisional dummies.

We have defined credit constraint based on the amount of credit demanded and amount of credit supplied. The definition of credit constraint involves with the size of credit. The amount of credit is endenously determined. The marginal effect of log of number of MFIs at village level suggests that ten percent increase in the number of MFIs at the village level will reduce credit constraint by 3.2 percent. Its effects are more pronounced in the remote village areas (above 5 km from nearby pucca road) when access to bank is very limited.

Table 14: Impact of MFI on Credit Constraint and Financial Inclusion (Marginal Effect of Probit Estimates)

Explanatory variables	Financial Inclusion
Predicted amount of micro credit (log)	0.4886
Non-selection hazard	-0.5289
Gender (Male=1)	-0.1542
Age	-0.0088
Square of age	0.0001
Years of schooling	0.0129
Square of years of schooling	0.0012
Head is day labor (Yes=1)	0.0449
Log of adult	0.097
Square of log of adult	-0.0547
Log of asset value	-0.023
Square of log of asset value	0.0005
Distance from bank	-0.0067
Square of distance from bank	0.0006
Rural dummy	0.0078a
Regression Statistics	
Number of observations	8,936
Log-Likelihood	-4,843.81
Pseudo R2	0.107

Note: a= insignificant, b=significant at 10 percent level. The other marginal effects are statistically significant at least at 5 percent level. The model considers division level fixed effect, and the results are omitted here.

Source: Access to Financial Services (InM, 2010)

Micro Credit Contributes in Expanding Financial Inclusion

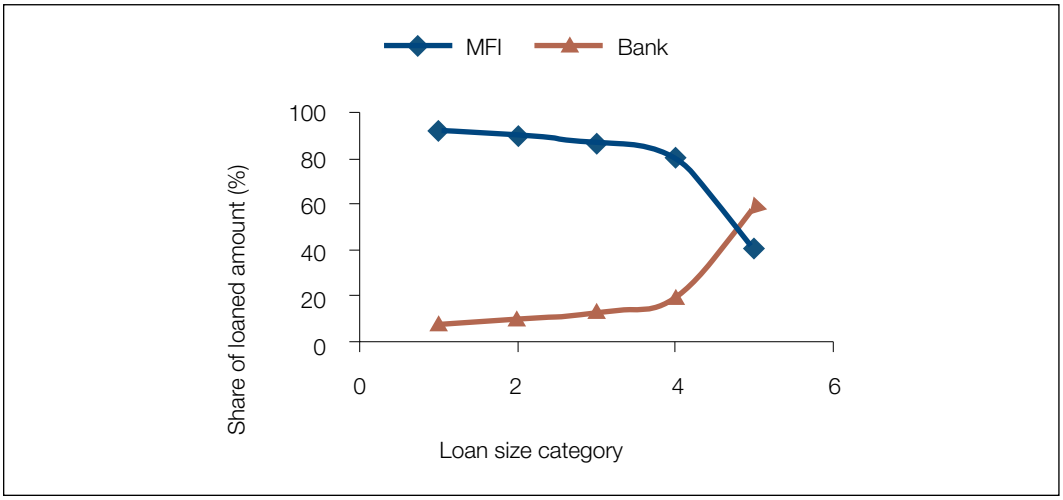
Since its inception, microfinance program is a credit driven financial service provision. The opportunity of getting credit service from microfinance institution opens the options for other financial services such as savings. Now, conceptually, we have hypothesized that credit expansion through microfinance institution can expand financial inclusion. We have tested our hypothesis using the Probit regression technique controlling other characteristics.

Our result suggests that the expansion of micro finance services contributes in enhancing financial inclusion and in reducing credit constraint and we reach in conclusion that, in Bangladesh, the steady proliferation of micro finance institutions has enhanced the access to financial services to a great extent and there is further scope of expanding the net of financial services by expanding the credit service of microfinance institutions. The results from the credit constraint equation show that the probability of being credit constraint is inversely related to the amount of MFI credit disbursed and this result is statistically significant. The marginal effect of the MFI credit estimating at mean level is 0.48 which tells that ten percent increase in total supply of credit at the village level increases financial inclusion by 4.8 percent.

First, the MFIs in Bangladesh have been playing a significant role to increase financial inclusion for their unique design and operations. They do so by two ways: they expand the horizon of credit supply, and they relax the constraints to formal credit. At this point, our finding corroborates with other studies (See Menkhoff and Rungruxsirivorn 2009; Kaboski and Townsend 2007; Pitt and Khandker 1996; and Zaman 1997).

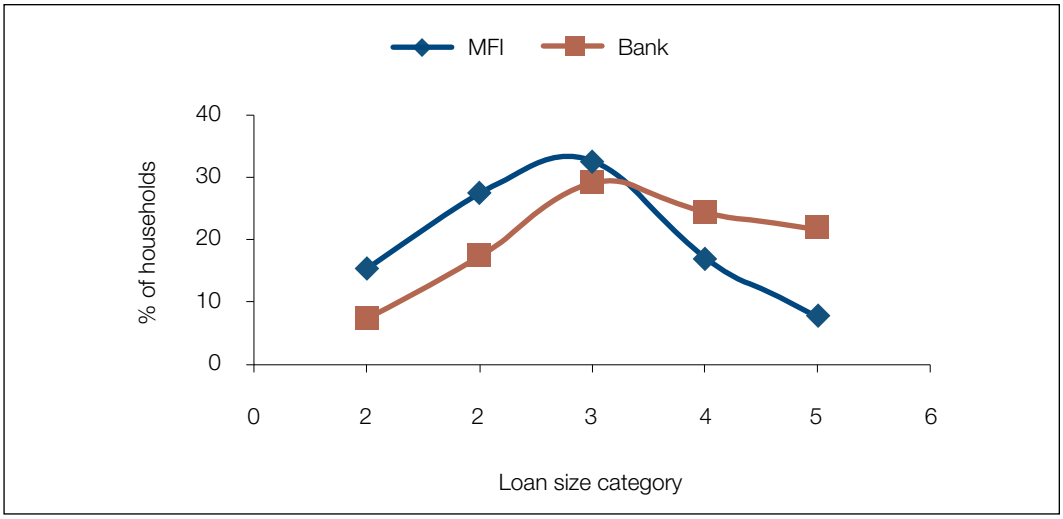
Second, the reason behind this critical role of MFI is that, MFIs and commercial banks are found substitutable. A bank serves within 3-5 km radius, and beyond that level, people use MFIs as the best alternatives. This behavior has sound economic background. Since both transaction cost and cost of asymmetric information is higher for accessing the service of banks, MFI can fill the gap. This is why essential transaction cost is an important determinant for financial inclusion.

Figure-11: Share of MFIs and banks in total supply of loans at the village level



Note: Categories of loan size in Taka (1) 0-5,000 (2) 5,000-10,000 (3) 10,000-25,000 (4) 25,000-50,000 (5) 50,000 above

Figure-12: Share of households by loan size



Note: Categories of loan size in Taka (1) 0-5,000 (2) 5,000-10,000 (3) 10,000-25,000 (4) 25,000-50,000 (5) 50,000 above

Third, banks tend to provide larger amount of loans (evident from Figures 11 and 12); while MFI has more symmetric information about the households seeking small loans. So both parties can use their comparative advantages, if they together serve the people who do not have sufficient access to finance. Banks can use MFIs as their agent and disburse larger loans to more remote areas. As MFIs are formal and legal entity now with MRA regulation, banks can be assured about security. This will eventually increase the depth of financial inclusion. A practical example can be Bangladesh Banks' order to BRAC for the distribution of agricultural credit.

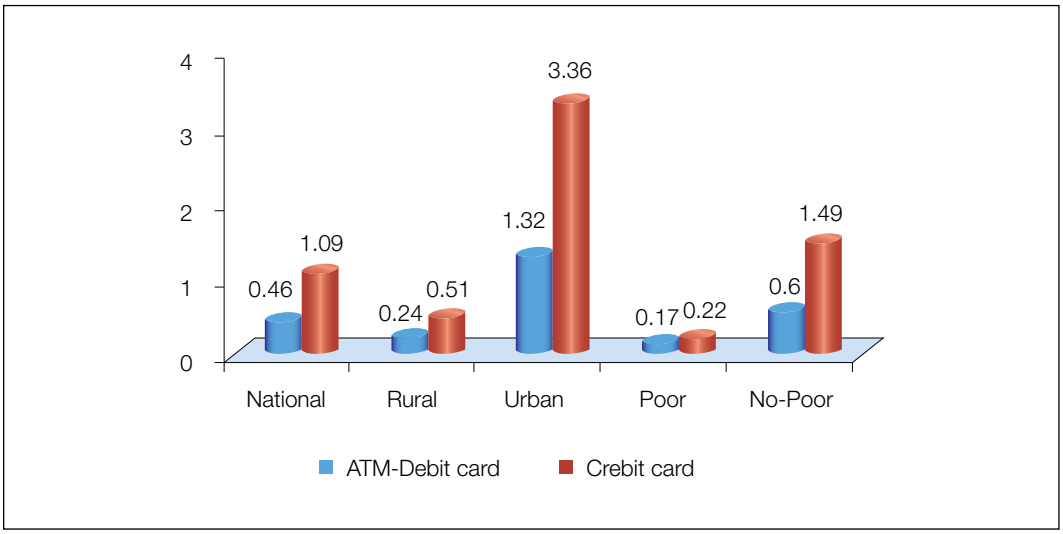
Finally, some policymakers who argue that individuals in remote areas can play the role of agents for commercial banks, must admit that this is more viable option for all. MFIs' security and regulation will be convenient to ensure than that of individuals.

Innovative Financial Services

Electronic banking is a segment of electronic business which encompasses all types of business performed through electronic networks. It facilitates for money transfers, account balance enquiry, transaction history, cleared cheque status, order checks etc. Traditional banking is time-consuming and more costly and therefore, E-banking is replacing traditional banking all over the world. E-Banking offers many beneficiary services both banks and customers compared to traditional banking system. It provides a full range of services to every individual customer. The main benefits from the customers' point of view are the significant saving of time by the automation of banking services and introduction of an easy maintenance tools for managing customer's money. It lowers transaction cost, provides 24-hour services, increase security and reduces fraud risk. From the banks' view point, the benefits for the banks are customer satisfaction, cost savings, cross selling, better branding and better responsiveness to the market. There are different forms of electronic banking such as Automated Teller Machine (ATM) Services, internet banking, home banking, pc banking, telephone banking and mobile banking.

Though the access to ATM/Debit or credit cards are low at present, their popularities are growing in Bangladesh. Less than half a percent of the households use ATM-Debit card and a little over one percent households use credit card. The access to this financial instruments varies by regions.

Figure 13: Access to ATM/Debit or Credit Card Services



Source: Access to Financial Services (InM, 2010)

The use of ATM-Debit and credit card is more popular in urban areas. Around 1.32 percent of the urban households use ATM/Debit card compared to 0.24 percent rural households mostly in peri-urban areas. The possibility of using the facilities of ATM/Debit or Credit Cards is higher for the higher educated group. The chance of using these services will be higher for the households head who are self employed in non-agriculture and service holders than the heads of different occupation. Rural and poor households have lower chance to use these services than the urban households due to lack of access of such services.

At national level 19.17 percent of the respondents are aware about mobile banking and 10.27 percent are willing to get this facility. In the matter of awareness about mobile banking, urban households are forward than rural households. About 34.88 percent of urban households and about 15.15 percent of rural households are aware of mobile banking. In the same way 11.46 percent urban households wish for mobile banking contrast to 9.97 percent rural households. . Non poor households positioned on higher with 22.90 percent and poor households placed on lower with 11.23 percent in the issue of awareness about mobile banking. Non poor households are more eager to use mobile banking relatively poor households.

Policy Implications

Based on the findings, we outline some policy implications for the professionals to ponder so that we can serve the unserved households and they are as follows:

Expanding financial services in unbanked areas

Location of financial institutions is important in accessing financial services of the households and firms. we have shown that bank branch density per 100,000 population and 100 square kilometer

has marginally increased during the past twenty years. Only eight percent of the HHs have access to credit, and 27 percent of the HHs have access to deposit services. Therefore, in order to create more impact on economic growth, banks need to expand financial services in unbanked areas as well as to deepen the volume of services. Bangladesh may take the following policy issues under consideration to expand financial services in unbanked areas and HHs:

- Bangladesh Bank needs to reformulate branching policy in order to force the banks to open branches in rural areas;
- If banks are not willing to expand financial services in the unbanked areas and deepen financial services particularly in rural areas, Bangladesh Bank needs to clearly debate the prospect of introducing rural banks
- Bangladesh in collaboration with MRA may consider allowing MFIs to mobilize public deposits and procide credit services. It is a policy issue that Bangladesh Bank needs to debate. But such increasing role of MFIs in rural areas will deepen access to financial services of the households and firms.

Expanding operation of MFIs in unbanked areas

MFIs and cooperatives (cooperatives appear to be less effective) need to expand its financial services in those unbanked areas. However, it is possible some areas may not be physically accessible and/or transaction cost will be high for the lenders. Following policy options may be considered to expand services of MFIs and cooperatives:

- MFIs should be treated as a part of formal financial system. This is an important policy option that Bangladesh Bank and MRA need to debate. Recognizing MFIs as a formal part of financial system will open avenues for the MFIs to extend financial services to the unbanked areas as well as to the non-targeted HHs otherwise left out.
- Banks are quite reluctant to operate in rural areas. This was evident from the fact over time, the ratio of rural advances and deposits has declined to 45 percent in 2009. From our study, we have found that that only 14 percent of the rural HHs have access to formal credit. In such a situation, some top performing MFIs may be transformed into rural banks or may be allowed to extend financial services to the non-poor rural households.
- MFIs and cooperatives should expand financial services to the poorest of the poor HHs.

Expanding Innovative Financial Services

In recent years, mobile banking is growing as a concept. In Bangladesh, it is widely perceived. There appears to be huge demand for such banking. In this survey, we found that around 30 percent of the HHs would like to use mobile banking services. Bangladesh Bank has already initiative to introduce mobile banking. What ought to be done is developing appropriate policy, defining scale and scope of mobile banking and developing appropriate governance structure so that risk is very negligible for the users of mobile banking.

However, the bank or MFI branch expansion strategies or even expansion through innovative financial services such as mobile banking involve several challenges. The major challenges are sustainability of operation and less developed infrastructure facilities.

Some households transact with informal service providers due to limited scope of availing services from the formal providers such as consumption credit, financing international migration, etc. The poor households sometimes need the overdraft facilities to meet the emergency. Financial

products for the aged people often are important to smooth the standard of living. The need for financial services such as insurance, remittances, reserve mortgage loans, facilities for pensioners and deposit schemes for the older population is high in Bangladesh.

Develop Partnership between Formal and Quasi-formal Institutions

Aformal collaboration between banks and quasi-formal financial institutions will contribute to to extend financial services to unbanked areas and un-served or under-served firms or individuals. Quasi-formal institutions are in advantageous position. Formal institutions have more resources and quasi-formal institutions have high level of capability and efficiency. Formal banks and quasi-formal institutions can develop partnership to reach out to the un-served regions and firms as well as individuals.

Experience Sharing – Formal banks need to learn from the experiences of micro finance institutions and informal market: Experiences of MFIs and informal market suggest that credit services can be rendered even to the destitute HHs without any collateral and third party guarantee. The reason that loans are recovered is the monitoring mechanism and introduction of incentive structure. Banks in Bangladesh need to learn from these experiences. The experiences also suggest loan products can be diversified in banking sector. Risk on the part of the lenders can be reduced or minimized through strengthening Credit Information Bureau and decentralising its operations also at the division levels so that information can be generated and disseminated quickly.

Financial Resource Mobilization

For finance to play role in growth, two requirements have to be satisfied - more resources should be mobilized, and mobilized resources should be utilized efficiently in desired sectors. We have so far discussed about policy implications mostly from the perspective of expanding credit facilities. We have not yet derived policy set for financial resource mobilization. Considering the findings, following policy implications may be derived:

- Transaction cost of withdrawing and depositing savings needs to be reduced. This, as we have argued earlier, can be reduced through expanding banking and micro finance network. This is supported by our econometric analysis that higher transaction cost reduces demand for deposits.
- Banks should increase deposit interest rate as deposits are interest sensitive. Deposit interest rate should be, in real term, positive.
- Informal savings exist because of some limitations of the banking sector in mobilizing resources. It also reflects limited financial instruments. Banks should develop multi-dimensional financial instruments to meet demands of all types of savers and depositors.
- Quasi-formal imstitutions may be tied with the banks to mobilize public deposits. Bangladesh Bank in collaboration with MRA may formulate appropriate policy for mobilization of deposits, in particular from rural areas.

Program and Product Initiatives

Promote and Finance Enterprises: We have found that firms are credit constrained. Althoug micro enterprises have relatively more access to quasi-formal credit, small enterprises have less access in formal market. They are the 'missing middle' in formal credit market but on the other hand, they have little access to quasi-formal credit. However, access to credit contributes to increase in productivity and efficiency. Firms with access to credit has higher average productivity of labor

and capital than the firms with no access to credit. We also found that credit influences total factor productivity and productivity of inputs. These results were statistically significant. However, we also found that new firms are more constrained. Based on these results, following policy implications can be derived:

- A different production technology should be developed to promote enterprise, particularly micro and small enterprises. Such technology should encompass the element of 'no collateral';
- Preference should be given to the entrepreneurs willing to start a business;
- Bangladesh Bank should allow small business to have lateral entry into quasi-formalcredit market;
- Special care should be given for promoting enterprises; and
- lenders should develop and organize skill enhancing training program for the betterment of this sector

Targeted Program for Women, and Female Headed HHs: Women, and female headed HHs are least represented in formal banking sector. Female constitute almost fifty percent of the population. They do not much access to formal credit and savings. Bangladesh Bank should develop a policy targeted towards women, and female headed HHs for accessing savings and credit services. Banks should be advised to develop a package of financial services for the women and the female headed HHs.

Finance International Migration and Expand Flow of International Remittances Through Banking System: We have shown that international migration is largely financed by sale of assets and/or borrowing from informal credit market at a high interest rate. This is erosive in nature. Therefore, it is important that international migration is financed. Good that recently the GoB has established 'Probashi Kalyian Bank' which is mandated to finance international migration as well as increase flow of international remittance. But such venture will have little implications. Other banks should finance international remittances, and they may work closely with the newly established Probashi Kalyian Bank

Way Forward

Ensuring the Sustainability of Banks and MFIs: Presenting the boquet of financial services to the poor, especially the hard-core poor is challenging for Banks and MFIs. Sustainability of bank branch or MFI branch is the key concern. The access to different sources of fund has to be ensured. Commercial banks already have access to plentiful sources of funds through deposits and the capital markets; as their roles in microfinance grows they will draw on these resources for financing. Accessing to the public deposit through different savings products may improve the financial viability of the institutions.

Removing misconceptions about micro finance institutions: MFIs are misperceived in some quarters of Bangladesh society. Misperception prevails about impact of micro credit and interest rate. The most important misperception is the ability of the regulatory authirty and GoB to aptly Our showed that high access to financial services is largely due to MFIs. Had there been no MFIs, access toecognize the role of MFIs as an important constituent of financial system. More than 80 percent of the formal and quasi-formal financial services is provided by the MFIs. Access to financial services would have been the lowest in South Asia, had there been no presence of MFIs. MFIs have come a long way. It has expanded its services enormously. But its role is not properly perceived. Bangladesh Bank, in particular, should recognise the greater role that the MFIs have been playing. Such exercise should not be limited to dissemination in seminar and workshops. It should be formally documented and disseminated.

Scaling up the formal and quasi-formal services to the poorest:

Reduction of transaction cost of borrowing: Transaction cost is one of the major determinants of access to finance. The farther the financial institutions are located, the higher is the cost that the borrowers will have to bear. Transaction cost of borrowing matters in access to finance and also in determining loan size. This can be done through supply side actions. Such actions include: (i) increase bank branch density, and (ii) improve efficiency of bank branches through innovation in loan production technology. The later action is required to minimize waiting period for loan sanctioning. However, because of higher cost of bribing particularly for public sector banks, banks need to focus on governance so that efficiency can be increased and transaction cost can be minimized for the borrowers.

Improving Financial Literacy: Although access to financial services is relatively high in Bangladesh, it does not necessarily imply that all households have complete information. In most cases, they are not aware of all available services. In case of insurance, literacy level is quite low. Awareness needs to be increased through advertisement, news, seminars and campaign.

Strengthening Postal Banking System: Not too long back, postal banking system was quite intrumental in rural areas. But over time, its role has become limited. This is what we found in our survey. But postal banking system needs to be strengthened as a viable alternate financial service provider in rural areas. The GoB and Ministry of Finance need to reformulate praction strategies to strengthen postal banking services.

Creating environment for a competitive financial system: Bangladesh Bank should create an enabling environemtn for creating a competive financial system with appropriate incentive and governance system so that banks can compete for providing financial services with a high degree of efficiency. Public sector banks have proven to be less efficient. We showed that non-interest cost of borrowing is higher for the public sector bank credit than the private banks. Morah hazard problem is dominating in agricultural development banks. Bangladesg Bank and the GoB need to fix the problem of moral hazard and create consucive environment so that borrowers and depositors can receive services at low cost.

Strengthening Insurance sector: Over 60 insurance companies operate in Bangladesh. But their services have been relatively limited. There is a huge potential market. But what is important is the monitoring of the operations of insurance companies. Insurance Regulatory Authority has recently been established. The Authority will have to formulate policies for systematic development of the insurance sector.

Improving Regulatory Frameworks: Improving the existing regulations, advocating for or creating new regulations, setting up new regulatory bodies, and improving transparency may enhance the financial inclusion. The microfinance can progress further if the regulatory environment is supportive. The policy and regulatory environment will determine which regions of the country will close the credit demand gaps most successfully.

Documentation and dissemination of best practices: Regulatory authority should document best practices in mobilizing financial resources and lending to under-served or un-served regions or households. Disclosure of such information among the lenders can encourage other institutions to participate in the process.

Financial Inclusion in Char and Haor Areas in Bangladesh

(Summary)

Mahfuz Kabir; Abdullah Nadvi

Introduction

Financial inclusion encompasses improving the range, quality and availability of financial services to the underserved and the financially excluded, and more importantly, to marginalized and low-income segments of the society. It has gained significance since the early-2000s. Financial exclusion has a direct correlation with poverty. Two-thirds of the adult population in developing countries (2.7 billion people) lack access to basic formal financial services. Improved access to finance is not only pro-growth but also pro-poor, reducing income inequality and poverty. Therefore, financial inclusion is now a common objective for many central banks among the developing nations including Bangladesh. A well-functioning financial system that includes offering savings, credit, payment, and risk management products through diverse modes in order to meet a wide range of needs would be vital to reduce income inequality and promoting economic growth. The reach of financial sector to *char* and *haor* area is hardly known through formal investigation even though these are the geographically most vulnerable areas in Bangladesh. Understandably, it is quite reasonable to argue that the poor, women, and youth of *chars* and *haors* are overwhelmingly excluded from formal financial systems due mainly to lack of availability in appropriate form, access, affordability, acceptability and financial literacy as they live in the extremely backward regions. Despite some recent developments, chars and haors are two major geographically vulnerable, remote and hard to reach areas in delivering basic economic and social services. Around six million people live in island *chars* while another two million live in *haor* areas. A recent study reveals that 86 percent of island char dwellers are poor, of which as high as 78 percent are extreme poor. These areas continue to get lesser attention compared to the mainland. *Char* people of Bangladesh live in an entirely different socio-economic reality than the rest of the population. Therefore, financial inclusion for them would significantly contribute towards poverty reduction and social development.

Objective and Technical Approach

The broad objective of this study was to examine the state of financial inclusion in *char* and *haor* areas in order to explore avenues for inclusive finance. The findings of the study can be used to devise the options and strategies for inclusive finance, for formal and semi-formal financial institutions. In assessing various aspects of financial inclusion confined to *char* and *haor* areas, the specific objectives of the study were threefold. First, to understand the nature and extent of financial inclusion as perceived by various service providers in selected char and haor areas to have a general impression about the sense and reality of financial exclusion. Second, to understand assess the perception of the degree of inclusive finance from the demand side of services on the above issues. Finally, to draw policy lessons for greater inclusion of financial services in these areas. The study was conducted in eight districts in five administrative divisions in Bangladesh in 2011 and 2012 by applying qualitative field investigation. The aspects of financial inclusion were availability, access, quality of service, and market structure where both demand side and supply side perceptions. Financial service providers focused by this study are: general commercial banks, specialised banks, department of social welfare, postal department, Microfinance Institutions (MFIs), cooperative societies, and insurance companies.

Financial Inclusion in Bangladesh

The early post-liberation initiatives of financial inclusion in Bangladesh were two-prong: expansion of rural branches of banks, all of which were nationalised in 1971 right after inception of Bangladesh; and promotion of mutually-owned cooperative credit societies offering deposit and credit services to their members. Even though those initiatives were aimed at promoting financial inclusion of the broad masses of illiterate and disadvantaged rural poor, the better-off rural elite benefited from these initiatives. Thus, the success of these efforts had been limited. The cooperatives were mostly 'elite capture' by powerful groups who were not interested to see that those are controlled by general mass by expanding membership. Rural branches of banks focused mainly on crop loans to farmers. They did not reach out the poorer, marginal and landless farmers who are illiterate.

Bangladesh Bank is currently aiming at deepening the ongoing financial inclusion programs through banking the unbanked. However, there are still a large number of under-banked people who are overwhelming majority of total population. Recent initiatives undertaken by Bangladesh Bank (to ensure financial inclusion) include- refinance schemes for banks against their loans to Small and Medium Enterprises (SMEs); measures taken to ensure institutional credit facility for the share-croppers; farmers being allowed to open bank accounts for Tk. 10; low interest loan (4 percent rate) for import substitute crop, salt cultivation; mobile phone banking and school banking; and reserving a certain portion low interest and SME credit facilities for women.

Since the late-1970s, microfinance has been one of the key instruments of financial inclusion through financing micro-entrepreneurs. Over the years, Grameen Bank and the MFIs played a pivotal role in reaching out to the rural poor who have minimal asset and literacy. Besides extending micro-credit, many MFIs in Bangladesh have collaborated with insurance companies in extending another financial service at affordably low rates of premium. Beside these shiny portraits, microfinance industry suffers from some major criticisms. First, there are episodes of borrower distress in complying with rigorous micro-credit regimes, compounded by overlapping. Second, excluding some special programs of BRAC and few other NGOs, microcredit does not help the poorest because it is intended only for those who can use it in income generating activities. Third, despite a large number of bank branches and Microfinance Institutions (MFIs), a significant part of the population particularly rural poor still have poor access to formal financial services.

Supply Side Provisions and Bottlenecks

Specialized Banks

Services provided by Bangladesh *Krishi* Bank (BKB) and Rajshahi Krishi Unnayan Bank (RAKUB) include loans for- seasonal crops, cow fattening, small poultry (including household poultry farm) and procurement of agricultural equipment. While the conditions to be eligible for loans from these banks are same for areas in close proximity of upazila headquarters as well as remote areas like *char* and *haor* areas, the number of applicants from remote areas is much lower than that from areas close to upazila headquarters. This is so as households from *char* and *haor* areas usually are poor and marginalized ones who in most cases own negligible wealth, no or minimum land, do not have proper land ownership documents, do not have steady income source, etc.

General Commercial Banks

People living in char and haor areas usually have vulnerable socio-economic condition and as those are hard to reach areas, these bank branches have not too many current or potential clients in those areas. Interviewed officials admitted the fact access to their services is relatively difficult for *char* and *haor* household compared to other households in non-remote areas. Lack of physical connectivity and infrastructure are the main reasons for this disparity according to the interviewees. Cost effectiveness issues related to serving clients in remote areas and higher perceived risks by commercial service providers have been found to be the major impediments in expansion of services of general commercial banks in these areas.

Department of Social Welfare

Department of Social Welfare of the government provides different benefits under various Social Safety Net Programs (SSNPs) and also has different credit programs that target the poor and marginalized segments of the society through its offices across the country. Interviews with the officials have revealed the major factors impeding financial inclusion in these areas to be: inadequacy of proper transportation and communication facilities; lack of manpower to serve remote areas and lack of awareness among people living in char and haor areas.

Post Office

People living in char and haor areas as well as marginalized people living in other areas have minimum or no capacity to save due to their vulnerable economic conditions. Savings schemes are dominant among the financial services provided by the postal department. Hence financial services other than money transfer services remain rarely utilized by these people.

MFIs and Cooperative Societies

They provide credit for both agricultural as well as non-agricultural purposes. *Char/haor* households having more vulnerable socio-economic conditions compared to those in non-remote areas; higher level of threat from covariate shocks to households in these areas; inadequate communication and transportation facilities; higher probability of rural to urban migration; lack of incentive from national level monitoring authorities etc. are major factor for which MFIs and cooperative societies are less interested in serving households in *char/haor* areas.

Insurance Companies

The products served by insurance companies are too expensive for economically vulnerable people living in *char* and *haor* areas. Apart from this, lack of financial literacy, lack of communication and transportation, improper product design etc. are also among the major impediments to expansion of services by insurance companies in char/haor areas.

Demand Side Perceptions about Financial Services

To identify how clients in *char/haor* area (i.e., individuals/households in those areas who seek financial service) perceive the situation regarding financial inclusion in *char/haor* areas and the factors impeding improvement of service quality or service outreach of different financial service providers (other than informal service providers) in char/haor areas, FGDs with both those living in

char/haor and those living in non-remote areas have been conducted. The major findings are as follow:

- In the case of the specialized banks while the service provider has products especially designed for the poor and the marginalised, the fruits of these products are not reaching such households in *char/haor* areas. The major factors responsible for this are: lack of resources of service providers needed to meet the demand, inadequate communication and transport facilities, and lack financial literacy among char/haor people compared to their non-remote counterparts.
- Difficult eligibility criteria set by the commercial banks and high cost of their servicesare major factors due to which many applicants from *char/haor* areas do not apply at all or if applied, fail to get that loan sanctioned. In addition, these banks most often are not inclined enough to operate in *char/haor* areas as they consider investing in such areas to be risky due to higher vulnerability of these areas to covariate shocks.
- Department of Social Welfare provides services (on behalf of the government) and has much liberal eligibility criteria in comparison with commercial banks and even the specialised banks. But its capacity to provide support is limited due to budget constraint.
- The products designed and served (for savings and money transfer) by the government run Postal Department are not designed to suit the poor and marginalised household. Consequently, here also the high cost of service is a constraining factor.
- Relatively high socio-economic vulnerability of life and livelihood in *char/haor* areas usually result in most MFIs being less interested to operate in these areas and more interested to operate in non-remote areas or areas in proximity to upazila headquarters. They consider investing/operating in *char/haor* areas to be more risky and this is especially true for the locally based smaller MFIs. Service providers lack resources also play as a barrier to operation of MFIs in *char/haor* areas.
- Insurance companies usually do not have products that suit vulnerable households in *char/haor* areas and cost of the services provided by these providers are high for such households for obvious reasons.
- Survey respondents also pointed out that they most often resort to informal moneylenders as-these providers despite requiring personal relationships and *charging* higher interest rates; are willing to provide credit at any time and for much more flexible eligibility criteria.

Policy Recommendations

Role of the Government Providers

While the assumption that further allocation of government resources for these bodies will improve their outreach in *char/haor* areas and ensure financial inclusion of *char/haor* people may seem to be a good one, one has to consider financial viability of these proposals considering resource constraints of the government. At the same time, it also must be taken in to consideration that administrative cost incurred by government operated bodies is usually higher in comparison other service providers (especially quasi-formal service providers). Therefore, instead of allocating limited resources for government operated financial services providers as well as taking up the complex task of renovating their service delivery mechanisms, the responsible authorities should focus on finding more viable solutions to the problems related to financial inclusion in *char/haor* areas.

Role of Non-Government For-Profit Providers

While both insurance companies and commercial banks have high demand in *char/haor* areas as well as may have capital needed to invest, they still lack the capacity to serve *char/haor* people in a flexible and cost-effective manner, since both of them are formal service providers. The inference here may be drawn that commercial service providers are less likely to enhance their service provision on their own to an extent which would ensure financial inclusion in *char/haor* areas to the desired level. On the other hand, developing partnership with quasi-formal service providers may help these commercial service providers in overcoming barriers caused due to their formal structure of service provision.

Imperatives for MFIs

Barriers to further enhancement of MFI services in *char/haor* areas are weekly/monthly installment payment system and higher cost of providing services due to relative socio-economic backwardness of *char/haor* areas. To create provision of yearly/semi-annually/seasonal installment payment or to be able take the risk of providing credit to a household that has higher susceptibility to covariate shocks or higher probability of migrating elsewhere for better life, MFIs obviously will need higher amount of capital. In that case, interest rate from loans taken by the partner NGOs of PKSF or from the commercial banks should be reduced for serving the *char/haor* areas.

Customized Products

To meet the specific demands of *char/haor* dwellers, service providers (especially MFIs) need to come up with customised products like anytime loans and crop insurance services, etc. It may be expected that MFIs will find providing insurance services in *char/haor* areas more viable compared to commercial insurance companies, as MFIs have long experience of working at grass root levels and serving financial demands of socio-economically backward people.

Teaming Up with Commercial Service Providers: Hybrid Model

MFIs are more acceptable as vessels of financial inclusion in *char/haor* areas compared to other commercial bodies providing financial services, e.g., commercial banks and insurance companies. However, they need additional capital to provide financial services for *char/haor* households in the same manner as they do for households in non-remote areas. On the other hand, the banking sector of Bangladesh is a growing sector. This creates the possibility of a partnership between the formal commercial banks and insurance companies and the MFIs as a 'hybrid' model.

DOES ACCESS TO FINANCE MATTER IN MICROENTERPRISE GROWTH? EVIDENCE FROM BANGLADESH

(Summary)

Shahidur R. Khandker[1]; Hussain A. Samad[2]; Rubaba Ali[3]

Introduction

Rural non-farm growth helps expand employment and income, provides forward and backward linkages with both the farm and modern sectors, and thereby leads to broad-based poverty reduction. Growth in the farm sector, with improved seed and other agricultural innovations, has been a major source of rural poverty reduction. However, this is not enough to absorb the burgeoning rural labour force in many countries where the modern sector is growing slowly. Therefore, development economics is paying increased attention to expansion of the rural non-farm sector in order to generate additional productive employment before the modern sector of the economy can absorb the surplus labour. Moreover, given the increased pressure on land due to increasing population density, labor-intensive non-farm activities can provide avenues for poverty reduction, without further stressing the land.

There were some 4 million rural micro enterprises in Bangladesh in 2003 (a number that has certainly increased) accounting for 30 percent of overall manufacturing value-added and 70 percent of the non-agricultural labour force. Given the scope of this sector both in terms of employment and income, growth in the non-farm sector, especially in micro enterprises, can play a significant role in furthering Bangladesh's overall growth and poverty reduction. Growth in micro enterprises seems to suffer from lack of access to finance, infrastructure, and markets, and poor quality technology and regulatory barriers appear to be most common.

Objectives

The present paper addresses a number of issues critical for understanding the sources and potential of micro enterprise growth, such as whether and how better access to finance matters in the profitability and further growth of micro enterprise in the country. Micro enterprise investment is financed largely by informal sources such as individual savings and informal loans from friends and relatives. Institutional credit can play a role, but it has until recently been marginal. With the advent of microfinance institutions, microcredit is expected to play a bigger role in supporting micro enterprise development in rural areas. However, scaling-up of microcredit to support progressive micro enterprises with diversified loans and competitive products has not been forthcoming as expected. Thus, access to finance may still be a major hurdle for micro enterprise growth.

We attempt to document how access to finance affects micro enterprise profitability and growth in Bangladesh. We also examine the role of finance in the participation of micro enterprise and return on enterprise. We address a set of pertinent questions for raising micro enterprise growth

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and productivity: Do the returns on such micro-investment justify the cost of capital? How do such returns vary across various micro enterprise activities? What underlying factors might be affecting the profitability of micro enterprises?

The central theme of the paper is to critically examine the sources of growth, focusing on the role of finance in enhancing micro enterprise growth and productivity.

Data and Methodology

The paper uses data from the three rounds (2000, 2005 and 2010) of a nationally representative Household Income and Expenditure Surveys (HIES) of Bangladesh. The number of rural households was 5,027 in the 2000 round, 6,027 in the 2005 round, and 7,830 in the 2010 round. Both descriptive and econometric tools are applied to analyze the data.

Findings

We find that rural households draw some 36 percent of income from an average micro enterprise. Data show that households with micro enterprise as an additional source of income are much better off in terms of income, consumption, and poverty than their counterparts which do not operate such income earning activities. An econometric analysis that establishes the causality between micro enterprise participation and household welfare shows that a household's participation in a micro enterprise raises income additionally by 6 percent and consumption by 5 percent, and consequently reduces moderate poverty by 2 percent and extreme poverty by some 4 percent per year. If micro enterprise does help reduce poverty by raising rural income, the question arises as to why micro enterprise expansion does not occur more quickly.

Our analysis shows that the rate of return to micro enterprise investment on average is high at 36 percent per year. This means that an entrepreneur with an incremental investment of Tk. 1,000 in an activity can obtain Tk. 360 in profit per year. Therefore, rate of return is not a constraint for micro enterprise expansion and its growth. It is the lack of access to affordable finance rather than the non-credit constraints (e.g., lack of demand or access to transportation and electricity) that matters most in restricting micro enterprise growth in Bangladesh. The data shows that more than 70 percent of enterprises' start-up capital comes from entrepreneurs' own savings; if we include borrowing from friends and relatives, it explains more than 85 percent of start-up capital of rural micro enterprises in Bangladesh. That is, the opportunity cost of start-up capital is high, in the sense that households must either save or have wealthy friends and relatives in order to set up an enterprise.

Informal lenders can also provide funds to operate micro enterprises. However, exorbitant interest rates (as high as 180 percent) make this option infeasible for financing micro enterprise investment. On the other hand, formal financial institutions such as commercial banks charge 10 to 12 percent interest rate and could thus be the most cost-effective sources for financing rural enterprises. But they rarely finance rural micro enterprise activities because of high transaction costs involved with small loans for micro entrepreneurs, who often further lack adequate assets as collateral for bank loan guarantees. Our data shows that barely one percent of the micro enterprises borrow from commercial banks to fund start-up capital.

In contrast, the country's large microfinance institutions (MFIs) may be a major source of support for micro enterprise expansion and growth for a variety of reasons: (a) MFIs have a large network of

outreach; (b) they do not require physical collateral to lend; and (c) they charge an effective interest rate close to 32 percent. We find that some 8 percent of micro enterprises acquired loans from MFIs to start-up micro enterprise activities in 2010. Lack of access to affordable finance for start-up capital is perhaps a barrier for micro enterprise growth

Conclusions

Our findings suggest that improved access to affordable loans through microfinance or other sources would help further micro enterprise growth and promote poverty reduction in Bangladesh. As the returns to micro enterprise investment are found high and meet the cost of borrowing from microfinance institutions, there are clearly large potentials of microfinance for supporting micro enterprise growth in Bangladesh. As the returns to microenterprise investment are found high, microfinance institutions (MFIs) can play a bigger role in supporting micro enterprise growth in Bangladesh.

ACCESS TO FINANCE AND PRODUCTIVITY OF ENTERPRISES

(Summary)

M. A. Baqui Khalily; Md. Abdul Khaleque

Introduction

Access to finance is a major factor in enterprise development. Firms, largely micro and small enterprises, in Bangladesh are credit constrained and consequently they have low productivity. Although the medium and large enterprises have considerable access to bank credit, the micro and small enterprises have limited access to such credit– they have more access to microcredit.

Access to credit for enterprise development can have impact at two levels– for starting up of enterprises and for scaling up of activities. Only around 23 percent enterprises in Bangladesh have access to credit for starting up and about one-third enterprises have access to credit for scaling up of activities. Access to credit as a policy for scaling up of activities can be justified if we find that it contributes to higher productivity.

Although there are a few evidences available on firm productivity in Bangladesh, almost no evidence is found on the impact of the access to credit on productivity. This paper is an attempt to examine the effect of the access to credit on enterprise productivity. The basic hypothesis is that access to credit contributes to firm productivity.

Enterprises in Bangladesh

In Bangladesh, economic entities are dominated by micro enterprises with more than 98 percent of the total firm enterprises. They are dominating in terms of employment also. Over 75 percent of the total off-farm employment was created by micro enterprises in 1986, and in 2002, it was about 67.5 percent. In the year 2002, the share in total off-farm employment was almost 18.2 percent. The SMEs grew at an annual rate of over 6 percent during the period 1981-2001.

Most (around 71 percent) micro enterprises are located in rural areas mainly because of the expansion of rural microcredit during the past decade. A little over 70 percent of the enterprises are owned by non-poor, though it does not imply that the MFIs have extended finance to the non-poor. In fact, financing from the MFIs has contributed to the establishment of micro enterprises by the poor entrepreneurs to a large extent. Further, their present status of being non-poor is essentially an outcome of microcredit.

In practice, in terms of access to credit, the enterprises can broadly classified into two groups – enterprises having access to credit or those having no such access. Access to credit involves two phenomena – zero rationing (amount of credit demanded equals amount of credit supplied) and partial rationing (amount of credit demanded is higher than the amount of credit supplied).

The concept of 'no access' involves issues like self-constrained or supply constrained (lenders completely reject the loan application) while the demand constraints may be of price rationing and risk rationing. An enterprise may also face transaction cost rationing. It is easy to identify the constraints to credit due to the mechanism of lenders, but we need to adopt a systematic approach to identify the demand side constraints.

Enterprises require external financial supports for expansion and development. In Bangladesh, the equity fund through capital market is not a source for micro and small entrepreneurs. Bank financing has always been a constraint to the development of micro and SMEs. Enterprises – micro

and small– are largely financed by own funds in this country and most of these enterprises have very limited access to formal credit market. Around 15 percent of the loan applications are rejected on the ground of guarantee or collateral, asymmetric information, and high transaction costs.

Data Source

Data used in this study come from a nationally representative sample survey of around 9000 households randomly selected from 63 out of the 64 districts of Bangladesh. The survey was conducted by the Institute of Microfinance (InM) in 2010. The survey schedule included fourteen modules. One module was on off-farm enterprise containing information on initial and current capital, profitability, and use of resources and the enterprise data are used in this study. The study shows that around 27.84 percent households have off-farm enterprises.

Analytical Framework

Both descriptive and econometric techniques are followed to analyze the impact of the access of firms to credit on productivity. In measuring productivity, production function approach and total factor productivity approach are followed. Robustness of the results of factor productivity is tested applying an appropriate econometric technique.

Credit can affect productivity in two ways: through increasing productivity of labor and capital, and by improving organizational and management efficiency. Since access to credit is endogenously determined and participation in credit market is of self-selection nature, we may have encountered two econometric issues: endogeneity and selection bias. To overcome the problem we have used instrumented two-stage least squares (2SLS) and Generalized Method of Moments (GMM) methods. Our estimates under both 2SLS and GMM were similar, which implies that there was no problem of *heteroskedasticity*.

Results

The major findings that emerge from the estimates are as follows: first, access to credit has significantly positive influence on the average productivity of labor, while it does not have impact on productivity of capital; second, access to credit improves the total factor productivity; third, the age of enterprise influences productivity positively; and fourth, micro enterprises have a higher average labor productivity as well as total factor productivity.

The consistency of results is checked in two ways: first, by evaluating the impact of credit rationing on productivity, and second, by estimating the effects of access to credit on productivity by using Switching Regression technique. The results show that the credit rationed firms have relatively low productivity compared with the firms without credit rationing; the firms with access to credit gain in total factor productivity by more than 176 percent over the counter-factual group; and the gain in average productivity of labor and sales for the firms with access to credit than that for the counter-factual group is higher by 13 percent. All these consistent results strongly suggest that firms with access to credit have higher productivity.

These results corroborate some earlier findings in Bangladesh manufacturing industry. In 2006, it was found by estimating production function that the effect of credit on total factor productivity and output to be positive. Similar results were found by estimating production function for

manufacturing firms in 2010. The present results are broader than the earlier findings, as the present study contain data on all types of enterprises. Also, additional pieces of information on robustness of the estimates are provided.

Table-1: Productivity with and without Access to Credit

Particulars	Access to Credit			Access to Credit		
	NO	Counter-factual (If access)	% of gains	YES	Counter-factual (If no access)	% of loss
TFP	-0.79	0.60	175.95	0.57	-0.83	-245.61
Log (APL)	10.34	11.64	12.57	11.61	10.30	-11.28
Log (Sales)	10.35	12.11	17.01	12.08	10.33	-14.49

Source: Based on survey data.

The results are consistent with the results of some other countries as well. In Bulgaria, it was found that the firms with access to credit had higher productivity and that micro enterprises had higher average productivity of labor. However, any positive impact of access to credit on average productivity of capital was not found there.

Policy Implications

These findings suggest that access to credit contributes to higher productivity. Now, the critical question is how to expand financial services to the enterprises when this has remained a major problem over the past forty years. Our analysis shows that only about 8.22 percent of the enterprises have access to formal credit– the medium and the large enterprises have more access to bank credit, while micro enterprises have more access to microcredit. The microfinance institutions have a wide network with more than 700 institutions with over 17,000 branches covering about 36.7 percent of the households in the country. Therefore, one way of solving the problem will be the expansion of credit services through the microfinance institutions.

The Government of Bangladesh in its development strategy has considered SMEs as a thrust sector because of its higher productivity, employment creation, and development of overall industrial sector with the backward and forward linkages. The government has always recognised 'access to credit' as a major intervention and thus it needs to examine different options to finance and promote enterprises in Bangladesh.

As small enterprises are more squeezed in the formal credit markets, and medium enterprises are more preferred to small enterprises, the policy of SME needs to be reformulated. It will perhaps be appropriate to classify enterprises into two broad groups – micro and small enterprises, and medium and large enterprises. This will make the credit program more focused. This ought to be done because around 99.35 percent of the enterprises are micro and small. This grouping will help the Bangladesh Bank monitor the access of MSMEs to credit more effectively.

From the lenders' perspective, innovative measures in loan production technologies need to be established as the transaction cost has a bearing on loan size. In recent time, a new technology of mobile banking has become popular in Bangladesh. However, this low cost mobile banking is applicable only for the deposit market. The Bangladesh Bank needs to find out more innovative approaches to reduce the transaction cost for both lenders and borrowers. One approach may be involving the microfinance institutions as agents of the formal banks. The measure, we believe, could make the credit market more efficient.

HAS MICROCREDIT HELPED THE RURAL POOR OF BANGLADESH? AN ANALYTICAL REVIEW OF THE EVIDENCE SO FAR

(Summary)

S. R. Osmani

Introduction

In the early days of microcredit it was taken as almost axiomatic that access to credit will bring economic benefits for the poor. Credit plays an important economic role by acting as a bridge between the present and the future. For example, costs of production are incurred in the present but returns will accrue only in the future. If the producer doesn't have enough capital to cover the costs, access to credit becomes essential to ensure that profitable activities can in fact be undertaken. Similarly, access to credit enables a household to protect its current level of consumption in the face of negative shocks by borrowing against future income and thus helps avoid excessive hardship in adverse circumstances. Poorer households have traditionally been deprived of these economic benefits of credit because the formal banking system is not willing to lend to them while village moneylenders, who may be willing to lend, charge exorbitant rates of interest. Faced with the credit constraint, poor people are thus less able to undertake potentially profitable economic activities and to avoid excessive fluctuations in consumption. It is, therefore, reasonable to expect that once they gain access to credit, they should be able to improve their economic well-being by earning more from productive activities and by being better able to smooth consumption over time.

The early studies of the impact of microcredit in Bangladesh seemed to confirm these expectations. The pioneering studies of Mahabub Hossain, for example, demonstrated that the members of the Grameen Bank fared better than eligible non-borrowers in terms of most of the economic indicators the study looked at – viz., average income, extent of poverty, level of employment, indebtedness to village moneylenders, and value of accumulated assets (Hossain, 1984, 1988, 2002). In yet another study of the early impact, Rahman and Khandker (1994) evaluated three major microcredit programs in Bangladesh (Grameen Bank, BRDB and BRAC) and found that all three were successful in expanding the opportunities of the poor for productive self-employment. In particular, credit was found to have enabled the poor to switch from low-paid wage employment to more remunerative self-employment.

These early studies soon came to be questioned, however, on methodological grounds. Doubts were raised about whether the methodologies typically employed in these studies were able to correctly identify the causal effect of credit on economic outcomes – a problem known in the econometric literature as the 'identification problem'. The present paper tries to explicate the nature of this methodological problem, discusses how subsequent studies have tried to deal with this problem, how successful they were in dealing with it, and as a result of these investigations what the current state of knowledge is on the impact of microcredit in rural Bangladesh.

Methodological Challenges

In assessing the impact of microcredit the identification problem arises mainly from the processes through which borrowers get selected into the credit programs. The basic problem is that the

effect of credit may get mixed up with the effect of the selection process itself, so that it may become difficult to identify the true effect of credit. If we cannot separate out the possible effects of selection, the resulting estimate of the effect of credit will be misleading – it will suffer from what is known as 'selection bias'.

For example, the MFIs may deliberately select the better off among the poor as their clients so as to ensure a better chance of their loans being repaid. In that case, the evidence of higher income of the borrowers compared to non-borrowers cannot be interpreted as evidence for the beneficial effect of credit because it may simply reflect MFIs' selection policy. Similarly, the MFIs may deliberately select villages of certain types – for example, relatively better off villages – because that's where their loans are likely to be repaid more. In that event, a straightforward attribution of the income gap between borrowers and non-borrowers to the effect of credit will be a mistake, because at least a part of reason for the gap may lie in the type of villages in which they happen to live. Another possibility is that individuals with better entrepreneurial ability may 'self-select' themselves into the MFI's program while those with lesser ability self-select out of it. Once again, any evidence of higher income of borrowers cannot be interpreted as being caused by credit because the real cause may lie in unobserved differential abilities of the borrowers and non-borrowers. In all such cases, the causal effect of credit is not 'identified'. Moreover, in all these cases, if selection indeed occurs in the manner described, the resulting 'selection bias' will be 'upward' – i.e., the effect on income will be inflated as a result of MFIs selecting the better off clients or more prosperous villages, and more able clients self-selecting themselves into the program. In consequence, the inference that access to credit has led to higher income will not be credible.

In order to generate credible estimate of microcredit, the identification problem must be solved, which requires that the estimates be insulated from selection bias. A good deal of later research on the impact of microcredit in Bangladesh (and elsewhere) has, therefore, been seriously concerned with finding appropriate 'identification strategies'. What constitutes an appropriate identification strategy depends very much on the nature of data at hand. Considering the nature of data used, and hence the type of identification strategy employed, we can classify the subsequent studies into three groups. The first group is based on cross-section data in which a sample of households is surveyed at a point in time. The second group contains studies that use longitudinal or panel data i.e., repeated surveys of the same sample of households at more than one point in time. The third category of data may be described as quasi-panel in nature, which is essentially cross-section data but enriched by information about the past so that some sort of longitudinal analysis can be applied.

Studies based on Cross-section Data

The most celebrated cross-sectional study on the economic impact of microcredit in rural Bangladesh is Pitt and Khandker (1998). Using BIDS/World bank data generated in 1991/92, the authors tried to assess the impact of microcredit on several indicators of household well-being such as expenditure and assets, differentiated by gender, using a novel identification strategy. They found that loans taken by females had a strong positive effect on the well-being of the borrowing households but loans taken by males did not. Since women constituted the majority of borrowers, the overall effect was judged to be positive. The magnitude of the effects they found was quite large. For example, total household expenditure was found to increase by 18 taka for every 100 additional taka borrowed by women, the corresponding figure for men being 11 taka for every 100 taka of additional loan. Professor Yunus' oft-quoted remark that microcredit lifts 5

percent of borrowers out of poverty every year in rural Bangladesh is widely believed to be based on these findings. The facts that the measured impact was so large, that it was estimated by an apparently sophisticated method of dealing with the identification problem, and that the findings seemed to vindicate the MFIs' decision to target credit mainly to women, have all combined to elevate the paper to a cult status in the world community of practitioners and academics involved with microfinance. It has remained the most frequently cited academic paper on microfinance to this day.

From the very beginning, however, there were also some rumblings of discontent within the academia, articulated most strongly in an unpublished note by Morduch (1998). He raised a number of concerns with the paper, the most important being the validity of the identification strategy employed. Pitt (1999) soon came out with a robust response, also in an unpublished note. And there the matter seemed to rest for nearly a decade, until the debate was resurrected in 2009 in a working paper which Jonathan Morduch co-authored with David Roodman (Roodman and Morduch 2009). Just at the time this new round of debate was coming to a boil, a parallel debate cropped up between Mark Pitt on the one hand and Maren Duvendack and Richard Palmer-Jones on the other (Davendack and Palmer-Jones, 2012). A great deal of the contents of these debates are too technical to go into here; also many of the claims and counter-claims have become redundant after being refuted during the course of the debate. The more important thing to assess is where the debate stands now, especially what remains of the original findings of Pitt and Khandker after all this scrutiny.

Both the Roodman-Murdoch pair and the Davendack-Palmer-Jones pair started their onslaught by claiming that they had refuted the original findings of Pitt and Khandker as their own analysis of the same data did not reveal any positive impact of credit on household expenditure. In the face of spirited response from Mark Pitt, however, both pairs eventually repositioned themselves. They conceded that they were unable to disprove the Pitt-Khandker findings but they professed to remain skeptical about the validity of those findings. Whether they are justified in holding on to their skepticism is an issue that, in our view, cannot be resolved on a scientific basis, because the arguments at this stage seem to belong more to the realm of faith than of scientific discourse. It is reasonable to argue, however, that even from a purely objective point of view not all the qualms about the Pitt-Khandker results have been fully resolved.

At least three reasons for qualms still remain. They relate respectively to (1) Pitt and Khandker's shifting position on what really is the identification strategy in their model, (2) the demonstration by Roodman and Morduch (2013) that the positive effect of credit seems to disappear once a handful of outliers are removed from the sample, and (3) a rather odd specification of the model in which current household expenditure is related to cumulative borrowing rather than current borrowing. In our view, while these qualms do not necessarily nullify the central message of Pitt and Khandker that microcredit has a positive impact on the economic condition of the poor, they do call into question the accuracy of the magnitude of the effect they claimed to find. As a result, bold inferences such as the one that claims that 5 percent of the borrowers climb out of poverty every year in rural Bangladesh ought to be eschewed.

At the same time, by its sheer analytical brilliance the Pitt-Khandker study demonstrates how far one can possibly go towards extracting causal inferences from cross-section data by using imagination and sophistication in the use of econometric techniques. Any remaining limitation is possibly a reflection of the inherent limitations of cross-section data itself. In order to make firmer causal inferences, it is necessary to move on to different kinds of data.

Studies based on Panel and Quasi-Panel Data

The use of panel data can offer a way of resolving the problem of identification in a more satisfactory manner than cross-section data ever can, even though it does not guarantee success in all circumstances. Since data are available for the same households at different points in time, a technique known as the difference-in-difference (DD) method (which comes in many variants) can be used to get rid of the selection bias that arises, for example, from unobserved characteristic of borrowers or from the MFIs' program placement policies so long as those biases remain constant over time. Even when the biases might change, it may still be possible to eliminate them provided they change in some systematic ways. For these reasons, the estimates of program effects that are obtained from panel studies can be interpreted as a causal effect with a great deal more confidence than in the case of cross-section studies.

The major panel studies that have been undertaken so far on the impact of microcredit in Bangladesh have relied mainly on three sources of data: (1) four rounds of surveys sponsored by PKSF covering the period from 1997-2005 (Razzaque, 2010; Imai and Azam, 2011 and Islam, 2011), (b) three rounds of surveys in 1991/92 to 1998/99 and 2011, sponsored by the World Bank and carried out with the help of BIDS for the first two rounds and the Institute of Microfinance for the third (Khandker, 2012; Khandker and Samad, 2012), and (c) several rounds of surveys carried out by BRAC to assess the impact of its ultra-poor programme (Emran et al., 2008). Quasi-panel data generated by the Institute of Microfinance has been used by Osmani (2012).

There are subtle variations in the methodologies these studies adopted to correctly identify the effect of credit and, as can be expected, there are also some variations in their findings. But on the whole, there is an overwhelming consensus that credit has had a positive impact on the economic condition of the poor, regardless of how this is measured – namely, household income, or overall household expenditure, or food expenditure, or the level of poverty.

These studies also reveal that (a) the positive effect of credit is greater when it is used for productive purposes, (b) the effect of credit depends on the length of participation, so that sometimes the benefit is apparent only when loans have been taken for several years, (c) loans taken by females generally have a stronger effect than loans taken by males, and (d) the beneficial effect is generally stronger for the extreme poor compared to the moderately poor or non-poor. One qualification to the last point is that in the study of the ultra-poor among the BRAC members, Emran et al. (2008) found that the lowest 20% of the ultra-poor always benefited less in absolute terms compared to the top 20%.

Most of these studies also reveal that those who had access to microcredit were able to accumulate assets faster than those who did not. For example, Osmani (2012) showed that the borrowers of microcredit had with fewer initial assets compared to the non-borrowers at the time their respective households were formed, but by 2010 the borrowers has surpassed the non-borrowers in the ownership of non-land assets. Understandably, their debts also increased, but as Khandker and Samad (2012) demonstrate the borrowers' net assets (assets minus debts) also increased faster than that of non-borrowers. There is thus no basis for the fear sometimes expressed that microcredit borrowers may be getting trapped into an unsustainable debt burden. This is not to deny that some individuals may sometimes fall into the debt trap, by this is by no means the general picture.

While these studies clearly demonstrate the beneficial effect of credit in rural Bangladesh, the

absolute magnitude of the effect needs to be kept in perspective. Khandker (2012) shows, for instance, that access to microcredit reduces extreme poverty in rural Bangladesh by 2.6 percentage points. Following a different methodology and using a different data set, Osmani (2012) comes out with a very similar figure; he estimates that if microcredit had not existed extreme poverty in rural Bangladesh would have been 1.8 percentage points higher in 2010. Since extreme poverty in rural areas was about 21.1 percent in 2010 according to official estimates, these figures suggest that microcredit has been able to reduce extreme poverty by somewhere between 9 and 12 percent over the years. The corresponding figure for overall poverty is about 5 percent (Osmani 2012).

Concluding Remarks

Cumulative evidence conclusively demonstrate that access to microcredit has made a positive contribution towards improving the living standard of the poor people in rural Bangladesh. In the absence of microcredit, extreme poverty in rural Bangladesh would have been 9-12 percent higher and overall poverty would have been about 5 percent higher in 2010. These figures clearly imply that microcredit, while useful, has by no means been the major driver of poverty reduction in Bangladesh, but then one should not expect it to be otherwise, for microcredit is but one intervention among many. Poverty is a complex phenomenon; strategies to reduce it cannot but be complex and multi-faceted, but microcredit must have an important role in any comprehensive strategy for poverty reduction.

FINANCING HEALTH CARE IN RURAL BANGLADESH: VULNERABILITY AND INSURANCE

Syed M. Ahsan; Syed Abdul Hamid; Shubhasish Barua[1]

"About 100 million of the world's population fall into poverty each year due to catastrophic health expenditures" (World Health Report, 2010)

Background

In the absence of adequate risk shifting devices, different types of idiosyncratic shocks cause low income households to face the risk of further increase in poverty. Informal risk-sharing schemes are usually limited in their outreach and the benefits typically meet only a tiny portion of the loss. The government also has limitations in protecting the poor from relapse into further poverty by means of either a well-designed safety-net program or by instituting a functioning public health system. Microinsurance refers to relatively a new level of risk management products that protect low income people against specific hazards such as illness, death, loss of livestock, fire or theft.

Reviewing the depth and reach of public sector health care provision in Bangladesh, WHO (2006) estimates that the density of medical workers (doctors, nurses, and midwives together) is only about a quarter of the recommended figure at 0.58 per 1,000 persons, whereas international evidence suggests the optimal density to be about 2.5. Further, the rural scenario is much worse than at the national level and unfortunately the outlook for significant progress in the immediate future does not appear promising. During 2005-2011, while tax revenue has increased moderately from 8.7 per cent to 10.45 per cent and, correspondingly, total revenue (tax and non-tax) has been augmented from 10.79 to 12.5 per cent of GDP, there has been an actual decrease in the share of public health expenditure in GDP by 0.02 per cent (from 0.99 to 0.97 per cent). Most striking though has been the burden placed on household's out-of-pocket (OOP) expenses in meeting health care needs. The latter has grown from 57 to 64 per cent of total health expenditure (THE). Appropriate financing of healthcare therefore emerges as a central issue of concern in the public health arena.

Thus it would seem that in spite of advances in microcredit and some movement in the structure of the social safety net, effective coping mechanisms remain limited for the poor, be they landless or small holders. The burden of OPP costs facing the poor and near-poor is believed to trap many households into poverty cycles indefinitely. The claim of tens millions of near poor falling back into poverty due to the lack of insurance as claimed in World Health Report (2010) and quoted at the start of the paper, even if only half true, is a sobering one. Persistent poverty may thus be widespread among those who are least able to fully benefit from self-insurance.

Microinsurance products can be defined to be those that are: (a) targeted to low net-worth households; (b) designed to reflect pooling of risks faced by the insured; (c) priced in accordance

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with the willingness to pay criterion as well as with being proportional to the likelihood and costs of the risks involved; (d) designed in such a way that all phases of the product are developed in close collaboration with the communities which are supposed to be the ultimate beneficiaries; and (e) of substantive value to the poor in terms of addressing the issue of vulnerability to poverty.

Against this backdrop, InM launched a longitudinal study entitled "Microinsurance, Poverty & Vulnerability in Bangladesh" in January 2009 in order to examine different aspects of microinsurance, analyze the current microinsurance market including its scope, demand, product range and design, regulation and the overall impact. Given that even the householdlevel shocks (not to speak of covariate shocks) are temporal in nature, any idea of the 'likely dimensions of the risk/loss' can only be formed once a long-term pattern of losses can be discerned. The latter type of data is what is precisely required in order to design the insurance products. Given the absence of a dataset of this type, the research team decided to start building a new panel dataset over a 6-year period (2009-14) with a majority of households to be interviewed every second year. The empirical research described below is based on the first phase of these surveys, which was carried out in the summer of 2009.

In the first phase (from January 2009 to December 2010), the study explored the existing status of the entire gamut of the microinsurance market in Bangladesh for life (both term and endowment), credit, health and livestock risks served by microfinance institutions (MFIs), commercial insures and the International Network of Alternative Financial Institution's (INAFI) by means of a survey of providers conducted over phone and a written questionnaire. A major focus of the first-phase research was however the execution and analysis of a baseline survey of 4,000 rural households through a carefully designed comprehensive questionnaire. The document presented here reports the summary of some of the scientific papers prepared by the research team.

Microinsurance Market in Bangladesh: An Overview

The paper analyzes the existing status of the microinsurance market in Bangladesh by evaluating the products offered by MFIs, commercial insurance companies and those by INAFI's microinsurance for mutually enabling (MIME) program. The key findings of this part of the studyare as follows.

- MFIs mainly offer term loan insurance minimizing lenders' risks with a quicker claim settlement process and is fully written off against the insurance fund in the event of death of the insured borrower. High premium rates are evident in most cases which manifest the lack of reliance on a relevant mortality table as well as taking advantage of the absence of regulation in premium setting or in the use of such excess insurance funds.
- Micro health insurance type of products, among others, offered in Bangladesh by Grameen Kalyan (GrK), Sajida Foundation, Ganoshasthya Kendra (GsK), BRAC, and Dhaka Community Hospital typically exhibit a very high co-payment on the part of the insured for most of the services rendered. In the few cases where referrals to external facilities are permitted, the insurance plan only covers a pre-set amount, again a minor part of the total cost of treatment. These pre-set limits are also rather low given the average cost of hospitalization.
- These features suggest that in a strict sense, these are not 'insurance' per se since the insured appear to carry a bulk of the risk that may befall them, and ironically, it is the insurers who bear only limited risks.
- The challenges in providing a meaningful health coverage in rural Bangladesh appear to be

the shortage of qualified personnel, and the consequent risk of delays (due to rotating staff among health centers) or even discontinuity of some services altogether in a given location.

- Microinsurance services offered by the commercial insurers are limited mainly to life insurance, mostly of the endowment type, operating with relatively high premium rates in view of high costs of intermediation by commission agents who lack access to the poor en masse. The market also lacks competition.
- There are no commercial products offering micro health insurance and/or hospitalization facilitiesfor the poor.
- Although INAFI has been implementing term and endowment life policies, the premium rates appear steep indicating high costs of intermediation, though the source of the latter may differ from those afflicting commercial providers.

Risk, Deprivation and Vulnerability Faced by Rural Poor

The paper analyzes various crises/shocks (death, accident, and major diseases of family members; damage to crops, assets and properties; robbery and theft of assets and life cycle events) faced by rural households and their responses to these crises.

- About 25 percent of the households experienced some of these shocks during the last twelve-months preceding the survey;
- Health exigencies appear to be the single most common shock that respondents had to face, occurring with the frequency of 30 per cent.
- The other important crises, which may also be mitigated via insurance, relate to crop damage, death of livestock, damage and robbery/theft of asset/property.
- More than 50 per cent households had to spend their entire (liquid) savings, and around 25 per cent took loan with high interest in mitigating the crisis related to death and health shock.
- A combined group of 7.3 per cent of the households also sold or mortgaged land or sold cattle, each of which has significant implications on their income earning ability in subsequent periods. These figures provide palpable evidence how health shocks may lead to poverty.

Utilization of Formal Care and Out-of-Pocket Payments

This paper carried out an in-depth analysis of OOP costs arising out of formal health care by the ill. Among their findings, the following may be noted.

- At individual level, about 33 per cent of the persons had some sort of illness in the 12-month period before the survey.
- At household level, about 88 percent had at least one episode of illness and out of which about 55 percent (48 per cent of the total households) suffered from more than one episode.
- The major disease symptoms were: general cough and fever, gastrointestinal disorder, pain, diarrhoea and typhoid. There was no significant difference in the prevalence of communicable and non-communicable diseases (CDs and NCDs).
- Most (98 per cent) of the patients sought health care, and among them 95 per cent sought outpatient care and the remainder, inpatient care.

- The utilization of formal care was relatively low (about 40 per cent) and private care was consumed by a majority (about 65 per cent) despite substantial efforts by both government and NGOs.
- The poor were more deprived in the utilization of formal care vis-à-vis the non-poor. In particular, the rate of utilization of formal care was much lower among children than among other age groups irrespective of the level of income.
- On an average, a household spent BDT4,200 in the reference year as out-of-pocket (OOP) payments for accessing medical care, a major portion of which (60 per cent or BDT 2,500) was spent on drugs.
- Each year about 15 percent of the households incurred catastrophic health expenses at the 10-percent threshold level.
- A large proportion (33 per cent) of the households needed to borrow and/or sell assets for coping with inpatient care.
- About 18 percent of the households financed general OOP charges for all types of care from relatively 'expensive' sources (borrowing and asset depletion).

Impact of Out-of-Pocket Payments on Poverty

This study measures disease-specific impact of out-of-pocket payments for health care on poverty (both headcount and poverty gap) by comparing pre-payment poverty (where payments for health care are included) and post-payment poverty (where payments for health care are excluded).

- Over three percent of the rural households (almost 0.8 million households) fall into poverty annually due to payments for health care.
- A quite large impact of OOP costs is discerned on deepening poverty; average poverty gap is raised by BDT 0.84 per capita daily or BDT 306.60 per capita annually and the normalized poverty gap by 1 per cent. Payment for drugs accounts for a major part of this impact since the former accounts for 60 per cent of health care payments.
- The impact was much higher for NCDs, chronic illnesses and hospitalization compared with CDs, acute illnesses, and out-patient care. It was exorbitantly high for catastrophic expenses and hospitalization. Note that most catastrophic and inpatient events were NCDs (88 per cent and 85 per cent respectively). Though there was equal proportion of incidence of CDs and NCDs, the absolute impoverishment burden was about five times higher in NCDs than CDs.
- The impact (especially headcount poverty) was excessively high for some NCDs, such as Cholecystectomy, mental disorder, kidney disease, cancer, benign tumor, hysterectomy, appendectomy, paralysis, UTI, rheumatic fever, and asthma. Note that a majority of these illnesses are chronic NCDs. Thus, these cause the major impoverishment burden.
- It appears that OOP payments for NCDs (especially, chronic NCDs) play a major role in the slow progress of reducing the poverty level of the country. In other words, OOP payments for NCDs undermine the impact of poverty reduction initiatives undertaken by the government and NGOs for achieving MDGs.

Does Inequity Exist in Health Care Use?

This study delineates the level of utilization of and inequity in the use of formal health care, giving a particular focus on the gender factor in rural Bangladesh. In determining horizontal inequity we use both the need-standardized approach and the decomposition analysis. We split the data primarily into poor and non-poor and then allocate each group into different subgroups along the following lines: gender, age, borrowing status, type of MFI member, micro health insurance placement status and enrolment status in micro-health insurance. We also split each category (if relevant) into male and female for a clearer understanding whether gender matters.

- The results show that the utilization of formal health care was very low (40 per cent) and especially so among the poorest (36 per cent). About two-thirds of the formal health care market was supplied by private facilities and about one-fourth by government facilities while NGOs played a small role.
- Interestingly, the poorest and the richest had almost equal use of government and NGO care. Private sector, however, dominated the formal health care scene and thus the poorest were more deprived presumably due to their inability to meet the costs. This led to a significant difference in the degree of formal care accessed by the richest and the poorest quintiles. The difference was also significant ($p < 0.01$) while comparing the poor and the non-poor.
- The need-standardized method reveals that there were pro-poor horizontal inequities in formal care use among the poor and pro-rich inequities among the non-poor while decomposition results show that in most cases the inequity favoured the better off in bothpoor and non-poor groups. Non-need factors, especially education of the household head, mostly contributed to this pro-rich direction.
- Severity of illness, duration and the incidence of NCDs appear to be the main contributors amongst the need factors of the underlying inequities.
- Both methods show that inequity is considerably higher for the non-poor female compared with the non-poor male even though both groups had about equal actual health care use. A similar pattern of difference is seen for the non-poor children, which however tallies with their actual use of health care.
- A very similar level of inequity prevails between both poor female and male children (for all measurement methods). In spite of this, the former had significant less use of actual health care than the latter.
- Difference in inequity is also not prominent between the adult female and the adult male while there is some difference between the elderly female and elderly male in both poor and non-poor groups.
- Inequity existed by borrowing status of households to some extent while this did not extend to the type of MFI membership, Grameen Kalyan's MHI placement status or the enrolment status in GK MHI in either poor or non-poor group.
- Thus, after all, inequity may not be the topic of the main public policy focus; low use of formal health care is the primary deficiency of the health system in rural Bangladesh.
- Moreover, prevailing inequity resides mainly in the utilization of private health care and NCDs is a significant contributor to this inequity.

Demand for Micro Health Insurance

The literature on micro health insurance generally point to low demand for insurance on the part of the poor, which can arise out of several issues, prominent among these are the awareness as well as familiarity with insurance benefit program kin question. We analyze the demand issues in the rural Bangladesh context, where the demand for an augmented version of the Grameen Kalyan's existing health package is explored in order to assess its replicability on a wider scale.

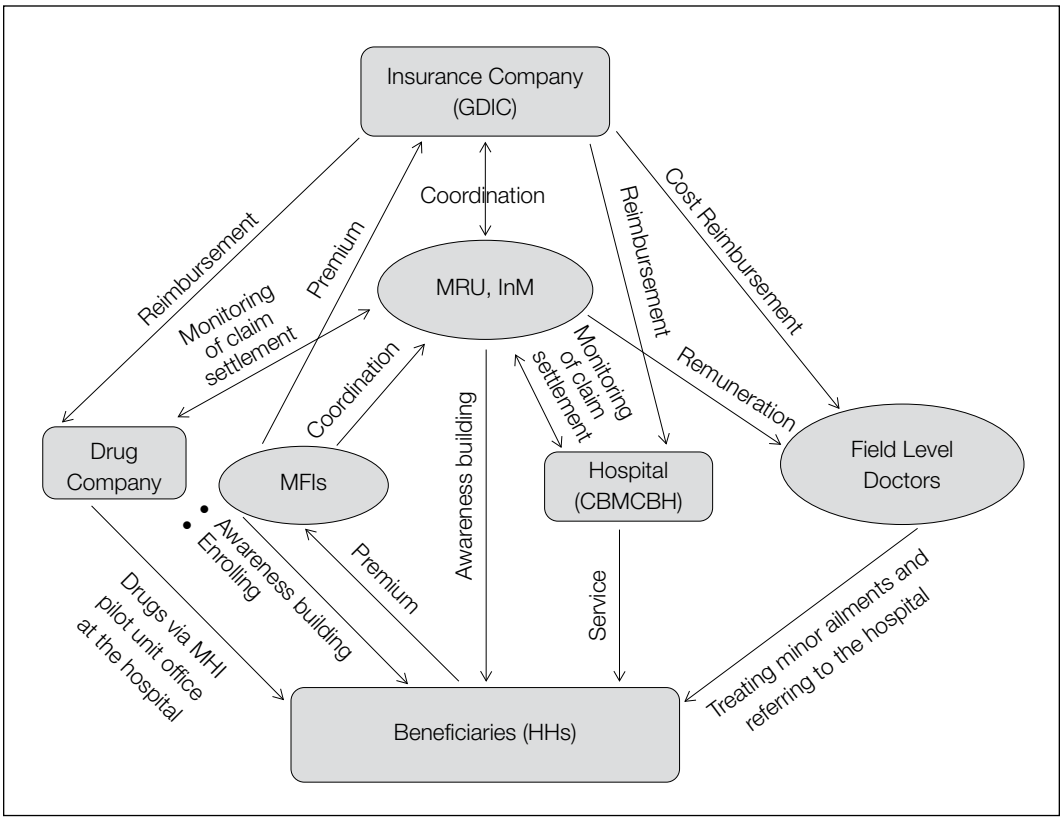
- The results show that the overall willingness to join (WTJ) was 54 per cent and, among the latter group, the household's average willingness to pay (WTP) for the package was BDT 406±171. These are quite low in terms of the expected cost of providing the services in question.
- The multivariate results show that a number of individual, household and village level attributes including gender, knowledge about health insurance, economic factors, an episode of child delivery in the household and flood in the village and location of household influence respondents' decision to join the package.
- The acceptability of MHI type of package à la Grameen Kalyan is rather low among potential beneficiaries either on account of the limited coverage or deemed too expensive vis-à-vis the cost.
- Thus, this type of packages may not be suitable for implementing widely in Bangladesh both from the insurer and the insured's point of view.
- These findings points to the need for designing a fresh MHI package that will offer more meaningful coverage to the beneficiaries by setting a reasonable co-payment or coinsurance.

An Innovative Micro Health Insurance (MHI) in Bangladesh

A Holistic Design

The research team designed the Niramoy model encompassing a number of partners, namely, the microfinance institutions, a hospital, drug companies, an insurance company, and, above all, the beneficiaries. The holistic design process requires the identification, empanelment and congregation of all these stakeholders on a common platform so that each partner bears some of the risks involved in the experimentation.

Figure 1: Role of different partner organizations in the "Niramoy" scheme



Benefit, Co-payment and Premium Structure of the Scheme

- Over the 12-month period, a maximum of five outpatient visits have been set for a household of four and five members, three visits for a household of two or three members, six visits for a household of six or seven members, seven for a household of eight or nine members and eight visits for a household of more than nine members
- Each eligible household is entitled to receive one complete maternal care including four ANCs, delivery (normal/C-Section), two PNCs and neonatal care.
- Each household is entitled to receive up to 2 episodes of in-patient care (surgical or non-surgical) available at the partner hospital.
- A household is considered eligible for the maternity component of the package if the pregnancy develops after enrolment in the MHI scheme by a mother who is at least 18 years old and does not have more than two children.
- A 20 per cent (or at least BDT 20) co-payment on drugs and injectables has been set (Table-1). The other co-payments are for Caesarean Section (BDT 400, which is about 3 per cent of the average cost of the procedure), hospitalization without surgery including child delivery (BDT 100) and for general surgery (BDT 200, about 2.5 per cent of the average cost of in-patient surgery at hospital).

Table-1: Benefits, co-payments and premium structure of Niramoy MHI scheme

No. of insured persons in household	No. of eligible outpatient care visits per household	No. of eligible inpatient stays per household	No. of eligible maternity cases per household	Co-payment on drugs and injectables* (%)	Total premium per household (380´ no. of members)
2	3	2	1	20	760
3	3	2	1	20	1,140
4	5	2	1	20	1,520
5	5	2	1	20	1,900
6	6	2	1	20	2,280
7	6	2	1	20	2,660
8	7	2	1	20	3,040
9	7	2	1	20	3,420
10	8	2	1	20	3,800

Study Design for Evaluating the Pilot Scheme

- We designed a clustered randomized trial (CRT) to evaluate the Niramoy micro health insurance scheme.
- The experimental design encompasses 51 villages within 36 clusters where 24 clusters were considered as program and 12 clusters were identified as control.

Objective and Outcome Measures

- Incidence of health care seeking from formal provider (especially hospital care);
- The level of OOP payments for acute illness (inclusive of consultation fees, diagnostic test, hospitalization and drug costs);
- The incidence of catastrophic (at 5 per cent threshold level) health events in the household;
- The dependence of OOPP financed through borrowing and asset depletion;

Policy Conclusions

- The scope of making the government facilities more efficient in allocating rural healthcare is plagued by both budgetary limitations as well as by daunting governance issues in the face of reported endemic corruption.
- Compared with the neighbouring countries, drug prices are quite high in Bangladesh. The high share of drug of OOP also requires some policy measures concerned to drug price control.
- Although Bangladesh National Drug Policy aimed to ensure the rational pricing of essential drugs, it is evident that the regulatory authorities have little control over the drug prices. There is also over use of drugs in Bangladesh. Evidence shows that at least half of the drugs are not prescribed, dispensed or sold appropriately. Self-medications and purchase of all type of drugs without any prescription and thousands of illegal and unlicensed drug stores are the

major reasons for over use of drugs. Thus, we also suggest for adopting proper measures for effective rationing of the prices of essential drugs and imposing restrictions on selling over the counter drugs.

- Bangladesh requires introducing some alternative ways to raise funds for provision of health care in the rural areas. Developing appropriate risk-pooling modalities such as low-cost micro health insurance schemes may be an innovation that needs to be seriously considered, which is gaining popularity in many contexts similar to that in Bangladesh.
- The unit of micro health insurance in developing countries should be household as a whole (all members) instead of individualand most of the households of a particular group (e.g., microcredit group) need to be enrolled for better risk pooling.

OVERLAPPING IN MICRO CREDIT MARKET IN BANGLADESH: DOES IT LEAD TO OVER-INDEBTEDNESS?

(Abridged Version of the Paper)

M. A. Baqui Khalily[1]

Introduction

In recent years, multiple memberships or overlapping has emerged as a challenging issue to the policymakers and practitioners in Bangladesh. Critics consider it as a failure of the microfinance sector, while practitioners view it as a sign of market development and competition. Lack of information and analysis has let the issue grow over time. Neither the MFIs have provided with complete information nor has there been any comprehensive analysis of the behavior of overlapping households. This is also not a politically correct state. Politicians too call microfinance as a failure, because they consider overlapping as a sign of over-indebtedness. Above all, the issue of overlapping has become important from the perspective of correctly estimating the coverage of microfinance programs in Bangladesh.

Over the past two decades, outreach-deepening of the Microfinance Institutions (MFIs) in Bangladesh increased. By the end of 2009, MFIs mobilized some 35 million members with a network of over 17,000 branches. The members had a net savings of BDT 105 billion and net loan liability of BDT 150 billion. This shows a phenomenal growth and development of the microfinance sector in Bangladesh. But along with such outreach-deepening, multiple borrowing or overlapping also increased. The evidence of overlapping in Tangail district and the surveys of PKSF suggest that the overlapping rate has been increasing. We defined[2] overlapping as the number of memberships of a household. Prior to this study, the evidence indicated an overlapping rate of 40 percent. The evidence was focused only on Tangail district. Therefore, a complete knowledge about overlappimg was missing.

The study was undertaken with the objective to clearly understand the problem of overlapping. Is overlapping a problem? Who goes for overlapping and why? What are its impacts on the household welfare? These questions guided us to design this research study. The study uses data

[1] The author gratefully acknowledges the contribution of Rushad Faridi, Assistant Professor, Department of Economics, University of Dhaka, and Farzana Saeed, Research Associate, Institute of Microfinance (InM), in preparing the report. He also acknowledges with thanks the supports that he received from Dr. Quazi Mesbahuddin Ahmed, the then Managing Director, PKSF and Dr. Jashim Uddin, Deputy Managing Director, PKSF in conducting the study. Comments from the participants at a seminar in PKSF are duly acknowledged. Thanks to Dr. Qazi Kholiquzzaman Ahmad, Chairman, InM, and Professor Wahiduddin Mahmud, former Chairman, InM, for their comments and observations on the report. Enormous contribution of Dr. Rashid Faruqee is deeply acknowledged. Finally, comments and suggestions from Professor S.R. Osmani and Dr. Shahidur R. Khandker that he received are appreciated with a sense of gratitude. Supports and comments from Dr. M. A. Latif, Director, InM, is appreciated.

[2] Overlapping is defined at two levels – household and individual. It is individual overlapping when an individual has membership with multiple institutions. Household overlapping takes place when a household has either (i) more than one member of the family having membership with one or more institutions without individual overlapping, or (ii) at least one person in the household has membership with more than one MFI. Individual overlapping is essentially a sub-set of household overlapping. To clarify further, household overlapping may exist even if there is no individual membership overlapping. Borrowing is essentially the driving force of multiple memberships. Therefore, it is expected that multiple borrowing will be the same as multiple memberships. However, it is plausible that the intensity of multiple memberships may be higher than the intensity of multiple borrowing, as borrowing has a time frame. Despite this, we do not differentiate between overlapping borrowing and overlapping memberships in this study, as multiple memberships or overlapping memberships are essentially for borrowing purpose. The overlapping characteristics of an individual or a household remain as long as multiple memberships exist.

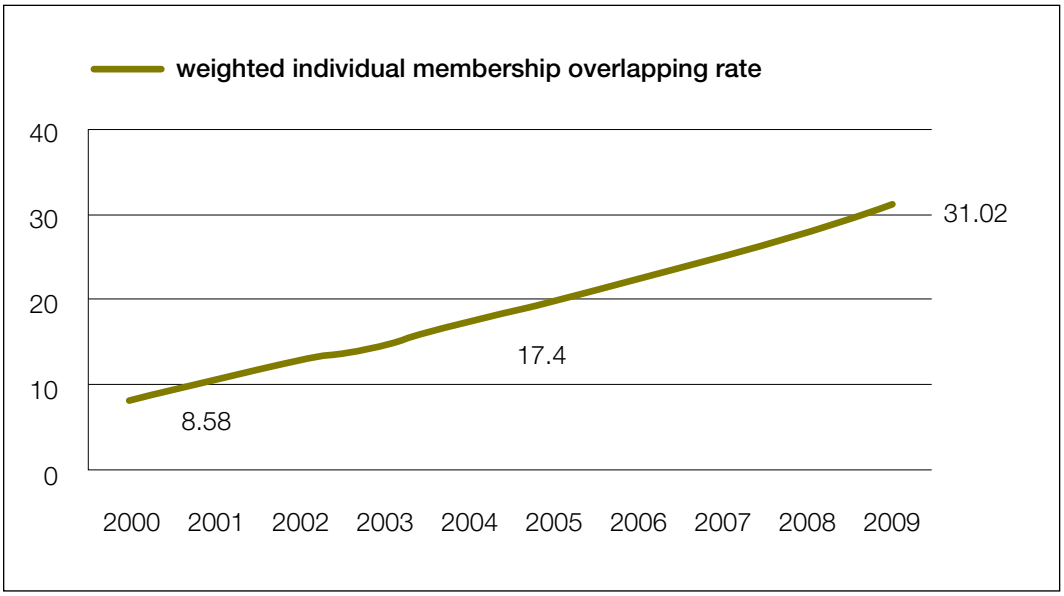
of 4,143 households selected randomly from the randomly selected 118 villages of selected 17 upazilas in 12 districts representing six divisions. The stratified sampling technique was used and the generated results were weighted.

Extent of Overlapping

Increasing Intensity of Individual Membership Overlapping

Individual membership overlapping is a manifestation of the competition in microcredit market. It may be caused by flexibility in loan contract and/or loan ceiling. Often it can be attributed to demand for lumpy expenditure and enterprise failure. It is often argued that the microfinance sector took off from the mid 1990s, and the program deepening had been increasing at a faster rate. Figure-1 shows the trend in individual membership overlapping for the period 2000-2009.

Figure-1: Trend in Individual Membership Overlapping



The above figure shows that in 2000, the individual membership overlapping rate was around 8.58 percent, and it increased to around 31 percent in 2009.

Not every individual has the same number of memberships– it varies. Some individuals have memberships with up to nine MFIs– this is a case of the highest individual membership overlapping. As the percentage of individuals with higher intensity of overlapping (above four individual membership overlapping) is lower, we have ordered the multiple memberships sequentially in terms of the number of institutions they have memberships with. The last group was 5+. It includes all individuals with memberships of more than four. The trend in the intensity of individual membership overlapping is reported in Table-1.

Table 1: Trend in Intensity of Individual Membership Overlapping

Intensity of Multiple Membership	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Growth Rate
1	91.42	89.19	86.84	85.23	82.6	80.03	77.24	74.93	72.14	68.98	-3.09
2	7.23	9.52	11.37	11.93	13.75	15.09	16.63	18.3	19.82	21.93	13.12
3	1.04	0.96	1.34	2.23	2.59	3.54	4.43	4.62	5.38	5.84	21.13
4	0.31	0.25	0.33	0.45	0.93	1.01	1.17	1.49	1.72	2.09	23.62
5+	0	0.08	0.13	0.15	0.13	0.34	0.53	0.66	0.95	1.17	39.84
Aggregate	8.58	10.89	13.16	14.77	17.40	19.97	22.76	25.07	17.86	31.02	15.35

Although a lower percentage of individuals had memberships with more than three or four, the average annual growth rate was increasing with different levels or intensities of overlapping. In fact, it was growing exponentially. It is vividly clear if we look at the average annual growth rate of each level of overlapping as reported in the table. The average annual growth rate of individual membership overlapping was over 15 percent over the period 2000-2009. The rate of growth over the period 2005-2009 shows a lower growth rate. This implies that the intensity of individual membership overlapping rate was growing at a decreasing rate. It should be noted here that only around one percent of the members had five and more multiple memberships (Table-1).

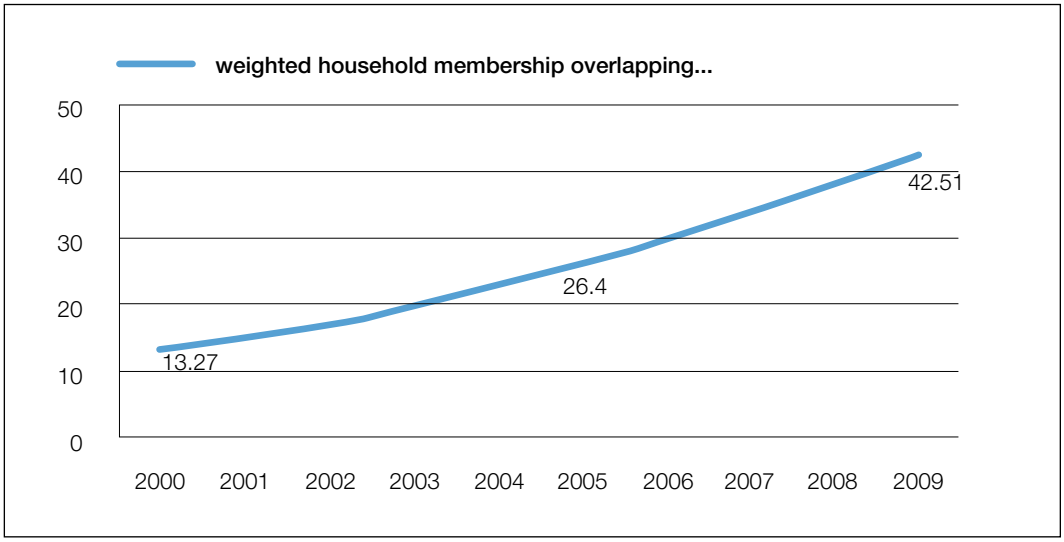
Geographical characteristics might induce overlapping. One would perhaps expect that the developed infrastructural and economically advanced regions or districts would have higher level of overlapping, as the fact is already well established that MFIs base their network in accessible and economically better-off regions. We find that individual membership overlapping varies by division. Barisal and Dhaka divisions have the highest individual overlapping rate of around 40 percent in 2009– nine percentage points higher than the aggregate average rate of 31 percent. Except Barisal and Dhaka, all other divisions had single digit overlapping rate in 2001, but over the past decade, it increased to more than 20 percent. The average annual growth rate was around 16 percent in all the divisions except Barisal, where the benchmark overlapping rate was comparatively high.

In 2009, we estimated the individual membership overlapping rate to be around 31 percent. It implies that the available statistics on the number of poor individuals brought under the microfinance network is reportedly over-estimated by 31 percent.

Increasing Intensity of Household Membership Overlapping

As stated earlier, our focus should be on household overlapping rate when evaluating the causes and impacts of overlapping or multiple memberships as the decision for multiple memberships or multiple borrowing is induced by overall household welfare, rather than individual welfare. As such, in this and subsequent sections, we shall focus on understanding the behavior of household overlapping.

Figure-2: Trend in Household Membership Overlapping



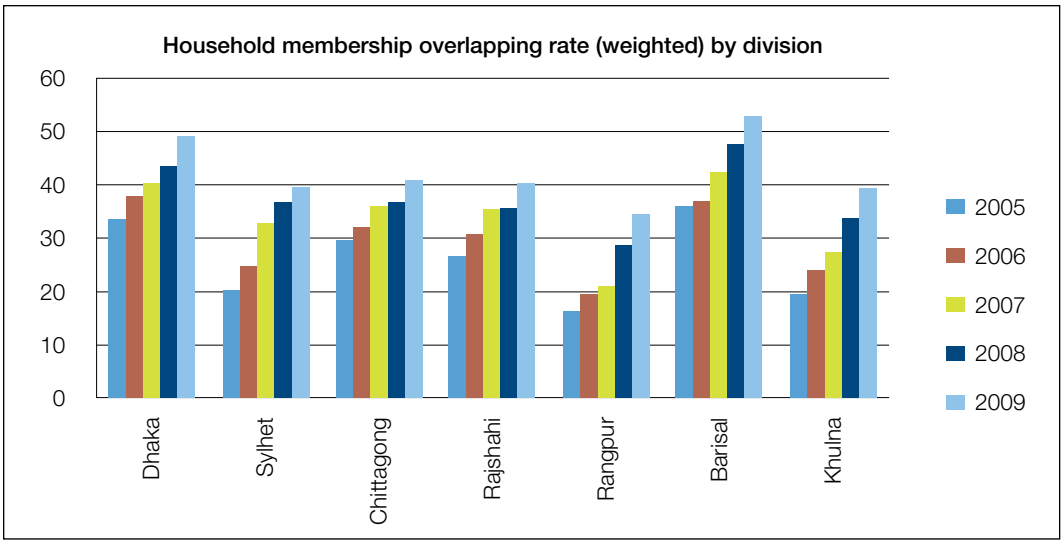
This is the first major survey conducted on the problems of multiple memberships or overlapping in Bangladesh. The earlier evidences were focused only on Tangail district. During the past decade, household overlapping increased enormously, it was around 13 percent in 2000, and increased by over three times to 42.5 percent in 2009 (Figure-2). The growth rate of single household membership is negative implying an increasing movement towards multiple membership households.

The intensity of household membership overlapping was increasing. The annual average rate of growth was estimated to be 13.81 percent for the period 2000-09, but the pace of growth was decreasing. This implies that the intensity of household overlapping was increasing at a decreasing rate. But the rate varies by number of multiple memberships. Although around 84 percent of the overlapping is limited to a maximum of two, the household overlapping of more than four memberships had the highest growth rate, and it was the lowest for the households for two memberships.

Table 2: Trend in Intensity of Household Membership Overlapping

Intensity of Household Membership	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Growth Rate
1	86.73	84.86	82.73	80.04	76.95	73.6	70.09	66.08	62.23	57.49	-4.47
2	11.49	13.31	14.84	15.21	17.51	18.83	20.33	22.2	23.86	26.57	9.76
3	1.51	1.16	1.48	3.39	3.41	4.74	6.03	6.97	7.91	8.33	20.90
4	0.15	0.3	0.48	0.86	1.65	2.02	2.03	2.9	3.72	4.42	45.63
5+	0.12	0.37	0.47	0.5	0.48	0.81	1.52	1.85	2.28	3.19	50.69
Aggregate	13.27	15.14	17.27	19.96	23.05	26.40	29.91	33.92	37.77	42.51	13.81

Figure 3: Trend in Household Overlapping by Division



Like the individual membership overlapping, the household overlapping rate was very high in Barisal and Dhaka divisions (Figure-3). In both the divisions, the overlapping rate was around fifty percent in 2009 while almost all the other divisions had the rate of around forty percent. The lowest overlapping rate was observed in Rangpur division which is quite expected as the microfinance network has expanded enormously in this division because of the PRIME project. Under the PRIME project, PKSF through its partner organizations (POs) expanded microfinance services for the monga-affected households. Intensity of microfinance services also increased because of the services provided under the FSVGD-UP program. Under the program, all extreme poor households were brought under the microfinance network.

In brief, both household and individual membership overlapping rates increased during the past ten years. The household overlapping of five or more memberships had higher growth rate than the rate of individual membership overlapping in the comparable group. The proportion of the households having more than four memberships in 2009 was around three percent compared to around one percent for individual membership overlapping. This implies that higher household membership overlapping was due more to memberships of multiple individuals of the family, rather than individual with more multiple memberships. It, therefore, suggests higher deepening of overlapping, in terms of the number of individuals brought under the microfinance network. The question is– what explains such higher overlapping rate? What are its impacts? Are the overlapping households over-indebted? These questions are examined in this paper.

WHY OVERLAPPING?

It is argued in the literature that overlapping in the microcredit market is caused by higher demand for loan for enterprise financing, meeting lumpy expenditure due to idiosyncratic shocks, coping with adverse impacts of covariate shocks, and repayment of previous loans. These are equally applicable for the overlapping households in entire Bangladesh. Table-3 reports on the overlapping rate by causes of overlapping.

Table-3: Causes of Overlapping in Bangladesh Microcredit Market

Causes of Overlapping	Causes faced	Overlapping Rate		
		2007	2008	2009
Demand for enterprise financing	YES	51.54	50.79	52.23
	NO	31.85	37.68	43.27
Lumpy Expenditure	YES	41.4	46.09	53.57
	NO	24.67	35.34	41.88
Covariate shock	YES	51	44.5	50.74
	NO	30.33	39.22	44.86
Previous loan repayment	YES	58.96	56.8	65.33
	NO	25.77	35.66	41.14

Not all households face all the causes. One or more causes are applicable for some households and some other causes are for some other households. Apparently, previous loan repayment appears to be the dominating cause of overlapping. But failure to repay loan is caused by enterprise failure, lumpy expenditures and covariate shocks. All these causes are inter-related. The actual influence can only be justified by an econometric analysis. Whatever be the causes, our study shows that the intensity of overlapping is high among the households with large size, relatively higher literacy rate and headed by female. These households are more likely to overlap more. But it is likely to be low for the households with day laboring as the principal occupation. We also find its validation in our econometric results.

Table-4: Intensity of Overlapping by Household Characteristics

Intensity of Multiple Membership	Family Size	Age of Household Head	Literacy Rate	Schooling Year of HH Head	% of Female Headed Households
1	5.23	47.09	0.62	2.55	1.39
2	5.67	47.35	0.64	2.86	1.22
3	5.97	48.46	0.67	3.14	1.73
4	5.9	48.57	0.66	3.26	2.31
5+	6.55	49.53	0.68	4.02	4.05

The econometric analysis using logit technique shows that excess demand for enterprise finance is the primary cause of overlapping. The probability of overlapping increases by 0.645 when there is a higher demand for enterprise finance and enterprise success. However, enterprise financing and lumpy expenditure are the substitutes. As such, the probability of overlapping due to excess demand for enterprise financing decreases whenever there is demand for loan for lumpy expenditure. It reduces the probability by -0.471. This suggests that they jointly influence the intensity of overlapping.

Lumpy expenditure of both current and lag time has positive influence on overlapping. The

probability of overlapping increases by 0.149, including probability of 0.119 due to current period demand for lumpy expenditure.

Demand for further loans for previous loan repayment occurs due to both the current year's and the previous year's loans. The probability of overlapping increases by 0.17 by the loan delinquency in the current period and by default of the past year's loan by 0.07. Regardless of time, demand for previous loan repayment increases the probability of overlapping by 0.24. Covariate shock matters. This is costly as well. The probability of overlapping increases by 0.11 when the households are inflicted by covariate shocks. Its effects are found both in the current as well as in the subsequent year of occurrence.

We find that, with access to bank, the probability of overlapping reduces by 0.117. It takes place only when the bank lending interest rate is lower than that of MFIs. Strictly speaking, bank lending interest rate is lower. Similarly, the access to informal credit at a lower rate reduces the probability of overlapping rate in the microcredit market. These results suggest that overlapping households take such a decision prudently in relation to access to loans and interest rate in different credit markets. When this holds, one may expect that mere presence of a large number of MFIs in the village does not contribute to higher rate of overlapping. This holds in our study– we have estimated the probability at 0.034 (statistically significant). This also corroborates the findings of other studies on India, Bolivia, and Uganda.

In brief, the findings suggest that primarily the households go for overlapping for scaling up their enterprises. But they also go for it due to their higher exposure to different types of shocks. Among other reasons, demand for repayment of previous loans is one of the dominating factors. Given the magnitude of marginal effects, one will conclude that demand for enterprise financing is the primary cause of overlapping. This is also reflected in the uses of loans.

USES OF LOANS

In this study, we find that more than 70 percent of the borrowing households have used loans in income generating activities and economic enterprises, and around three percent for retrieving mortgaged land. Households have used loans for multiple purposes. The purposes are not mutually exclusive. About 70 percent of the borrowers have used loans for productive purposes i.e. IGA and enterprise financing. The rate has remained more or less constant during the period. On the other hand, over 43 percent of the households have used loans for lumpy expenditure caused by shocks in 2009. Around 25 percent of the borrowing households have used loans for repayment of previous loans. Although a large proportion of the borrowing households have used loan for productive or income generating activities, this does not provide information on the actual amount used. The average use of loans by purpose is presented in Table-5.

The borrowing households have used more than 60 percent of the loans for productive and income generating activities. Contrary to the conventional wisdom, only 15 percent of the loan amount has been utilized for repayment of previous loans; but the proportion has been 11 percent for the non-overlapping households. This suggests that multiple borrowing is not driven exclusively by the need for repayment of previous loan. The repayment of previous loan remains as a problem for both overlapping and non-overlapping households. Lumpy expenditure is essentially a source of vulnerability and fluctuation in cash flow of the borrowing households. Around 24 percent of the loan amount is utilized in lumpy expenditure. There is a little divergence in the rate between overlapping and non-overlapping households.

Table-5: Percentage of Major Loans Used by Household Overlapping Status

Use of Loan Type	Overlapping Status	Percentage of Loan Used		
		2007	2008	2009
IGA Enterprise Financing and Leasing-in of land	YES	63.14	63.16	61.25
	NO	72.46	65.62	68.23
Lumpy Expenditure	YES	24.27	22.43	24.20
	NO	21.25	26.10	20.67
Previous Loan Repayment	YES	12.59	14.41	14.55
	NO	6.40	8.30	11.10

All these results suggest that by and large, borrowing households use loans largely for IGA and enterprise financing or expansion of existing enterprises. The most striking revelation is the relatively smaller amount of loan is used actually for repayment of previous loan. But both overlapping and non-overlapping households use substantial amount of loans for lumpy expenditure. It is quite expected as the poor households do not generate large amount of surplus or do not have sufficient savings to cope with major shock, be it idiosyncratic or covariate. Given the fact that around three-fifth of the loans are utilized for enterprise financing, it is expected that the impact of overlapping on different economic outcomes will be positive.

We evaluated impact using both descriptive and econometric analysis. Our results showed that overlapping households are better off. They have higher income, larger amount of assets and net savings with higher growth rate compared to single membership households (Table-6). These results were statistically significant.

Table 6: Indebtedness and Other Outcomes against Overlapping

Overlapping	2007		2008		2009		Growth Rate	
	SM	MM	SM	MM	SM	MM	SM	MM
Income (BDT)	41,844	46,162	45,937	52,295	72,496	85,949	33.8	38.8
Net Savings (BDT)	1963	1814	3494	3345	5237	6939	63.9	95.9
No of days Employed	-	-	-	-	379	421	-	-
Total Assets	154,263	163,430	171,378	180,220	200,743	251,630	14.11	24.98

Note: SM refers to single membership and MM indicates multiple memberships. Growth rate is annual average.

We have used two types of measure to examine the question of over-indebtedness. They are: debt-income ratio and growth of net assets. The former one is a short run measure and the later one is a long run measure. The short run measure provides early warning about growing indebtedness and possible bankruptcy, while the long run one provides information about stability or instability of the borrowing households.

DOES OVERLAPPING LEAD TO OVER-INDEBTEDNESS?

Debt-Income Ratio: A Short Run Measure

The existing literature suggests that over-indebtedness is commonly measured as the extent of ability of the borrower to repay current due loan from current income. The most common indicator is debt-income ratio. We use the same indicator to measure over-indebtedness of the microcredit borrowing households in Bangladesh. We have used data for the year 2009. A caveat at the beginning: since we do not have data on monthly debt and monthly income, we have used annual debt and annual income to assess the over-indebtedness. In some cases, not all annual debts were due to the repayment in the year 2009. As a result, our results of over-indebtedness may be over-estimated. In this context, our results should be evaluated.

Table-7: Distribution of Households by Extent of Over-Indebtedness

Extent of over-indebtedness	Percent
Up to 0.25	71.19
0.25 - 0.50	17.44
0.50 - 0.75	6.60
0.75 - <1.00	2.47
1.00	0.11
>1.00	2.30

Source: Based on survey data.

The results are reported in Table-7. Most of the borrowing households (88.64 percent) are not over-indebted. But around 5 percent households are in critical and/or insolvent stage. They have annual debt of over 75 percent of the annual income. About 7 percent are in a state of 'risk of being in over-indebtedness'. These households have annual debt from 50 to 75 percent of the annual income. The extent of over-indebtedness in Bangladesh is much lower than in many Latin Amerian or African countries. One of the reasons may perhaps be a conservative approach of the MFIs in Bangladesh in loan size. The average debt size is quite low. Obviously, close monitoring by the field staff may have facilitated borrowers to use their loans prudently.

Although over-indebtedness in Bangladesh is not an issue, by and large, its increasing trend with increase in multiple borrowing will be a matter of future concern for the MFIs. The average over-indebtedness index for each group of multiple borrowers has remained below 50 percent, but it has an increasing trend (Table-8).

Table-8: Over-Indebtedness and Other Financial Outcomes by Intensity of Overlapping

Intensity of Overlapping	Over-indebted	Loan Outstanding	Annual Total Loan
1	0.2118868	2568.84	8232.952
2	0.2577896	3129.393	14327.76
3	0.3256919	3156.316	19676.25
4	0.3529663	3828.049	26910.13
5+	0.4543755	4336.457	33453.09

Growth of Net Asset: A Long run Measure of Over-Indebtedness

The short run measure provides early warning to the borrowers about growing over-indebtedness and potential bankruptcy. But this measure is not conclusive about over-indebtedness, as in the long run households are able to better manage cash flow and use financial resources. Households may be over-indebted in the short run but not necessarily in the long run. We have used growth rate of the net assets as a long run measure of over-indebtedness.

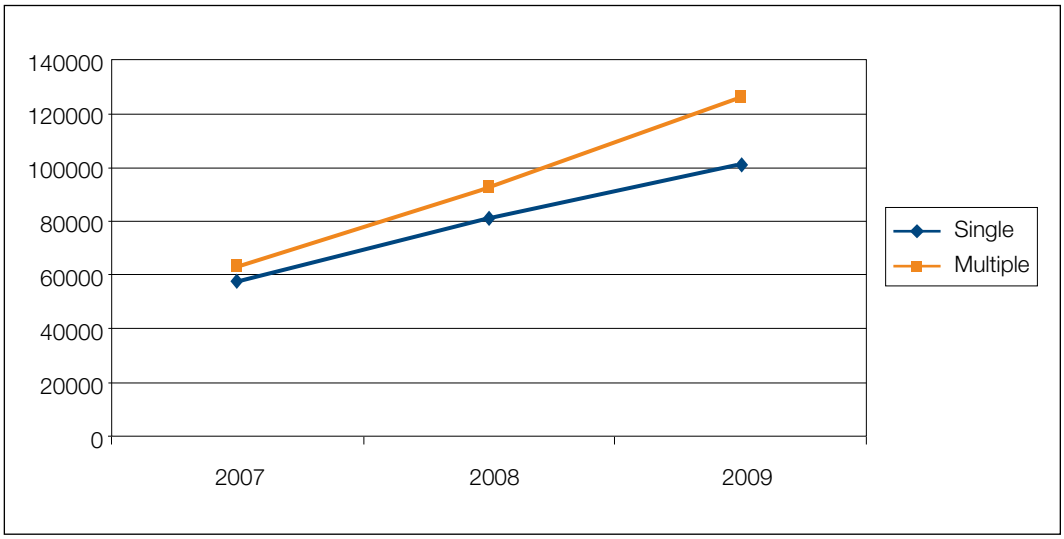
Overlapping households, on an average, have higher net assets over time, despite increases in loan outstanding. This means, the households have higher ability to pay for loan liability from the generated income. It is quite clear from Figure-4 that net assets of the overlapping households increased over the period 2007-2009 at a higher rate than that of the single membership households. Based on graphical representation, we can argue that overlapping does not contribute to the problem of over-indebtedness, as overlapping households had higher growth in net assets than the single or non-overlapping households.

However, the state of over-indebtedness varies by intensity of household overlapping. We find, as shown in Table-9, that the amount of net assets is higher for the households with higher level of intensity. The annual average growth of net assets or net worth for the period 2007-2009 was consistently higher for the households with higher intensity. It was 25.95 percent for the households with single membership, and it increased to 50.57 percent for the households with four memberships. Although the growth rate of net assets for the households with five or more memberships was lower, but it was higher than the growth rate of assets for the single membership households. In brief, since net assets had been growing positively, we can fairly conclude that higher intensity of household overlapping does not contribute to over-indebtedness, but overlapping households with five or more memberships might find themselves in difficult situation over time. Difficult situation may be aggravated by exposure to shocks.

Table 9: Trend in Net Assets

Intensity of Overlapping	2007	2008	2009	Growth Rate (%)
1	61951	76682	98241	25.95
2	77988	90810	115163	21.63
3	82128	98947	133880	27.89
4	69081	103642	156611	50.57
5+	99142	133496	171821	31.68

Figure-4: Trend in Net Assets and Overlapping



As argued earlier, overlapping is caused by need for meeting idiosyncratic and covariate shocks. Essentially it creates a default situation where a borrowing household finds it difficult to use the resources for productive purposes. As such, one will argue that over-indebtedness may be caused by higher degree of vulnerability. We present in Table-10 the amount and the growth rate of net assets by exposure to risks of different types such as lumpy expenditures due to idiosyncratic shocks, exposure to covariate shocks and repayment of previous loans.

Table 10: Trend in Net Assets by Sources of Risk

Sources of Risk		Net Assets (BDT)			
		2007	2008	2009	Growth Rate (%)
Lumpy Expenditures	Yes	140005	117964	156133	8.31
	No	172875	171310	175835	0.86
Exposure to Covariate Shock	Yes	160735	149375	159432	-0.16
	No	155207	145942	169263	5.01
Repayment of Previous Loans	Yes	106651	117838	161533	23.78
	No	176851	156475	168700	-1.85

Several interesting findings emerge from the table. First, lumpy expenditures do not affect net worth in the long run. This suggests that a household may be in a difficult situation in a year but over time is able to adjust against its surplus income. This we find from the value of net assets in 2008, it declined from the 2007 level for the households incurring lumpy expenditures, but these households were able to adjust loss against gain in 2009. Second, net assets continued to grow for the households that used loan for repayment of past loans. It may sound irrational, but in fact, it is not. Assets are created when loans are used for productive purposes. Repayment of

previous loans does not mean that previous loans did not add to asset creation. Third, households with exposure to covariate shocks had negative annual growth of net assets as compared with the households with no covariate shocks which had positive growth rate. This suggests that the households find it very difficult to cope with covariate shocks given its assets. Therefore, these households are more likely to fall into a state of over-indebtedness. It aggravates further when loan liabilities are higher.

Is Overlapping A Real Problem?

Overlapping is not necessarily a curse for households. It may create crisis only when the households are exposed to diversified risks – idiosyncratic and covariate shocks. But it is equally a blessing when the households can accumulate more financial resources for productive use. We have shown that overlapping households have higher net assets. Here, we pose the question in a different way– is overlapping a real problem? We have addressed this problem using a very simple argument. In the long run, the overlapping households might still be in over-indebtedness if it is unable to repay loans. It is possible only when incremental net assets are lower than the amount of loan outstanding. In such a case, these households are in great danger of long run over-indebtedness. But the results, as reported in Table-11, show that net assets have been growing with increase in multiple borrowing. It implies that households are generally able to repay loans out of their incomes, as it is evident from low debt-income ratio. Higher ability of households to repay loans is further evident when average loan outstanding is less than net financial savings. Around 50 percent of net financial savings is loan outstanding.

All these results suggest that over-indebtedness is yet to emerge as a threat for the borrowing households in the microcredit market both in short and long run. Only 5 percent of the borrowing households are in the state of being over-indebted.

Table-11: Relationship between Intensity of Overlapping and Various Measures of Over-indebtedness

Intensity of Overlapping	Debt-income ratio	Net Assets	Loan Outstanding	Total savings	Loan outstanding as % of savings	Total Loan Amount
1	0.2118868	108591.8	2568.84	5299.927	48.46	8232.952
2	0.2577896	135576.1	3129.393	6280.566	49.83	14327.76
3	0.3256919	163259.5	3156.316	6097.009	51.77	19676.25
4	0.3529663	180761.7	3828.049	8843.295	43.29	26910.13
5+	0.4543755	197652.7	4336.457	9954.494	43.56	33453.09

Policy Implications

Before we draw policy implications from the findings, we need to understand the critical state of the poor households. The poor are more vulnerable than the non-poor, due to inadequate resources. Poverty can be alleviated through access of the poor households to financial resources, and by developing human skill through training and education. This will not guarantee that the poverty free households will not fall below the poverty line again, because their acquired resources may not be sufficient to pay for lumpy expenditures caused by idiosyncratic and covariate shocks. Therefore, improving financial conditions and minimizing vulnerability may emerge as policy options.

First, as households have demands for funds for meeting lumpy expenditures and other shocks including repayment of previous loans, MFIs should introduce low cost new loan products for reducing vulnerability of the borrowing households.

Second, MFIs need to review their policy of loan ceiling. Since households are able to repay higher accumulated loans from different MFIs, it will be quite in the interest of both borrowers and lenders if MFIs relax their loan ceiling. This will reduce transaction cost for both borrowers and lenders. Perhaps the MFIs can experiment it.

Third, the microcredit market is matured now. Competition prevails in the accessible areas. This is generally expected that competitors will not share information about their borrowers until they are faced with higher probability of default. Nevertheless, it will contribute to sound development of the sector if centralized Credit Information Bureau (CIB) is established. This needs to be carefully examined so that borrowers' transaction cost is not high, loan sanction is not delayed, operating cost is not very high for the CIB and the CIB is operationally sound.

Fourth, MFIs should introduce micro insurance to cover the risk of idiosyncratic and covariate shocks. Both life and property insurance should be developed and introduced. This will reduce the demand for fund for lumpy expenditures and other shocks including repayment of previous loans. Overlapping due to these shocks may be minimized. Microcredit will then have larger impact.

In conclusion, overlapping is not necessarily bad. It is not overlapping that should be a matter of concern. If the borrowers can mobilize resources, use it properly and repay in time, one should not be concerned about it. Certainly, some degree of vulnerability prevails among the poor. Households always allocate and reallocate resources in response to different shocks. Some households may succeed and others may not. This is where we need to be concerned. Our findings suggest that overlapping households with higher intensity of overlapping are more likely to be worse off. They become worse off because of higher intensity of covariate shocks. Overlapping solves largely the problem of credit constraint but it equally addresses the problems of idiosyncratic and covariate shocks. It is not desirable that credit should be used for coping with shocks; insurance mechanism should be in place to create larger impact of microcredit.

DETERMINANTS OF DROP OUT BEHAVIOR IN THE BANGLADESH MICRO CREDIT MARKET: EVIDENCE FROM THE NORTH-WESTERN REGION

(Summary)

M. A. Baqui Khalily; Farah Muneer; Souran Roy

Introduction

The issue of drop out in the micro credit market has received less attention in research and remained a less understood problem. In Bangladesh, a very few research studies were conducted on this issue and most of them were in the nineties. In recent years, very little has been heard about the drop out phenomenon possibly because of the debate, whether micro finance contributes to poverty alleviation. In most studies of the nineties, the issue was evaluated both from demand and supply side perspectives. The common demand side problems are: loss in micro business, unmet demand for loan, adverse and large impact of idiosyncratic and covariate shocks. The common supply side problems are: burdensome weekly installment payments, compulsory weekly meeting, high interest rate and inappropriate competition in the micro credit market. All these problems have rationale and hold for many borrowers who exit from the market.

Objectives

While many have dropped out of micro credit programs, many have also continued their memberships for decades. The question is why some exit from the market and why some others remain in the market? The study examines this crucial issue.

Data and Methods

The first part of the question needs to be examined from the perspective of improvement of the system. 'One size fit all' cannot hold for all borrowers because of their diverse characteristics. For example, moderate poor can derive benefits from access to credit, and some of the extreme poor may also be benefited from accessing credit. Any credit program for the extreme poor is expected to have a high drop out rate because of the structural problem and a high degree of vulnerability of the members.

We have examined the drop out behavior of the micro finance members using household level data of PRIME (Programmed Initiative for Monga Eradication) for the year 2012. PRIME is a multi-dimensional program designed and initiated by Palli Karma- Sayahak Foundation (PKSF) in 2006. The components of the program are: micro credit, savings, training, technical assistance, and health services. The program design is based on the assumption that extreme poverty is structural in nature and the people belonging to this group are more vulnerable. The program was implemented in the monga prone north-western region (Greater Rangpur) of Bangladesh.

We have taken a couple of steps to address the issue of drop out behavior of the PRIME households. In the first step, we have estimated the drop out rate, and then in the second step, we have examined the determinants of such drop out behaviors. The drop out rates have been estimated by following three approaches– cross-sectional drop out rate for 2012, panel drop out

rate using the successive membership profile of the participants, and average drop out rate over the period 2008-12 using pooled cross sectional data.

Results

The first approach of measurement shows that drop out rate in 2012 was 34 percent for the PRIME participants compared to around 30 percent for the non-PRIME (generally regular micro credit program with credit component only in most cases) participants. It does not provide information on the drop out behavior of the households over time. The balanced profile of drop out behavior through 2012 of the households who joined in 2008 and 2009 shows that around 37 percent of the households dropped out of the program at the end of the second year of their participation. The marginal drop our rate decreased in the subsequent years. However, by the end of 2012, over 50 percent of these members exited from the market. Our third approach of measuring drop out by using the pooled cross sectional data of the borrowers shows a similar story– a higher drop out rate in the initial years and lowers in the later years. But this high drop out rate is not unique for PRIME participants; it is not much lower for the non-PRIME participants. The question is, why is this so? We have examined the question both from the demand and supply sides.

The demand side results show that old age members, female headed households, low income households and wage earners are more likely to exit from the micro credit market. These households are truly vulnerable. Interestingly, the drop out rate among the PRIME participants is not significantly higher than that of the non-PRIME participants. The household characteristics matter in their exit decision. Vulnerable households find it difficult to comply with the terms and conditions of the credit contract. The presence of many MFIs may add to overlapping but reduces the probability of exit from the market.

We have evaluated the drop out behavior of the households from the supply side terms and conditions. Our descriptive analysis shows that the weekly payment system was considered as a major problem for exit from the market for over 50 percent of the drop out members of both PRIME and non-PRIME programs. Idiosyncratic shocks appear to be the second most important reason.

We have examined the question, does program design contributes to explaining the drop out behavior of households? We have looked into it in the light of the PRIME design. The econometric results show that the probability of drop out is lower for the households who received credit plus other non-credit services compared with those who received only credit services. The result suggests that non-credit interventions like training, technical assistance and health services reduce vulnerability and increase capability of the members to use credit effectively. From this perspective, PRIME design is effective.

Conclusions

The major conclusions are: micro credit may not be suitable for every member under its existing terms and conditions. Program design matters. Credit plus programs contribute to lower probability of drop out. Improving capability of the members or borrowers should be a requirement to make micro credit more effective and reduce drop out rate.

IMPACT OF MICRO FINANCE ON FOOD SECURITY IN BANGLADESH: EVIDENCE FROM PRIME

(Abridged version)

M. A. Baqui Khalily; M. A. Latif; M. A. Khaleque; Mehadi Hasan; Nahid Akhtar

Introduction

Bangladesh is termed as an emerging middle-income country for maintaining higher rate of economic growth, macro-economic stability, continuous decline in poverty and higher social development (often higher than some South Asian countries).Yet food insecurity, poor diet quality, and persistent nutritional deficiencies prevail among the extreme and moderate poor. The term 'food security' refers to food availability and food access. Historical background of food security in the country demonstrates a high dependence on rice production— as the highest income generated from nurturing of rice and also most of the cultivated lands are used in rice production. Bangladesh is the sixth largest producer of rice in the world[1]. Since rice is the leading staple food and the key source of energy, protein and micro-nutrients, substantial achievement in generating rapid growth in the yields has been attained in the last four decades, resulted production of 33 million metric tons in 2012 from 11 million metric tons in 1971. This improvement has been done by use of higher productive rice varieties, fertilizer, pesticides, proper irrigation, enhanced crop fortification and use of better execution practices by agronomists and farmers.

Among the various initiatives taken to cope with perpetuating poverty in the mid 70s, access to financial services to the previously unbanked group was introduced considering it as an important pathway to enhance income as well as food security of the vulnerable households. These services include credit, savings and insurance services under flexible conditions suitable for varied demands of the poor. The effect of micro financet is realized through income generation, asset building, self employment and income of households. These may put some positive effects on health status of the members of the micro credit plus programs, which offer basic health care during illness and food security in the face of seasonal starvation. However, debates exist about effectiveness of micro financet in ensuring food security as well as in reducing poverty (e.g., Morduch; Karlan). In contrast, there are other studies that clearly show that micro finance has contributed to improving food security and reducing poverty both in short and long run in Bangladesh (Khandker et. al. 2013; Osmani 2012; Khalily et. al. 2011). This paper attempts to evaluate the impact of PRIME model of micro finance in improving food security and reducing poverty in the monga-prone north-western region of Bangladesh.

Palli Karma Shayak Foundation (PKSF), a leading wholesale lending agency in the micro finance sector, designed a comprehensive program for mitigating monga in the north-western region of Bangladesh. The program is known as Programmed Initiative for Monga Eradication (PRIME). It is a composite program with provisions for credit, savings, training, technical assistance and health services. It was introduced in 2007. One of the core objectives of PRIME is to improve the state of food security of the targeted[2] people in the region. Given this objective, this paper assesses the impact of PRIME on food security in the north-1western region of Bangladesh using data for the

[1] http://irri.org/index.php?option=com_k2&view=item&id=10824:rice-in-bangladesh

[2] Extreme poor households were identified using the criterion: (i) household must have wage income; (ii) maximum income should be BDT 1500 per month; (iii) household should have land maximum of 50 decimals.

period 2008-2012. We adopted both descriptive and econometric approaches to evaluate the impact of PRIME on food security.

In this paper, considering the objective of the PRIME, we define 'food security' based on 'food access'. A household is termed as food-secure if it has the capability to access food through income enhancement.

Role of Micro Finance in Food Security

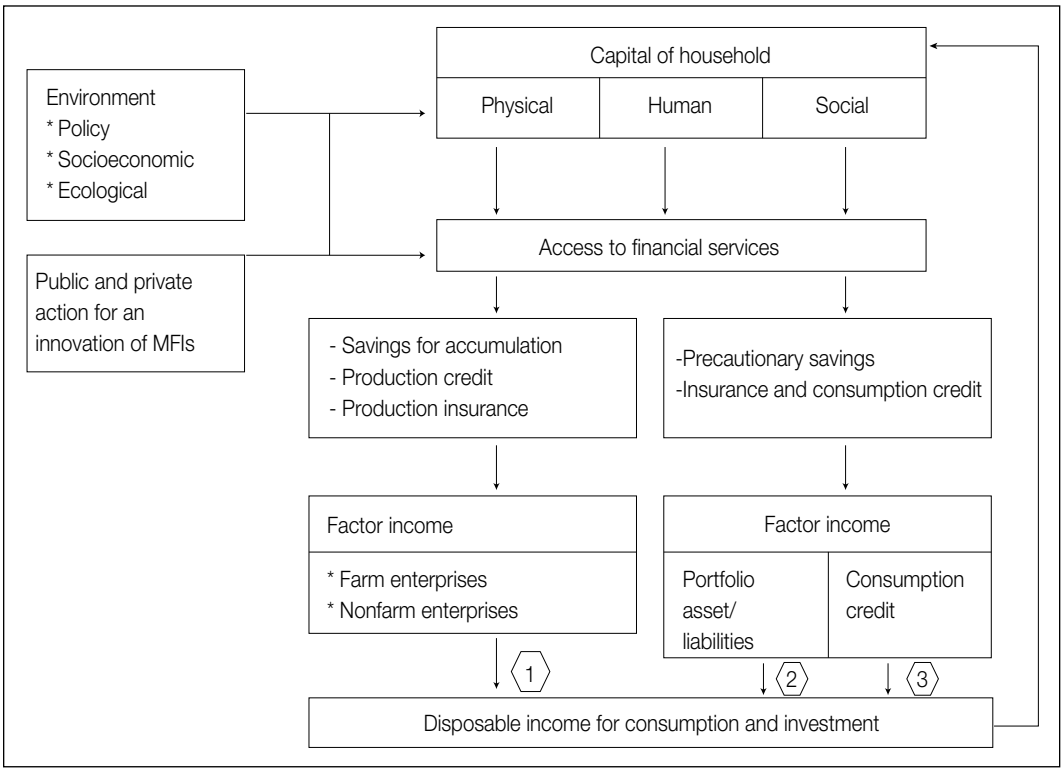
The extent of vulnerability of households depends on their exposure to jeopardy and economic, social and mental capability to deal with or endure the feeble situation. Micro finance along with other development programs have passed a long way in Bangladesh, though faced with questions and doubts about its credibility on poverty alleviation and wellbeing of the poor. Against this backdrop, several evaluation studies have been done. However, maximum evaluation studies usually authenticate short term positive effects of micro financet on several indicators like income, asset accumulation, and food or non-food expenditure etc., but still long term effects of micro financet need to be assessed especially on risk coping capability and food security. Research so far on the impact of micro financet specifically on food security is limited; however, few studies have shed light on the issue.

Except focusing on the effects of micro financet on the poor, Zeller and Sharma (2000), have demonstrated the pathways through which micro financet program can put a credible impact on household's food security. The pathways are, (a) improving income generation; (b) decreasing costs for self-insurance through more cost-efficient assets and liabilities of households, and (c) direct use of credit to finance immediate consumption needs (Flow chart 1) (Zeller and Sharma, 2000). They have shown that the deprived group mainly saves under the motivation of holding preventive savings so that they can smooth future consumption under any fluctuating situation. While describing the first pathway, the study have shown that additional capital through micro credit and savings can be temporarily used to augment the level of the household's or firm's human, physical and social capital as well as to assist to generate income and future investment. The second pathway has suggested that expensive informal savings and holding of risky assets (e.g., jewellery or staple food) by the poor could be substituted through different savings products offered by the MFIs, as these informal savings are subject to a number of risks, such as inflation, animal disease, and theft. The third pathway has recommended that costly consumption credit from informal sources, expensive traditional savings, self-insurance, and community level coinsurance strategies could be substituted by accessing formal financial services to the poor. Finally, they have recommended, along with production credit, micro finance institutions can offer innovative credit which can be used for consumption and other fundamental requirements.

Several authors have examined the effect of access to micro credit on food security. Chowdhury and Bhuiya (2004) have found that BRAC member households are in a better position compared with the poor non-member households in terms of food expenditure, per capita calorie intake, child survival rate, nutritional status and basic education[3].

[3] A child satisfying a minimum level of competency in reading, writing, arithmetic and life skills was considered to have 'basic education' (Chowdhury et al., 1993).

Flow Chart 1: How Does Access to Finance Influence Food Security



Khalily et. al. in evaluating the impact of micro finance support interventions on 'Food Security for Vulnerable Group Development (FSVGD) and Ultra-Poor (UP) Beneficiaries' have shown that special micro credit program for ultra poor had strong positive impact on income, consumption and asset formation of the ultra poor. Evidence shows that the severity of food insecurity has declined and the rate of improvement is higher for the participants than for the early drop-out group. Islam (2011) while examining the efficiency measures of the agricultural micro finance comparing micro finance borrowers and non-borrowers in Bangladesh has found that access to agricultural micro finance significantly influences various efficiency like technical efficiency, production and cost efficiency, profit efficiency, etc. The paper has recommended modernizing the agricultural micro finance and making greater access to the smallholder farmers on a sustainable basis to enhance productivity and efficiency. Wadud (2013) while analyzing the impact of micro credit on agricultural farm efficiency, has found that suitable and low cost delivery of micro credit could reduces the inefficiency of agricultural farms and hence could boost up production. Farms, if operate at its full efficiency, can reduce production cost by around 19 percent and increase production as well as lower the price, which could strengthen food security.

PRIME: A Framework for Improving Food Security

As strategies to acquire and uphold food security, households seek to maintain two concrete approaches: (a) efforts to maintain adequate current consumption and production in the case of frequent natural or socioeconomic hazards or seasonal food insecurity and, (b) efforts to gather sufficient strength to tackle future sudden hazards like price hick or abrupt unemployment or death of earning members of the households.

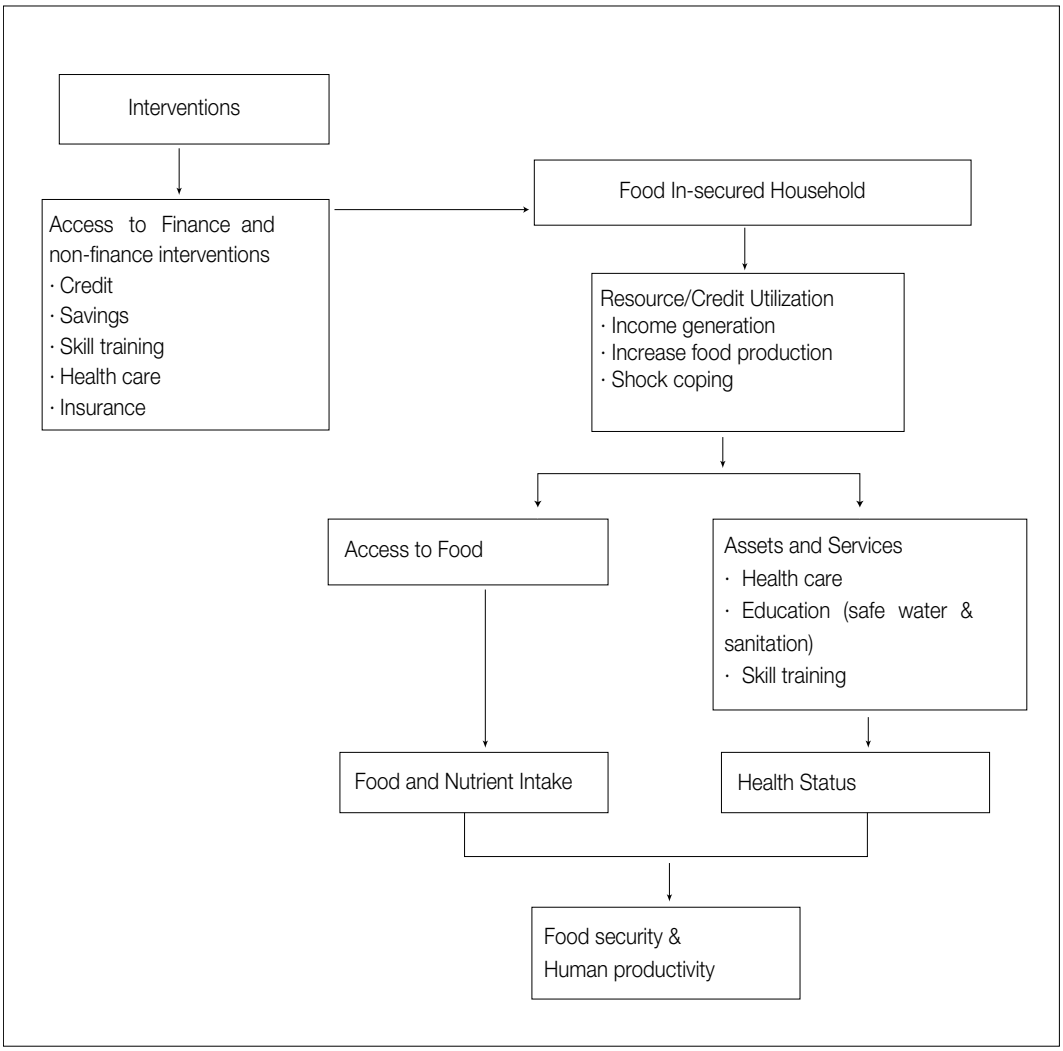
Among the various poverty reduction programs in Bangladesh, food transfer programs though very crucial, can provide only short term food security and take the form of an ex-post program. Consequently, though these programs provide a caution against sudden shocks cannot produce any significant change on the recipient's living. Thus along with these programs, focus should also be put on implementing significant ex-ante preventive programs to acquire the sustainable and greater improvement. Appropriate micro finance programs especially credit-plus4 programs can act as a key strategy for strengthening food security and livelihood of the poor. Access to credit can boost up income generating activities and act as a means to fill in the void of food deficiency of poor households. Flow Chart - 2 can provide an idea about the whole process.

The flow chart shows a synopsis of the micro finance services and their association with the poor households which finally settle on nutrient intake and human productivity if the credit amount can be utilized effectively. It also shows the channels through which food insecure households can generate income by utilizing credit and skill training received from the MFIs. Thus the fundamental assumption in micro finance is that this increased income would lead to improved diet quality of households. Other services like basic health care can help recovering their health status and micro insurance services (in the form of health insurance or other) can act as a caution in incidence of sudden shocks and thus help them deal with the adverse situations. Finally, the improved consumption would enhance human productivity and overall development of the society.

PKSF has designed a composite program called PRIME (Programmed Initiatives for Monga Eradication) that can be described by the above framework. The program is administered through sixteen Partner Organizations (POs). The basic objective is to improve food security and reduce poverty of the monga-prone ultra-poor households who routinely suffered food insecurity and seasonal hunger, in Greater Rangpur, As a credit-plus micro credit program, PRIME, mainly target the ultra-poor households of Greater Rangpur having less than 50 decimals of land and monthly income less than BDT 1,500 and selling labor.

[4] 'Credit plus' program, where along with credit facility, other socio-economic services such as various training for skill development, education, healthcare and other outreach services are provided.

Flow Chart 2: Micro Finance Intervention in Household's Food Security



It was initially a pilot project in Lalmonirhat in 2006, to allow the ultra-poor households access to financial services. On a long-term basis, it aims to create diversified income sources within the households so as to ensure the households not to experience food insecurity during the off-harvesting season. This is done by making accessible, flexible micro credit, micro savings and training on income generating activities for the target households. It is also offering skill and capacity building and technical assistance support, vocational training in order to increase the livelihood options, and making accessible, health services to the members. The program was implemented in three phases, with the first phase, initiated in 2006, being administered in five upazilas of Lalmonirhat district. Successively, it covered 18 upazilas of four other districts, namely, Gaibandha, Kurigram, Nilphamari and Rangpur.

Estimating Food Security

In this study, we define food security based on the information collected on household expenditure, a week-recall of food consumption and expenditure, and number of meals before and after monga.

From the literature, we have identified several approaches to measure food security at the household level. We have defined food security of the ultra poor based on household survey data. The food security is measured directly and indirectly. In the direct method, we have used the number of meals per day before and during monga, the minimum level of income to meet the basic needs (poverty perspective), the state of food rationing among household members, and the availability of food. In the indirect method, we have examined food security by measuring income security, spending capability, and asset building.

Empirical Results

We have examined the impact of PRIME on food security of the ultra poor in the north-west of Bangladesh using the data of PRIME participants and non-participants for the period 2008-2012. The PRIME program is six years old. Since joining a program is endogenous and self-selective, households have dynamic state of continuing or receiving financial services from the service providers. Moreover, households have an option to participate in other types of credit programs. Therefore, we have grouped households according to joining status. We have found that some households participate in PRIME program, non-PRIME programs, or in both while some households do not participate in any program overtime. Again, the PRIME participants are grouped into two – the credit receiving and credit plus5service receiving households.

The analysis has been done using both balanced panel data and cross section data of 2012. Using balanced panel data, we have estimated the difference-in-difference (DID) estimates of various indicators such as income, expenditure, asset, etc; and other panel estimation techniques such as panel Probit in the case of dichotomous variables; random effect model in the case of continuous variables, and panel Tobit model in the case of truncated variables. In measuring DID estimates, we have not controlled for the other covariates especially household characteristics that are presumed to affect participation opportunities, whereas in analyzing the panel regression techniques, we have controlled for some other variables which are supposed to affect the outcome indicators besides the program variables.

Impact on Food Security (Direct Measures)

The state of food security of households is illustrated directly by using the trend of three meals during normal time or monga time and possessing the minimum level of income for the consumption basket of measuring poverty.

The trend analysis of household food security suggests that it has improved overtime. Households had higher number of three meals in normal time compared with monga time. In 2008, only 13 percent of the never participant households in control villages had three meals, whereas around 22 percent continued PRIME households had three meals. In 2012, the figures for the two groups– continued PRIME households and never participants stood at 61 percent and 51 percent respectively. The trend of monga time food security measured by the number of meals per day has

[5] Beyond credit service such as training, healthcare, technical assistance, etc

some interesting features. The food security status of both the groups had improved sequentially up to 2010, and it plateaued in between 2010 and 2011. After 2011, the food security of the never participant households further improved while that of the continued PRIME households remained plateaued. During normal time, the food security status follows the same trend as the food security in monga time. Linear estimation of the trend shows that the continued PRIME households were improving at higher rate compared with the never participant households in control villages, both in monga and normal times.

Figure 1: Three Meals in *Monga* Time

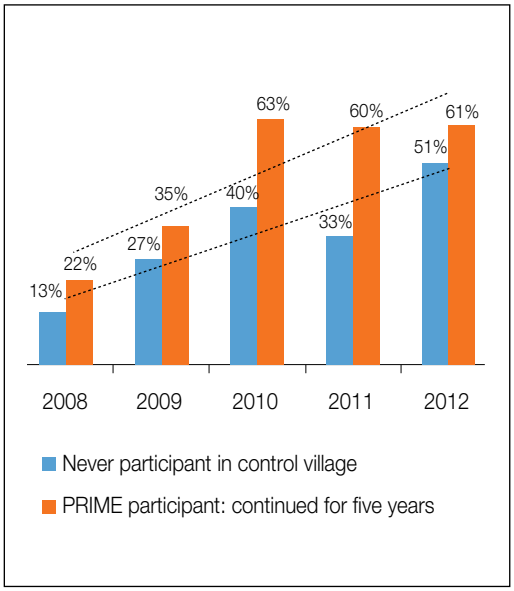
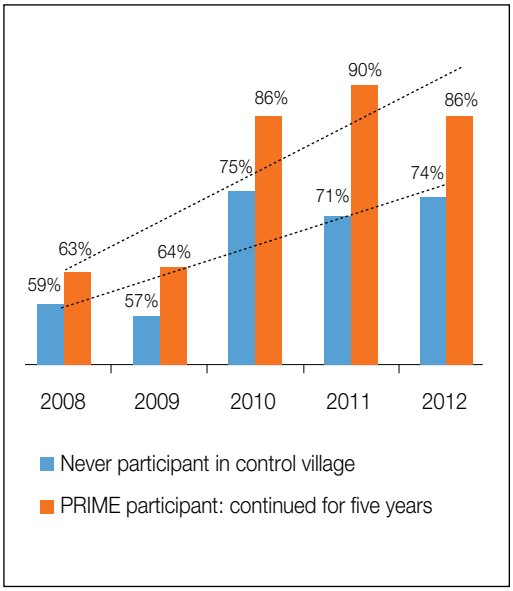


Figure 2: Three Meals i Normal Time



Around 50 percent of the never participant households have three meals all the year round. The corresponding figure for the continued PRIME households is estimated at around 61 percent. The overall food security has improved for both types of households. The occasional starvation and two meals in a day have declined substantially overtime. Interestingly, although the food security has improved, the vulnerability to food insecurity is quite substantial among both the continued PRIME and never participant households. Only 8 percent of the never participants were found to have year round three meals since 2008. On the other hand, around 22 percent of the continued PRIME households had year round three full meals.

It is pellucid that the proportion of households having three meals in a day during normal and monga periods has increased. But what factors contribute to such achievement? To find the significance of program participation and other household factors on food security and poverty, we have estimated the random effect panel Probit model. The marginal effects of the model are reported in the following table.

Table 1: Factors Determining Food Security (Direct Measures)

1	2		3	
Explanatory variables	**Marginal effect of three full meals**		**Marginal effect of Extreme poverty**	
	coef	se	coef	se
Membership with 1-2 years	0.182***	0.019	0.023	0.020
Membership with more than two years	0.249***	0.022	0.208***	0.021
Village was affected by flood	-0.045**	0.018	0.058***	0.019
Household head age (year)	0.003***	0.001	-0.001*	0.001
Household head education (Year)	0.010***	0.003	-0.007*	0.004
Head is wage earner	-.109***	0.016	0.100***	0.017
Economic dependency	0.019***	0.006	0.080***	0.006
Log of annual household income	0.119***	0.011	0.042***	0.011
Household has access to electricity	0.059**	0.026	0.160***	0.026
Total number of cow	0.049***	0.008	0.039***	0.008
Log of land	0.047***	0.007	0.055***	0.007

The marginal effect of the determinants of three meals during monga and extreme poverty shows that compared with the new members or never members, a larger number of households with one or two years of membership has three meals during monga, and this estimate is statistically significant. However, the poverty of this group has not declined and the coefficient is insignificant. This is plausible since poverty is measured using the year round data – both normal and monga period and the program may have little effect on this group in the short run. This may be reflected among the continued PRIME households having membership over 2 years. A higher proportion of households of this group compared with the continued PRIME households with membership up to two years have three meals. The marginal effect of this variable as a determining factor of extreme poverty is found statistically significant. Natural disaster such as flood reduces the proportion of households to have three meals. The food insecurity is high among the oldest compared with the others. The day laboring households have lower incidence of three meals and higher probability of being extreme poor. Education improves food security and poverty. Asset and income play some roles in food security as expected.

In the fifth round survey (2012), further investigation is done to cover other dimensions of food security. Several questions are included to capture it. For example, availability of sufficient meals, availability of food, starving at night, etc. are used to measure food security in good periods as well as in bad periods. The results are reported in Table-2.

Table 2: Food Security (Cross Sectional Analysis)

	Never participant				PRIME continued participation: joined in year 2008			
	Never	Hardly (1-2 days)	Some-time (3-10 days)	Often (10 days+)	Never	Hardly (1-2 days)	Some-time (3-10 days)	Often (10 days+)
Monga time								
Having insufficient meals	27.42	46.72	23.67	2.19	41.3	49.28	8.7	0.72
No food	56.62	29.2	13.14	1.04	68.12	28.26	3.62	
Going to bed in starve	63.82	24.3	10.84	1.04	69.57	26.81	3.62	
Normal time								
Having insufficient meals	51.72	35.32	10.87	2.09	70.29	23.19	5.07	1.45
No food	72.73	20.79	5.54	0.94	87.68	9.42	2.9	
Going to bed in starve	77.87	17.33	3.97	0.84	86.96	11.59	1.45	

Source: InM Household Survey (PRIME)

In the year 2012, about 73 percent of the never participant households had insufficient food in meals in monga period. In the same period, about 41 percent of the continued PRIME participants never faced such insufficiency in food. About 43 percent of the never participant households had no food at all at least for one day during monga period, while it has happened to 32 percent of the continued PRIME participant households during monga time. During monga time, 64 percent of the never participant households did not go to bed without meal. The proportion was higher among the PRIME participants by 6 percentage points. Severity of food security was less in normal time in comparison with monga time for both groups. Still the continued PRIME participants were better-off in terms of various indicators of food security.

Impact on Food Security (Indirect Measures)

To understand the impact of PRIME program on food security measured indirectly, the difference-in-difference technique and panel regression analysis have been followed.

The difference in difference (DID) parameters suggest that at its early stage the program did not have any impact on income, expenditure, and financial assets. However, as the program duration increased the net gains became significant. For example, the average income gap between the continued PRIME households and the never participant households (in both program and non-program villages) became statistically significant in 2012, whereas in the program villages, the gap tended to be significant since 2011, and the magnitude of the effect became higher and stronger in 2012 compared to 2011. The impact of the program on expenditure was more pronounced. The DID estimates of total expenditure and food expenditure between the comparison groups were also found significant in 2011 and 2012. The continued PRIME members had accumulated higher financial assets.

The mere membership of PRIME program does not accrue any benefits to the participant households; rather it is the maturity or duration of membership that contributes. The role of membership duration in addition to other household characteristics is also examined.

The income regression shows that the older PRIME members accrued significantly more income compared with the younger members. Holdings of land and other assets have positive impact on income. The duration of membership has significant impact on food expenditure. The significant impact is found in non-food expenditure as well. Duration of membership also contributes to increase financial asset. Other household characteristic such as day laboring explains lower income, lower consumption expenditure, and lower financial asset.

Do the Results Corroborate Findings from Similar Program? Evidence from FSVGD and UP program[6]

FSVGD and UP program was implemented by PKSF through its POs in 19 northern districts of Bangladesh. The project had similar kind of intervention components – credit, training, and technical assistance. For this program, we have attempted to estimate the state of food security of the households or availability of food in the household annually. The availability of food was classified into four groups– year round deficit, occasional deficit, break-even, and surplus. The findings are reported in the following table.

Households managed to have food security by raising income with the help of integrated training and credit facilities they received. Increased income has a positive impact on food security, living standard, and generating savings and many other things. The FSVGD and UP program has huge impact on the participant group. The group has a higher amount of food availability than the other groups over the year. In the follow-up survey, more than 60 percent households of the participant group have achieved food security while only over 7 percent have food security during the benchmark survey.

Table 3: State of Food Security among Participants and Drop-out

Food Availability	Benchmark			Follow-up		
	Drop out group	Parti-cipant group	Early drop out group	Drop out group	Parti-cipant group	Early drop out group
Year round deficit	50.08	44.25	51.50	17.42	11.32	21.11
Occasional deficit	38.21	48.14	32.34	33.43	28.03	38.89
Beak-even point	9.24	7.45	11.38	26.83	40.16	20.00
Surplus	2.47	0.16	4.79	22.33	20.49	20.00

Source: InM Household Survey (FSVGD & UP Project November, 2010).

[6] Food Security for Vulnerable Group Development (FSVGD) and Ultra Poor (UP) program

Is PRIME-type of Program More Effective?

Effectiveness of PRIME-type of program with credit and non-credit interventions among specialized target group, need to be justified in comparison to other traditional micro credit programs. Providing non-credit interventions is costly. If it appears that non-credit interventions do not have any impact on food security and poverty reduction, then one can argue that the program is not different from the regular micro credit programs. Effectiveness is, therefore, evaluated in terms of differences in outcomes of credit only and credit plus programs. If it is found that PRIME participation does not bring any significant change among participating households in comparison to traditional micro credit receivers then the validation of running costly a program like PRIME will be controversial. So, we take up to analyze whether the overall program design of PRIME is better than a traditional one.

Analysis in the previous section was based on PRIME membership. To identify the impact of the program, one should not compare between PRIME participants and non-PRIME MFI participants, since the targeting criteria was different and hence the households might be observationally different in the base year. In addition, non-PRIME participants have higher average loan size. We compare the credit only PRIME participants with credit plus PRIME participants for evaluating the effectiveness of the PRIME-type of program.

We assume that all PRIME participants are homogenous at the time of joining the program. However, the impact may vary across participants due to difference in receiving various services of the program. The PRIME program has various components of intervention such as credit and non-credit services. To find the result, we have identified prime households having only credit service and those having credit and other services like training, technical assistance, health care, etc (credit plus services).

The panel Probit result suggests that a higher proportion of households having credit plus services get three meals during monga compared to the only credit recipient households. Analogously, credit plus service contributes more in reducing extreme poverty than credit service only. The PRIME households having credit plus components have higher income, higher expenditure and higher financial assets. But the gains reduce when covariate shocks like flood occurs. Nevertheless, net gain is positive because marginal gain from credit plus is higher than the marginal loss due to flood.

The direct and indirect measures of food security suggests that the PRIME households have relatively high food security and low probability of extreme poverty compared with the never participant households. We further validate the findings by estimating the outcomes of credit only and credit plus households using Propensity Score Matching technique. The earlier findings are validated as the outcomes are positive and significant.

Conclusion

We have evaluated the impact of PRIME on food security directly and other economic outcomes indirectly. Our results show that it contributes to food security and economic outcomes. Both descriptive and econometric analyses provide us with similar inferences. Improving food security of the vulnerable extreme poor households with sustainability is not simple; it requires long term interventions and assessment. We have found that even the households that had joined the program in 2008 and continued through 2012 became more food secured compared with the never-participants, after four years of participation. Until the fourth year of participation there is no

significant difference in the outcomes. The results become stronger when compared with never participants in the control villages.

PRIME is a multi-dimensional program. It includes credit, training, technical assistance, and health services. It is well argued in the literature that credit alone cannot reduce poverty and improve food security of micro credit participants on sustainable basis; it requires non-credit interventions as well. PRIME program has been designed based on this perspective. But the question is, is credit plus program more effective than credit only program? This question can be addressed by comparing the outcomes of the PRIME participants and the non-PRIME participants, or by comparing the outcomes of the credit only participants and the credit plus participants within the PRIME program. The former approach may suffer from the problem of non-homogeneity. The later approach ensures homogeneity and solves the problem of selection bias as well. Our results show that the credit plus participants are better off than the credit only participants of the program. Moreover, they have higher ability to cope with natural shocks. We find that marginal gain from participation is higher than the marginal loss due to flood. The findings are further validated derived from the analysis using propensity score matching technique.

Participants can be better off further if they have insurance mechanisms to cope with idiosyncratic and covariate shocks. The only insurance mechanism they have is savings. Although several risk minimizing interventions like training and health services are provided under PRIME, they are mostly subsidized. Social benefits of PRIME can only be found positive if it appears that aggregate net gain of the PRIME participants outweighs the social cost of providing non-credit interventions. This is an issue that has to be examined in future; but it should be evaluated in long run. Five years of a program is not sufficient to compensate for associated social cost; perhaps a decade long program will make it more sustainable, and the social cost can perhaps be recovered. One inference we can strongly infer is the need for multi-dimensional interventions for improving food security. One limitation that we draw attention of the readers: food security encompasses the elements of food availability and food access. This paper focuses on the access to food of the targeted poor households through improving capability. It will be interesting to examine the extent to which food availability has facilitated in improving food security condition of the poor households.

(Endnotes)

[i] References have not been included. Interested readers may get the references from the authors if needed.

IMPACT OF MICROCREDIT ON AGRICULTURAL FARM PERFORMANCE AND FOOD SECURITY IN BANGLADESH

(Summary)

Md. Abdul Wadud

Introduction

Agriculture in Bangladesh is mainly characterized by small and marginal farms with limited financial resources which do not enable them to apply optimal input mix and production technology. This results in lower agricultural production and productivity that hampers food security.

Increasing food production and attaining food security require on time and adequate supply of agricultural inputs. Farmers require financial support from institutional and non-institutional sources to meet the expenses of various inputs. Considering credit as a crucial factor in ascertaining sustainable development of the sector, it is necessary to find ways in which farmers' access to credit can be ensured.

As marginal and small farmers have little or no access to formal sources of credit, microcredit can enable them access to purchase inputs like seed, fertilizer and irrigation at right time which, in turn, helps utilization of new production technologies thereby increasing food production and ensuring food security.

The use of microcredit in agriculture has been on the increase and now it constitutes around 40 percent of all credits that the farmers receive. A priori, it is thought that microcredit could have a positive impact in enhancing efficiency performance of farms, and hence raise farm income and food security of the marginal and small farmers and reduce poverty. It has, therefore, become necessary to study the impact of microcredit on performance efficiency of farms and agricultural production. This present research is designed to conduct a thorough study to assess the impact of microcredit on farm performance, agricultural production and food security.

Objectives

Microcredit can have double-edged impact on food security. By extending microcredit to farmers, the level of inefficiency in crop production can be reduced and the supply of food can be increased. This helps in availability of food. Extension of microcredit to farmers can increase their income through provision of job in dire times that improve access to food. Thus, microcredit helps reduce poverty through an increase in food production and increase in purchasing capability of the farmers. The basic objectives of the study are to examine: the improvement in the availability of food through reduction in production inefficiency of farms, the role of microcredit in raising productive efficiency, and the link between microcredit, food security and poverty alleviation. Inefficiency in production is resulted from the failure to produce the maximum output from a given input mix at minimum cost. Efficiency of a farm consists of two components: technical and allocating efficiency. Technical efficiency measures the ability of a farm to produce the maximum output from a given set of inputs using the existing technology. Microcredit helps small and marginal farmers procure inputs.

Data and Methods

The study uses survey data of 450 microcredit receiving and 232 non-receiving farms from four north-western districts of Bangladesh, namely, Gaibandha (111 and 60), Dinajpur (110 and 61), Rajshahi (111 and 59) and Joypurhat (118 and 52) districts.

We examine the existing inefficiency in farm production and factors associated with such inefficiency. The factors include the use of microfinance also. The reduction in such inefficiency leads to increase in farm production and hence food security. This evaluates the impact of microcredit on farm production and food security.

This research applies the Stochastic Frontier Analysis (SFA), Data Envelopment Analysis (DEA) method and Propensity Score Matching Techniques (PSM) to analyze the impact of microcredit on agricultural farm performance and food security.

The SFA and DEA models are applied to estimate the technical efficiency performance. Inefficiency effects models are applied to identify and quantify such a factor as microcredit which explains efficiency performance. The PSM technique is also applied to evaluate the likely positive impact of microcredit on farm output and consequent food security.

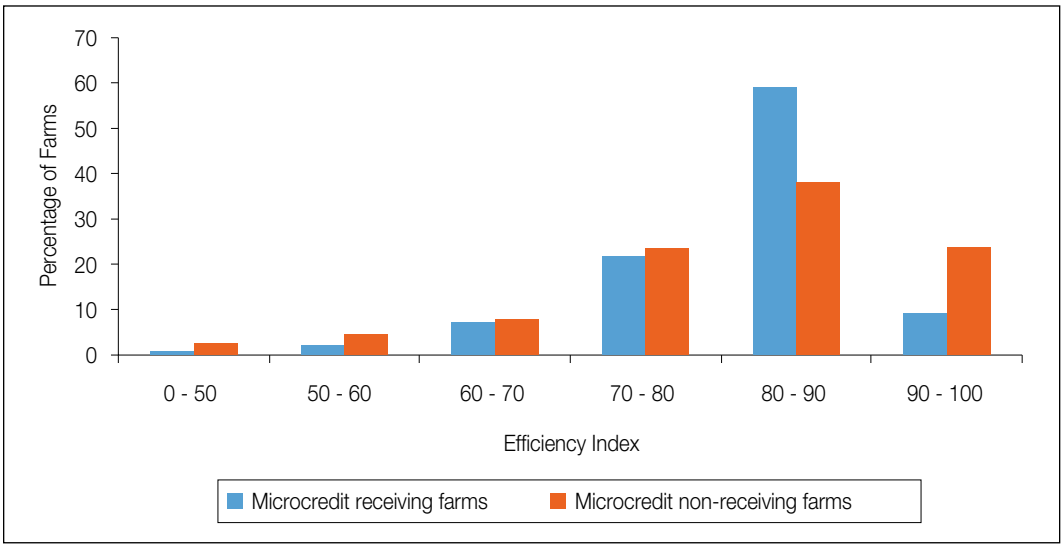
Results

First, we specify the Cobb-Douglas stochastic frontier model to obtain the farm-specific efficiency performance along with the output elasticity and the coefficient of variance parameters. Then, we apply maximum likelihood estimation methodology to estimate the frontier model.

An analysis of efficiency shows that 68 per cent of the microcredit receiving farms and less than 62 per cent of the non-receiving farms are more than 80 per cent technically efficient (Figure-1). The average efficiency performance of the microcredit receivers is one per cent higher than the microcredit non-receivers. This difference in efficiency between microcredit receiving and non-receiving farms seems to be very small. This is perhaps because that microcredit received by the farmers is a small part of their total production cost. The variability of farm-specific efficiency performance among farms is higher in the later farms than the former. This can be explained by the contribution of microcredit. Thus we can conclude that microcredit can reduce inefficiency, and hence increase efficiency performance which could lead to enhancement of farm output and food security.

The maximum likelihood estimates of the parameters of the Cobb-Douglas form of frontier model for the whole sample give all coefficients positive and significant as expected. The highest elasticity of output is for fertilizer (elasticity=0.2676) indicating this input as the dominant factor of production. The next important factor is machinery (elasticity=0.1852) followed by land (elasticity=0.1490). Labor (elasticity=0.1098), irrigation (elasticity=0.1057) and seed (elasticity=0.0460) have relatively small effects. Return to scale is estimated at 0.8633. This indicates slightly decreasing returns to scale.

Figure-1: Distribution of Farms by Efficiency Index



Source: Based on survey data

We calculate the overall technical inefficiency effects and find that these effects are a significant component of the total variability in output. This indicates that there exists considerable inefficiency in farm production. Therefore, there is room for improvement of farm output and thus food security through reducing inefficiency of the farms.

The estimated inefficiency coefficients for microcredit, experience and education of farmers are all significantly negative. This is an indication that microcredit helps reduce inefficiency in farm production and that farmers with more experience and education have higher efficiency performance. Thus, farmers with more education, experience and microcredit are capable of utilizing agricultural inputs in an efficient way which, in turn, increase farm production and income, and hence contribute to improving food security.

The estimated coefficients of land fragmentation are positive which shows that increase in land fragmentation causes inefficiency in farm production. This is possibly because of land fragmentation; the marginal and small farmers can neither better apply the new technologies like tractors nor manage irrigation on their land.

Results of the inefficiency effects model for microcredit receivers also show that the coefficient for microcredit, experience and education are all negative indicating that given the technology these variables help utilize their agricultural inputs properly. This again contributes to the increase in agricultural farm production and food security.

The results of the stochastic frontier, variance parameter and inefficiency effect models of the farmers who received microcredit and who did not are also derived separately. Here, all coefficients for microcredit receivers are positive but except irrigation all other coefficients are significant and all coefficients except for seed for microcredit non-receivers are positive and significant. Unlike microcredit receiving farms where fertiliser is the dominant factor, for microcredit non-receiving farms, irrigation stands as the dominant factor followed by machinery and fertilizer. The returns to scale is 0.8415 and 0.9203 respectively which imply that farms are operating at below the

optimal levels. Coefficients of variance parameters for both cases imply that there is scope for enhancement of farm output and food security through reduction in farm efficiency.

Like in the SFA model, all coefficients in the DEA model exhibit the similar results. But coefficients associated with CRS TI exhibit positive signs which are not expected. This is perhaps due to the imposition of constant returns to scale assumption. Results show that technical inefficiency effects are higher for farmers with smaller land size.

We apply the specification of logistic regression model to obtain propensity score as a function of the set of variables as defined. Using the estimated propensity score, we match a participant farm from the treatment group (microcredit receivers) with a non-participant farm from the control group (microcredit non-receivers) to facilitate causal inference so that the treatment group and control group are balanced. This approach isolates the impact of idiosyncratic factors have on outcome variables by reducing heterogeneity between the groups. An important characteristic of this technique is that after units of the groups are matched, the unmatched comparison units are discarded and not used in estimating the impact.

Different algorithms can be used to identify matching pairs after the propensity score is estimated. We apply the Nearest-Neighbor Algorithm in this study as this is the most employed algorithm. This method matches each treated observation with a controlled observation with the closest propensity score.

Results imply that farmers with experience and education have probability of receiving microcredit, and that farmers with land fragmentation are likely to receive microcredit. Farmers with larger farm size are unlikely to receive microcredit.

Each treated farmer is matched with a control farmer and then the difference between the outcome of the treated farmer and the outcome of the control farmer is calculated. The average effect of treatment on the treated (ATT) is obtained by averaging these differences. The results show that the microcredit program as a whole has a positive impact on the average income of the farms. This positive impact means, those who receive microcredit earn on an average 9.46 percent more than those who do not. This definitely contributes to food security.

Conclusions

Based on the results of this study, we conclude that policies which extend microcredit and ensure fair, timely and low-cost delivery of inputs to marginal and small farmers could lead to reduction in agricultural farm inefficiency and hence lead to improve the performance of agricultural farms. This could enhance farm output and welfare, help reduce poverty and improve food security.

ISSUES OF CLIMATE CHANGE AND MICROFINANCE

(Abstract)

Qazi Kholiquzzaman Ahmad[1]
Fazle Rabbi Sadeque Ahmed[2]

Changes in the global climate has occurred naturally over time due to continental drift, astronomical cycles, and changes in volcanic activity and solar energy output. However, the industrial revolution changed the balance of energy in the earth's climate system. Industrial activity increased the amount of anthropogenic, or man-made, greenhouse gases in the atmosphere and changed the natural equilibrium of earth's climate system. All evidence unequivocally suggests that the climate system has been warming and that human activities are responsible for the increase in the earth's temperature. If drastic actions are not taken to reduce greenhouse gas emissions, global temperature will likely increase by between 1.80C and 6.40C by end 21st Century. (IPCC, 2007). Since then, it transpires from newer research works that the warming prospects may be worse.

The worsening climate change will have catastrophic consequences for the poor. Weather patterns will become more variable and unpredictable. The rise of sea levels will increase salinity ingress and decrease the availability of fresh water in the regions that are home to more than one sixth of the world's population, particularly those living in the mega-deltas of Asia and Africa. Additionally, there will be a higher incidence and severity of natural disasters, such as floods, cyclones and droughts. The warming of the earth will also change the geographical distribution of some infectious disease vectors and increase their incidence among humans, crops and livestock (IPCC, 2007).

Many of the world's poor are directly dependent on natural ecosystems for their survival and wellbeing. Therefore, the intensifying climate change is likely to have the strongest impact on African, Asian and Latin American poor and low-income populations, who often live on vulnerable geographical locations. The projected declines in the productivity of major crops and livestock as a consequence of climate change impacts will adversely affect food security, resulting in more extensive incidence of malnutrition. The spread of diseases such as diarrhea, malaria, and other vector- and water-borne diseases will cause increasing numbers of people facing health hazards. Natural disaster-caused deaths is also sure to increase.

Due to clime change impacts, the number of people in poverty and the severity of poverty will increase. By 2100, between 145 and 220 million additional people may fall below the $2-a-day poverty line (Stern, 2007). Climate change will also increase the variability of the income of the poor, heightening the chance that a shock will hit them.

Microfinance services provided to the poor are used by them seeking mainly to improve their employment opportunities and income. In the vacuum due to absence of formal banking services for the poor, MFIs came forward to fill the gap. Over the past few decades, the number of MFIs multiplied not only in Bangladesh, but also in other counties. The range of financial services involved in microfinance, as opposed microcredit, includes credit, savings, insurance, money transfers, etc. But, it remains basically focused on credit.

[1] Dr. Q. K. Ahmad is Chairman, InM and PKSF.

[2] Dr. Ahmed is Project Coordinator, Community Climate Change Project, PKSF.

Microfinance is of little avail in relation to sustainable poverty reduction and beyond-poverty inclusive, equitable and sustainable development. While microfinance has helped the receivers of the microfinance services undertake some economic and related activities, there has been very little improvement in their level of resilience to shocks, particularly climate change induced natural disasters. As a consequence of climate change, many developing countries are increasingly becoming more vulnerable to losses and damages and the poorest people are facing the consequences most severely. These poor people are often the microfinance service receivers. In fact, in the face of climate change, their economic and social conditions tend to deteriorate, leading to non-poor turning poor, the poor turning hardcore poor, and hardcore poor turning destitute.

Under the circumstances, if rural microfinancing is to be effective in relation to natural disaster management-related capacity building at the community level, this intervention needs to be combined with other economic and social capacity enhancing elements in an integrated fashion. In order to position micro finance within an integrated approach to rural financing and development to help the communities move on the sustainable poverty reduction and development pathway and to combat climate change and other impacts better, careful studies are necessary to understand the existing and emerging dynamics in the rural areas, particularly as a consequence of intensifying climate change and its impacts.

About InM

Establishment

Institute of Microfinance (InM) is an independent organization established to perform research, training and knowledge management in the field of microfinance, poverty and development. It was promoted by Palli Karma-Sahayak Foundation (PKSF), an apex body of the microfinance institutions (MFIs) and a wholesale lending agency for microcredit. The Institute started its journey officially from 1 November 2006. It is registered as a 'non-profit institution' under the Societies Registration Act 1860. At the initiation, InM was provided with seed money by PKSF. Later in 2007, UKaid, DFID came forward to finance the Institute under it PROSPER program.

Governance

InM is governed by a two-tier governing system– Governing Body and General Body. The basic governance lies with the Governing Body. It comprises of seven members. The General Body consists of 12 members.

Governing Body

Chairman: **Dr. Qazi Kholiquzzaman Ahmad**
Chairman, Palli Karma-Sahayak Foundation (PKSF), and
Governing Council of Dhaka School of Economics (DScE)

Members: **Professor A. K. M. Nurun Nabi**
Vice-Chancellor, Begum Rokeya University

Mr. Md. Abdul Karim
Managing Director, PKSF

Ms. Rasheda K. Choudhury
Former Advisor to the Caretaker Government of Bangladesh, and Executive Director, Campaign for Popular Education (CAMPE)

Dr. Toufic Ahmad Choudhury
Director General, Bangladesh Institute of Bank Management (BIBM)

Dr. Pratima Paul-Majumder
Senior Research Fellow, Bangladesh Institute of Development Studies (BIDS)

Professor M. A. Baqui Khalily
Executive Director, InM (Ex-officio)

General Body

Chairman: **Dr. Qazi Kholiquzzaman Ahmad**
Chairman, PKSF, and Governing Council of Dhaka School of Economics (DScE)

Members: **Professor A. K. M. Nurun Nabi**
Vice-Chancellor, Begum Rokeya University

Mr. Md. Abdul Karim
Managing Director, PKSF

Ms. Rasheda K. Choudhury
Former Advisor to the Caretaker Government of Bangladesh, and
Executive Director, CAMPE

Dr. Toufic Ahmad Choudhury
Director General, BIBM

Dr. Pratima Paul-Majumder
Senior Research Fellow, BIDS

Professor M. A. Baqui Khalily
Executive Director, InM (Ex-officio)

Dr. Jashim Uddin
Deputy Managing Director, PKSF

Ms. Parveen Mahmud
Managing Director, Grameen Telecom Trust

Mr. Khondkar Ibrahim Khaled
Former Chairman, Bangladesh Krishi Bank (BKB) and
Former Deputy Governor, Bangladesh Bank

Dr. M. A. Hakim
Chairman, Department of Economics, Southeast University

Dr. Md. Mosleh Uddin Sadeque
Director (Training & Operations), InM

Past Members of the Governing Body

Chairman: **Prof. Wahiduddin Mahmud**

Members:
Professor Muhammad Yunus
Dr. Fakhruddin Ahmed
Dr. Quazi Mesbahuddin Ahmed
Begum Tahrunnesa Abdullah
Mr. Muhammad A. (Rumee) Ali
Dr. Iqbal Mahmud
Dr. Nazmunnessa Mahtab
Mr. Mosharraf Hossain Khan
Dr. Mahabub Hossain
Professor Nasreen Khundker
Dr. Md. Mosleh Uddin Sadeque

Role and Achievement

During the last seven years since its inception, InM made strong headway with research, knowledge management and training. The purpose of all activities is for the promotion of microfinance sector in Bangladesh as well as in other parts of the world.

A. RESEARCH AND KNOWLEDGE MANAGEMENT

Research

Goal and Output

Research is the most crucial among the core activities of the Institute. The strategic goal is to take leadership in research on microfinance and the related poverty eradication programs as well as on their effects on the economy, poverty alleviation, inequality and vulnerability. The Institute takes collaborative efforts with national and international organizations and universities in research, action research and other professional activities such as livelihood promotion and environmental issues.

In order to achieve the goal, the Institute addresses the following key output areas:

- Impact assessment
- Product development
- Policy guidelines

Impact Assessment

Assessment of the impact of microfinance and other poverty alleviation programs implemented by different government and non-government organizations are under the purview of InM research.

Product development

Microfinance has passed a long way with a few products. Innovation and product development are a dire need of the changing circumstances. InM addresses these research issues.

Policy guidelines

InM research is for deriving lessons and insights to guide policymakers and practitioners of microfinance.

Focus and Issues

At the beginning, the research focus of the Institute was on microfinance. Over time, it has moved towards a broader perspective with diversified dimensions of development and equitable growth. As such, InM takes up to address the following broad issues:

- Microcredit Market
- Overlapping of Microcredit
- Poverty Impact of Microcredit
- Access to Finance
- Financial Inclusion
- Dynamics of Poverty
- Poverty Alleviation Programs
- Risk and Mitigating Strategy
- Climate Change Issues and Microcredit

Microcredit Market

In order to understand the whole scenario of microcredit, we need to understand the size and structure of microcredit market in the country. Under the market structure, studies on outreach and institutional development of MFIs are to be done. The supply-side study along with the demand side aspects is important for formulation of microfinance policies.

Overlapping of Microcredit

A current burning issue in the microcredit market is 'overlapping' or 'multiple borrowing'. It is criticized to have contributed to indebtedness of borrowers. Addressing the extent, nature and consequences of overlapping is an importance research agenda of InM.

Poverty Impact of Microcredit

Addressing this issue is the core of InM research. Almost all previous researches suggest that microcredit has strong positive impact on poverty alleviation. But those studies are on short-term impact evaluation based on cross-section information. In order to have a clear understanding of the role of microcredit on poverty alleviation, a detailed and long-term impact assessment is an utmost necessity, and the Institute endeavors to do that with generating and analyzing panel data.

Access to Finance

Microcredit gives us only a partial picture of the financial sector. In order to understand the importance of microcredit or microfinance in relation to overall financial sector, we need to have a comparative as well as an overall picture of the household access to informal and formal financial markets along with the quasi-formal microcredit market. Addressing this issue will enable us to understand the broader role of finance in poverty alleviation and development. InM ventures to undertake research on access to finance and its role in development. A longitudinal approach is followed in order to understand the changes over time.

Financial Inclusion

Traditionally, microcredit was meant for the poor who do not have access to formal financial institutions because of collateral to offer as security or they have access to moneylenders who charge exorbitant interest. But the extreme poor or the people living in remote char pockets are often deprived of the opportunity on the plea of risk in realization of loans and high administrative cost or both. InM ventures to determine the extent, causes, nature and the consequence of such financial exclusion through studying financial inclusion per se.

Dynamics of Poverty

Poverty alleviation and economic development are the goals of InM research. Poverty is multi-dimensional. In order to formulate any effective policies for poverty alleviation, it is important to examine the dimensions and underlying causes of poverty. InM strives to address the issue by examining all details of the dynamics of poverty in rural Bangladesh through longitudinal survey approach.

Poverty Alleviation Programs

Government and non-government organizations implement poverty alleviation and development programs at different times. InM undertakes to evaluate the effectiveness of these programs and identifies flaws, if any, in terms of formulation of the programs and implementation process, thereby to guide the policymakers and development practitioners.

Risks and Mitigating Strategy

Risks and shocks are two important factors determining poverty and vulnerability. Households have to face various risks and shocks which need mitigation. They adopt various mechanisms to cope with the shocks. Health shocks are a common phenomenon which every household has to face. Literally, there is no microinsurance mechanism for the poor in the rural areas of Bangladesh to mitigate the health shocks. InM strives to study the nature and extent of health shocks as well as to explore the possibility of introducing micro health insurance scheme in the rural areas. InM also undertakes a pilot health insurance scheme with the product designed under the project.

Climate Change Issues and Microcredit

Climate change is a common phenomenon in the present-day world. It is more common in the tropics like Bangladesh. It has severe negative impact on poverty. Intermittent cyclones and tidal bores in the south, desertification in the north, and river erosion all over the country are affecting the lives and livelihood of the people, which contribute to poverty. People do not have enough adaptive capacity against these climate change effects. Building resilience and adaptive capacity are a great need now. InM takes up the matter in its research strategy and in collaboration with a foreign organization the Institute looks into the matter that how and to what extent microfinance can play a role in building resilience and adaptive capacity of households.

Completed Research Studies (2007-2012)

- Monga in Greater Rangpur: Intensity, Coping, Vulnerability, and the Impact of Mitigating Strategies
- Dynamics of Poverty in Rural Bangladesh: Phase I
- Access to Financial Services in Bangladesh: Phase-I
- Multiple Memberships (Overlapping) in Microcredit Market of Bangladesh
- Impact of Microcredit on Agricultural Farm Performance and Food Security in Bangladesh
- Urban Microfinance in Bangladesh
- Searching for an Explanation of Poverty Levels and Trends at Subnational Levels
- Microfinance, Gender Role and Individual Modernity: Evidence from Rural Household in Bangladesh
- Internal Female Migration in Rural Bangladesh: An Effective Household Coping Strategies
- Impact of PRIME Interventions on Monga Mitigation in Greater Rangpur: Phase-I
- Impact of PRIME Interventions on Monga Mitigation in Greater Rangpur: Phase-II
- Effectiveness of PRIME Interventions in Greater Rangpur: Phase-III
- Effectiveness of PRIME Interventions in Greater Rangpur: A Longitudinal Approach, Phase-IV
- Effectiveness of PRIME Interventions in the South-western Bangladesh: Baseline Survey
- Baseline Data Analysis of Microfinance Support Intervention for Food Security for Vulnerable Group Development (FSVGD) and Ultra Poor (UP) Beneficiaries
- Impact Study of Microfinance Support Intervention for Food Security for Vulnerable Group Development (FSVGD) and Ultra-Poor (UP) Beneficiaries Project
- An Evaluation of Microfinance Programme of Plan Bangladesh:
- Effectiveness and Efficiency to Reach the Extreme Poor
- Developing Appropriate Microinsurance Products for the Low Income Households (UNDP)

- Microinsurance, Poverty and Vulnerability: Phase-I
- The Impact of Governance Mechanisms on performance and outreach of Microfinance Institutions in Bangladesh
- Strategic Behaviour of NGOs/MFIs in Bangladesh
- The Outreach-Profitability Trade-off: Evidence from an Ultra-Poor Programme in Bangladesh
- Impact of Regulation on the Cost Efficiency of Microfinance Institutions in Bangladesh
- Effectiveness of MRA Regulations in the Microfinance Sector: The User Perspective

On-going Research Studies

- Microinsurance, Poverty and Vulnerability: Phase – II
- Long-term Dynamics of Microcredit Programmes in Bangladesh
- Social Impact of Microfinance on Gender Norms and Behavior
- Assessing Financial Inclusion in Char and Haor Areas in Bangladesh
- Access to Financial Services: Phase – II
- Study on Assessment of Existing Status of Beneficiaries and Experience of Service Providers in the Sidr, Aila affected areas of Bangladesh with a Particular focus on Micro-credit
- Dynamics of Poverty in Rural Bangladesh: Phase-II
- Effectiveness of PRIME Interventions in Greater Rangpur at the Household and Institutional levels: A Longitudinal Approach: (Phase -V)
- Assessing Risks, Resilience, and adaptation strategies in CHT in the Lens of Microfinance (jointly with IGES, Japan)

Knowledge Management

Knowledge management activities involve dissemination of knowledge created through InM's own research or are globally available from different sources, on various aspects of microfinance, poverty and development. This division works as the voice of the Institute by featuring its activities to a wider audience.

The dissemination of knowledge involves the following process:

- Publication
- Participatory programs
- Media relations and advocacy

Publication

InM publishes working papers, research reports, research briefs, policy briefs, occasional papers, and books presenting results from InM research studies. It has already published a considerable number of these items. Besides, it regularly publishes annual microfinance statistics. The Institute has a plan to publish a journal of international standard in near future. Further, in order to reach a wider spectrum of people, InM uses the ICT tool (web/mail) of publication.

The Institute has so far published the following materials to its credit:

Working Paper Series

- Microinsurance, Poverty and Vulnerability: A Concept Paper by *Syed M.Ahsan*
- Toward an Efficient and Sustainable Microinsurance Market: The Regulatory Perspective by *Syed M. Ahsan, Shubhasish Barua and Jaimie L. Tax*

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- Mitigating Seasonal Hunger: Evidence from Northwest Bangladesh by *Shahidur R. Khandker* and *Wahiduddin Mahmud*
- Impact of Microfinance Programme on Poverty in Bangladesh by *Rashid Faruqee*
- Multiple Borrowing by MFI Clients by *M. A. Baqui Khalily* and *R. Faridi*
- Interest Rates in Bangladesh Microcredit Market by *Rashid Faruqee* and *M. A. Baqui Khalily*

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- Interest Rates in Bangladesh Microcredit Market by *Rashid Faruqee*
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Occasional Paper Series

- Mitigating Seasonal Hunger: Evidence from Northwest Bangladesh by *Wahiduddin Mahmud*
- Microfinance in Bangladesh: Past, Present and Future by *Rashid Faruqee*

Edited Book

- "Readings in Microfinance: Reach and Impact" (2011) by *M. A. Baqui Khalily* and *S. R. Osmani*

Research Brief

- Access to Financial Services (ATFS) in Bangladesh by *M. A. Baqui Khalily*
- Dynamics of Poverty in Rural Bangladesh by *S. R. Osmani*
- Microinsurance, Poverty and Vulnerability by *Syed M. Ahsan*
- The Social Impact of Microfinance on Gender Norms and Behaviour-1
- The Social Impact of Microfinance on Gender Norms and Behaviour-2

Bangladesh Microfinance Statistics Series

- Bangladesh Microfinance Statistics (2007-2011)

Study Report

- Microfinance in SAARC Countries (Overview Report 2010)

Bangla Book

- Microfinance in Bangladesh: Past, Present & Future by *Rashid Faruqee* and *S. Badrudozza*

Collaborative Publication (with The World Bank)

- Seasonal Hunger and Public Policies: Evidence from Northwest Bangladesh by *Shahidur R. Khandker* and *Wahiduddin Mahmud*

Participatory Program

Participatory programs that the Institute undertakes include organizing seminars, workshops, dialogues, and conferences for disseminating and communicating the results of InM research studies to the sector stakeholders and practitioners. The present conference is such a noble attempt. Besides presenting its own research results, the Institute also organizes seminar/ workshop/dialog/conference highlighting the current/burning issues on microfinance, poverty, and development programs.

Media Relations and Advocacy

To sensitise people in the development sector, the Institute organizes talk shows on different TV channels on various microfinance and development issues. Renowned academicians and practitioners from various associated organisations and institutions participate in the programs highlighting the microfinance sector as a tool of development

B. TRAINING

Goal and Output

InM endeavors to take leadership in training and capacity building programs in the field of microfinance and allied areas of poverty reduction. Mechanisms are being developed to ensure innovation through need assessment, module development and imparting training and academic programs that will cater to the vibrant need of the sector. In order to achieve the goal, the key output areas of training are:

- Developing a new generation of practitioners in microfinance industry
- Developing mid-term and long term academic programs

Developing a new generation of practitioners

InM ventures to foster the next generation of practitioners to develop a proficient and specialized career in the microfinance industry with a view to complimenting the sector to transform itself in a more professional way. It will adapt high impact programs and launch niche for professional programs to deliver it to learners at home and abroad. InM endeavors to create a strong national and international network, strategic alliances and/or partnership with microcredit specialists and esteemed institutions to create opportunities for future practitioners and give the institute a leading edge.

Developing mid-term and long term academic program

InM will uniquely position itself in designing and offering outcome-oriented and technology–enhanced certificate and/or diploma programs. It will materialize these programs through innovative delivery methods, on-campus, off-campus or distance learning, to the target learners.

Training Mode

InM so far has developed 10 training modules for the practitioners. The quality of the training modules is widely acknowledged by the sector stakeholders at home and abroad. The training encompasses the following activities:

- Direct training by InM
- Targeting implementing partners of PKSF
- Certificate/diploma courses
- Web based courses

Direct training by InM

Since the beginning, the Institute used to provide training to the clients through its selected Training Service Providers (TSPs). But on recommendation, InM changed its earlier mode to imparting training directly to the clients from January 2013.

Targeting implementing partners of PKSF

At the outset, two training programs – *"Microfinance Operations and Management"* and *"Book Keeping and Accounting Management for MFIs"* were extensively conducted with a view to deepening the basic issues as envisaged in the findings of regional dialogues, need assessment and suggestions of the stakeholders.

Later on, InM decided to go with the modules *"Improving Participatory Managerial skills and Management Style"* and *"Monitoring and Evaluation of Microfinance Program"* developed for the

practitioners and targeted the non-POs at the grass root levels. This would help the TSPs cover the non-POs, especially the MFIs having less or little access to training as well as those of remote areas.

Certificate/diploma courses

The institute is in unique position in designing and offering certificate/diploma courses for the microfinance practitioners. To help institutionalize the MFIs and reinforce their capacity building initiatives, InM intends to introduce certificate (2-4 months) and diploma (6-9 months) courses on microfinance.

Web-based Courses

InM intends to introduce training and certificate/diploma courses for microfinance practitioners through innovative delivery systems such as distance learning or off-campus programs.

International Training

The Institute has a plan to intrude itself into the Chinese microfinance market. Besides, as per cooperation with AIT (Bangkok), ToT courses on the specialized areas may be organized with AIT resource persons for the certified trainers of the sector.

Training Highlights

- 1 Comprehensive TNA for Microfinance Sector
- 10 Training Courses to cater the need to the sector
- A pool of 211 Certified Trainers developed by InM
- 21 Training Service Providers to organise training across the country
- Training offered to 13,663 microfinance practitioners at field
- 16,000 practitioners to train: Target by June 2015

List of Training Modules

	Name of the Module	Language
Developed by InM	01. Microfinance Operations and Management (10 days)	Bangla & English
	02. Microfinance Operations and Management (5 days)	
	03. Book Keeping and Accounting Management for MFIs (5 days)	
	04. Monitoring and Evaluation of Microfinance Programme (5 days)	
	05. Improving Participatory Managerial Skills and Management Style (5 days)	
	06. Legal & Regulatory System and Governance (5 days)	
Developed by InM for Chinese Practitioners	07. Microfinance Credit Delivery Process and Operations (5 days)	Chinese & English
	08. Microfinance Product Design and Business Planning (3 days)	
	09. Effective Management of Microenterprise Loans (5 days)	
Developed with AIT	10. Advanced Generic ToT (10 days)	English