Role of Microfinance Tools in Disaster Risk Reduction: A Study in India, Bangladesh and Sri Lanka

Bangladesh Country Report

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Glossary and Abbreviations

ASA	Association for Social Advancement
Bangladesh *Ansars*	Irregular law enforcement agency
BRAC	Bangladesh Rural Advancement Committee
Chairman	Top local level elected leader
CODEC	Community Development Centre
CRA	Community Risk Assessment
DGoF	Director General of Food
DMB	Disaster Management Bureau
DMC	Disaster Management Committee
DMIN	Disaster Management Information Network
DRRO	District Relief and Rehabilitation Officer
DRR	District Relief & Rehabilitation; Disaster Risk reduction
FFW	Food for Work
FGD	Focus Group Discussion
GDACS	Global Disaster Alert and Coordination System
GO	Government Organisation
GUK	Gana Unnayan Kendra
Gher	Salt-water shrimp farm
H/H/h/h	Household
INAFI Asia	International Network of Alternative Financial Institution-Asia
LDRRF	Local Disaster Risk Reduction Fund
LPG	Liquid Petroleum Gas
MFI	Microfinance Institutions
Mohajons	Local moneylenders
MRA	Microcredit Regulatory Authority
NGO	Non Government Organisation
NPDM	National Plan for Disaster Management
PIO	Projects Implementation Officer
PKSF	Pally Karma Shahayak Foundation
Red Crescent	Red Cross
RRAP	Risk Reduction Action Planning
SAARC	South Asian Association for Regional Cooperation
Shomity	MFI group
SIDR/Sidr	Cyclonic storm that lashed of Bangladesh coast in Nov 2007
SKS	Samaj Kalyan Sangstha
SME	Small and Medium Enterprise
SMS	Short Messaging Service
TMSS	Thengamara Mohila Sabuj Sangha
Upazila	Sub-district, lowest level govt. bureaucracy in Bangladesh
Union	Lowest level local govt. unit
Union *Parishad*	Lowest level local govt. body
VARD	Voluntary Association for Rural Development
Ward Member	Junior local level elected leader

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Abstract
This paper presents survey findings from 2368 members in 500 households that were disaster victims, and 23 focus group discussions which took place in five districts in Bangladesh in June, and October, 2008. This study finds disasters to have some common negative effects on households as well as not all that declining trends as perceived generally. The research tentatively suggests, poor households under stressful conditions, either during or post-disaster situations mainly rely on themselves, and on community coping mechanism than to any public or private assistance. Both government and microfinance institutions provide little support to the people prepare for the onslaughts, or rehabilitation needs of the disaster victims. Poor community people, under circumstances, tend to increase their levels of borrowing, but as MFIs don't offer any product for the disaster victims, people heavily depend on their savings, or local moneylenders. Number of cases of decline has been outnumbered by not so negative effect featured prominently in this study, supported both by the quantitative as well as qualitative survey. Loss or damage of assets, illness, and adverse dependency ratios in families were all seen as important causes of decline in a large number of households and draw attention to the need for a better understanding of life-cycle-related pressures on poor households during or after a disaster hits. Improvements in managing disaster risks tended to be related to experience of fighting disasters with preventative measures. Improvements are seen generally gradual, whereas distresses were seen to be caused by the type of events which are either slow and regular or sudden. These findings suggest that policy interventions aimed at preventing deluge losses and supporting improvement should take into account the changing risk profile facing disaster-porn poor people in Bangladesh.

Keywords: disaster risk reduction, focus group discussions, community coping mechanisms, microfinance tools, Bangladesh

1. Introduction

Bangladesh is largely a flat deltaic country formed by the confluence of great river systems of the Ganges, the Brahmaputra and the Meghna. These river systems annually drain a vast basin about 12 times its own size. Since the water of the above three major river systems passes through Bangladesh (only 7.5 percent of total catchment area) to the Bay of Bengal, the country becomes the worst victim of excessive rainfall in the upper catchment area outside its territory. Due to the low gradient of the rivers of Bangladesh and a flat terrain, every year, floods inundate a substantial part of the country and causes destruction to lives and properties. But at times it turns into catastrophic proportion.

Apart from this, hilly regions experiences flash flood after heavy rainfall and due to frequent depressions in the Bay, Bangladesh experiences regular threats of cyclonic storms, often catastrophic. From early July 1998, Bangladesh began to experience the worst flood of the century, and thereafter it experienced floods in 2004 and twin floods in a season in 2007 including catastrophic cyclonic storm surge SIDR in the same year. Bangladesh witnessed severe floods in 1954/55, 1971, 1974, 1987 and 1988 when one-fourth to half of the country went under water causing immense damage to lives and properties.

The flood in 1988 was termed as catastrophic when 52 percent of the country's land was inundated. In that flood 52 districts and 30 million people were affected. However, the scale and duration of the recent flood of 1998 has surpassed all past experiences in recorded history. Almost two-thirds of the country went under water on an average of 8 to 9 weeks; 55 of the total 64 districts (32 in the riverine areas of Jamuna, Brahmaputra, Padma and Meghna), were severely affected. A total of 33 million people were marooned of which 18 million needed emergency food and health services. The prolonged and devastating flood caused huge damage to crops, property and livelihood. Houses were inundated, some being washed away by the current of the surging water. The roads and highways and related infrastructure went under water, thus disrupting the communication lifelines of the country. There was immense damage to dams and culverts. At the peak of the disaster, there were few places where people could find a dry place for shelter as all the traditional places where people usually take shelter during flood such as schools, mosques, community centres were submerged. They had to live with their cattle and poultry under the same roof. The marooned people in millions suffered from scarcity of safe drinking water and were without any sensible means of sanitation.

They result in the loss of lives, assets and infrastructure, which adversely affect the development of the country. The magnitude of poverty, increasing rural to urban migration and high population density contribute to rising levels of vulnerability to catastrophic episodes, which affect life and livelihood. Growing understanding of climate change issues brings a new dimension to community risk and vulnerability. Although the magnitude of these changes may appear to be small, they could substantially increase the frequency and intensity of climatic phenomena.

Current indications are that not only will floods and cyclones become more severe, but that they will occur increasingly outside of their characteristic seasons. Events such as drought, which may not have previously occurred in some areas, may now be experienced.

1.1 Policies and Practices of Disaster Risk Reduction of the Public Sector[1]

The Government of Bangladesh, through the Rules of Business, allocates the responsibility of disaster management to the Ministry of Food and Disaster Management. The National Plan for Disaster Management (NPDM) aims to materialise the Government's vision to reduce the vulnerability of the poor to the effects of natural, environmental and human induced hazards to a manageable and acceptable humanitarian level as well as to put in place an efficient disaster management system capable of managing large-scale disasters by bringing a paradigm shift in disaster management from conventional response and relief practice to a more comprehensive risk reduction culture and strengthening the capacity of the Bangladesh disaster management system in improving the response and recovery management at all levels.

The strategic goals of the National Plan for Disaster Management are drawn from the SAARC Disaster Management Framework, and closely linked to international and national drivers, so that the plan can articulate the Government's long-term strategic focus of disaster management in Bangladesh. The plan references the Standing Orders on Disaster to mandate disaster management operations at the procedural level in Government agencies.

1.1.1 Institutional Arrangements

The National Disaster Management Council, chaired by the Prime Minister, is the apex body. It is advised by the National Disaster Management Advisory Committee and line up the resources of the country to exercise its will through the Inter-Ministerial Disaster Management Coordination Committee. This committee significantly includes representation of the Ministry of Food and Disaster Management, with its three agencies: The Ministry funds the Cyclone Preparedness Programme, a network of about 42,000 volunteers in the coastal belt maintained by the Bangladesh Red Crescent Society to sustain cyclone preparedness, early warning systems, emergency response and recovery activities at the Upazila (Sub-district), union and village levels.

The Directorate of Relief and Rehabilitation maintains Disaster Management Committee (DMC) offices and provides the Member Secretaries at the district and Upazila levels to support the coordination of their multi-sectoral member

[1] Source: Secondary materials of the Government of Bangladesh's (Ministry of Food and Disaster Management) policies, and interview with Ms. Mohsena Ferdausi, Joint Secretary, Ministry of Food and Disaster Management

Government agencies and NGOs in risk reduction and emergency response. DMCs operate similarly in municipalities, cities and unions. The Standing Orders on Disaster specify the roles and responsibilities of the DMCs and their constituent member agencies, in the fulfilment of their disaster management mandates. During disaster, however, Deputy Commissioners of districts chairs the DMC, and coordinates all the activities of government and non-government agencies at district level and no GO agencies or NGO can operate wilfully, or on their own.

1.1.2 Susceptibility Assessment

The Government has established agencies to extend knowledge about weather, water, seismic phenomena, socio-economic conditions and other domains of concern in disaster management. These bodies contribute information to support the assessment of the vulnerability of people, infrastructure and socio-economic sectors to hazards. The Ministry has developed a nationally implemented hazard risk reduction methodology, which incorporates Community Risk Assessment (CRA) and Risk Reduction Action Planning (RRAP). CRA is a participatory process that integrates local knowledge and scientific data to identify and prioritize local hazards, and to provide a basis for Risk Reduction Action Planning according to the consensus of the community.

1.1.3 Planning Process

The National Plan for Disaster Management is the apex of a hierarchy of plans for disaster management at all Government levels. The Government requires all of its agencies to maintain contingency plans that foresee and mitigate hazard events that could reduce their effectiveness to meet their mandates. Every Disaster Management Committee is required to have a Disaster Management Action Plan. Risk Reduction Action Plans at the union level identify and prioritise community approved actions that are beyond the resources of the community to implement and consequently require external support. Preparation of risk reduction action plans through engagement of all players including the community vulnerable groups increases community ownership. These RRAPs have visibility at higher levels of Government and shape their planning. The Ministry is implementing a programme to pilot development of Household Risk Reduction Plans in some villages where hazards impact livelihood insecurity.

1.1.4 The Actors

Many other Government agencies contribute to disaster management. In emergencies these principally include the Armed Forces Division, Bangladesh Police, Bangladesh Ansars, Fire Service, and the Civil Defense Directorate. A national NGO Coordination Committee on Disaster Management chaired by the Director General of the Disaster Management Bureau provides a mechanism for coordination of Government and NGO activities. The Disaster Management Committees have countrywide presence down to the union level for the implementation of disaster management programmes. DMCs have members from all local government agencies concerned with disaster management, and

NGOs, and provide an effective forum for coordination of activities, to reduce redundancies and gaps in effort. At the district level, the District Relief and Rehabilitation Officer, a DRR employee, is the member secretary of the DMC while the Deputy Commissioners are chairman. At the Upazila level, the Project Implementation Officer (PIO) has this function. The PIO is the DRR employee closest to the community and administers DRR-funded risk reduction projects at the location of execution. Termed Food for Work and Cash for Work, these projects employ disaster-affected local people in worthy community works, such as repairing roads and embankments. In emergency times, DMCs mobilise to provide relief materials, evacuate endangered populations and monitor developing situations. The Ministry of Food and Disaster Management has established a Local Disaster Risk Reduction Fund (LDRRF) to support actions prioritised in communities' Risk Reduction Action Plans that are beyond their means. The LDRRF can provide up to the equivalent of US$50,000 for a single intervention.

1.1.5 Information Network

The Government's e-governance development policy is replacing traditional hardcopy bureaucratic processes with networks of database servers, office computers and automated procedures. In the Ministry of Food and Disaster Management, a Disaster Management Information Network (DMIN) is in development to link DMCs, other government agencies, NGOs and private citizens with risk reduction and emergency response resources hosted in an Internet portal. The network currently connects 60 percent of district level DMCs to the Internet. By yearend 2008, all DRROs and 235 PIOs at the upazila level will be connected. The portal server hardware is located in the DRR and DMB offices in an operations centre which will be staffed 24/7 and connected by microwave link with an Emergency Operation Centre mirror site in the Ministry. The portal will provide resources for generating and disseminating information products for awareness raising, training and early warning. It will provide storage and Internet retrieval of scientific data inputs to Community Risk Assessment, and of CRA reports and action plans. It has fax and email servers, and will soon automate hazard early warnings in SMS alerts to subscribers.

The Ministry will use the DMIN as a command and control channel for emergency response through its Emergency Operation Centre mirror site. The long-established procedure for collection and aggregation of damage information on hardcopy reports through the DMC hierarchy will be improved to exploit the DMIN for electronic presentation of emergency-site situation information to decision-makers and more timely response with remedial actions. Work is on-going to integrate the various damage and situation reporting systems developed by the Government and NGOs, to support sharing of consistent information. The DMIN subscribes to international disaster management information resources including the Global Disaster Alert and Coordination System (GDACS) and will be connected with the SAARC Disaster Management Centre in New Delhi when that facility is available to support regional initiatives.

1.1.6 Emergency Response Modalities

The Ministry and other disaster management actors have a variety of emergency response modalities. The Minister in charge of the Ministry of Food and Disaster Management chairs the Inter-Ministerial Disaster Management Coordination Committee, which ensures whole-of government coordination of emergency response, relief and rehabilitation operations. Committee members include representatives of all Government agencies affected by hazards. The Director General of the NGO Affairs Bureau represents NGOs. Though a Microcredit Regulatory Authority has been formed for the MFIs recently, they didn't have a direct role during disaster as per the Rules of Business of the Government of Bangladesh. As most of the MFIs are 'NGOs' also, they also feel comfortable to work under NGO Affairs Bureau. Acting on situation and damage reports, the Committee directs its members to respond to the emergency according to their agencies' capacities.

The Armed Forces Division applies its large resources of manpower, equipment and communication to emergency response. Acting through the DMC hierarchy, the DRR collects situation and damage reports and responds to them by directing its officers to take specific relief action. The Directorate General of Food maintains regional and local food grain silos throughout the country, with a data network that provides real-time status of stock inventories. The DGoF operates closely with the DRR to provide food where it is needed. Although the Government has far greater resources, the NGO or MFI community makes a significant contribution to emergency response and recovery. National MFIs or NGOs coordinate their programmes with the Government's and community-based MFIs/NGOs respond quickly in their local context to fill gaps to the extent that they are able.

1.1.7 Issues, Gaps and Priorities

The Government and disaster management community in Bangladesh recognise many challenges that must be overcome to significantly improve the safety of its citizens. The Ministry intends to improve the disaster management of the country incrementally. Its goal to address all hazards, all sectors, and all places at all times will be achieved only in small steps, one hazard and one sector at a time. During the past decade, the Ministry focused on responding to the two most significant hazards, cyclones and river flooding, but it needs to broaden its scope to ultimately reduce the risk of all hazards to acceptable levels. Presently in Bangladesh, disaster management attention is generalised across all sectors, without resolving the specific natures, issues and needs of individual sectors. The Ministry needs to study those aspects in collaboration with sectoral agencies, particularly other Ministries, to identify productive risk reduction approaches that suit the characteristics of each sector. For example, preventable health issues probably account for more lives and economic losses than all other hazard sectors combined, but the disaster management community has proposed few actions that impact health.

Agriculture has received more attention than any other sector but still more is required. The transport, industrial, education and communication sectors are among others that have strong implicit but weak actual linkages in disaster management. The DRR through its DMC hierarchy in principle reaches throughout the country, down to the lowest level of government, but in fact most DMCs are far less effective than they could be, and many of those for practical purposes do not function at all. The DMB is taking action to remedy this by providing disaster management training that will saturate the hierarch within a year. The revision of Standing Orders on Disaster will specify the roles and responsibilities of DMCs in the new risk reduction regime and provide a basis for assessing compliance. The Disaster Management Information Network will introduce transparency and accountability into DMC operations by giving management and perhaps even public visibility into their reports, plans and meetings.

The slow communication media of the past century introduced latency in emergency response that cost lives and economic losses that are now avoidable. Mobile networks, improved land networks, digital networks, better roads and the increasing availability of air transport should contribute to achievement of immediate response to emergencies. The Ministry's Disaster Management Information Network will operate around the clock to complement the continuous operations of the Armed Forces Division, Bangladesh Police and other public safety agencies.

On the other hand, MFIs in Bangladesh have a wide range of complementary activities to mitigate disaster risk, and thereby contribute to ensure that emergency responses become more community-based and sustainable. MFIs play an important role by promoting disaster risk and vulnerability assessments of their clients. Although further research is required, several factors seem to influence the effectiveness of MFIs during disasters. Those institutions with good leadership, sound financial management and accounting systems, and a certain level of disaster preparedness manage to respond faster and better to the disaster situation. Rapid access to cash made available in the form of emergency funds or through efficient transfer of external funds, are particularly critical.

1.2 Policies and Practices of Disaster Risk Reduction of the Private Sector[2]

Corporate sector in Bangladesh has little known policies and practices of disaster risk reduction, and they mainly focused on giving only. But, having committed and easy to deploy field staff allows MFIs in Bangladesh to carry out damage assessments rapidly and to monitor the situation closely. In turn, damage assessments and close monitoring of the situation enables these institutions to respond better to their clients' needs, and the assessments provide them later on

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[2] Source: Secondary materials like Bangladesh Microcredit Regulatory Authority Act 2006; published/unpublished documents on NGO/MFI policies and practices on microfinance, disaster risk reduction/preparedness or management programmes, their web sites and interviews with chief or senior executives and field-level staff of NGOs/MFIs covered under this study.

with more accurate estimates of the funds needed for the recovery process. Another critical factor influencing the relative success of MFIs' assistance during disasters is the level of engagement with, and relative dependency on government, donors and international NGOs. Given ongoing relationships, donors and Bangladesh Government have typically found it practical to channel emergency and recovery funds through MFIs. In fact, the major source of funds for the products and services offered by MFIs during or post-disaster situations has been grants from donors, or soft loan from Pally Karma Shahayak Foundation (PKSF), a government-controlled refinancing agency for the MFIs. Setting up new private sector organisations as during or post-disaster response, however, proved not to be effective because these institutions lack experience, and knowledge of the area and of the affected households.

1.2.1 Strategic Focus

Most MFIs today in Bangladesh do not consider loan absolution as part of their during or post-disaster efforts. Past experiences indicate that, even though loan absolution brought immediate relief to affected borrowers, it undermined years of work of the microfinance sector and creating a culture of repayment and financial discipline. At the same time, loan absolution may increase the losses suffered by the institutions and exacerbate their liquidity constraints, while making them more dependent on donors or government support. Although context-specific, the long-term negative consequences on the impact and sustainability of the microfinance institution may often probably be higher than the immediate benefits enjoyed by borrowers.

1.2.2 Disaster Mitigation Plans of MFIs

Most of the leading MFIs in Bangladesh including BRAC, TMSS, CODEC, VARD, GUK studied have been reported learning from the experience of floods in 1998 and from more recent perennial floods and disasters like SIDR storm. Most of them found having developed disaster risk reduction and prevention plan whose objectives are to identify, prepare for and mitigate natural disasters in order to protect their institutions, their clients and staff from possible losses. The plans are rather comprehensive, including measures to protect the institutions' clients, staff, portfolio, facilities, equipment and information systems and records, as well as measures to better respond to the many disasters that affect Bangladesh. The plans recognises that priority should be given to assisting clients in finding food and medical aid, contacting relief organisations and joining FFW programmes, but, in keeping with the sector's orthodox best practices, most of them do not consider that the institutions should provide relief directly.

Most of the MFIs' plans are interesting in that they further outlines almost identical, a basic, flexible credit policy for disaster emergency and recovery, and the creation of disaster loan funds, to help them prepare for possible cash flow demands and control credit and liquidity risks. Specifically, the plans establishes that the institutions will, among other things, stop collecting payments during the emergency period, allow clients to withdraw their deposits (which are normally used as collateral), stop lending, and, on the basis of a field damage assessment, prepare loan restructuring and refinancing plans, considering two types of situations: restructuring loans where clients lose their housing but productive assets are not affected and/or they are severely injured, and refinancing loans when productive assets are lost but clients escaped the disaster unharmed. However, short-term loans of 1 or 2 months, with special interest rates granted in cases of severe emergencies for household needs such as food or medicines. Most disaster or emergency loan funds have at least two levels of terms and conditions, as money needs to be transferred from MFIs and from there to clients.

1.2.3 Policies and Practices of Disaster Responses of MFIs

Microfinance programmes are examined commonly in the framework of income generation, productive investment and poverty alleviation. It has become a very important institutional channel of providing financial services to the poor, who lack access to traditional financial institutions. Beginning with non-collateral credit, the ambit of microfinance programmes has expanded to include savings and insurance as well. Many of these programmes use social mechanisms, such as group-based lending, to reach the poor and other groups, especially women. While the jury is still divided on the impact of microfinance on poverty alleviation, its role in risk management and vulnerability reduction has been acknowledged more conclusively. There are two ways through which access to financial services can help the poor to manage their risks and smooth their income and consumption. The first one leads to income smoothing. It involves the provision of credit and savings services through which households can raise finance to enhance the level of the household’s productive capital and smooth income. Second leads to consumption smoothing through provision of consumption credit, withdrawal of savings, and insurance claims.

1.2.4 Microfinance for Disaster Risk Reduction

The attributes of microfinance, which are applied in reducing household level risks, are relevant for reducing disaster risks too. Microfinance instruments help poor households diversify their income by source and season. They also diversify income by earner as it provides opportunities to women to earn. Multiplicity of income-earning opportunities and asset building through microfinance help poor households in dealing with disasters better. Microfinance also provides explicit and implicit insurance to the households, though in practice these mechanisms work imperfectly. Some of the other attributes of microfinance which are very helpful in dealing with large-scale disasters are loan forgiveness or rescheduling in the areas affected by disasters, better targeting of relief programmes through microfinance networks, better flow of information among the clientele of microfinance organisations, and empowerment of women.

An important feature of microfinance is its capacity to build social capital as expressed in specific mitigation measures. At the institutional level, microfinance institutions offer a number of services, which can help clients in coping with the impact of natural disasters. These services include provision of temporary loans, rescheduling of loan payment, asset replacement and housing loans, and loans for starting new activities. MFIs provide these services at different stages of post-disaster rehabilitation, first one with relief, then for recovery and reconstruction. The flexibility inherent in microfinance enables it to serve a wide range of rehabilitation needs after a disaster.

1.2.5 Microfinance Institutions' Response to Disasters

The role of microfinance services in responding to disaster risks was demonstrated first during the 1998 flood, and thereafter during other floods and disasters, viz. floods of 2004, 2007, and storm surge SIDR 2007. Bangladesh experienced the worst floods in its history from July to September 1998. About 100,000 square kilometres, which is 70 percent of the country's landmass, was inundated for about two and half months. About 30 million people were affected in 52 out of 64 districts. The damages to standing crops, livestock and houses were overwhelming. The income generating activities of rural landless people were almost suspended. There had been a huge loss of property and human and animal lives during the SIDR attack in 2007 in the coastal areas of Bangladesh, nearly 4 millions affected, and more than six thousand people died, thousands of livestock perished, and 0.9 million homes fully or partially damaged. Apart from that, some geographic locations in Bangladesh experience perennial floods, and flash floods due to heavy rainfall and inadequate drainage system. All the MFIs in Bangladesh responded to the unprecedented situation of floods and SIDR. During the floods and cyclones, MFI workers even went on boats to ensure that weekly contacts with all members were maintained. Workers carried money with them and provided immediate interest-free consumption loans so that the members would not go hungry. They provided a number of financial services as discussed below.

1.2.6 Disaster Mitigation Products from MFIs

As discussed above, in response to the floods or cyclones, the MFIs allowed the members to withdraw their savings. Grameen Bank, BRAC, ASA, Proshika, TMSS, CODEC, GUK and many other small MFIs despite a very serious financial consequence for their liquidity, opened access to compulsory savings account in an attempt to reduce the precipitous decline many households experienced in their incomes. In non-disaster times, members of these institutions did not have access to these funds unless they had fully repaid any outstanding loans and decided to leave the MFI. BRAC also operated disaster-related deposits, which allowed members to keep their assets safe from loss or damage due to the floods. A number of MFIs such as ASA and others provided voluntary savings facilities to their members. These facilities provided the members more assistance in disasters than compulsory or disaster-related savings with less negative financial consequences for the MFI.

MFIs extended credit facilities in several ways. Most of them rescheduled loan repayments, permitting members to delay several repayments on their existing loans. The MFIs carried out the rescheduling on a case-by-case basis rather than using a blanket approach for all affected households in a community. In addition to rescheduling their loans, the MFIs provided quick disbursal loans, often small in size, to help the members address their immediate relief and consumption needs. A number of MFIs also provided loans for economic recovery and reconstruction of houses. However, advancing these loans was problematic for all the MFIs, partly because of their resource constraints, and partly because of the members' incapacity to take on more debt. None of the MFIs provided any insurance to their members against disaster-related losses.

Though most of the MFIs have this or that insurance schemes but the general nature is to protect their portfolio, and to reduce their portfolio at risk. ILO's WEEH project carried out a study in 2003 where they mentioned one disaster insurance scheme among 36. Another INAFI Bangladesh study carried out in 2007 found only two property schemes out of 81 insurance schemes. Most of the schemes reported by the studies were either loan or life. As it was found, MFIs' responses to disaster limited to open up their savings, and in some cases, quick credit disbursement, and they didn't try disaster insurance to mitigate the loss their clients.

1.2.7 Microfinance Product from MFIs

During disasters, BRAC Microfinance Programme does not usually disburse any kind of loan since the clients were still in debt and unable to take on more debt. So they were excluded from future access to credit, at the time of disaster. However in the wake of SIDR Cyclonic storm surge in 2007, BRAC commenced a loan/grant scheme named "SIDR loan/disaster loan" where they disburse maximum Tk.40,000 for loan and Tk.4,000 as grant. There have been some modifications in the process of microcredit issued by BRAC from 2006 to 2008. Among the amendments, the important one was rescheduling the instalment and reducing the interest rate. This scheme has taken for the welfare of the affected clients and for the betterment of the institution as well. In 2006, the interest rate was 15 percent flat and the number of instalment was 46 but BRAC reduce the interest rate to 12.5 percent flat, as fixed by the Micricredit Regulatory Authority, the regulatory body of microfinance in Bangladesh, and the number of instalment to 45. In 2008, the number of instalment was again reduced to 40 keeping the interest rate unchanged. BRAC permits its clients to defer instalment payment from 17th November 2007 to 31st March 2008 due to cyclone SIDR.

Disbursing the disaster loan, for 2 months, BRAC withheld from taking instalment from the affected people. Afterwards, clients refund the loan by monthly instalments. Now, the number of instalments and the interest rates has changed time to time. In January 2008, the interest rate was 17.5 percent flat and the number of instalment was 40, in February 2008 the interest rate reduced to 15.5 percent flat and in March it has been reduced to 14.5 percent remaining the number of instalment to 35. Disaster loans are given to purchase of power pump, rickshaw, van, agricultural equipment, power tiller, boat and fishing net, domestic animal and for crop, nursery and fish culture etc. Microcredit was provided only in the general microfinance programmes not in specific sectors of BRAC. If anyone borrows this type of loan of Tk1, 000, s/he is supposed to deposit Tk.500. For being eligible for loan facilities s/he has to pay Tk.20 on weekly basis for two weeks. In this case loan security has been cut from the borrowed money. For example, if Tk.10,000 is granted as loan, then Tk.500 is cut down as loan security so the borrower gets Tk.9,500. Instalment has to be paid by the specific deadline in the time of group collection.

TMSS has three products for the general category of the borrowers (except for SME, Micro-enterprise or urban credit programme. Product 1: Access to loan from Tk.1,000 to Tk.29,000. Requirement for savings deposit per week is Tk.20, and loans are disbursed as per the accumulated savings, minimum 5 percent and maximum 10 percent. Interest rate for this kind of loans is 12.5 percent flat. Product 2: Access to loan from Tk.500 to Tk.10,000. Requirement for savings deposit per week is Tk.10, and loans are disbursed as per the accumulated savings, minimum 10 percent. Interest rate for this kind of loans is 10 percent flat. Product 3: Access to loan from Tk.1,500 to Tk.3,000. Saving not required for this kind of loans because this is the product meant for hardcore poor that bears a minimal interest rate of 4 percent flat. Interest rate for all the products of TMSS remains same during or pre-disaster and post-disaster period. If someone fails to continue his/her instalments during the disaster, his/her instalments are withheld for the time being. S/he is not pressurised for the instalments then. During disaster, TMSS can give loans only to those who have already completed their instalments. After the disaster, however, TMSS gives interest free loan only for 3 months. After 3 months, Tk.20 per thousand has to be deposited in order to repay the loan in 18 months or 53 instalments, whichever is suitable. They give 6 percent interest on the savings. If anyone dies after taking a loan, his/her loans are forgiven and the interest from his/her savings is given to his family.

SKS also offers three kinds of loans, such as, Grameen Micro Credit, in which 10 percent of the loan asked for has to be deposited from savings. There are 45 weekly instalments and the interest rate is 12.5 percent flat. SKS gives another type of loan to its members, and they call it Loan to the Marginal Farmer. This loan is given to those farmers, who cultivate their own lands as well as do the sharecropping. System of this loan is same as the previous one. Seasonal Loan is another product of SKS. This loan is given before the sowing of the crops. Interest rate for this kind of loan is 8 percent. However, no deposition of the savings is required for this loan. Farmers can get a direct loan. After they sell out their crops, they have to repay the loan at a single payment. Before, after and during the disaster, SKS provides Grameen Micro Credit and the Loan to the Marginal Farmer products to its members. The interest rate and the amount of loans are never changed. During the disaster, the instalments are withheld on a temporary basis, and if the previous instalments are not completed, then another loan is not allowed before, after or during the disaster in SKS. The members are given an interest free loan of Tk.1,000 during the disaster, however.

In GUK, members are required to deposit Tk.10 from their savings in every week to the *shomity*. After 46 weeks of such deposition, they can get a loan of Tk. 5,000. Normally, the interest rate is 6 percent flat. But during disasters, GUK gives interest free loans. Only GUK offers something like this. Besides, they provide seasonal loan. The instalments of this loan are dealt according to the wish of the borrowers. GUK has no obligations on whether s/he wants to repay the loan at weekly or monthly instalments or s/he does not pay any instalments during the period from sowing to harvest. But one must repay the loan after harvesting. The interest rate, profit, deposit amount from the savings etc remains same before, after and during the disasters, however.

In CODEC, clients are supposed to deposit 10 percent of their received loan and they start getting loan facilities after 3 months of being member of the institution. The loan is disbursed according to the ability of the borrower. After taking a loan, a member, from the next month, obliged to repay the loan with 45 instalments at 12.5 percent flat interest rate. The same is obligatory during disaster. CODEC does not disburse any loan product at the time of the disaster. However, they reschedule loan repayment as necessary, and two instalments are usually excused.

VARD microfinance products are simple, and group members of VARD can enjoy loan facilities if they deposit 20 percent of the loan money sought from their savings. On an average every member initially gets Tk.5,000 to Tk.6,000, and the amount may increase if borrowers' savings deposit increases. However, VARD shows flexibility based on the vulnerability of the people. For example, if anybody fails to pay instalment, VARD takes the instalment at borrower's convenient time. The demand for credit decreases at the onset of disasters. Borrowers who default excluded from the future access to credit. VARD disburses loan at 15 percent flat interest rate.

1.2.8 MFIs' Participation in Flood/SIDR Relief and Mitigation

Grameen Bank set up a Disaster Mitigation Task Force at the central level. It prepared and implemented a rehabilitation programme, which included new loan products, and loan assistance for housing rehabilitation and agricultural production. The Bank gave fresh loans to members who had 5 to 10 instalments remaining in the repayment schedule. The borrowers who had already paid half or more of their loans were eligible to take new loans for the amount that they repaid. The first time borrowers who had paid 16 instalments were given seasonal loans to start their activities again. Grameen Bank members who received housing loan before were given 5,000 taka again, if their houses suffered damages. Those members who did not get housing loans before were given 2,500 taka towards the same. Other members whose houses were destroyed but were considered for the housing loan were given a fresh loan to reconstruct their houses. After the cyclone SIDR, Grameen planned, and disbursed 10,000 taka interest-free loans to rebuild each home in the SIDR affected areas.

After the 1998 flood, BRAC extended loans to 240,000 families for housing to supplement people's efforts in repairing and rebuilding homes. The loan amount would be mostly used to buy construction or repairing materials. BRAC purchased 364 tons of rice in the open market and sold it at subsidized rates to group members. After the cyclone SIDR, BRAC generated short-term employment for 1, 99,505 people through cash for work projects, and 2,522 fishermen and ‘Gher’ (saltwater shrimp farm) owners received loans from BRAC. Both Grameen and BRAC have some ‘relief’ and ‘infrastructure development’ projects, however, and distributed many things among boats or saplings etc free of cost to the SIDR affected people. ASA offers an interest-free loan product for clients affected by natural disasters e.g., flood, cyclone etc of an amount of 1,000 Taka maximum for one year on a flexible repayment term, i.e., either weekly or monthly. ASA has three types of savings – mandatory, voluntary and long-term – all can be withdrawn anytime but need to keep 5% equivalent of loan (principal) as balance.

Proshika took up an emergency rehabilitation programme worth 5 crore taka through which 100,000 affected families would be provided an interest-free loan of 500 taka each. It also supported a credit programme worth 3 crore taka for *aman* (winter) paddy cultivation, vegetables and winter crop cultivation, to be adjusted during the following yield. After the SIDR attack, Proshika planned to provide Tk.25,000 each to 10,000 families as interest-free loans for house building. The loans will be realized from recipients within a period of five years. In addition to these credit operations, all the MFIs took up a number of relief and recovery activities, independent of their credit operations. For example, they set up medical centres, distributed food, drinking water, milk, and medicines. They also agreed to support a number of activities in non-farm sector, which would help the flood-affected people to resume their economic activities.

1.2.9 Palli Karma Shahayak Foundation (PKSF)’s Role

Palli Karma Shahayak Foundation is the whole-selling, i.e., the refinancing body for many microfinance organisations in Bangladesh. Immediately after the floods, all the MFIs demanded additional funds to maintain their liquidity, as the participant borrowers withdrew their savings, repayment of old loans was deferred, and loans were advanced to the new and old borrowers for rehabilitation needs. PKSF required 9.2 billion taka to meet the demand of MFIs in wake of the 1998 flood. PKSF responded by disbursing 1 billion taka to its partner organisations. In the month of October 1998 alone, 640 million taka was disbursed to help the flood-affected people. PKSF also disbursed 10 million taka from its own fund to 138 partner organisations as grant contribution to the “Disaster Management Fund” of the partner organisations.

After the cyclone SIDR in 2007, PKSF has taken initiatives to create a special fund amounting to Taka 500 million to provide long term interest free loan to the affected microcredit borrowers to re-construct their houses through its 32 POs. Partner organisations increase the volume of the disaster management fund from a portion of their income from service charges. If a partner organisation failed to repay any instalment of PKSF on account of its inability to collect loan instalments from the borrowers due to floods or cyclones, the organisation could apply to the PKSF for rescheduling. PKSF also approached the government and the international donor agencies to involve the partner organisations of PKSF in the flood rehabilitation programme since the network of PKSF partner organisations offer a solid institutional base to work in the remote areas of Bangladesh. TMSS, CODEC, VARD, SKS or GUK microfinance programmes are covered by PKSF programmes and products.

1.2.10 Up and Downsides of MFIs' Responses

A number of factors contributed to the effective intervention of MFIs in floods and storm surge like SIDR. Some of these factors were capable leadership, committed staff, sound management and financial practices. MFIs with good leadership responded quickly to the situation, availed of existing disaster mitigation funds, or developed alternative strategies of fundraising to meet the demand for resources. The involvement of committed field staff who visited to assess the damage of affected people was also very important. The close monitoring of the situation was crucial to the rehabilitation strategy of the MFIs. It provided reasonably good information on the damage to assets and income of clients, loss of programme income as a result of potential drops in savings and repayment.

On the basis of the information, MFIs could project capital requirements for loans during the rehabilitation period. Good financial and institutional management including provision of cash reserve, flexibility in management and decision-making, and clarity in chain of command were also effective in responding to the crisis. The MFIs in Bangladesh could respond to the floods and cyclones and withstand its serious financial impact, because they have more than two decades of operational experience as well as has enough capacity and linkage to raise grant funds from donors for immediate response. On the contrary, the small MFIs found it difficult to operate due to the increased cost of delivery, loss of income and shortfall of cash for fresh loans, and less or no capacity to generate donor grants. It is clear that there are several factors that limit the role MFIs can play in natural disaster response and mitigation. First, the MFIs do not have the liquidity position to respond quickly or fully in a disaster context. Second, most MFIs are not currently prepared to either weather or respond to a natural disaster situation. Third, most MFIs have not considered client needs from an emergency perspective; rather products and services are primarily geared to day-to-day business or household concerns. Fourth, demand for special services may be small, yet may require significant institutional investment. Therefore, individual MFIs are unlikely to invest in developing or maintaining these services.

The MFIs' intervention in the wake of floods and cyclone SIDR was more in nature of the immediate mitigation measures. Emergency loans, permission for withdrawal of savings, small advances against savings, loan rescheduling were some of the financial facilities extended to borrower families for coping with the disaster. However, microfinance has the potential of supporting long-term mitigation measures too. Income generation, diversification of asset base and housing improvements are some of the examples of long-term mitigation measures. These measures contribute to better disaster preparedness on part of the households and communities.

1.2.11 New Horizon

As there is a growing demand for these services, it is likely that the MFIs would diversify their services, and offer special products and services aimed at reducing disaster risks, such as disaster insurance apart from covering the lives. However, these services require considerable investment in product development and pilot testing. In fact, there is a strong need for investment in institutional development in microfinance so that they can offer additional products like disaster insurance. Many argue that from a policy perspective, external support, be it from the donor community or from the corporate sector for building rural financial institutions ought to be, in principle, not be judged on the prospect of achieving financial sustainability of the institution itself, but on the economic sustainability of such kind of investment. Economic sustainability of a policy implies that scarce funds are used to maximize social returns, which may reduce vulnerability in both the short and the long run in a more effective way than some other competing policy instruments.

Faced by natural disasters, many MFIs have consistently managed to maintain discipline in their existing projects and sometimes even been able to use these events as opportunities to strengthen the sector. In several cases, they have been found to come together in an informal manner to avoid the impact of adverse decisions such as government directives to forgive loans, a relief strategy often resorted to in the past. Vulnerabilities have change over time as MFIs evolved and expanded, and their portfolio changed. Government and donors have an important role to play in promoting the adoption of DRR strategies in the microfinance sector, and evaluate their results, in order to maintain appropriate policies and procedures. MFIs can carry out important functions in preparedness, reduction or mitigation and risk transfer, response, coping and recovery. Unfortunately, they have been doing this much less than would be desirable, so that these examples are drawn from relatively few practical experiences.

Similar to the rescheduling of compulsory savings, loan rescheduling help clients and protect the MFI by allowing clients to repay loans in a flexible manner. By giving affected clients the option to delay repayments on their loans for a specified time, MFIs can counteract the probability of defaults and reduce financial losses. In Bangladesh, disaster-stricken borrowers do not necessarily insist on loan absolution always, and are willing to accept assistance to improve their liquidity through, for instance, cash or in-kind relief loans, and access to savings. Though emergency loans is a good mechanism to help affected households, insurance, which can be offered to everybody across the affected area and which would ease cash flow problems of clients and non-clients, has not been explored, and MFIs avoid disaster insurance schemes to offer though they are keen to offer life insurance that covers their portfolio at risk. The provision of technical supervision is an unavoidable requirement of a housing programme if one of the objectives is to improve building standards and practices that take disaster risk reduction into consideration. Experienced MFIs do not recommend using the solidarity group lending methodology for house building or improvement loans but one-to-one basis.

2. The Study

2.1 Background and Rationale of the Study[3]

The current scenario in the world witnesses a paradigm shift in disaster response from relief and rehabilitation to disaster management and risk reduction through prevention, preparedness and mitigation approach. Restoring the situation alone will not be sufficient and hence warrants for addressing continuing vulnerabilities. This further strengthens actions to promote disaster risk reduction as a prime developmental issue.

Social security measures especially to reduce the disaster risk and vulnerabilities are increasingly seen as an integral part of the development process. It is both a concept as well as a system. It represents basically a system of protection of individuals who are in need of such protection by the state as an agent of the society. State has an important mandate to harmonize such differences through a protective cover to the poor, the weak, the deprived and the disadvantaged. Communities that are prone to frequent floods, cyclones or tsunami etc have long been under the protective cover of the welfare programmes of the state. In recent years, it is being perceived that microfinance and microinsurance as parts of social security measures have greater potential, to reduce disaster risk and vulnerabilities of disaster prone communities.

The provision of micro finance services like savings and credit to the poor is well recognized as an effective instrument to address poverty. However, the poor face many risks or shocks, which make them vulnerable, despite access to savings and credit services through microfinance. Poverty is not only a state of deprivation but also a state of vulnerability. Poverty and vulnerability are closely related. The sources of risk include expensive illness, death of a breadwinner, natural calamities (flood, drought, animal diseases, crop failure, etc.), the need to meet customary obligations (weddings, funerals), political instability, communal

[3] Source: Background paper of the Tata-Dhan Academy "Role of MF Tools in Disaster Mgmt-4 May 2008."

riots and market shocks, etc. The coping mechanisms against such crisis lead the poor into a situation of further debt and impoverishment. Insurance services extend the coping capacity of the poor to a next level of leverage complementing the role of savings and credit in addressing their poverty and vulnerabilities.

In the Indian context, the existing micro insurance schemes by the mainstream service providers do not adequately address the needs of the client system; so is the case with Bangladesh and Sri Lanka. The concept of mutuality is well expressed and established in many of the community based microfinance operations. Many experiments in the field have proven the feasibility of applying the concept of mutuality in delivering micro insurance services to the poor. In such cases they become purely member owned, controlled and managed and hence provide a greater flexibility to the members in terms of products and services.

With this background, the study focuses on the relevance of microfinance and microinsurance tools in providing social security to the disaster prone areas of India, Bangladesh and Sri Lanka for disaster management. Mapping the vulnerabilities of the disaster prone communities, investigating how they cope with such vulnerabilities, the present indigenous and other social security mechanisms, the reach and relevance of microinsurance products / packages available for them and the scope for promotion of microinsurance mutual integrating with the microfinance services was included in the study. Moreover, the role of MFIs or NGOs, insurance sector, government, and donor for innovative micro insurance partnerships focused as part of this study.

2.2 Objectives of the Study[4]

The over all aims of the Study were to (1) find out the impact of micro finance and micro insurance tools in reducing disaster risk and facilitating post disaster recovery, (2) Make policy and product recommendations for enhancing the potential of MF & MI for disaster risk reduction. Based on these two aims the objectives of this proposed research study were framed as:

- Map disaster risk, livelihood vulnerabilities and financial coping strategies of communities in hazard prone areas.
- Understand the available social security mechanisms and how did they contribute to recovery in the aftermath of recent disasters
- Study the contribution of Micro finance and Micro Insurance as social security mechanisms.
- Analyze existing Government policies on communities based Micro finance and Micro Insurance
- Make policy and product recommendations including reinsurance mechanisms for making MF & MI effective tools for disaster recovery and risk reduction.

[4] Source: Background paper of the Tata-Dhan Academy “Role of MF Tools in Disaster Mgmt-4 May 2008.”

2.3 Implementation structure of the study

The study was collaborative in nature identifying and involving the appropriate institutions from India, Bangladesh and Sri Lanka to undertake the research, and Oxfam, America and ProVention Consortium for financial, technical and dissemination support. Along with the overall coordination, India part of the study covered by the Centre for Disaster Risk Reduction of Tata-Dhan Academy, Madurai, India. The study of the Bangladesh part was entrusted on INAFI Asia & Bangladesh after consultation. The research project was centrally coordinated by the Centre for Disaster Risk Reduction of Tata-Dhan Academy. There was a Steering Committee consisting of representation from Oxfam America, ProVention Consortium, Dhan Foundation, ASKMI and Tata-Dhan Academy to guide the strategic and operational details of the project. For Bangladesh part of the study, an Operational Research Team including Principal Investigator and two Research Associates have been formed under the guidance of the Executive Director of INAFI Asia & Bangladesh. The research tools were prepared by the Centre for Disaster Risk Reduction by involving the members of both Steering Committee and Operational Team from Bangladesh. Data collection, data processing, and report writing (including conducting the FGDs) done by the Bangladesh Operational Team.

2.4 Methodology of the Study

Due to quality of the information required, a survey design was adopted to collect both quantitative and qualitative data on the effects of the flood on the lives of the poor and their post-flood rehabilitation needs. Along with the interview method through structured interview schedule, various tools of participatory learning methods (PALM) have been applied to study the vulnerability context of the disaster-affected communities. Focus group discussion method also employed for understanding their social security mechanisms, indigenous practices of risk reduction, contribution of microfinance and microinsurance for disaster risk reduction, etc. Interview with NGOs and MFIs through structured or semi-structured interview schedules were also used as a part of the research to understand the problems and prospects of microfinance and microinsurance to reduce disaster risks and vulnerabilities.

2.4.1 Selection of the study areas

The study was conducted in three specific geographic locations in Bangladesh that are prone to disasters such as perennial flash floods, monsoon floods in the Ganges floodplains, and storm-surge prone southern coastal areas. Remote rural villages of five districts were chosen. These were: Kunderpara, Kamarjani, Char Gobindi and Shaghata under Gaibandha district; Sonaimukhi, Maizbari, Kazipur under Sirajganj district (Ganges floodplains); Badarpur, Gulzarbari, Patakata, Fuljhuri under Barguna district; Bemorta, Doibagahati, Abela, Morelganj under Bagerhat district (storm-surge prone southern coastal areas of Bangladesh); and Sundergarh, Kurutala, Rangarchar, Shologhar, Hasannagar under Sunamganj district (flash flood prone area). Finalisation of the study areas were confirmed followed by visiting the areas by Central Study Coordinator-2 from Tata-Dhan Academy, India and Bangladesh Study Coordinator.

2.4.2 Sampling design and size

The study covered 500 disaster affected sample households inclusive of 100 control households from the areas selected. The households not involved in microfinance and microinsurance is referred as control group. Economically poor households have been selected on the basis of sampling technique outlined below.

Table1 Sampling design and size

Interventions	No of Sample units				
	MF clients			Control (Non MF clients)	Total
	Flood	Cyclone	Flash flood		
Quantitative survey	150	150	100	100	500
FGD with community	3	4	3		10
FGD with MFI staff	3	4	3		10
FGD with elected community leaders	1	1	1		3

For the second phase of this research, 23 focus group discussions were carried out in each of five sites with the objective that findings might guide, and add value and insights into the quantitative data generated earlier.

2.4.4 Data collection

The data collection commenced on 14th June 2008 just before the flash floods began to set off and the monsoon floods knocking on the doors and was completed by 20th June 2008. The investigators had to work sometimes under difficult circumstances as communication and availability of respondents was disrupted by downpour, and inclement weather, and they needed some continuous clarification on the schedule of survey and the codes used. In each sites mentioned in the section 2.4.1 separate focus group discussions were conducted in October 2008 (from 20th to 28th) after the flood season was over with each of the above mentioned categories of people as mentioned in the section 2.4.2, and were selected after initial discussions with key informants. The focus groups had from 5 to 10 participants for community people.

2.4.5 Development of instruments, training, data processing and analysis

A structured form developed by Tata-Dhan Academy was used for data collection on 500 households as per sampling design mentioned in the section 2.4.2. FGD checklists as prepared by Tata-Dhan Academy were also used for focus group discussion and observation. For group discussion, at least five to ten respondents were assembled in a convenient place, and for staff of MFIs, in their respective field offices. Community leaders were interviewed at their houses. In selecting respondents and discussants, attempts were made to include some knowledgeable members from the villages, if and when available. Wherever possible, all information was cross-checked with a second person from the same village while recording. A two-day intensive training was given to the field investigators on the survey instruments. Each research team working in the rural districts consisted of one lead investigator and 6 interviewers. The team also received help from operational team and research assistants during fieldwork. Data processing and analysis was done using Excel 2007 software as prepared and delivered by Tata-Dhan academy with the help of a data entry operator.

2.5 Limitations of the Study

Among many constraints in designing this study, it was required to reduce highly complex concepts into simple formats and this has been identified as a challenge. There were some marked disadvantages of using recall methods for the respondents relating to the preciseness of memory and difficulties in description of their status. The precision of outcomes from one-off surveys often reflects current realities rather than an annual perspective, without having any other suitable alternatives the study had to rely on this memory recall method. Apart from this, some of the other limitations may be pointed as:

- All the affected households of the survey area chosen could not be included in the survey, and the choice of sample households might not have above erroneous
- Time and budget limit for field-level data collection was inadequate for such large informative survey
- Data collectors did not have enough experience
- Conception of the respondents about the purpose of the survey was not clear enough for some of them

It was also noticed during the survey that respondents were sometimes reluctant to respond, rather busy with their own work and some of them were also observed to be suspicious about the survey, which is perhaps a common drawback of the one-off survey process. The findings may not be generalised for the entire country also.

3. Findings

3.1 Insurance Coverage

3.1.1 Insurance coverage of eligible persons before and after disaster: The study revealed, and Table2 depicts, that a total of 18 women had life insurance contracts before disaster while the contracts rose to 65 after they caught by deluges. This increase mainly reported in the SIDR storm affected areas of Southern Bangladesh. The study also shown that while no men had any sorts of insurance exposures before disasters, 22 of them have life insurance contracts now. As far as health insurance contracts, 2 men and 9 women got contracts after disasters hits. The coverage is pretty low, i.e., only 98 contracts out of total

2368 respondent in 500 control and non-control households covered under the study. It would be worth mentioning in this regard what microfinance clients Ms. Halima Begum, Ms. Mazeda Begum, and Ms. Rowsona Begum of Kunderpara, Gaibandah that lives in the Jamuna floodplains told “We are quite familiar with the insurance policies but none of us have got enough trust on any insurance company. Previously an insurance company deceived some of us.”

Table2 Insurance coverage of eligible persons before and after disaster

Sl. No	Insurance product	Before disaster			After disaster		
		Men	Women	Total	Men	Women	Total
1	Life	0	18	18	22	65	87
2	Health	0	0	0	2	9	11
	Total	0	18	18	24	74	98

Two other women from Badarpur, Barguna, the worst SIDR affected area, Ms. Hosneyara Begum and Ms. Ambiya Begum told “We all have a clear concept regarding microfinance but microinsurance is totally unknown to us.” These statements revealed that the low insurance coverage in the study areas maybe the outcome of company or insurance agents’ malpractice or lack of awareness of the benefits of insurance contracts among the poor.

3.1.2 Source of support for insurance coverage: When asked who influenced them to buy insurance contracts, 25 of the respondents that have a policy for life reported that they themselves were convinced or their relatives or friends influenced them to buy such contracts. Four of the same category has health insurance. However, 28 and 6 respondents respectively told they bought life and health insurance pursued by company agents. The largest chunk, 47 persons came under life coverage promoted by MFIs. One of such respondents promoted by her MFI bought a health insurance contract also.

Table3 Source of support for insurance coverage

Sl. No	Source of support	Number of persons covered under insurance	
		Life	Health
1	Self/relatives/friends	25	4
2	Insurance agents	28	6
3	SHG/MFI	47	1

In this regard, Mr. Abul Kalam Azad’s remark, who is an Area Manager, Sirajganj Area, TMSS, Sirajganj has merit. He told: “At present, many NGOs/MFIs are operating in the villages. So the people can now weight the services provided by these MFIs and they are concerned of those services. No matter if the service is for microcredit or for microinsurance. For the risk of the microcredit, we collect tk5 per thousands of taka as insurance risk fund. For instance, if anyone dies before completing the instalments, we condone his/hr loan. This is known as the benefit from the insurance. People of this area have anxiety about the insurance, as they got deceived before. TMSS has to convince the villagers about the insurance product and attract them towards it. To do so, we have to give assurance to the members of the *shomity* that their money will not be swindled."

3.1.3 Status of continuity in insurance schemes: The study revealed, and Table4 depicts that while all the life and health contracts made by the policyholders themselves found renewed till the date of interview, but 2 life contracts were found discontinued those were sold by the insurance agents.

Table4 Status of continuity in insurance schemes

Sl. No	Source of support	Number of persons covered under insurance			
		Life		health	
		Renewed till date	discontinued	Renewed till date	discontinued
1	Self/relatives/ friends	25	0	4	0
2	Insurance agents	26	2	5	0

During the focus group discussions, many microfinance clients found positive about insurance, that maybe the reason for low drop-out rate. Statements made by respondents are significant like Mazeda Begum (48) of Sonaimukhi village of Maijbari, Sirajganj who said: "If there is insurance in my name, then this insurance will be the only thing that will stay beside me in case my husband leaves," or as opined by Farida Begum of Hasannagar, Sunamganj: "When we get old, our sons and their wives do not want to keep us with them. But if I have insurance, they will take care of me from the interest of getting the amount form my insurance. When I think about this fact, I realize the importance of insurance."

However, this study revealed the need for new infusion of blood into public-private partnership to draw out the insurance coverage. The opinion articulated by a community leader maybe important to take note. Mr. Akramul Hossain (Ricto), Union Parishad Member, Bemorta, Bagerhat said: "We are well concerned and clear about microcredit, but we do not know much about the microinsurance. So far, very few among us have received the interim bonus from 1 or 2 microinsurance institutions. But at the end of the term, the clients have complained of being deceived. The insurance companies gave around Tk.3,000 to Tk.4,000 as bonus to their clients in every 2 to 3 years. At the end of the term, they return the amount to their client that is left after deducting the bonus amount from the deposited amount saying that the clients have failed in their conditions for payment of premium instalments and withdrawing money. This way, many of us have suffered losses going for an insurance policy. But people still feel the need of microinsurance along with microcredit and if they are guaranteed the opportunity of it in a right way, they are eager to go for insurance. However, to start this micro insurance system, the involvement as well as the presence of the superior officials is needed to be confirmed first. Because, the deceived clients assume that the field level officials in collusion with their superior officials were involved in this swindle."

3.2 Income generating assets: The study generated a lot of information regarding the acquisition or loss of income generating assets of the responding households, and the role of disasters or MFIs in the acquisition or damage of the assets. Though the quantitative study revealed that percentage value of income generating assets purchased through the support of MFIs of the total income generating assets were only 11 percent, i.e., against the value of total Tk.10,046,540 of their income generating assets, they bought Tk.1,087,400 worth of income generating assets using MFI loans, but during the focus group discussions many has told that they acquired income generating assets using MFI loans without quantifying the value of assets . Examples worth mentioning are that Minara from Sadargarh, Sunamganj said: "Many of us started small trade like grocery or purchased animals like cows, goats etc. with the loan from the NGOs. Some of us also bought rickshaw or boats." Similar statement made by Morsheda and Mozila of Chor Gobindi, Gaibandah: "We have bought cows with the borrowed money." Sima Rani Das and Kamla Rani Das from Abela, Bagerhat also told: "After receiving the credit facilities, we are now able to make some income generating assets like some of us have bought a van, some have become the owner of a tea stall, some bought cows and goats and those who were landless bought land. This way, everyone is able to generate income by creating such sources."

However, the study finds that the average value of income generating assets that were partially damaged due to disaster was Tk.54 per person (n=2368) only. Average value of income generating assets that were lost due to disaster was Tk.200; average value of income generating assets that were completely damaged due to disaster was Tk.224, and percentage value of income generating assets that were lost/partially damaged/completely damaged of the total value of income generating assets due to disaster was 12 percent.

The study also made known that percentage of lost asset units replaced after disaster was only 1 percent because out of 98 respondents who answered this question, only one has reported the replacement. However, percentage of replaced units through the own savings of the households (here total is number of asset units replaced and not total asset units) is 100 percent because only one respondent reported such replacement. Nobody reported replacing units through selling out assets, and again percentage of replaced units through the credit from MFIs was 100 percent because only one respondent reported such replacement. The study also revealed that there were no replaced units through credit from either banks or other formal or informal financing institutions. Percentage of replaced units through credit from friends and relatives was again 100 percent because only one respondent reported such replacement. There had been no reported case of such replaced units through donations from government, MFIs or from other NGOs.

The study revealed that 49 of the total 500 households answered the question when asked whether they repaired their partially/completely damaged asset units after disaster. 15 said yes. Number of repaired units through the own savings of the 15 households (here total is number of asset units repaired and not total asset units) were 20. There was no reported selling out of assets to repair their units. The same number of h/h (15) said 80 percent of them (12) replaced units through the credit from MFIs, but no reported case of repairs through credit from banks and other formal or informal financing institutions. While 4 respondents (out of total 500 h/h) said they did that through credit from friends and relatives, there was no reported case of doing so through donations from government or MFI/NGOs.

Out of 500 h/h, 11 said their gear units damaged due to disaster, and they were only 2 percent amongst total respondents. The same number of respondents 11 out of 500) lost their crafts to disaster. None of their storage units damaged due to disaster, and percentage of agriculture land damaged due to disaster was only 2 percent as only 9 respondents reported such damage out of total 500 sample h/h. Percentage of agriculture implements damaged due to disaster was even meagre 1 percent, but percentage of live stock damaged due to disaster was 22 percent, as 108 h/h out of 500 said yes to this question. There had been no reported case of agriculture pump set damage due to disaster, and 1 percent said they incur damage of other assets due to disaster. Average value of gear damage due to disaster was Tk.1273.

3.3 Household assets: The study revealed that percentage value of household assets purchased through the support of MFIs was meagre 2 percent. They reported to have total h/h assets of Tk.3,251,531 while they bought Tk.73,400 worth of h/h assets using MFI loans. The study also finds that average value of household assets that were partially damaged due to disaster was Tk.6 per person only since 2368 persons in 500 h/h reported Tk.13,800 partial damage. The average value of household assets that was lost due to disaster was reported Tk.51, and average value of household assets that were completely damaged due to disaster was Tk.16. However, the percentage of value of household assets that were lost/partially damaged/completely damaged (Tk.172,065) of the total value of household assets (Tk.3,251,531) due to disaster was 5 percent. Here, we can recall an observation from Jamila Khatun, Shabjan Begum and Selina Begum of Kurutala, Sunamganj who told during the FGD: “During the flood, we take shelter at some high lands. We make ourselves prepared ahead of the disaster. Like- it is decided from before that where to take shelter during the disaster. We try to keep it safe for us as well as for our household goods and domestic animals.”

The study finds that the percentage of lost units replaced after disaster was only 4 percent since 407 h/h reported 17 replacements, and percentage of replaced units through the own savings of the households (here total is number of asset units replaced and not total asset units) was 65 percent because out of 17 replacements 11 was made using their savings. However, there had not been any reported replaced units through selling out assets, credit from MFIs or banks and other formal or informal financing institutions or credit taken from friends and relatives. However, 6 respondents (out of total 500 sample h/h) said they replaced 6 units through donations from government. The study also finds that there had not been any replaced units reported through the donation from MFIs or other NGOs.

The study revealed that 80 h/h reported 106 damaged asset units repaired after disaster, and out of 106 repair 91 units were repaired using their own savings of the households (here total is number of asset units repaired and not total asset units). While nobody repaired any units through selling out assets, percentage of replaced units through the credit from MFIs was 9.43 percent (10 units out of total 106). There had been no reported case of such repairs using credit from banks and other formal or informal financing institutions or donation from government, MFIs or NGOs. Percentage of repaired units through credit from friends and relatives was reported 2.83 percent (3 units repaired out of 106).

3.4 Risk related to life

3.4.1 Death of persons: Amongst total 2368 h/h members, only one women's death was reported by the quantitative survey. It is common in Bangladesh that people seldom die during floods, but during storm surge death and injuries occurs. During the focus group discussions, the study finds some clients and staff of MFIs confirmed both the survey results as well as reported some death cases, though not in particular. Examples were: Ms. Krishna Rani Dash from Abela, Bagerhat, the area that was hit by SIDR storm said: "None of us became orphan as there was no case of dying." Minara Begum, Ms. Nazma Aktar and Ms. Fakir Banu Morelganj, Bagerhat also told: "Sidr failed to take away any life in this area." Ms. Riziya Begum, Ms. Parul Aktar and Ms. Kulsum Begum of Badarpur, Barguna, the worst affected area by SIDR 2007 said: "Sidr failed to take away any life in Badarpur and Gulzar Bari."

The study took some particular note while Shabjan Begum from Kurutala, Sunamganj told: "My child died from cold during the flood." The statement neither suggests nor rejects the death case was due to disaster. However, the study also noted with caution while Shuktara from Sadargarh, Sunamganj said: "Some babies died due to cold during the disasters." But the study takes this as a note of significance when Ranmu Begum of Patakata, Fuljhury, Barguna, the worst affected SIDR area, said: Sidr is the only disaster that we faced in last 10 years. We have never seen this kind of disaster since the last 10 years. A woman and three children died during this disaster. Otherwise there were no other incidents of death." The study also noted Sheikh Abdul Amin's comment in this regard who is a Program organizer (micro credit) of CODEC, Bagerhat. He said: “In last ten years, natural disaster killed 5 to 6 people and some people were wounded.” But the study guardedly noted Dipak Sarkar’s observation who is a program organizer with BRAC, posted at Borguna Fuljhuri Branch who said: “The hurricane Sidr was the only disaster hit my working area in last 10 years. Almost 300-350 people were killed and thousands of people were wounded in this cyclone.”

3.4.2 Disability of persons: The study didn’t find any disability case due to disaster while surveyed amongst 2368 persons in 500 households. This was also confirmed during FGDs. Shuktara of Sadargarh, Sunamganj told: “There has not been any disability reported due to disaster. Mrs Papia Ray, credit assistant of VARD, Sunamganj also said: “My work area is very prone to natural disasters and flash floods are most frequent events. However there is no loss of life due to disaster in last ten years and none of the residents was disabled in these catastrophes. Ms. Mazeda Begum, Female Member of Union Parishad, Kundepara, Gaibandah also confirmed: “I have never heard of any disability case due to disaster.” The credit assistant of VARD, Ruhul Amin also said “ Flash flood is frequent event in my locality, it strikes three time in last ten years, still no record of disability of people due to flood has been found.” But some of the participants during the FGDs also told about some ‘wounds’ incurred as stated above in section 3.4.1. In addition Mr. Md. Abul Kalam Azad’s comment who is the Chairman of the Union Parishad, Rangarchor, Sunamganj can be cited: “Some of the local have wounded by the disaster.”

3.4.3 Physical trauma or illness due to disaster: While the study sought to know whether any person become ill or physically traumatised during disaster, it was made known that out of 2368 persons in 500 h/h, some 116, or 4.9 percent of the total sample became ill or were physically traumatised during disaster period. Amongst them, 38 were less than12 years old, 76 were more than 60 years old, and 54 were women. Number of traumatised or sick persons who were treated in MFI-run hospital or camp organised by MFIs were only 7. Amongst 116 ill or traumatised persons due to disasters, 61 of them got immediate treatment and it was good, 22 got immediate treatment also but it was not good, 22 of them got delayed treatment but it was good, and 9 of them got delayed treatment and it was not good. Only one person found who did not receive any treatment.

The study found that 116 sick or traumatised persons spent Tk.288,510, and average amount of expenditure incurred per person for illness and physical trauma during disaster period was Tk.2,487. 32 sick/traumatised persons found, out of 116, who spent higher than the pre disaster time on medical expenses, and which was affordable to them, and 9 of them told that was not affordable. However, while nobody told the expenses were lesser than the pre disaster time, 9 of them reportedly received free medical service. 26 of the sick / traumatised persons managed the medical expenses through their own savings; either cash at hand or cash at bank, 5 of them managed the expenses by selling out assets, 12 of them took credit from MFIs, a lone person took credit from banks and other formal financing institutions, 9 from informal financing sources, and 36 from friends and relative to meet up the expenses of treatment. 7 of them however received donation from government in cash or in kind for the treatment purpose and 10 of the 116 sick people received donation from other NGOs, and one got support from local community and philanthropists for their treatment. However, none of them received any donation for that purpose from the MFIs.

The study also exposed that 52 of the ill/traumatised persons for whom the availability of medicine was immediate and adequate, 29 opined that it was immediate but not adequate, and also the same number of respondents said it was delayed but adequate. Only 4 people said the availability of medicine was both delayed and inadequate. 37 of the respondents told they were treated in government-run hospitals, 26 in privately-run hospitals; none took treatment at the missionary-run hospitals, and 7 of them told they took their treatment from MFI-run hospitals. None said they went to medical camp organised by MFIs or government or NGOs. A lone respondent said she went to medical camp organised by local community, and 15 of them went to indigenous practitioners. One out of the total 116 reportedly sick respondents told that she resorted to household medicine.

3.4.4 Additional members in work: None of the respondents reported any additional members, such as elderly, women, children etc entered into work after disaster due to income or employment loss of main earning members within h/h.

3.4.5 Change in economic activity: None of the respondents reported any change in economic activity after disasters, such as, getting increased or decreased incomes. However, it was made known elsewhere that 18 percent of the total h/h, i.e., 424 persons received under payment during disaster.

3.4.6 Migration: Migration was also not reported during the quantitative survey. But during the focus group discussions, a young local community leader commented in this regard that maybe important to take a note. Mr. Akramul Hossain (Ricto), Union Parishad Member, Bemorta, Bagerhat said: Before the disaster (Sidr 2007), some of our villagers took loans from the *Mohajons* at 10-20 percent interest rate (per month). But during the period of disaster, this rate of interest was increased because the loan giving NGOs were not giving any loans in this area at that time. As a result, many of them were compelled to take loans at a higher interest rate. At last, they failed to repay the amount according to the rule of *Mohajons* and thus left the locality.

3.4.7 Employment and income lost: The study revealed that 668 out of total 2368 persons in 500 households lost either employment or income due to disasters, and that stood 28 percent. Average number of days for which employment opportunity was lost during disaster was 12 days, and 18 percent of them received under payment during disaster. Average number of days for which the working persons were receiving under payment during disaster was 6 days. The study also shown that while the average value of crop loss due to disaster was Tk.372, and average value of stock loss was Tk.45. Only 11 Percent of households could take adequate food for three times per day during disaster while an overwhelming 67 percent of the respondents could take food two times per day. The study revealed that persons could take food once a day was 22 percent, and nobody was totally without food during the deluges. For food, 24 percent of households managed from own stock or spending own money, a majority of 41 percent feed by donation from MFIs in kind and cash, 26 percent lived up by donation from government, 8 percent from other NGOs, 4 percent from friends and relatives, 2 percent from local community and philanthropists. The entire donation made either in kind or in cash.

The study also revealed that 1 percent of respondents lived up upon getting loan from MFIs, and none dependent on loan from formal or informal financing sources for managing their food. However, 6 percent of them dependent on loan from friends and relatives for their daily food, and 1 percent on selling out household assets. Percentage of households that received compensation for income loss during disaster period was overwhelming 64 percent. While 17 percent of them dependent on compensation support from government, 39 percent on MFIs, 15 percent on other NGOs, 11 percent on local community / philanthropists. None was reportedly dependant on banks. Average amount of cash savings lost during disaster was Tk.2977.

Here are some accounts how people and community responses during disasters to cope with income loss, or food crisis.

Shuktara, Sadargarh, Sunamganj: “During the flood, many of us were at the edge of starving, as there is nothing to eat.” Sheikh Abdul Amin, Program organizer (micro credit) of CODEC, Bagerhat said: “The income generating activities of rural landless people were almost suspended.” Selina Begum, Kurutala, Sunamganj said: “Many of us suffered from food scarcity during the disasters.” Ms. Sima Rani Dash, Abel, Bagerhat said: “Nobody didn’t ensure food, clothes and other necessary good after the disaster.” Ms. Halima Begum and Ms. Shilpi Begum, Patakata, Barguna said: “Many NGOs has provided us with food and clothes as well as the other necessary things during the disaster.” Dipak Sarkar, the program organizer of BRAC, Borguna said: “Standing crops on hundreds acres of land were completely destroyed; innumerable numbers of livestock lost their lives and were washed away in flood water. In this situation the survivors lived on starvation.” FGD discussant of Abela, Bagerhat told: “Most of the village people try to solve their problems by themselves. They face the disaster according to the situation. Many women save money and food for the hard times through which she helps herself as well as the others during the period of disaster.”

3.5 Access to goods

3.5.1 Status of availability of goods: Table5 depicts serious inadequacy of essentials during disasters for the disaster-hit households in Bangladesh. Percentage of households suffered rice inadequacy was 99 percent, grocery and vegetables 100 percent, firewood 85 percent, kerosene 81 percent, and cloths 60 percent. A few respondents said supplies of firewood, kerosene or cloths adequate, and the percentage of adequacy were reportedly 13.4, 15.6 and 39 percent respectively. It would be useful to take note that LPG is not in use in rural Bangladesh as a fuel to cook. During the discussions with disaster affected people, Selina Begum of Kurutala, Sunamganj said: "Many of us suffered from food scarcity during the disaster."

Table5 Status of availability of goods

Goods	Percentage of households			
	Adequate	Inadequate	Completely not available	Total
Rice	0.6	99	0	100
Other grocery	0	100	0	100
Vegetables	0	100	0	100
Firewood	13.4	85	2	99.8
Kerosene	15.6	81	4	99.8
LPG	0	0	79	79.2
Cloths	39	60	0	98.8

Regarding making available the essential goods during disasters, Ms. Krishna Rani Dash of Abela, Bagerhat who was affected by the storm SIDR in 2007 posed a serious policy question: "No one has taken any kind of steps towards risk reduction in our area. Though there were announcements (from the government) to go to a shelter to ensure our safety before the sidr knocked, but they (the government) didn't arrange any food in the shelter places." Ms. Sima Rani Dash of the same area also told: "They didn't ensure food, clothes and other necessary good after the disaster." Ms. Halima Begum and Ms. Shilpi Begum, Patakata, Barguna however told: "Many NGOs has provided us with food and clothes as well as the other necessary things during the disaster."

3.5.2 Average number of days of inadequacy: The study revealed, and Table6 portrays that the average number of days of inadequacy during and after the disasters for rice and other groceries was 34 days, vegetable, firewood and cloths was 33 days, and kerosene for 29 days. Days of inadequacy was surmounted when people get back to their normal lives, mainly at their own. Here it is important to note what Mr. Md. Abul Kalam Azad, Chairman of the Union Parishad of Rangarchor, Sunamganj said: "There were no one to help them in repairing their houses and providing food so they do these on their own."

Table6 Average number of days of inadequacy

Goods	Average number of days
Rice	34
Other grocery	34
Vegetables	33
Firewood	33
Kerosene	29
LPG	60
Cloths	33

3.5.3 Changes in prices: Table7 reveals that there had been a rise of prices of essential during or after disasters hits the communities. But most of the responding h/h also told that they can afford. 89 percent of them told rice was sold higher than the pre disaster time but they could afford. 91 percent told the same for groceries, 92 percent told the same for vegetables, 66 percent for firewood, 65 percent for kerosene, and 37 percent of the respondents told cloths were costlier but they could afford to buy those items. Less than 10 percent respondents told that the prices of essentials were higher than the pre disaster time and they could not afford. 20 percent of them however said kerosene was higher than the normal price, and they could not afford. While only 18 percent respondents said they got free service in collecting firewood, none of the items were reportedly free. Some of the respondent conversely said that there had been no change in price of the goods they need than the pre disaster time. 2.6 percent reported the same for rice, 6 percent for firewood, 14.4 percent for kerosene, and a large 56.6 percent of them said the same for cloths.

Table7 Changes in prices

Goods	Percentage of households				
	No change than the pre disaster time	Higher than the pre disaster time but we could afford	Higher than the pre disaster time and we could not afford	Free service	Total
Rice	2.6	89	8	0	99.6
Other grocery	0.2	91	8	0	99.6
Vegetables	0.2	92	7	0	99.6
Firewood	6	66	7	18	96.6
Kerosene	14.4	65	20	0	99.4
LPG	3.6	0	0	0	3.8
Cloths	56.6	37	4	0	97.8

3.5.4 Percentage of households that managed access to goods from: Table8 gives a picture of how household managed access to goods from. For rice, majority 40 percent said they managed the stuff from their own stock or spending own money, 30 percent said they got donations from MFIs in kind and cash, 20 percent managed that through donation from government, 8 percent from other NGOs' donation, 6 percent loaned from friends and relatives, 4 percent from donation of friends and relatives, 2 percent from donation from local community and philanthropists, and 1 percent of the respondents managed the foodstuff either taking loan from informal financing sources or from selling out h/h assets. Here we can evoke what the FGD participants of Abela, Bagerhat told: "Most of the village people try to solve their problems by themselves. They face the disaster according to the situation. Many women save money and food for the hard times through which she helps herself as well as the others during the period of disaster." Participant in Morelganj, Bagerhat also told: "The members of the *Shomity* are very helpful towards each other. Like if any one is out of food then the other members manage food for her. Once we received 15kg rice on behalf of the government."

Table8 Percentage of households that managed access to goods from

Goods	Source										
	Own stock or spending own money	Donation from SHG/mF group (kind and cash)	Donation from government (kind and cash)	Donation from other NGOs (kind and cash)	Donation from friends and relatives (kind and cash)	Donation from local community and philanthropists (kind and cash)	loan from SHG/mF group	loan from informal financing sources	loan from formal financing sources	loan from friends and relatives	selling out household assets
Rice	40	30	20	8	4	2	0	1	0	6	1
Other grocery	50	16	8	9	4	2	0	1	0	16	1
Vegetables	65	6	2	2	4	3	0	1	0	16	1
Firewood	65	4	2	1	2	2	0	1	0	10	1
Kerosene	66	5	2	2	2	2	0	1	0	18	1
LPG	1	0	0	0	0	0	0	0	0	0	0
Cloths	57	1	0	4	1	0	0	0	0	12	1
Medicines	53	11	2	6	1	1	0	1	0	12	1

For other grocery, a bulk of 50 percent said they managed from their own stock or spending own money, 16 percent said they acquired donations from MFIs, 8 percent managed groceries from government donation, 9 percent from other NGOs, 4 percent obtained the groceries from friends and relatives' donation, 2 percent from local community and philanthropists, and like rice, 1 percent of the respondents managed the groceries either taking loan from informal financing sources or from selling out h/h assets.

For managing vegetables, firewood and kerosene, 65 to 66 percent respondent reportedly dependent on their own stock or spending own money, and a meagre

1 to 6 percent relied on donation from other sources like from MFIs, government, NGOs, friends and relatives, local community and philanthropists etc. A good number of the h/h (10 to 18 percent) relied on loan from friends and relations while the same 1 percent of the respondents managed the things either taking loan from informal financing sources or from selling out h/h assets. 57 percent respondents manage their own cloths whereas 1 percent received donation from MFIs, 4 percent got it from other NGOs, and 12 Percent of them, however, managed cloths from friends and relatives as loan.

For medicine, 53 percent said they managed that spending own money, 11 percent got donations from MFIs in kind and cash, 2 percent from government, 6 percent managed that from other NGOs' donation. Meagre 1 percent managed their necessary medicines either from friends and relatives, local community and philanthropists as donations or taking loan from informal financing sources or from selling out h/h assets. 12 Percent of them, on the other hand, managed medicines from friends and relatives as loan as it has been the case for managing cloths. Nobody, however, managed anything taking loan from either MFIs or any of the formal financial sources like banks.

The study revealed that majority of the people managed their necessary things like food, fuel, cloths or medicine during or after disasters either on their own or taking loans from friends and relatives. However, for rice, more than half of them depend on donations from others. A few (1 percent) of the respondents, extremely poor, neither credit worthy nor socially well-connected show their vulnerability in getting necessary things, and prone to take a loan from informal lenders or sell out h/h assets. Aleya Begum and Lutfunnesa's observation is significant to take a note here who was from Hasannagar, Sunamganj. They said: "During the flash flood, we had to borrow at a higher interest rate. Interest rate grows with our insufficiency and it reduces when we are better off." Another comment made by Selina Begum of Kurutala, Sunamganj also noteworthy: "*Mohajons* (local moneylenders) always wait for us to get in some kind of trouble. Once we are in trouble, they come forward and lend us the money by themselves. Later, they realise the lending amount with a very high rate of interest."

3.6 Details related to shelter: Table9 depicts the shelter status of the respondents. It made known that most of the houses the respondents have were tin (corrugated CI sheet) roofed followed by thatched roofed, and none of their houses were either tiled or asbestos-roofed. It shows that 443 h/h or 88.6 percent of the respondents had tin-roof house at the time of disaster and none of them suffered and damage. However, 53 h/h or 10.6 percent of them had thatched roof, and presently, 39 h/h or 7.8 percent have the same, and the rest were lost in disaster. Only one of them had a RCC roofed house and that remained the same as it was. Two of them had other type of roof at the time of disaster, and presently 14 of them have that type of roofed house. It is likely the case that the thatched roof houses were converted to this type, esp., polythene-wrapped roofed houses. It was also revealed from Table9 that while 12 houses had cemented wall at the time of disaster, now it stood to 20 houses, that means, a rise in cemented wall type from 2.4 percent to 4 percent after disaster. However, majority of the wall type was ‘temporary’, 230 in number, 46 percent of the total 500 houses, and the number slide down to 228 (45.6 percent) after disaster. Wall made of ‘other materials’ was 169 in number, and that stood to 175 after disaster. Mud-packed walled houses were 17.8 percent at the time of disaster, and now that type of houses declined to 13.8 percent, thanks to the floods of storms that washed, or taken them away. In Bangladesh, most of the houses in flood or storm prone areas have ‘temporary’ or ‘other type’ of walled house, and that means they are made of bamboo canes, paper, leaves, or even polythene. The tin-roofed houses are built on bamboo or wooden structures, and the entire structure can be dismantled within hours.

Table9 Details related to shelter

	At the time of disaster		Present status	
Roof type	No. of Households	Percentage	No. of Households	Percentage
Reinforced concrete cemented (RCC)	1	0.2	1	0.2
Tiled	0	0	0	0
Asbestos	0	0	0	0
Thatched	53	10.6	39	7.8
Tin	443	88.6	443	88.6
Other materials	2	0.4	14	2.8
Wall type				
Cemented	12	2.4	20	4
Mud	89	17.8	69	13.8
Stone	0	0	0	0
Temporary	230	46	228	45.6
Other materials	169	33.8	175	35

3.7 Housing at pre and post disaster situation: The study revealed that 482 or 96.4 percent of the respondents owned their houses having legal ownership, only 2 of them lived in a rented house, and 5 in leased housed. However, 7 of the respondents, or 1.4 percent of the total sample lived on encroached site, while 2 lived in a shelter provided by the government. The study also revealed that percentage of houses with partial damage was 62.8 percent (314 out of 500), 21.2 percent houses (106) completely damaged, and 79 house (or 15.8 percent of the total houses) didn’t suffer any damage. Out of 421 houses that were fully or partially damaged, 121 or 29 percent of h/h stayed in their houses and house condition was good. 163 or 39 percent h/h stayed in their houses but the house condition was bad and could not go out of rescue, 145 or 34 percent of the h/h members stayed in common shelter (closed roof), and 4 of them (1 percent) stayed in open field/tent. Percentage of h/h members stayed at friends and relative’s houses was 15 percent (65 h/h), and percentage of h/h who got support for stay immediately after the disaster from government 14.73 percent (62 h/h). 66 of them got support from MFIs, 4 of the h/h got NGO support, 18.76 percent or 79 h/h got support from local community /philanthropists for their shelter, and none from banks. Majority of them, 54.87 percent or 231 households got support from other sources. 41 of them or 9.74 percent didn’t get any support

Percentage of house could not be repaired was 23.99 percent (101 out of 421 house that were fully or partially damaged), 322 house or 76.48 percent got repaired, 6.18 percent (26 h/h) constructed /received a new house, 5 of them shifted to rental house, and 3 of them shifted to leased house. Percentage of h/h that got support for repairing of their houses from government was 5.6 percent (28 h/h), 94 from MFI (18.8 percent), 17 from other NGOs/Corporate agencies, 6 percent from local community /philanthropists. 2 households received supports from banks to repair their house. 53.4 percent, or 267 h/h received support from other sources. 48 of them whose houses were fully or partially damaged didn't get any support to repair their houses.

Selina Begum of Kurutala, Sunamganj said: “It has not been possible for us to re-build our dwellings after the flood washed them away.” Shilpi Begum (19) of Sonaimukhi, Kazipur, Sirajganj told**:** “After the flood, houses were broken almost everywhere in the village. But the public representatives swindled the tin allotment as a relief to help us building new houses.” Puranjan Sarkar, the insurance officer of VARD, Sunamganj said: “Everyone lost their house and assets and afterwards some of them were failed to repair their houses. Whoever rebuilt or repair their house had to deal with a severe financial crisis by taking loan.” Ms. Shirin Akter, field staff of SKS, Gaibandah said: “UNDP granted 14 sheets of tin and tl1700 to each of the affected families for reconstructing their houses.” Ms. Aktara Begum, staff of GUK, Gaibandah said: “Necessary assistance is provided for the reconstruction of the dwellings of the affected people.” Dipak Sarkar, the program organizer of BRAC, Borguna said: “In my working area (Fuljhuri branch), BRAC distributed fund of Tk.40,000 to Tk.48,000 among 55 families to reconstruct their fully damaged house and Tk.10,000 for repaying the damaged house partially. Local influential and chairman did not give any kind of relief and did not provide financial assistance or shelter.” Mr. Md. Abul Kalam Azad, Chairman of the Union Parishad, Rangarchor, Sunamganj said: “There were no one to help them in repairing their houses and providing food so they do these on their own.” Ms. Mazeda Begum, Female Member of union Parishad, Kunderpara, Gaibandah said: “As we live in *Char* (shoal) area we don’t have any permanent dwelling.”

3.8 Access to services: The study reveals, and Table10 portrays that 21.4 percent of the h/h said regarding rescue operations, which they termed as immediate and adequate. But a majority of 56.2 percent respondent identified the rescue operations as immediate but not adequate. 14.2 percent said the operations were delayed but adequate, and a nominal 7.8 percent said the rescue operations were both delayed and inadequate. Regarding mobility during disaster, 24.4 h/h said in was immediate and adequate, 57.8 percent said scopes for mobility was immediate but not adequate, 11.6 percent opined it was delayed but adequate, and meagre 6.2 percent of the household expressed their dissatisfaction and coined their scopes for mobility as both delayed and inadequate.

Table10 Access to services

Services	Percentage of households			
	Immediate and adequate	Immediate but not adequate	Delayed but adequate	Delayed and inadequate
Rescue operations	21.4	56.2	14.2	7.8
Mobility	24.4	57.8	11.6	6.2
Communication	15.6	43.6	14.6	25.8
Drinking Water	40	30.8	11.8	11.8
Electricity	2.6	9.8	2.6	16.2
Educational Institutions	1.8	16.8	41.4	36.2
Market	18.2	64.6	10.2	6.8
Revenue / Other govt. Offices	82	6.4	0.2	4

While describing the communication facilities during disasters, 15.6 percent of the h/h said it was immediate and adequate. But a good number of 43.6 percent respondents termed the communication facilities as immediate but not adequate. 14.6 percent said the facilities were delayed but adequate, and a significant 25.8 percent said the rescue operations were both delayed and inadequate. Regarding availability of drinking water the majority 40 percent of the h/h said it was immediate and adequate. But also a good number of 56.2 percent respondent term the facility as immediate but not adequate. Only 11.8 percent said availability of drinking water was delayed but adequate, and the same number of people (11.8 percent) said that availability of water was both delayed and inadequate.

In Bangladesh rural remote villages are poorly covered by electricity, and supply is marred by frequent load-shedding, though 2.6 percent of the h/h said availability of electricity was immediate and adequate. 9.8 percent respondents identified the facility as immediate but not adequate, and a meagre 2.6 percent said the electricity supply was delayed but adequate, and a big chunk of 16.2

percent said the supply of electricity was both delayed and inadequate. However, the study also made known that nearly 70 percent respondent h/h didn't have electricity facility at their homes, during the time of disasters, or presently.

Regarding access to educational institutions, a meagre 1.8 percent of the h/h said it was immediate and adequate, but 16.8 percent respondents term the facility as immediate but not adequate. Majority 41.4 percent said access to educational institutions was delayed but adequate, and a nearly similar number of people, i.e., 36.2 percent of the h/h said that the access was both delayed and inadequate. It is important to note that educational institutions are universally used in Bangladesh as shelters during disasters, and during the crisis period, government declares all the institutions closed.

While describing access to market during disasters, 18.2 percent of the h/h said it was immediate and adequate. But a huge number of 64.6 percent respondents termed the market access facilities as immediate but not adequate. However, 10.2 percent said the facilities were delayed but adequate, and a small number of 6.8 percent people said the rescue operations were both delayed and inadequate. Table10 shows that while asked to describe access to revenue or other government offices during disasters, an overwhelming 82 percent of the h/h said it was immediate and adequate. But a small number of 6.4 percent respondents termed the facilities as immediate but not adequate. A microscopic 0.2 percent respondent said the access to government offices was delayed but adequate, and a meagre 4 percent said the accesses were both delayed and inadequate.

Mrs Papia Ray, Credit Assistant of VARD, Sunamganj said: "In my working area, at the time of disaster no one came to rescue the flood marooned people immediately. The inhabitants rescue themselves and then help others if necessary." Ruhul Amin, Credit Assistant of VARD, Sunamganj said: "Some of the chairman and local representatives rescued people and provided shelter to the flood victims in their own houses. Besides, the flood-marooned people took shelter in school, college and madrasa as well as in the hospital." Shirin Akter, staff of SKS, Gaibandah said: "For continuous and uninterrupted rescue, Oxfam arranged motorboats for 24 hours during the disaster." Mr. Md. Abul Kalam Azad, chairman of the Union Parishad, Rangarchor, Sunamganj said: "After the natural disaster the first rescue and shelter are provided by the neighbours and then by the relatives. No one hopes for the rescue workers or *Shomity* because they didn't ever come to help them at that time. In maximum case the chairman and the member of the union council help them. Even social volunteer have not been here ever."

3.9 Inadequate days for services: Table11 reveals the days of inadequacy during disasters for availing the services. Regarding rescue operation 31.8 percent of the respondents said days of inadequacy was less than a day followed by 31.2 who said it was 1 to 3 days. 14.6 percent opined that rescue operations were delayed by 3 to 7 days, 10.2 percent said the delay was for 7 to 15 days. 11.4 percent however said the days of inadequacy for rescue operation was ever more than 15 days. While 25.4 percent respondents said their mobility was merely restricted by less than a day, a greater number of them (36 percent) said they couldn't move for 1 to 3 days due to disaster. However, while some 16 percent h/h said their mobility were restricted for 3 to 7 days, it was 7 to 15 days for 9.6 percent disaster-affected people. A good number of 12.6 percent of the respondents said their days of inadequacy for mobility were even more than 15 days.

Table11 Inadequate days for services

Services	Percentage inadequate days				
	< 1	1-3	3-7	7-15	>15
Rescue operations	31.80	31.20	14.60	10.20	11.40
Mobility	25.40	36.00	16.00	9.60	12.60
Communication	15.40	30.80	14.40	17.20	21.40
Drinking Water	42.40	20.60	6.40	10.20	14.80
Electricity	1.20	7.20	3.20	5.40	13.80
Educational Institutions	0.40	2.40	10.80	16.40	67.20
Market	35.20	35.20	14.80	3.20	11.20
Revenue / Other govt. Offices	70.00	8.80	5.80	1.00	6.80

Regarding inadequate days for communication services, 15.4 percent of the respondents said days of inadequacy were just less than a day. However, 30.8 percent of h/h said communication was restricted for them for 1 to 3 days. 14.4 percent opined that their inadequacy for communication services were 3 to 7 days, 17.2 percent said that was for 7 to 15 days. 21.4 percent of the responding households however said the days of inadequacy for communication services were more than 15 days for them. Regarding days of inadequacy for having drinking water, 42.4 percent respondents said their inadequacy was merely restricted by less than a day, a good number of them, 20.6 percent, of the total sample however said they couldn't have adequate drinking water for 1 to 3 days due to disaster. However, while some 6.4 percent h/h said they suffered from drinking water inadequacy for 3 to 7 days, it was 7 to 15 days for 10.2 percent disaster-affected people. A good number of 14.8 percent of the respondents said their days of inadequacy for drinking water were even more than 15 days. Regarding inadequate days for electricity, a meagre 1.2 percent of the respondents said days of inadequacy were just less than a day. However, 7.2

percent of h/h said electricity was not available for them for 1 to 3 days. 3.2 percent opined that their inadequacy for electricity services were 3 to 7 days, 5.4 percent said that was for 7 to 15 days. The bulk 13.8 percent of the responding households however said the days of inadequacy for electricity services were more than 15 days for them.

While reporting inadequate days of services for educational institutions, a microscopic 0.4 percent of the respondents said days of inadequacy were less than a day followed by 2.4 percent who said it was 1 to 3 days. 10.8 percent opined that school facility were delayed by 3 to 7 days, 16.4 percent said the delay was for 7 to 15 days. An overwhelming 67.2 percent h/h however said the days of inadequacy for services of educational institutions were more than 15 days. Regarding inadequate days for market, 35.2 percent of the respondents said days of inadequacy were just less than a day. The same number of respondents, 35.2 percent of h/h said market was restricted for them for 1 to 3 days. 14.8 percent opined that their inadequacy for market services were 3 to 7 days, only 3.2 percent said that was for 7 to 15 days. 11.2 percent of the responding households however said the days of inadequacy for access to market were more than 15 days for them.

Table11 presents the days of inadequate services for revenue or other government offices also. It revealed that while 70 percent of the respondents said days of inadequacy were just less than a day, 8.8 percent of h/h said that govt. offices were restricted for them for 1 to 3 days. 5.8 percent opined that the inadequacy for access to govt. offices were 3 to 7 days, only 1 percent said that was for 7 to 15 days. 6.8 percent of the responding households however said the days of inadequacy for access to govt. offices were more than 15 days for them.

3.10 Coping mechanism: Table12 generates data on coping mechanism of disaster-affected households during or after disaster hits communities. It was revealed that regarding rescue operations while 51 percent h/h managed on their own, 47.2 percent of them received support from others, and 1.4 percent respondents reported that they didn't get any support. 50.2 percent managed their mobility on their own while 47.2 percent received support from others, and 1.2 percent didn't get any support. For communication, 56 percent relied on themselves while 43 percent h/h received support from others in managing their communication needs. A meagre 0.6 percent respondent reported having no support in communications. The study also revealed that 56.6 percent of h/h managed their own drinking water needs whereas 34.6 percent of them got support from other in this regard. 2 percent of them, however, didn't get any support to collect drinking water. Regarding electricity, 13.2 percent of the h/h relied on their own supply while 10 percent took help from others in meeting the electricity needs. A minuscule 0.4 percent h/h didn't get any support in managing electricity at home. Regarding access to educational institutions, 59.8 percent h/h reportedly managed that on their own while 25.8 percent h/h took help from others, and 2.2 percent without any support. 64 percent h/h managed to go to the markets on their own while 33 percent of them took help from others to go there. 0.8 percent. 0.8 percent of them were helpless to go to the market, however. For going to the government offices, 52 percent h/h banked on self-help while 19.2 percent got others help. 2.4 percent of them, however, without any sorts of support to go the government offices.

Table12 Coping mechanism

Services	Percentage of households		
	Managed on our own	Received support from others	No support
Rescue operations	51.00	47.20	1.40
Mobility	50.20	45.40	1.20
Communication	56.00	43.00	0.60
Drinking Water	56.60	34.60	2.00
Electricity	13.20	10.00	0.40
Educational Institutions	59.80	25.80	2.20
Market	64.00	33.00	0.80
Revenue / Other govt. Offices	52.00	19.20	2.40

The study revealed that while most of the disaster-hit households, to say, more than 55 percent cope on self-help during disasters, a good number of them, 32 percent or so, cope on others help, and a mere 1.4 percent without any support. This revelation was also supported by FGD findings. Sofeda Begum of Hasannagar, Sunamganj said in this context: “We do not rely or wait for the assistance from outside during the disaster; we help each other to fight the crisis.” Jamila Khatun, Shabjan Begum and Selina Begum of Kurutala, Sunamganj said: “We make ourselves prepared ahead of the disaster. Like- it is decided from before that where to take shelter during the disaster. We try to keep it safe for us as well as for our domestic animals.” Ms. Fatema Begum of Morelganj, Bagerhat said: “There were no voluntary approaches for any kind of rescue activities in this area. We had to arrange all our basic needs like food, clothes, accommodation by ourselves as there were no one to look after us.” Ms Zahura and Ms. Rayhana Begum, Char Gobindi, Gaibandah said: “The training that we obtain through SKS plays a big role of securing ourselves from any disaster. “

3.11 Sources of support: While the study wanted to know the sources of support that the disaster-hit community people got regarding their rescue, mobility, or in managing drinking water or medicine etc, it was made know that 10.8 percent of the h/h said regarding rescue operations, they got support from the government, 24.6 percent from MFIs, 9.8 percent from NGOs, 15.4 percent from local community or philanthropists, none for banks, and a majority of 39.8 percent said they were rescued by others not mentioned in the Table13. Regarding mobility, 10.4 percent respondent said they've got support from the government agencies, 25 percent from MFIs they're involved with, 9.6 percent from other NGOs, 15.8 percent from local people and philanthropists, none from banks, and 39.8 percent said they got the support for mobility from other sources. Regarding communication support 5.8 percent of the h/h said they got support from the government, 18.2 percent from MFIs, 7.2 percent from NGOs, 22.6 percent from local community or philanthropists, none for banks, and a majority of 46.4 percent said they were rescued by others not mentioned in the Table13.

Table13 sources of support

Services	Percentage of households					
	Government	SHG/ MFI	NGOs / Corporate agencies	Local community /philanthropists	Banks	Others
Rescue operations	10.80	24.60	9.80	15.40	-	39.80
Mobility	10.40	25.00	9.60	15.80	-	39.80
Communication	5.80	18.20	7.20	22.60	-	46.40
Drinking Water	3.20	14.80	14.40	15.60	-	46.20
Electricity	5.20	-	2.60	3.00	-	20.40
Educational Institutions	23.80	6.00	2.40	6.20	-	58.20
Market	2.20	4.80	5.00	30.40	0.80	56.80
Revenue / Other govt. Offices	30.60	0.40	1.80	0.40	-	57.40

Regarding managing drinking water, a minuscule 3.2 percent respondent said they've got support from the government agencies, 14.8 percent from MFIs they're involved with, 14.4 percent from other NGOs, 15.6 percent from local people and philanthropists, none from banks, and a majority 46.2 percent said they got the support for managing drinking water from other sources. Regarding making electricity available 5.2 percent of the h/h said they got support from the government, none from MFIs, 2.6 percent from NGOs, 3 percent from local community or philanthropists, none from banks, and a majority of 20.4 percent said they were supported in managing electricity available by other groups not mentioned in the Table13. Regarding having access to educational institutions, 23.6 percent respondent said they've got support from the government agencies, 6 percent from MFIs they're involved with, 2.4 percent from other NGOs, 6.2 percent from local people and philanthropists, none from banks, and an overwhelming majority of 58.2 percent said they got the support for managing drinking water from other sources.

Regarding having access to market, a meagre 2.2 percent respondent said they've got support from the government agencies, nearly similar 4.8 percent from MFIs they're involved with, minimal 5 percent from other NGOs, majority 30.4 percent from local people and philanthropists, a minuscule 0.8 percent from banks, and an overwhelming number of 56.8 percent said they got the support for getting access to market from other sources. Regarding having access to government offices, a good number of 30.6 percent respondent said they've got support from the relevant government agencies, a microscopic 0.4 percent from MFIs they're involved with, unimpressive 1.8 percent from other NGOs, minuscule 0.4 percent from local people and philanthropists, none from banks, and a majority 57.4 percent said they got the support for managing drinking water from other sources. What the Table13 generates data confirms that during disasters community people help themselves, and the role played by the government agencies or MFIs or NGOs were unimpressive.

We can retort to our qualitative findings to support the data the quantitative survey generated. During the FGDs, Ms. Monoara Begum of Kunderpara, Gaibandah said: "Chairman or member provides tins and other necessary things to repair the damaged houses. They ensure people's instant move to the shelter places. Sometimes they give shelter at their own house. Moreover they provide dry food and clothes to the affected people. A group of volunteer is always retained in the affected area constantly." Participants in Abela, Bagerhat said: "Most of the village people try to solve their problems by themselves. They face the disaster according to the situation. Many women save money and food for the hard times through which she helps herself as well as the others during the period of disaster." Ms. Kohinoor Begum and Ms. Fakir Banu, Morelganj, Bagerhat said: "The members of the *Shomity* are very helpful towards each other. Like if any one is out of food then the other members manage food for her. If anyone fails to replay the instalment then others help out to arrange the money. They are very cordial with each other. But we don't have any contribution regarding the other problems beside these." Abul Kalam Azad, Area Manager, Sirajganj Area, TMSS said: Erosion of the river *Jamuna* and floods in every year have made the poor people even poorer. Yet, they try to fight back for their lives. One member tries to help another by any means; no matter how severe the problem is.

3.12 Credit provision

3.12.1 Credit provision at the time or after disaster: Table14 generates data regarding credit provision within communities at the time or after disasters. It was made known that except for MFI or local moneylenders involvement, no financial institutions like commercial banks, cooperative banks or chit fund agencies gives loans to people in need. Table14 revealed that MFIs provides credit to 56.4 percent of the h/h at the time of disaster, and 47.6 takes credit after the disaster from the MFIs. Average amount of loan outstanding at the time of disaster was Tk.8,979 per h/h, and the amount was Tk.8,914 after disaster. While the average amount of annual interest at the time of disaster was reportedly 17 percent (flat), it stood to 19 percent after the disasters.

Table14 Credit provision at the time or after disaster

Financial Institutions	Percentage of households		Average amount of loan o/s		Average annual interest rate	
	At the time of disaster	After disaster	At the time of disaster	After disaster	At the time of disaster	After disaster
Commercial banks	-	-	-	-	-	-
Cooperative banks	-	-	-	-	-	-
Chits funds agency	-	-	-	-	-	-
SHG/MFI group	56.40	47.60	8,979	8,914	17	19
Local money lenders with collateral	0.20	-	5,000	-	20[5]	-
Local money lenders without collateral	-	-	-	-	-	-
Village / Agricultural / fish traders	-	-	-	-	-	-
Friends and relatives with interest	-	-	-	-	-	-
Others	-	-	-	-	-	-

Though the local moneylenders penetration and outreach in terms of depth and breadth is very nominal in providing credit to the community people, it was learnt that a microscopic 0.2 percent h/h took loan from them during disaster only, and the average amount was Tk.5,000. However, the interest rate was exorbitantly high, 20 percent per month.

[5] Monthly interest rate

FGD participants of Chhalavara, Maizbari, Kazipur, Sirajganj said: “Before the disaster, they provided loans at 45 weekly instalments. One had to deposit tk20 every week. If, however, savings were at 20 percent of the loan amount sought, one could then get a loan. The interest from these loans was 15 (flat, APR). Most of the loans were sanctioned before the harvest and no loans were given during the flood. Instalments were brought to a close for 4 months during the disaster. After the disaster, the NGOs had decreased the amount of loan, as most of the borrowers had not completed their instalments. According to the rule of the NGOs, if the loan taken is not completely repaid, re-loan is not allowed. “At present, we get tk5000 of loan facilities upon a deposit of tk.1000. The interest rate of the *shomity* has not changed in pre-disaster period, during disaster or even after the disaster. But after the disaster, *shomity* issued some interest free loans but that is not available to everybody.”- Said Ms. Morsheda Begum, Ms. Shiuli Begum, Ms. Mozila Begum, Ms. Amicha Begum and Ms. Anowara Begum of Char Gobindi, Gaibandah. “Interest rate was never changed during the disaster or even after that. Though no loans were offered during the flood, they considered our instalment payments for 3 months. We might not be able to pay the instalments followed by the loans during flood/sidr and that’s why *Shomity* didn’t offer any,” Ms. Halima Begum and Ms. Hasina Begum of Patakata, Barguna.

“These people (*mohajon*) always wait for us to get in some kind of trouble. Once we are in trouble, they come forward and lend us the money by themselves. Later, they realise the lending amount with a very high rate of interest,” says Shuktara of Sadargarh, Sunamganj about the local moneylenders. Aleya Begum and Lutfunnesa of Hasannagar, Sunamganj Said: “During the flash flood, we had to borrow at a higher interest rate. Interest rate grows with our insufficiency and it reduces when we are better off.” FGD participants from Maizbai, Kazipur, Sirajganj said: “As the NGOs give out loans at smooth/flexible conditions, the number of borrowers is decreasing day by day and consequently, the *mohajon*i system is becoming less important. However, the rate of interest the *mohajons* are charging has been doubled. This has happened due to the fact that, some wants to get an immediate loan avoiding the rules of the NGOs. Even if they get the desired amount of loan they would be still paying at a higher interest rate, 20 percent per month, at least. Some even pays tk10 per day.” Ms. Nazma Aktar, Morelganj, Bagerhat said: “The number of local money lenders (*mohajon*) has decreased in the last 3 years as various micro finance institutes started their programmes in our area. Nevertheless people go for the *mohajoni* loan when the institutional services are not available at the time of emergency. *mohajoni* loan costs a higher interest rate of about 10 to 25 percent (per month).”

3.12.2 Loan purposes at the time of disaster: Table15 builds on to show the loan purposes at the time of disaster, and the principal providers of loans in Bangladesh. As it was revealed by Table14, It was exposed that except for MFI or local moneylenders, no financial institutions like commercial banks, cooperative banks or chit fund agencies gives loans to people in need. This statement made by a woman during FGD could be instrumental to understand the situation better. “Even who are familiar with the rules of the bank loan, don’t go for any loan because the bank regulations harass them a lot. Like they keep land documents as security to acquire the loan. This process is out of our reach and that’s why we don’t even inspire others to go for a bank loan,” said Monoara Begum, Kuderpara, Gaibandah.

However, it was revealed from the Table5 that a mere 1.4 percent households takes loans from MFIs for consumption, a meagre 1 percent for meeting health expenses, 5.8 percent for house repair, 2.4 percent for repairing income generating assets, and a bulk of them, 42.6 percent taken loan during disaster for running income generating activities.

Table15 Loan purposes at the time of disaster

Purpose	Percentage of households								
	Commercial banks	Cooperative banks	Chits funds agency	SHG /MFI group	money lenders with	Local money lenders without collateral	Village / Agricultural / fish traders	and relatives with	Others
Own consumption	-	-	-	1.40	-	-	-	-	-
Health expenses	-	-	-	1.00	-	-	-	-	-
House repair	-	-	-	5.80	-	-	-	-	-
Education	-	-	-	-	-	-	-	-	-
Repair of income generating assets	-	-	-	2.40	-	-	-	-	-
Income generating activities	-	-	-	42.60	-	-	-	-	-
Asset purchase	-	-	-	1.20	-	-	-	-	-
Life cycle events	-	-	-	1.20	-	-	-	-	-
Dept redemption	-	-	-	0.20	-	-	-	-	-
Festivals and social obligation	-	-	-	-	-	-	-	-	-
Other purposes	-	-	-	-	0.20	-	-	-	-

A meagre 1.2 percent takes loans from MFIs for asset purchase, a similar number of h/h takes loan for life cycle events, and a minuscule 0.2 percent for debt redemption. On the other hand some 0.2 percent of h/h takes loan from local moneylenders for ‘other purposes’.

3.12.3 Loan purposes as on date: Table16 builds on to show the loan purposes at present, i.e., during the time of the surveys (June 2008), and the principal providers of loans in Bangladesh. As it was revealed by other tables (Table14 & 15), It was known that except for MFI or local moneylenders, no financial institutions like commercial banks, cooperative banks or chit fund agencies etc gives loans to people now. However, the study revealed that a meagre 1 percent household takes loans from MFIs for consumption, a minuscule 0.4 percent for meeting health expenses, 5.8 percent for house repair, 1 percent for repairing income generating assets, and a good number of them, 38 percent takes loan at present for running income generating activities.

Table16 Loan purposes as on date

Purpose	Percentage of households								
	Commercial banks	Cooperative banks	Chits funds agency	SHG/MFI group	Local money lenders with collateral	Local money lenders without collateral	Village / Agricultural / fish traders	Friends and relatives with interest	Others
Own consumption	-	-	-	1.00	-	-	-	-	-
Health expenses	-	-	-	0.40	-	-	-	-	-
House repair	-	-	-	5.80	-	-	-	-	-
Education	-	-	-	-	-	-	-	-	-
Repair of income generating assets	-	-	-	1.00	-	-	-	-	-
Income generating activities	-	-	-	38.00	-	-	-	-	-
Asset purchase	-	-	-	1.00	-	-	-	-	-
Life cycle events	-	-	-	0.20	-	-	-	-	-
Dept redemption	-	-	-	-	-	-	-	-	-
Festivals and social obligation	-	-	-	-	-	-	-	-	-
Other purposes	-	-	-	-	-	-	-	-	-

Some meagre 1 percent takes loans from MFIs for asset purchase, and minuscule number of h/h takes loan for life cycle events, and a minuscule 0.2 percent for debt redemption. On the other hand some 0.2 percent of h/h takes loan from local moneylenders for 'other purposes.' It is to be noted here that except for MFIs or local moneylenders, no financial institutions like commercial banks, cooperative banks or chit fund agencies gives loans to people in Bangladesh.

3.12.4 Repayment of the loan at the time of disaster: Table 17 revealed that 48.8 percent borrowers of loans from the MFIs chose to repay the loan by weekly instalments at the time of disasters. It is also the dominating practice over here. A few, say 2 percent of the sample h/h have the opportunity to repay their loan instalments monthly. However, 5.2 percent of the h/h said they have the opportunity to repay their loans yearly. A seasonal loan after disaster is widely practiced now in Bangladesh, and this data maybe the reflection of the same. Repayment schedule for moneylenders were monthly, as it was documented elsewhere, and 0.2 percent of the respondents told. It is to be noted here that except for MFIs or local moneylenders, no financial institutions like commercial banks, cooperative banks or chit fund agencies gives loans to people.

Table17 Repayment of the loan at the time of disaster

Repayment	Percentage of households								
	Commercial banks	Cooperative banks	Chits funds agency	SHG/MFI group	Local money lenders with collateral	Local money lenders without collateral	Village / Agricultural / fish traders	Friends and relatives with interest	Others
Daily	-	-	-	-	-	-	-	-	-
Weekly	-	-	-	48.80	-	-	-	-	-
Monthly	-	-	-	2.00	0.20	-	-	-	-
Annually	-	-	-	5.20	-	-	-	-	-

3.12.5 Repayment of the loan as on date: Table18 revealed the present practice (as on June 2008) that a small 0.2 percent of the h/h who took loans from the MFIs repaying by daily instalments. But the normal practice over here is to make weekly instalment, and 41.4 percent of the loanees repaying as such. There is no repaying opportunity monthly however, as reported by the borrowers. 5.8 percent of the h/h however repaying by annual instalments. It is to be noted here that except for MFIs, no financial institutions like commercial banks, cooperative banks or chit fund agencies gives loans to h/h during normal time. However, at the time of disaster, moneylenders get in.

Table18 Repayment of the loan as on date

Repayment	Percentage of households								
	Commercial banks	Cooperative banks	Chits funds agency	SHG/MFI group	Local money lenders with collateral	Local money lenders without collateral	Village / Agricultural / fish traders	Friends and relatives with interest	Others
Daily	-	-	-	0.20	-	-	-	-	-
Weekly	-	-	-	41.40	-	-	-	-	-
Monthly	-	-	-	-	-	-	-	-	-
Annually	-	-	-	5.80	-	-	-	-	-

3.12.6 Change in repayment terms at the time of disaster: Table19 shows the change in repayment terms at the time of disasters. It was exposed that a mere 1.8 percent households reportedly told that the change came in the reduction of interest rate. Here this observation came from the FGD participants in Char Gobindi, Gaibandah is worth mentioning. "At present, we get Tk.5,000 of loan facilities upon a deposit of Tk.1,000. The interest rate of the *shomity* (MFI)has not changed in pre-disaster period, during disaster or even after the disaster. But after the disaster, *shomity* (MFI) issued some interest free loans but that is not available to everybody," said Morsheda Begum, Shiuli Begum, Mozila Begum, Amicha Begum and Anowara Begum. "12.5 percent interest rate is charged by the *Shomity* (MFI). Nevertheless this remains unchanged during or after the disaster," said Ambiya Begum, Badarpur, Barguna. Rawshana Begum and Shilpi Begum of Patakata, Barguna said: "We are concerned of bank loans but it requires our land documents in order to receive those loans. From where will we obtain these documents? We always look for the place from where we can receive loans at a flat condition. Like *Shomity* (MFI) offers loans at a low interest and we can easily repay the loan through weekly instalments. Moreover their time limit turns out to be flexible one during our hard times.

However, Table19 revealed that a minuscule 0.8 percent reported reduction or waif off in interest outstanding, a meagre 2.8 percent told their loan outstanding was waif off (principal and interest), and the majority 29.2 percent reported increase in repayment period. However, a microscopic 0.4 reported reduction in repayment period. A good number of 21.2 percent reported other changes in repayment. On the other hand some 0.2 percent of h/h takes loan from local moneylenders for 'other purposes'. It is to be noted here that except for MFIs or local moneylenders, no financial institutions like commercial banks, cooperative banks or chit fund agencies gives loans to people in Bangladesh during disasters.

Table19 Change in repayment terms at the time of disaster

Change in repayment terms	Percentage of households								
	Commercial banks	Cooperative banks	Chits funds agency	SHG/MFI group	Local money lenders with collateral	Local money lenders without collateral	Village / Agricultural / fish traders	Friends and relatives with interest	Others
Reduction in interest rate	-	-	-	1.80	-	-	-	-	-
Increase in interest rate	-	-	-	-	-	-	-	-	-
Reduction/waif off in interest outstanding	-	-	-	0.80	-	-	-	-	-
Waif off of the loan (principal and interest)	-	-	-	2.80	-	-	-	-	-
Increase in repayment period	-	-	-	29.20	-	-	-	-	-
Reduction in repayment period	-	-	-	0.40	-	-	-	-	-
Other changes in repayment	-	-	-	21.20	0.20	-	-	-	-

3.12.7 Change in repayment terms as on date: Table20 shows the change in repayment terms at present, i.e., at the time of generating data, during June 2008. It was exposed that a minuscule 0.2 percent households reportedly told that the change came in the reduction of interest rate. However the same percentage of respondents reported opposite by saying the interest rates increases. There had been no reported reduction or waif off in interest outstanding. However, a meagre 1 percent h/h told their loan outstanding was waif off (principal and interest). A good number of 9 percent respondents reported increase in repayment period, and nobody reported reduction in repayment period. The majority 34.2 percent reported other changes in repayment. It is to be noted here that except for MFIs, neither financial institutions like commercial banks, cooperative banks or chit fund agencies gives loans to people in Bangladesh during normal time nor potential client run behind them for their complex lending procedure. Here a comment of a local elected leader is important to note. Mr. Md. Abul Kalam Azad, Union Parishad Chairman, Rangarchor Union, Sunamganj said: “In my locality some NGOs like ASA, Grameen Bank, BRAC and VARD provide a huge amount of loan than any other formal banking system.”

Table20 Change in repayment terms as on date

Change in repayment terms	Percentage of households								
	Commercial banks	Cooperative banks	Chits funds agency	SHG/MFI group	Local money lenders with collateral	Local money lenders without collateral	Village / Agricultural / fish traders	Friends and relatives with interest	Others
Reduction in interest rate	-	-	-	0.20	-	-	-	-	-
Increase in interest rate	-	-	-	0.20	-	-	-	-	-
Reduction/waif off in interest outstanding	-	-	-	-	-	-	-	-	-
Waif off of the loan (principal and interest)	-	-	-	1.00	-	-	-	-	-
Increase in repayment period	-	-	-	9.00	-	-	-	-	-
Reduction in repayment period	-	-	-	-	-	-	-	-	-
Other changes in repayment	-	-	-	34.20	-	-	-	-	-

4. Conclusions and recommendations: Bangladesh government and other actors can enhance the adoption of preventive measures against natural disasters at the micro-level. Given that asset-based self-insurance mechanisms seems insufficient for most households, the alternative courses of action should be devised to provide households with safer assets and/or to avoid asset-based risk management strategies and focus on the provision of credit for productive purposes, and possibly, suitable asset-based insurance products. MFIs can assist their clients long before a natural disaster strikes and continue long after the event has passed. Pre-disaster activities would include adapting current lending and compulsory savings products such as house building loans; leasing assets as well as insurance and voluntary savings and non-financial services such as training for disasters.

To date, in Bangladesh, a few MFIs have taken the path of disaster risk reduction (DRR) or preparedness activities or products. Though most of them focused on grant-based relief operation, they started to show change attitude to suit their microfinance products that could help borrowers during disasters, and can get rid of local moneylenders. On the financial side, loans to encourage diversification into disaster-proof activities or safer housing are in the offing. Other products, which include efforts to link loan clients to institutions that can provide voluntary savings or remittances, are also in the pipeline. Bangladesh has shown that lines of credit and remittance services are now appearing in the microfinance world here. The most comprehensive efforts to help clients in risk reduction and mitigation activities have taken place in Bangladesh. In fact, Bangladeshi MFIs have led the industry in insurance, credit, and savings services, and have also taken the lead in loans for disaster-proof housing, as well as in small emergency loans and larger asset replacement loans.

Emergency relief in the immediate aftermath as well as recovery efforts or long-term post-disaster rehabilitation would comprise carrying out rapid portfolio reviews; restructuring and writing-off loans; switching from group-based liability to individual liability during the disaster; providing emergency loans; allowing withdrawal of forced savings; modifying loan product terms; and providing non-financial emergency services. Yet again, in terms of disaster response, only a few of the larger, better-capitalised MFIs might have been able to match their post-disaster services to the preferred coping mechanisms this study made known, and recommended. Specifically, MFIs have to provide their clients more with post-disaster savings and loan services making them less likely to resort to distress sales of assets after disaster strikes, or forced to go to the local moneylenders for their livelihood needs. Unfortunately, very few Bangladeshi MFIs, many of them are known to be the best managed MFIs in the world, have the institutional structure or capital base required to provide these services. For small or medium organisations, microfinance remains primarily a credit-based activity and most institutions are undercapitalized usually to allow maximum possible lending reach.

It is recommended that providing households with more and better assets in terms of their divisibility and value-holding properties like livestock in times of stress should help them to deal better with natural disasters. The best possible alternative for households to adopt assets insensitive to price and survival risks, i.e., livestock brought about by disaster shocks are low-cost saving accounts. This financial asset is highly divisible and could maintain a fixed value and positive returns all at once during a disaster for instance. Savings can allow households to avoid borrowing from moneylenders that could charge high interest rates when emergency funds are needed and can be especially valuable during a crisis. However, replenishing these savings proved challenging. This study recommends providing clients enough time to re-deposit their savings.

The study recommends promotion of savings for precautionary purposes against disaster shocks in general. Clients know that larger savings deposits mean access to larger loans. Therefore, most saving instruments still appear to be mostly used as means for developing reputation and commitment for accessing microcredit. Some of the keys to success of savings programmes rest in the provision of long-term security and convenience, hedge against inflation, minimizing costs, and re-lending deposits safely but profitably.

An alternative route to limit the asset-based risk management strategies of households is to provide access to credit. This seems a more convenient and widespread mechanism to help the poor protect themselves. Households use loans in a number of ways. One way is the asset-creation associated with a series of loan-financed investments. A household who has taken several loans would typically have focused its asset building on the creation or expansion of one or more income-earning assets and would also have invested in improving housing conditions. Another could be to smooth income flows rather than consumption. In the areas that affected by disaster frequently, this could occur through the creation of non-farm sources of income as well as by saving part of the loan disbursed for the disaster season. This could have both direct and indirect effects on the household's resilience against natural calamities. The accumulation of assets and income could lead to an increase in savings as well allow some employment diversification reducing the exposure to risk.

The revealed preference for savings and especially microcredit as the main engine for accumulating assets as a way to diversify economic activities and exposure to risks rather than for consumption smoothing purposes reaffirms the fact that policy responses should give priority to disaster risk reduction strategies over coping. An additional measure that could strengthen the effectiveness of microcredit is to put more emphasis on savings combine with disaster or asset insurance products. The linkage of credit with these kind of proposed insurance products would allow households not to take out loans to cope with transitory emergencies, but to accumulate productive assets that could be destined to income-mitigating activities without having to worry about short-term needs. Simultaneously, as disaster risk poses a risk to the operation of MFIs the provision of disaster insurance could guarantee loan repayments by poor households. The study proposes a minimal percent of savings balance is to be annually transferred to a fund that will pay twice the amount of the savings deposit in the case of property damage due to disasters, while savings stay intact.

The study recommends that microfinance, as has been played in Bangladesh, could play a greater role in large-scale disasters by offering emergency loans, housing loans and asset replacement loans; by allowing loan forgiveness/ rescheduling in the areas affected by disasters, better targeting of relief programmes through established microfinance networks, better flow of information among the clients of MFIs, and through the empowerment of women and their capacity to build social capital. But the main challenges for microfinance remain the potentially high transaction costs that could arise from reaching disaster-prone areas with low population densities and targeting poorer families with non-diversified income sources.

Insurance products alone or linked to credit can allow households to adopt higher-return activities and thus reduce their exposure to risk. However, this study didn't find any hard evidence in this respect though during the FGDs women show their interest to be under cover of insurance products. The scopes for disaster insurance is still very limited, and there is no clear evidence of the relationship between microinsurance and shifts to higher risk, higher-yield activities either through bundling insurance with credit loans or standing alone. It has been assumed that although disaster insurance might not be fully conceived a mitigation strategy, a well-designed insurance programme could be promoted. But the programme should fully equate premiums to risk, and should not offer reduced premiums based on the adoption of preventive measures or collect any extra-premiums for a risk-mitigation fund. Obviously, for poor segments of the population the additional administrative costs involved would make disaster-insurance inaccessible, even if there is a demand. I recommend to test whether such instruments can help to reduce the vulnerability and risk-exposure of households through their inbuilt incentives.

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6. List of interviews

1. Bangladeshi Rural Advancement Committee (BRAC). Senior management: Shabbir Ahmed Chowdhury, Director Microfinance; Mohammad Shajahan, Programme Coordinator, Disaster Management Department. BRAC Centre, 75 Mohakhali C/A. Dhaka 1212, Bangladesh. Field staff: Dipak Sarkar & Nikhil Chandra, Programme Organizer (microfinance), Fuljhuri Branch. BRAC Barguna.

2. Community Development Centre (CODEC). Senior Management: Saifullah, District Coordinator, Bagerhat and Khulna; Shankar Kumar Biswas, Program Manager, Bagerhat Programme; Morshed Alam, Credit Manager. Field staff: Sheikh Abdul Amin and Azhar Ali Molla, Programme Organizer (Microcredit), Doibagghati Branch, Morelgonj, Bagerhat.

3. Grameen Bank. Dipal Chandra Barua, Deputy Managing Director. Grameen Bank Complex, Mirpur 2, Dhaka, Bangladesh 1216.

4. Gono Unnayan Kendra (GUK) Field staff: Aktara Begum, Credit Assistant, GUK, Kunder Para, Gaibandha.

5. Samaj Kalyan Sangstha (SKS). Field staff: Shirin Akter, Development Associate, Char Gobindi Branch, Shaghata, Gaibandha, Samaj Kallyan Sangstha.

6. Tengamara Mohila Sabuj Sangha (TMSS). Senior Management: Fazlul Haque Majumder, Director, Executive Secretariat; M Nazmul Islam, Assistant Director, Executive Secretariat and Disaster Management, TMSS Head Office Bijoynagar, Dhaka, Bangladesh 1000.

7. Village Assistance for Rural Development (VARD). Senior Management: Dr. Abdullah Al Mamun, Administrator, VARD Sunamganj; Javed Ali, Project Manger. Field staff: Papia Ray and Ruhul Amin, Credit assistant, VARD Branch office, Hasannagar, Sunamganj;

8. Palli Karma-Sahayak Foundation (PKSF). Md. Fazlul Kader, General Manager. PKSF Bhaban, Agargaon, Dhaka, Bangladesh 1205.

9. Ministry of Food and Disaster Management, Government of Bangladesh: Mohsena Ferdausi, Joint Secretary, Bangladesh Secretariat, Ramna, Dhaka 1000.

7. Attachments

Attachment 5.1: Background Paper

Role of Microfinance Tools in Disaster Management: A Study in India, Bangladesh and Sri Lanka

1. Background

The current scenario in the world witnesses a paradigm shift in disaster response from relief and rehabilitation to disaster management and risk reduction through prevention, preparedness and mitigation approach. Restoring the situation alone will not be sufficient and hence warrants for addressing continuing vulnerabilities. This further strengthens actions to promote disaster risk reduction as a prime developmental issue.

Social security measures especially to reduce the disaster risk and vulnerabilities are increasingly seen as an integral part of the development process. It is both a concept as well as a system. It represents basically a system of protection of individuals who are in need of such protection by the state as an agent of the society. State has an important mandate to harmonize such differences through a protective cover to the poor, the weak, the deprived and the disadvantaged. Coastal communities, particularly the fisher communities, who are vulnerable to natural disaster like cyclone, flood, tsunami etc, have long been under the protective cover of the welfare programmes of the state. In recent years, it is being perceived that microfinance and micro insurance as parts of social security measures have greater potential, to reduce disaster risk and vulnerabilities of disaster prone communities.

The provision of micro finance services like savings and credit to the poor is well recognized as an effective instrument to address poverty. However, the poor face many risks or shocks, which make them vulnerable, despite access to savings and credit services through microfinance. Poverty is not only a state of deprivation but also a state of vulnerability. Poverty and vulnerability are closely related. The sources of risk include expensive illness, death of a breadwinner, natural calamities (flood, drought, animal diseases, crop failure, etc.), the need to meet customary obligations (weddings, funerals), political instability, communal riots and market shocks, etc. The coping mechanisms against such crisis lead the poor into a situation of further debt and impoverishment. Insurance services extend the coping capacity of the poor to a next level of leverage complementing the role of savings and credit in addressing their poverty and vulnerabilities.
In the Indian context, the existing micro insurance schemes by the mainstream service providers do not adequately address the needs of the client system; so is the case with Bangladesh and Sri Lanka. The concept of mutuality is well expressed and established in many of the community based microfinance operations. Many experiments in the field have proven the feasibility of applying the concept of mutuality in delivering micro insurance services to the poor. In such cases they become purely member owned, controlled and managed and hence provide a greater flexibility to the members in terms of products and services.

With this background, the proposed study focuses on the relevance of microfinance and micro insurance tools in providing social security to the disaster prone areas of India, Bangladesh and Sri Lanka for disaster management. Mapping the vulnerabilities of the disaster prone communities, investigating how they cope with such vulnerabilities, the present indigenous and other social security mechanisms, the reach and relevance of micro insurance products / packages available for them and the scope for promotion of micro insurance mutual integrating with the microfinance services will also be included in the study. Moreover, the role of NGOs, insurance sector, government, and donor for innovative micro insurance partnerships would be focused as part of this study.

2. Definitions

Risk: Risk as a condition of the real world in which there is an exposure to adversity. More specifically risk is a condition in which there is a possibility of an adverse deviation from a desired outcome that is expected or hope so far. (Vaughan & Vaughan, 2003)

Vulnerability: The characteristics of a person or group and their situation that influence their capacity to anticipate cope with and recover from the impact of a hazard. (Blaikie et al, 1994)

Disaster: Any occurrence that causes damage, ecological disruption, loss of human life, deterioration of health and health services, on a scale sufficient to warrant an extraordinary response from outside the affected community or area. (WHO)

Micro Finance (MF): Providing financial assistance to an individual or an eligible client, either directly or through a group mechanism for: an amount, not exceeding rupees fifty thousand in aggregate per individual, for small and tiny enterprise, agriculture, allied activities (including for consumption purposes of such individual) or An amount not exceeding rupees one lakh fifty thousand in aggregate per individual for housing purposes, or Such other amounts, for any of the purposes mentioned at items (i) and (ii) above or other purposes, as may be prescribed. (Proposed Microfinance services regulatory bill, India)
Micro Insurance (MI): Micro insurance is the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved. Low-income people can use micro insurance, where it is available, as one of several tools (specifically designed for this market in terms of premiums, terms, coverage, and delivery) to manage their risks.

Social Security: Social security primarily refers to social welfare service (such as food, clothing, shelter, education and medical care) concerned with social protection, or protection against socially recognized conditions, including poverty, old age, disability, unemployment and others.

3. Objectives

The over all aims of the Study are to (1) find out the impact of micro finance and micro insurance tools in reducing disaster risk and facilitating post disaster recovery, (2) Make policy and product recommendations for enhancing the potential of MF & MI for disaster risk reduction. Based on these two aims the objectives of this proposed research study were framed as:

- Map disaster risk, livelihood vulnerabilities and financial coping strategies of communities in hazard prone areas.
- Understand the available social security mechanisms and how did they contribute to recovery in the aftermath of recent disasters
- Study the contribution of Micro finance and Micro Insurance as social security mechanisms.
- Analyze existing Government policies on communities based Micro finance and Micro Insurance
- Make policy and product recommendations including reinsurance mechanisms for making MF & MI effective tools for disaster recovery and risk reduction.

4 Variable Matrixes

No	Objective	Research Questions	Indicator
1.	Map disaster risk, livelihood vulnerabilities of communities in hazard prone areas	1.1. What are the types of disasters faced and their extent 1.2. How do the disasters impact households, livelihoods & infrastructure? 1.3. Finding out the vulnerable community groups affected by disaster. 1.4. What are the awareness levels of the community in terms of disaster and vulnerability? 1.5. What informal systems exploit the community- like local money lenders, artificial price hike, illegal activities etc.,	1.1.1. Number of disaster incidences occurred during past 10 years 1.1.2. Extent of disaster 1.2.1. Household level impact ▪ No. of persons died ▪ No. of persons handicapped ▪ No. of earning members died ▪ No. of earning members handicapped ▪ % of died person's income to total household income ▪ No. of family members affected by break outs / epidemic ▪ No of houses totally damaged ▪ No of houses partially damaged ▪ Values of house damaged ▪ No of children drop-outs of school (Male & Female), Child labor ▪ Losses in house hold assets (No & Value)

No	Objective	Research Questions	Indicator
			▪ Change in food consumption pattern ▪ Psychological effects or incidences ▪ Children, women and old aged becoming orphan 1.2.2 Lose of income generating assets (No. volume & value) ▪ Fishing gear & crafts ▪ Livestock assets ▪ Agri. Crop loss ▪ Losses of Agri. Implements ▪ Land degradation ▪ Other income generating assets (Agri. goods, dry fish, etc) ▪ Change in the productivity (Marine & Agriculture) 1.2.3 Impact on infrastructure and services (Availability, Accessibility & Affordability) ▪ Roads, Bridges & Transport ▪ Communication ▪ Public Distribution System ▪ Drinking water ▪ Public Health & Sanitation System ▪ Electricity ▪ Financial institutions ▪ Police ▪ Educational institutions ▪ Market / Sandi operations (Consumer markets, Inputs and produce markets) ▪ Services of Revenue and local government office ▪ Surface water bodies – Breaching, lose of water, water quality etc ▪ Community shelters,

No	Objective	Research Questions	Indicator
			Warehouses and go-downs 1.3 Gender, age, caste, class including income, livelihood, lifecycle stages, isolation, physical proximity to the risk, female headed households 1.4.1 Local knowledge on disaster incidences 1.4.2 Knowledge on time line of disaster incidences 1.4.3 Knowledge about the mainstream institutions & Services (Early warning, preparedness and management) 1.4.4 People's perception on "vulnerability segments" 1.5.1 Availability & artificial price hike for food articles, medicines, fuel, fodder, drinking water, cloths, transportation and communication charges, 1.5.2 Theft, robbery keeping the disaster situation 1.5.3 Credit services: 1.5.3.1 Timely and adequacy of credit, Rate of interest, repayment schedule, collateral, penalty 1.5.4 Incidences of Human trafficking (Women & Children) 1.5.5 Violence against women 1.5.6 Change in employment opportunities 1.5.7 Distribution of govt. services / other agencies 1.5.8 Existence exploitative power system, corruption 1.5.9 Distress Sale of household assets
2	To understand	2.1. What are the existing financial coping	2.1.1 Liquidating the saving (Cash in hand, Bank)

No	Objective	Research Questions	Indicator
	the available social security mechanisms and how did they contribute to disaster risk management	strategies in disaster recovery? 2.2. What are the available indigenous security mechanisms in response to disaster risk? 2.3. What are the interventions of supply system (Government, Non - Government) towards Disaster management? 2.4. What is the nature of access and control on these disaster risk management mechanisms by the community? 2.5. What are the levels of awareness and perception on social security services provided by different stakeholders?	2.1.2 Mortgaging of jewelleries, any assets (Income generating, Non income generating - Normal & Exploitative terms) 2 .1.3 Selling of jewelleries, stocks, assets (At market price, Distress selling) 2.1.4 Borrowing from social networks, informal sources and formal sources (Normal & Exploitative terms) 2.1.5 Shift in livelihood (Changing of livelihood with in the area, Migration, Underemployment, Associating with illegal activities) 2.1.6 Increase in No. of earning members (Women, Children in work) 2.1.7 Insurance coverage (Enrolment & renewal) to life, asset and health 2.1.8 Existence of community contingency fund and its continuance 2.2.1 Indigenous security mechanisms in Disaster Preparedness: (Availability & Utility or usefulness) ▪ Building community based disaster risk reduction structures (Physical structures and networks, Information dissemination - early warning system, Social order & Control (*Kudimaramathu*, Regulatory mechanisms, etc,)) 2.2.2 Indigenous security mechanisms in disaster recovery: (Availability & Utility or usefulness) ▪ Collective action in terms of rescue, restoring the physical structures, community kitchen, community shelter, assessing the damage, etc ▪ Philanthropic support for food, shelter and other basic needs

No	Objective	Research Questions	Indicator
			(Local or other area) ▪ Support from informal Panchayats / village committees 2.2.3 Indigenous security mechanisms in disaster rehabilitation / Restoration (Availability & Utility or usefulness) ▪ Financial aid by traditional Panchayats / village committees ▪ Community / individual adoption of disaster victims 2.2.4 Indigenous practices, which are not in practice or in declining trend for better disaster risk reduction 2.3.1 Security mechanisms provided by supply system on Disaster Preparedness (Availability & Utility or usefulness) ▪ Early warning systems (Availability & Utility or usefulness) ▪ Community awareness programs such as mock drills, campaign and folk arts ▪ Infrastructure development (Construction & maintenance of check dams, drainage channels, protection structures, houses) ▪ Insurance coverage 2.3.2 Security mechanisms provided by supply system on disaster recovery (Availability & Utility or usefulness) ▪ Govt. / NGO initiatives on rescue, food & restoring the physical structures, community kitchen, community shelter etc ▪ Damage assessment 2.3.3 Security mechanisms provided by supply system on disaster rehabilitation / Restoration (Availability & Utility or usefulness) ▪ Special schemes / Projects on Grants, livelihood restoration,

No	Objective	Research Questions	Indicator
			Health, Education, Housing and other infrastructure development ▪ Financial assistance to disaster victims 2.4 (Crosscutting question to the above variables) 2.5 Awareness of social security mechanisms for DM provided by Community institutions, NGOs, Govt. Institutions, Insurance providers, Philanthropic institutions, etc ▪ Availability of services / schemes ▪ Procedural requirements ▪ Benefit packages ▪ Target group specifications (In ideal & in practice) ▪ Perception on its efficiency and effectiveness
3	To study the contribution of micro finance as social security mechanism	3.1 How the micro saving is helping to address disaster situations? 3.2 What is the role of micro credit in disaster management? 3.3 How micro insurance and other social security products are contributing to disaster risk recovery? 3.4 What is the role of micro finance plus services such as housing, health, capacity building, behavioral change communication, mainstream linkages, etc in disaster risk management? 3.5 What is the perception of communities about MF in connection with social security, economic security and disaster recovery? How the microfinance tools are helping to build social capital and leverage funds and services from mainstream institution during disaster situations?	
4	Analyze existing government policies on communities based micro finance	4.1 What are the available government policies relating to micro finance? 4.2 Whether the issues related to MF and DRR are addressed in the policies? 4.3 Whether the policies are defective or restricting the MF role in DRR? 4.4 Whether the policies are inadequate to meet the demand of MF in DRR? 4.5 Whether the policies are good but not in practice?	

No	Objective	Research Questions	Indicator
		4.6 What are the roles and contribution of academia and NGO in advocating policy changes? 4.7 What are the current strategies, products and practices of MF? What is the cost of MI? Is it affordable? Can it be made affordable for the families and viable for companies?	
5	Make policy and product recommendations including reinsurance mechanisms for making MF as effective tool for disaster management	5.1 What can be the policy recommendations to facilitate MF to contribute DRR? 5.2 How the philosophy of reinsurance is relevant to the effectiveness of MF in Disaster management? 5.3 What are the leads for inculcating reinsurance in MF activities? 5.4 What are the possible MF and MF plus products that can suit for disaster management? 5.5 What are the best practices by communities, NGOs involved in MF, GO, etc can be highlighted for scaling-up? What is the strategic changes req. for MF to focus more on disaster response to disaster risk reduction and preparedness?	

5. Sampling Design

Nation	No of Sample units				
	MF clients			Control (Non MF clients)	Total
	Flood	Cyclone	Tsunami		
India	150	150	100	100	500
Bangladesh	150	150	100	100	500
Sri Lanka	150	150	100	100	500
FGD with community / Country	3	3	4		10
Interaction with MFI's / Country	3	4	4		10
Stakeholders workshop / Country	1	1	1		3

The study would cover the select Tsunami, cyclone & flood affected areas in South India, Sri Lanka & Bangladesh. The rationale of conducting the study in the above three different countries is to understand the social security mechanisms through microfinance and micro insurance for disaster management of the disaster prone - vulnerable poor in South Asian context. Also, the above three countries have witnessed the adverse effect of Tsunami in the year 2005. Moreover, the study will help to identify the gaps at policy level for integrating disaster risk reduction with the existing microfinance and micro insurance programmes and products for South Asia.

The proposed study is collaborative in nature identifying and involving the appropriate institutions from India, Bangladesh and Sri Lanka to undertake the research, and Oxfam, America and Provention Consortium for financial, technical and dissemination support. Along with the overall coordination, India part of the study would be covered by the Centre for Disaster Risk Reduction of Tata-Dhan Academy, Madurai, India. The potential partners from Bangladesh and Sri Lanka would be finalized after consultation.

The study is envisaged to cover 500 disaster affected sample households inclusive of 100 control households from the severely affected parts of each country. The households not involved in microfinance and micro insurance is referred as control group. Economically poor households would be selected on the basis of appropriate sampling technique.

Along with the interview method through structured interview schedule, various tools of participatory learning methods (PALM) will be applied to study the vulnerability context of the coastal fisher communities. Focused group discussion method would be employed for understanding their social security mechanisms, indigenous practices of risk reduction, contribution of microfinance and micro insurance for disaster risk reduction, etc. Interview with the insurance companies, NGOs and MFIs through structured or semi-structured interview schedules are also envisaged as a part of the research to understand the problems and prospects of microfinance and micro insurance to reduce disaster risks and vulnerabilities. The photo and video documentation incorporated along with the study process.

6. Implementation structure

The research project will be centrally coordinated by the Centre for Disaster Risk Reduction of Tata-Dhan Academy. There will be a Steering Committee consisting of representation from Oxfam, America, Provention, DHAN Foundation, ASKMI and Tata-Dhan Academy to guide the strategic and operational details of the project. Besides, there will be an Operational Research Team including Principal Investigator, and two Research Associates in each country. The research tools will be prepared by the Centre for Disaster Risk Reduction by involving the members of both Steering Committee and Operational Teams. Responsibility of data collection, data processing, and report writing will be done by the respective Operational Teams. The three reports will be consolidated into a single report by the Centre with the support of Operational Teams and advice of the Steering Committee.

7. Time line of the study

No	Aspect	Mar – May 2008	Jun – Oct' 2008	Oct – Dec 2008
1	Finalizing the research design including tools development and sampling			
2	Finalize partners for other countries			
3	Review of literature			
4	Research methodology meeting of all country partners			
5	Field execution, Data entry & Processing			
6	Focused group discussions, Workshops and other events			
7	Field data sharing workshop of all country partners			
8	Draft report preparation and finalization of project report			
9	Draft report sharing and inputs from select experts in each country			
10	Sharing of the outcomes with community and other stakeholders			

Attachment 5.2: Schedule of Survey

Household Interview Schedule
Role of microfinance tools in disaster management:
A study in India, Bangladesh and Sri Lanka

Interviewer: COMPLETE BEFORE BEGINNING THE MODULE

A. Household ID number: | | | | | (For Office use only)

B. Name of the country 1.Bangladesh 2. India 3. Sri Lanka

C. Type of Disaster 1. Cyclone 2. Flood 3. Tsunami

D. Microfinance program _______(for control write 99)

C. Date of visit: Day Month Year

E. Starting time of Interview | | | : | | | AM / PM

F. Household Address:

House No :
Street Name :
Village :
District :
PIN Code :
Phone No :

Acceptance for the Interview: | 1 | 2 |

General household level details
Demographic:

1.1.1	1.1.2	1.1.3	1.1.4	1.1.5	1.1.6	1.1.7	1.1.8	1.1.9	1.1.10	1.1.11	1.1.12	1.1.13	1.1.15
Household Member ID	Person name	Age	Sex	Relationship	Education	Primary Occupation	Annual Income	Secondary Occupation	Annual Income	Marital status	Social membership	Insurance	Bank A/C

Details on Socio economic status:

1.2.1. House type :
1.2.2. Ownership of the house :
1.2.3. Religion :
1.2.4. Caste :
1.2.5. Economic status as defined by government :
1.2.6. Distance from sea or water body :
1.2.7. Elevation of residence site :
1.2.8. Availability of Ration card (Public Distribution System) :
1.2.9. Electricity facility :
1.2.10. Telephone connection :
1.2.11. Cooking fuel :
1.2.12. Toilet facility :
1.2.13. Drinking water facility :

Details on family income from common sources:

Source of income	Annual Gross Income
1.3.1 Fishing	
1.3.2 Agriculture	
1.3.3 Dairying	
1.3.4 Other livestock animals	
1.3.5 Petty trading	

1.4. Income generating assets

1.4.0	1.4.1	1.4.2	1.4.3	1.4.4	1.4.5	1.4.6	1.4.7	1.4.8
No	Asset details	No of units	Year of Purchase	Value during Purchase	Type of damage / Loss due to disaster	Value of damage / Loss due to disaster	Present status of asset	Source of repair / recovery
1.	Gear							
2.	Craft							
3.	Storage units							
4.	Agriculture land							
5.	Agriculture implements							
6.	Livestock							
7	Other assets							

1.5. Household assets

1.5.0	1.5.1	1.5.2	1.5.3	1.5.4	1.5.5	1.5.6	1.5.7	1.5.8
No	Asset details	No of units	Year of Purchase	Value during Purchase	Type of damage / Loss due to	Value of damage / Loss due to	Present status of asset	Source of repair / recovery
1.	House							
2.	Cycle							
3.	Clock / Watch							
4.	Radio							
5.	Television							
6.	Table / Chair							
7.	Shelf / Bureau							
8.	Cot							
9.	Kitchen utensils							
10.	Mobile Phone							
11.	Motor cycle							
12.	Jewels							
13.	Car							
14.	Stove							
15.	Fan							
16.	Sewing machine							
17.	Computer							
18.	Refrigerator							

1.5.0	1.5.1	1.5.2	1.5.3	1.5.4	1.5.5	1.5.6	1.5.7	1.5.8
No	Asset details	No of units	Year of Purchase	Value during Purchase	Type of damage / Loss due to	Value of damage / Loss due to	Present status of asset	Source of repair / recovery
19.	Wet-Grinder / Mixer							
20.	Iron Box							
21.	Other assets							

Information on vulnerability condition due to disaster:
Vulnerability or risk related to life (Death, Disability & Health):

2.1.1. Did any person in your family die due to disaster?

2.1.1.0	2.1.1.1	2.1.1.2	2.1.1.3	2.1.1.4	2.1.1.5	2.1.1.6	2.1.1.7	2.1.1.8	2.1.1.9	2.1.1.10	2.1.1.11	2.1..1.12	2.1.1.13	2.1.1.14	2.1.1.15
No	Name of the died person	Age	Sex	Relationship to HH head	Education	Occupation	Income	Marital status	Social membership	Insurance coverage	Sum assured	Actual claim amount	No. of days for disbursal after	Amount of Compensation	Source of compensation

2.1.2. Did any person in your family disabled due to disaster?

2.1.2.0	2.1.2.1	2.1.2.2	2.1.2.3	2.1.2.4	2.1.2.5	2.1..2.6	2.1.2.7	2.1.2.8	2.1.2.9	2.1.2.10
No.	Household member ID	Type of disability	Occupation	Gross Income	Insurance coverage	Sum assured	Actual claim amount received	No. of days for disbursal after claim	Amount of Compensation assistance	Source of compensation

2.1.3. Did any person in your family become ill or traumatised due to disaster?

2.1.3.0	2.1.3.1	2.1.3.2	2.1.3.3	2.1.3.4	2.1.3.5	2.1.3.6	2.1.3.7	2.1.3.8	2.1.3.9	2.1.3.10
No.	Household member ID	Type of ailment	No. of affected days	Source of treatment	Responsiveness of health provider	Actual expenditure incurred	Change in charges and medicine prices	Source of money	Availability of medicines	Employment lost (No of Days)

2.1.4. Consequences of death / full disability incidences	a. HH member ID	b. Type of change
2.1.4.1 Drop out from school		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
2.1.4.2 Additional members in work		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
2.1.4.3 household members changed the economic activity		
2.1.4.4 Migration		

2.2. Vulnerability or risk related to income

2.2.0	2.2.1	2.2.2	2.2.3
No	Household member ID - earning	No of days employment opportunity lost due to disaster	No of days with under wages due to disaster
2.2.4	No of days for which fishing / agriculture / family economic activity / self – employment could not be run due to disaster		Ranges should be given (10 – 15 days, 16 – 20 days etc)
2.2.5	Value of crop loss in the field		
2.2.6	Value of stock loss		
2.2.7	Amount lost due to non functioning of fishing / family		

2.2.0	2.2.1	2.2.2	2.2.3
No	Household member ID - earning	No of days employment opportunity lost due to disaster	No of days with under wages due to disaster
	economic activity		
2.2.8	Adequacy of food availability		
2.2.9	What did you do for food consumption in these days		
2.2.10	Amount of compensation for the loss		
2.2.11	Source of compensation		

Vulnerability or risk related to access to goods and services

2.3.1 Access to goods:

2.3.1.0	2.3.1.1	2.3.1.2	2.3.1.3	2.3.1.4	2.3.1.5
		Availability in market			
No.	Goods	Status	No of Days of inadequacy	Changes in Price	What did you do to buy these goods?
1	Rice				
2	Edible oil				
3	Firewood				
4	Kerosene				
5	LPG				
6	Cloths				
7	Medicines				
8	Essential goods (Sanitary napkins, condoms etc)				

2.3.2 Details related to shelter

No.	Aspect		a. Response	b. Source of support
2.3.2.1	Type of ownership of house during pre disaster situation			
2.3.2.2	Condition of shelter in the time of disaster	:		xxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxx
2.3.2.3	Value of the asset just before the disaster	:		xxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxx
2.3.2.4	Value of damage	:		xxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxx
2.3.2.5	What did you do for stay immediately after the disaster?	:		
2.3.2.6	Present status of shelter	:		

2.3.3. Access to services

No.	2.3.3.1 Services	Availability		2.3.3.4 Change in charges	2.3.3.5 Coping mechanism	2.3.3.6 Source of support
		2.3.3.2 Status	2.3.3..3 No of days of absence			
1	Rescue operations					
2	Mobility					
3	Communication					
4	Drinking water					
5	Electricity					
6	Educational institutions					
7	Market					
	Revenue / other Govt. offices					

2.3.4 Financial institutions

2.3.4.0	2.3.4.1	2.3.4.2	2.3.4.3	2.3.4.4	2.3.4.5	2.3.4.6
No	Credit status	Purpose	Amount	Annual Interest rate	Repayment term	Source
1	Loan outstanding before disaster situation					
2	Credit availed with in one year of disaster incidences					
3	What is the loan outstanding as of today					

Codes for Household level Interview schedule

1.1.4 1. female 2. male	1.1.5 1. family head 2. Wife 3. husband 4. mother 5. father 6. daughter 7. son 8. mother in law 9. father in law 10. sister 11. brother 12. cousin 13. niece 14. others
1.1.6 1. illiterate 2. primary school 3. secondary school 4. higher secondary school 5. degree 6. technical education 7. post graduation 8. others	1.1.7 1. fishing (own) 2. fishing allied (own) 3. fishing and allied (labour) 4. agricultural labour 5. non fishing and non agricultural daily wage labour 6. Technical worker (carpenter, electrician, plumber etc.) 7. street vending 8. salaried employee in govt., private and NGO 9. student 10. others
1.1.9 1. fishing (own) 2. fishing allied (own) 3. fishing and allied (labour) 4. agricultural labour 5. non fishing and non agricultural daily wage labour 6. Technical worker (carpenter, electrician, plumber etc.) 7. street vending 8. salaried employee in govt., private and NGO 9. student 10. others	1.1.11 1. unmarried 2. married 3. widow/widower 4. deserted 5. divorced
1.1.12 1. SHG/mF group	1.1.13 1. life insurance and renewed the

2. farmers' association 3. fishermen association 4. caste/religion based association 5. political party 6. youth club 7. Others	policy till date 2. health insurance and renewed the policy till date 3. had enrolled in life insurance but could not renew 4. had enrolled in health insurance but could not renew 5. never insured
1.1.14 1. through SHG/mF group 2. through fishermen/farmers' association 3. through individual effort or through agents 4. through employer 5. Others	1.1.15 1. available and functional 2. available but not functional 3. not available 4. Others
1.2.1 1. Pucca RCC 2. Tiled/asbestos roofed 3. thatched 4. Others	1.2.2 1. own having legal ownership 2. rental house 3. leased in house 4. on encroached site 5. shelter provided by the government
1.2.3 1. Buddhist 2. Christian 3. Hindu 4. Muslim 5. Others	1.2.4 1. Forward category 2. Other Backward/ Most Backward category 3. Scheduled caste 4. Scheduled tribe 5. De-notified
1.2.5 1. Below poverty line category 2. Above poverty line category	1.2.7 1. uplands 2. low lying lands
1.2.8 1. available 2. not available	1.2.9 1. available 2. not available
1.2.10 1. mobile phone 2. landline connection 3. not available	1.2.11 1. fuel wood 2. kerosene 3. char coal 4. liquid petroleum gas 5. cobar gas 6. others
1.2.12 1. attached within house 2. common use toilet 3. open air defecation	1.2.13 1. tap water connected to home 2. tap water-common use 3. tank/pond water

	4. river/fountain water 5. others
1.4.5 1. lost the asset 2. partially damaged 3. completely damaged 4. no damage	1.4.7 1. could not be replaced/repaired/reclaimed 2. replaced with other one 3. repaired/reclaimed and being in use 4. not applicable
1.4.8 1. own savings (cash at hand and cash at bank) 2. selling out assets 3. credit from SHG/MF group 4. credit from banks and other formal financing institutions 5. credit from informal financing sources 6. credit from friends and relatives 7. donation from government (cash and kind) 8. donation from SHG/MF group (cash and kind) 9. donation from other NGOs (cash and kind) 10. support from local community and philanthropists 11. others	1.5.6 1. lost the asset 2. partially damaged 3. completely damaged 4. no damage
1.5.7 1. could not be replaced/repaired/reclaimed 2. replaced with other one 3. repaired/reclaimed and being in use 4. not applicable	1.5.8 1. own savings (cash at hand and cash at bank) 2. selling out assets 3. credit from SHG/mF group 4. credit from banks and other formal financing institutions 5. credit from informal financing sources 6. credit from friends and relatives 7. donation from government (cash and kind) 8. donation from SHG/mF group (cash and kind) 9. donation from other NGOs (cash and kind) 10. support from local community and philanthropists 11. others

2.1.1 1. yes 2. no	2.1.1.3 1. female 2. Male.
2.1.1.4 1.1.5 1. family head 2. Wife 3. husband 4. mother 5. father 6. daughter 7. son 8. mother in law 9. father in law 10. sister 11. brother 12. cousin 13. niece 14. others	2.1.1.5 1. illiterate 2. primary school 3. secondary school 4. higher secondary school 5. degree 6. technical education 7. post graduation 8. others
2.1.1.6 1. fishing (own) 2. fishing allied (own) 3. fishing and allied (labour) 4. agricultural labour 5. non fishing and non agricultural daily wage labour 6. Technical worker (carpenter, electrician, plumber etc.) 7. street vending 8. salaried employee in govt., private and NGO 9. student 10. others	2.1.1.8 1. unmarried 2. married 3. widow/widower 4. deserted 5. divorced
2.1.1.9 1. SHG/MF group 2. farmers' association 3. fishermen association 4. caste/religion based association 5. political party 6. youth club 7. Others	2.1.1.10 1. tap water connected to home 2. tap water-common use 3. tank/pond water 4. river/fountain water 5. others
2.1.1.13 1. less than 7 days 2. 8-30 days 3. 31-90 days 4. more than 90 days	2.1.1.15 1.. government 2. SHG/MF group 3. other NGOs/corporate agencies 4. local community/philanthropists

5. did not receive	5. banks 6. others
2.1.2 1. yes 2. no	2.1.2.2 1. partially disabled and now can act independently 2. totally disabled and now cannot act independently without support of other persons or aids
2.1.2.3 1. fishing (own) 2. fishing allied (own) 3. fishing and allied (labour) 4. agricultural labour 5. non fishing and non agricultural daily wage labour 6. Technical worker (carpenter, electrician, plumber etc.) 7. street vending 8. salaried employee in govt., private and NGO 9. student 10. others	2.1.2.5 1. coverage included disability 2. coverage did not include disability

2.1.2.8 1. less than 7 days 2. 8-30 days 3. 31-90 days 4. more than 90 days 5. did not receive	2.1.2.10 1.. government 2. SHG/MF group 3. other NGOs/corporate agencies 4. local community/philanthropists 5. banks 6. others
2.1.3 1. yes 2. no	2.1.3.2 1. injury 2. fever 3. diarrhoea 4. others
2.1.3.4 1. government run hospital 2. private run hospital 3. missionary run hospital 4. SHG/MFI run hospital 5.. medical camp organised by the government 6. medical camp organised by SHG/MFI 7. medical camp organised by other NGOs	2.1.3.5 1. could get immediate treatment and it was good 2. could get immediate treatment but it was not good 3. could get delayed treatment but it was good 4. could get delayed treatment and it was not good also

8. medical camp organised by local community 9. quacks 10. indigenous practitioners 11. household medicine 12. other sources 13. did not take treatment	
2.1.3.7 1. no change than the pre disaster time 2. higher than the pre disaster time but we could afford 3. higher than the pre disaster time and we could not afford 4. lesser than the pre disaster time 5. free service	2.1.3.8 1. own savings (cash at hand and cash at bank) 2. selling out assets 3. credit from SHG/MF group 4. credit from banks and other formal financing institutions 5. credit from informal financing sources 6. credit from friends and relatives 7. donation from government (cash and kind) 8. donation from SHG/MF group (cash and kind) 9. donation from other NGOs (cash and kind) 10. support from local community and philanthropists 11. others
2.1.3.9 1. immediate and adequate 2. immediate but not adequate 3. delayed but adequate 4. delayed and inadequate	2.1.4.3.b 1. lesser wage/income than the pre disaster time 2. higher wage/income than the pre disaster time 3. no change in wage/income

2.1.4.4 1. seasonal migration 2. permanent migration	2.2.8 1. could take adequate food for three times per day 2. could take food two times per day 3. could take food once a day 4. could not have food
2.2.9 1. managed from own stock or spending own money 2. donation from SHG/MF group (kind and cash) 3. donation from government (kind and cash)	2.2.11 1.. government 2. SHG/MF group 3. other NGOs/corporate agencies 4. local community/philanthropists 5. banks 6. others

4. donation from other NGOs (kind and cash) 5. donation from friends and relatives (kind and cash) 6. donation from local community and philanthropists (kind and cash) 7. loan from SHG/MF group 8. loan from informal financing sources 9. loan from formal financing sources 10. loan from friends and relatives 11. selling out household assets 12. others	
2.3.1.2 1. adequate 2. inadequate 3. not available or completely not in use	2.3.1.4 1. no change than the pre disaster time 2. higher than the pre disaster time but we could afford 3. higher than the pre disaster time and we could not afford 4. lesser than the pre disaster time 5. free service
2.3.1.5 1. managed from own stock or spending own money 2. donation from SHG/MF group (kind and cash) 3. donation from government (kind and cash) 4. donation from other NGOs (kind and cash) 5. donation from friends and relatives (kind and cash) 6. donation from local community and philanthropists (kind and cash) 7. loan from SHG/MF group 8. loan from informal financing sources 9. loan from formal financing sources 10. loan from friends and relatives 11. selling out household assets 12. others	2.3.2.1 1. own having legal ownership 2. rental house 3. leased in house 4. on encroached site 5. shelter provided by the government

2.3.2.2.a 1. partially damaged 2. completely damaged 3. no damage	2.3.2.5.a 1. house condition was good and we stayed there 2. house condition was bad but we could not go out for rescue 3. stayed in a common shelter (closed

	roof) 4. stayed in a open field/tent 5. stayed in friends and relatives house
2.3.2.5.b 1.. government 2. SHG/mF group 3. other NGOs/corporate agencies 4. local community/philanthropists 5. banks 6. others	2.3.2.6.a 1. could not be repaired 2. repaired 3. constructed/received a new house 4. shifted to (another) rental house 5. shifted to leased in house 6. not applicable
2.3.2.6.b 1.. government 2. SHG/MF group 3. other NGOs/corporate agencies 4. local community/philanthropists 5. banks 6. others	2.3.3.2 1. immediate and adequate 2. immediate but not adequate 3. delayed but adequate 4. delayed and inadequate
2.3.3.3 1. less than one day 2. 1-3 days 3. 3-7 days 4. 7-15 days 5. more than 15 days	2.3.3.4 1. no change than the pre disaster time 2. higher than the pre disaster time but we could afford 3. higher than the pre disaster time and we could not afford 4. lesser than the pre disaster time 5. free service
2.3.3.5 1. managed on our own 2. received support from others 3. we were helpless	2.3.3.6 1.. government 2. SHG/MF group 3. other NGOs/corporate agencies 4. local community/philanthropists 5. banks 6. others
2.3.4.2 1. consumption 2. health 3. house repair 4. education 5. repair of income generating assets 6. income generating activities 7. asset purchase 8. life cycle events (e.g. marriage) 9. dept redemption 10. festivals and social obligation 11. others	2.3.4.5 1. daily 2. weekly 3. monthly 4. annual
2.3.4.6 1. commercial banks	

2. cooperative banks 3. Chit funds agency 4. SHG/mF group 5. local money lender with collateral 6. local money lender without collateral 7. village /agricultural/fish trader 8. friends and relatives with interest 9. others	

Annexure 5.3: Guidelines for FGD

Lead Questions for FOCUS GROUP DISCUSSION (FGD)

FGD will be conducted, with members and non members of microfinance programmes.

Purpose

The purpose of the focus group discussions is to

- Understand social security mechanisms,
- Indigenous practices of risk reduction,
- Contribution of microfinance and micro insurances for disaster risk reduction.

The FGD will incorporate the *quantitative data and member's own words* wherever necessary in the report.

Key areas for focus group discussions

General background of village /MFI activity

History of the group and village

- Brief note of village details- Households, employment opportunities, school, hospitals, road/ transport etc., (PRA or baseline data of the members if available)
- Socio-economic status of the members/Occupational status
- Pre-debt status of the members

Financial details and achievements of microfinance groups (if any)

- Financial services by microfinance programme- total savings, credit mobilized pre, during and post disaster period
- Bank linkage (formal sector)
- Informal services – dependency on money lenders, pawn brokers- interest rate- pre, during and post disaster period
- Change in the number of money lenders in the local area, change in the interest rate, trust worthiness of the members
- Timely and adequacy of credit, rate of interest, repayment schedule, collateral, penalty
- Number of members initiated Enterprise activities or occupational deepening/shift/complimenting – investment, benefit, employment opportunities.
- Coping strategies- relationship with seasonality of income and emergencies(nature of emergencies)

- Assets created – House, Land, Ornaments

Women empowerment

- Decision making- family/community level
- Mobility to outside
- Participation/ consultation in public/ *grama sabha* (village group) meetings
- Approaching Government officials/bankers
- How many members experience the Leadership in group/cluster/federation and their contribution

Indirect effect at member/community/village level

- Significant contribution of the group to village/community, which otherwise not achieved
- Expressing solidarity to solve the Microfinance group member's problems
- Solving public problems related to street light, hand pump, road etc.
- Problems faced and solved at fair price shop/ cooperatives/ Govt. offices
- Campaign against alcohol addiction / action against liquor outlets
- Implementing any civic programmes
- Contribution/service to socially disadvantaged or poor peoples-nature of service or contribution

Understanding social security mechanisms,

- Detailed description of previous disasters/risk occurred in the place – No. of disasters occurred during past 10 years, extent of disaster
  - Losses human, assets and all material losses
  - Short terms and long term losses/ issues that were brought out by the risk
  - Children, women and old aged becoming orphan
  - Psychological effects of incidences
  - Violence against women
  - Incidences of human trafficking (women & children), theft and robbery during the disaster incidence
- Any relief / rehabilitation activities undertaken by anyone including their own
  - Quantum of such works /money/ monetary payouts/ other resources mobilized/ costs associated
  - Issues associated with relief works – like who got first, who left out etc.,
- What social security mechanism existed?

  - Village level/ community level – example: assistance to relief, cremation assistance
  - Financial assistance mobilized internally – local philanthropy/ Panchayats/ village committee
  - Issues connected in availing such assistance
- List out Governmental / non-governmental assistance- on rescue, food and restoring the physical structures, and development works, damage assessment
- **Indigenous practices of risk reduction,**
  - communal practices such as Jati/panchayats involving in relief, development etc
  - Building community based disaster risk reduction structures (Physical structures and networks, information dissemination – early warning system, social order and control, community emergency fund etc)
  - Collective action in terms of rescue, restoring the physical structures, community kitchen, community shelter, assessing the damage
  - offering communal assets for individuals and families for accommodation etc.,
  - mobilizing volunteers/ communal manpower for relief after disasters/ risks
  - Philanthropic support for food, shelter and other basic needs (local and other area)
  - Financial aid by local traditional Panchayats/village committees
  - Community / individual adoption of disaster victims
  - Community awareness program such as mock drills, campaign and folk arts

Contribution of Micro finance and Micro insurance

  - Extent of awareness on microfinance / micro insurance products on DRR
  - Do the people realize about the need for micro insurances / micro finances
  - What type of insurance benefits were received

    Human losses / asset losses/ animal losses / crop loss
  - How the microfinance tools are helping to build social capital and leverage funds and services from mainstream institution during and post disaster incidences.