The Role of Microfinance and Micro Insurance in Disaster Management

This multi-country research study examines the ways in which microfinance and micro insurance tools provide social security to the disaster prone areas of India, Bangladesh and Sri Lanka. It asks how microfinance and micro insurance institutions contribute to disaster management.

ACEDRR sponsored a three-country research study on how microfinance and micro insurance can be mobilized for disaster risk reduction. Researchers collected quantitative and qualitative data in Bangladesh, India and Sri Lanka.

As part of this project, researchers mapped the vulnerabilities of the disaster prone communities and investigated how they cope with such vulnerabilities. To do this, they sought out indigenous and other social security mechanisms and compared these to the reach and relevance of micro insurance products available for local people. They further analyzed the opportunities for micro insurance to integrate with the microfinance services.

Moreover, researchers examined role of NGOs, the insurance sector, government, and donor in developing innovative micro insurance partnerships.

Bangladesh

In Bangladesh, researchers determined that the most vulnerable were people living below the poverty line who had suffered disasters in the past and who are still living in areas where flash-floods, monsoon floods and storm surges are common. They sampled five remote rural villages that met this criteria.
Microfinance Profile of Kunderpara Village, Gaibandha, Bangladesh

Researchers interviewed staff at organizations implementing microfinance programs. This is taken from an interview with Ms. Aktara Begum, credit assistant at the Government of the UK for Kunderpara.

The village of Kunderpara in Gaibandha, Bangladesh is situated right next to the Jamuna river. Two hundred thirty families live and work in this region. The vast majority of them live in tin sheds.

Most people in Kunderpara work in agriculture for nine months out of the year, earning very little money. In the off-season the lucky ones go to town to work as the drivers of vans or rickshaws. The unlucky ones are unemployed during this season.

There are a number of primary schools and madrasas in the village, and one junior high school. For more advanced studies, students go to Gaibandha Sadar, 26 kilometers, and one and a half hours, away from the village. The ride costs as much as a farmer can earn in one day.

There are three mosques and no government hospitals or health care centres in the village. However, Kunderpara does have some health camps, which provide emergency medical care to the villagers. To reach the government hospitals, one has to cross the river by trawler and then take a rickshaw, also for 26 kilometers.

There are no paved roads in Kunderpara. Some residents have bicycles, but most walk to their destinations.

People in Kunderpara drink water from their tube wells. Most use sanitary toilets, though some still use open and non-sanitary toilets.

Many organizations have been working for the development of Kunderpara. In particular, the Government of the UK has worked here since 1995 and has contributed much to the development of the village.

Before the Government of the UK initiated their community-based microfinance people were indebted to mohajon, or local money lenders, mohajons used to exploit the villagers by charging a 20 to 25 percent interest rate. If the villager failed to repay the loan in time, they were subjected to torture and abuse.

After the Government of the UK initiated a community-based microfinance institution called a shomity, the per capita income in the village increased. Moreover, farmers are able to get seasonal loans, which leaves them with money to spare after their basic needs are met. They are able to invest this money back into income generating activities.

Since the Government of the UK started microcredit here in 1995, the system of mohajon has ended. Farmers who used to work on other's lands are now leasing lands and cultivating them. Some have achieved food sufficiency. Others have become owners of their homes. Still others have purchased poultry and fowls, or opened their own grocery shop.

While the Government of the UK is supporting the shomities to manage finances, they are also supporting them to to deal with disaster. Kunderpara suffers from floods. The Government of the UK has taken surveys to map the houses, tube wells, toilets that are on the lowlands, and has taken steps to raise them up.

Members of a shomity also look out for each other. If one member is in danger the other members come forward to help her in every possible way. If anyone dies during a flood, the cost of their funeral is supported by the local representatives, local elites or the shomity.

People in this area know well about microcredit, but they are not very interested in micro insurance, in part because residents consider themselves temporary dwellers in this village, since the village is constantly eroded. Also, some people from Kunderpara have been deceived before from people claiming to sell insurance.

Villagers in Kunderpara are more interested in the shomity model, where they would be able to get back the money they deposited, whenever they might need it.

These people have been made vulnerable by massive damages caused by floods and other natural disasters in the last 10 years. These have washed away roads and houses, and have even washed the fish out of ponds.

The study found that many of the microfinance institutions (MFIs) are privately owned and follow a corporate, profit-seeking model. The study in Bangladesh looked at how these microfinance institutions responded to a number of disasters, including the country’s most recent floods in 2005.
In Bangladesh, the study found, most of the sample households including the control group families did not have active insurance (life or health) coverage prior to the 2005 floods. Three microfinance clients, women, in the Jamuna floodplains told researchers, “we are quite familiar with insurance policies, but none of us have got enough trust on any insurance company. Previously, some of us were deceived by an insurance company.”

Despite this, the fact that interest in micro insurance products jumped after disasters demonstrates a real need. During the survey for this study, MFIs were found to be sold micro insurance plans to vulnerable people, allowing people to insure against damage or loss of life caused by floods, cyclones or other natural disasters. However, the study also found that, excluding actions for economic development in terms of providing loans for income generating assets, most MFIs did not make other pre-disaster efforts to limit the vulnerability of their clients.

The critical role of MFIs in addressing vulnerability was evident from the fact that a majority of member families have taken loans to meet their different requirements including repairing the damaged assets, purchasing new income generating assets, and house repairing. The role of MFIs was also discernible with the fact that none of the control group families had access to credit after a disaster.

The study found the MFIs as the single largest stakeholder followed by the government, NGOs, and local community to provide different short-term support to the disaster victims. The short-term support services included donation for health treatment, purchase of household essential commodities, and humanitarian services. On the other hand, most of the respondents told the researchers that the money out of their own saving was the most important component to address the loss of disaster in the long term. They said that among the external sources, MFIs are important in terms of providing credit for reconstruction and rehabilitation after disaster.

After a disaster, microfinance institutions in Bangladesh had the resources to provide rapid access to cash, in the form of emergency funds or through efficient transfer of external funds, or emergency loans. They could offer permission for clients to withdraw against their savings or could give advances against savings. When compared to the self-help group model, these cash-rich solutions are the privilege of corporate model MFIs.

The study also found that most microfinance institutions in Bangladesh avoided absolving loans. While loan absolution is good for borrowers in the short term, the MFMI research report said, there was the feeling among microfinance institutions that...
loan absolution undermined their efforts to create a culture of repayment and responsibility. It also limits the liquidity of the MFI and makes it dependent on donors.

Instead of absolving loans, MFIs in Bangladesh stopped lending and stopped collecting payments after a disaster, in order to prepare loan restructuring and refinancing plans in line with field damage assessments. They rescheduled loan payments to ease the burden on affected families.

The study suggested that the MFIs may take the lead in advancing loans for disaster-proof housing, emergency loans, and asset replacement loans. They may design a special product of disaster savings, for which the government could provide a matching grant.

The scope for exclusive disaster insurance is still very limited and there is no clear evidence of the relationship between micro insurance and shifts to higher risk, higher yield activities either through bundling insurance with credit loans or standing loans.

It was also suggested in the study to emphasize on savings that has to be combined with disaster or asset insurance products. The linkage of credits with these kinds of proposed insurance products would allow households to not take out loans to cope with transitory emergencies.

**Sri Lanka**

Sri Lanka is a multi-hazard prone area which gets exposed frequently to floods, droughts, elephant and animal attacks, landslides, cyclones, lightning, fire, gales and coastline storms. It is also exposed to tsunami risk. These natural disasters impact the lives, assets bases and livelihoods of the local community.

In Sri Lanka, the vulnerability to natural hazards is mainly due to physical environmental and ecological imbalances. This can also be directly or indirectly related to institutional and organisational weaknesses. If land use patterns, human settlement developments and construction practices are not responsible to maintain ecological balance, then the man-made environment can lead to further life-threatening hazards.

It is anticipated that changes in demography and climate, and the continuation of unsound environmental practices and unsustainable development patterns may increase the frequency of and losses from natural disasters.

The Government of Sri Lanka has adopted several policy measures aimed at assisting disaster affected populations. The policy measures include various cash grants, cash transfer,
concessionary credit, and provision of permanent shelter with electricity, running water, and sanitation and drainage facilities.

The Sri Lanka portion of the research found that the most vulnerable people were women headed families which constituted 17% overall including tsunami and flood affected areas. Among the families surveyed, 11 (4%) flood affected families and 24 (12%) tsunami affected families are headed by widows and widowers. Along with women, people aged above 60 years usually depend on other family members and are more vulnerable to shocks. A total of 83 (16.5%) family heads are over 60 years old.

Poverty is a major vulnerability against any disaster risk drastically reducing the ability of a family to cope with any disaster and usually making a family poorer after a disaster. The study shows a total of 183 (36.6%) families below poverty line to be vulnerable.

Not possessing a ration card also makes a poor family more vulnerable. Of the 299 flood affected families, 166 (56%) did not have a ration card and among the 199 tsunami affected families, 130 (65%) did not have a ration card.
The lack of electricity may also be considered as a vulnerability for a poor family, and this affected 76 (15%) families overall. Similarly, 161 (32%) families did not have any communication facilities, for instance landline or mobile phones.

Other areas of concern included the provision of fuel after a disaster (68% of the families relied on collected wood or cow dung for fuel) and the general lack of sanitation facilities.

The Sri Lanka study found that microfinance activities reduced some of these vulnerabilities. The study added that microfinance groups have better access to relief and rehabilitation activities after a disaster when compared to non-control groups and thus these groups have reduced disaster vulnerability.

The Sri Lanka research offered interesting findings when it came to community perceptions of MPI products. Out of all respondents, 64 percent of people were not participating in any social welfare group or association, and were not eager to obtain health or life insurance policies under any agency or organization. Only 40 percent of respondents had active bank accounts, and one third did not have any bank account, leading researchers to conclude that formal financial institutions have not yet been able to reach these people to a sufficient degree.

Additionally, 95 percent of respondents did not have any life insurance or health insurance, but interest in purchasing insurance jumped by 22 percent after recent disasters. Similarly, in Bangladesh, after a cyclone in 2007, the number of insurance contracts in the study group almost quadrupled.

In Sri Lanka, “members of the households are not aware of about the possible role of microfinance or micro insurance as a strategy for disaster management and risk reduction in their day to day life,” the report says, adding that people are “reluctant to obtain insurance products when they feel that their day to day earning is not enough to satisfy their basic needs and when they are not aware that they are in a ‘risk environment’.”

In Sri Lanka, insurance agents provide 80 percent of insurance coverage, friends and relatives, 9 percent, and self-help groups, 3 percent. Twenty percent of the total life insurance schemes developed through insurance agents in these households have already been discontinued, leading researchers to conclude that very poor Sri Lankans are more likely to continue investing in insurance if they get insurance from relatives and friends or through self-help groups, rather than through insurance agents.

Thus, in Sri Lanka, the study proposes to evolve a community driven mutual fund assisted by the government and non-
government agencies as a community-driven, pro-poor insurance strategy.

The proposed micro insurance product framework envisages having the attributes of insurance coverage of life, health, assets and livelihood activities, premium calculated on individual basis considering the level of risks each member faces, their income levels, number of dependents or number of persons covered by that policy, and differential terms of the premium payment either monthly, quarterly or annually depending upon the changes in the income generation pattern.

Interestingly, the proposed micro insurance product framework involves the government, the community and the private sector as a tri-partite combination in administration of the fund and integrates the fund from village to regional and national levels.

As part of organisational setting, it proposes particular village-level community driven mutual fund to be linked with the other villages’ mutual funds at district level and finally to the Ministry of Disaster Management of the country. A “bottom-up approach and multi-level participation is imperative to the suggested framework” says the report.

India

In India, the study focused on families in microfinance groups in tsunami affected areas and flood affected areas. The primary occupations of the families in tsunami hit areas are agriculture, agriculture labour, and fishing, whereas in flood affected areas, it is farming.

The study found that with respect to many of the risks and vulnerabilities listed, families of microfinance group fare better than the control group. These include a lower illiteracy levels, higher access to electricity and telephones, higher number of earning members per family, better asset holding (both income generating assets and household assets), better financial services and higher percentage of house ownership.

The differences between the microfinance group and control group are significant in all these aspects as the results above suggest under two sample tests. Thus there is evidence to suggest that microfinance helps reduce disaster risks and vulnerabilities.

Furthermore, self-help groups (SHGs) improve social cohesion and encourage collective action. SHGs have played significant role during disaster relief and rehabilitation in helping with activities such as rescue, mobility and communication. Microfinance activities in disaster-affected areas can thus help increase organized social capital and improve disaster
Researchers surveyed these fishing women on their level of engagement with microfinance. The India portion of the research finds that the poor would benefit from a wider array of insurance products, including insurance to cover income-generating assets like boats and nets and time lost at work while sick.

preparedness. Additionally, since these activities are participatory by design, the community is engaged in their development activities.

Microfinance groups have better access to various financial services, better access to credit, more functional bank accounts and more people with insurance. These all reduce vulnerability.

This is important when considering that the penetration of commercial banks and cooperative banks among the poor is low and their role in disaster relief and rehabilitation is negligible. Often, the first support received by the affected community is from their neighbors and relatives, followed by moneylenders and microfinance self-help groups. However, as the fund available in the self help groups in the form of savings is inadequate, they are unable to extend bigger credit needs for livelihoods rehabilitation and asset creation.

Thus, unless commercial and cooperative banks can offer financial services to the disaster affected families affected communities run the risk of falling into the money lenders’ debt trap.

The study findings suggest that the Reserve Bank of India and the Government can design a special credit package services to be offered for relief and rehabilitation to disaster affected families. It
can also make a provision for rescheduling of loans with appropriate monitoring mechanisms.

Despite the benefits of microfinance, due to the nature of a community-wide disaster, without insurance, even families in microfinance groups may suffer. The penetration of micro insurance is very low among the disaster affected families and more so among the non-micro insurance families.

The report found that the partner-agent model for offering micro insurance was most prominent. Community-based and mutual models are under-represented, but they have immense potential for offering micro insurance. Moreover different insurance products are needed such as life, health, and asset.

Insurance can be designed as a package for disaster preparedness by involving different stakeholders such as private organizations, community based organizations, corporations and civil societies as partners. Such products will help communities to reduce their risks and enhance their risk coping abilities.

**Conclusion**

The study done in all three countries—India, Bangladesh, and Sri Lanka—reveal that disaster affected families have numerous disaster risks and vulnerabilities related to gender, old age, dependency, caste and religion, literacy, economic status, access to various amenities, occupations, asset holding, access to various financial services, and housing. Microfinance families are found to have significantly lower levels of some of these risks and vulnerabilities compared to non-microfinance families.

For most families, the support for coping with disasters came from their own families, friends, and relatives; government agencies; NGOs; SHGs, and the local community. The role of government agencies in disaster relief and rehabilitation was significant, especially in India and Sri Lanka. SHGs played a significant role in relief and rehabilitation, especially in Bangladesh.

Among the traditional coping mechanisms suggested by the literature, livelihood diversification, sale or mortgage of assets and withdrawing children from school were not significantly seen in the studied disasters as coping mechanisms. Permanent migration was seen on a significant scale among tsunami affected families of Sri Lanka, to some extent in India, but not in Bangladesh. Credit from informal sources was prominent in India. Cutting down food intake was seen immediately after the disasters on a significant scale in Bangladesh and to some extent in India, but was negligible in Sri Lanka. However, as this survey was conducted not much later than many of the disasters, the...
conclusions about the various traditional coping mechanisms stated above may or may not hold true for the long run.

In all three countries, it was found that microfinance can be a potential disaster risk and vulnerability reduction tool by offering various financial services, building social cohesion to cope with disasters and as an intermediary between various donor agencies and the affected people. Further, it was revealed that the penetration of micro insurance is very low among the disaster affected families. Microfinance could be used to promote micro insurance. The penetration of commercial banks and co-operative banks among the poor is present in India and Sri Lanka and absent in Bangladesh. Their role in disaster relief and rehabilitation is also negligible.

The study concludes by stating there exists scope for offering disaster insurance in the areas of life, disability, assets (income-generating and household), employment (wage-loss compensation, compensation for stopping business due to disasters), production (crop and stock loss), and housing.

Finally, with respect to policy, two aspects were seen as gaps which need to be addressed: lack of insurance penetration, and lack of involvement of banks in providing financial relief to disaster-affected poor families.
Project Summary

Objectives

The goals of the study were (1) to find out the impact of microfinance and micro insurance tools in reducing disaster risk and facilitating post-disaster recovery, and (2) to make policy and product recommendations for enhancing the potential of microfinance and micro insurance for disaster risk reduction. Specific objectives of the research were:

- To map disaster risk, livelihood vulnerabilities and financial coping strategies of communities in hazard-prone areas.
- To understand the available social security mechanisms and how they contributed to recovery in the aftermath of recent disasters.
- To study the contribution of microfinance and micro insurance as social security mechanisms.
- To analyze existing government policies on community-based microfinance and micro insurance.
- To make policy and product recommendations including reinsurance mechanisms for making microfinance and micro insurance effective tools for disaster recovery and risk reduction.

Methods

The study covered 500 disaster-affected sample households including 100 control households from the severely affected parts of each country. The households not involved in microfinance and micro insurance comprise the control group.

- Selected economically poor households based on appropriate sampling technique.
- Interviewed through structured interview schedule, applied various tools of participatory learning methods (PALM) to study the vulnerability context of the coastal fisher communities.
- Employed focus group discussion method for understanding social security mechanisms, indigenous practices of risk reduction, and the contribution of microfinance and micro insurance for disaster risk reduction.
- Interviewed representatives of insurance companies, NGOs and MFIs through structured or semi-structured interview schedules to understand the problems and prospects of microfinance and micro insurance to reduce disaster risks and vulnerabilities.
- Collected photo and video documentation.

Outcomes

- One research report which analyses research conducted in each country (Bangladesh, India and Sri Lanka)

Findings

- In study locations in Bangladesh, most of the microfinance institutions followed a corporate, profit-seeking model and most avoided loan absolution in the event of a disaster. However, in the event of disaster, these groups were able to offer cash rich solutions like advances against payments and emergency loans.
- In study locations in India, the biggest lenders both before and after recent disasters were self-help group style microfinance institutions. The study found that the poor would benefit from disaster insurance for loss of economic activity, crop and stock loss, loss of assets. Currently, these losses do not get compensated.
- In study locations in Sri Lanka, most respondents did not have and were not interested in insurance products, but interest jumped 22 percent after a disaster, highlighting a need for education on insurance as a disaster risk reduction tool.

What is next?

Microfinance experts at DHAN Foundation will undertake deeper analysis of the study findings. The lessons learned from this report will be released in a research report and incorporated into the work of the DHAN Foundation and in the curriculum of the Tata-Dhan Academy and DHAN People Academy.

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ACEDRR

The Advanced Centre for Enabling Disaster Risk Reduction (ACEDRR) is a specialized centre of Tata-Dhan Academy established to enhance the knowledge and practice on disaster risk reduction through research and pilot projects, training and education, networking, consultancy, and policy advocacy activities to ensure secured lives and livelihoods of vulnerable communities.

Tata-Dhan Academy

Tata-Dhan Academy is promoted by DHAN Foundation, a pioneering grassroots organization, and Sir Ratan Tata Trust, Mumbai, to identify, nurture, and groom young graduates into development professionals through its flagship two-year Programme in Development Management. The Academy offers a number of short-duration Development Management Programmes and undertakes research, documentation, and consultancy services.

DHAN Foundation

DHAN Foundation works with about 8,50,000 families in 12 states of India, striving to improve the lives and livelihoods of vulnerable communities by organizing them to reduce poverty and address their various development needs. The interventions are spread across urban, rural, coastal, and tribal contexts. DHAN works in different thematic areas including microfinance, tank-fed agriculture, information and communication technology for the poor, and local self-governance.

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