

A Colloquium On Microfinance: Disaster Risk Reduction for the Poor
Wednesday, February 2, 2000

Proceedings

A one-day colloquium entitled "Microfinance: Disaster Risk Reduction for the Poor" was organized in the World Bank on February 2, 2000 and jointly sponsored by the United Nations Development Programme and the Disaster Management Facility of the World Bank. Important issues to be addressed by the colloquium were as follows:

1. The relevance of microfinance /microinsurance for natural disaster risk reduction at the household and community level,
2. The suitability and possible application of microfinance/microinsurance mechanisms for implementing disaster mitigation measures,
3. Measures necessary to address the covariate risks implied by natural disasters,
4. Other incentive -based instruments of mitigation investment, such as vulnerability reduction funds, and community-based mitigation programs,
5. The need for redressing knowledge gap through research, education program and public information,
6. The appropriate balance of public and private sector participation in microinsurance schemes, and
7. The formulation of prototype projects to test and demonstrate the role of microfinance/ microinsurance in disaster mitigation.

Alcira Kreimer, Manager, Disaster Management Facility, welcomed all the participants and spoke about the importance of developing appropriate financial incentives and instruments for disaster risk reduction and mitigation.

Fred Krimgold provided a broad outline of the issues to be discussed in the colloquium, emphasizing the need to provide households in developing countries with greater access to financial resources for disaster risk reduction. Vulnerable communities need financial resources for both ex ante and ex post disaster mitigation investment. Ex ante investment in hazard mitigation reduces the vulnerability of households to natural disasters, and has a long-term impact. In the post-disaster phase, access to finance helps the poor in smoothing their consumption and in coping with the impact of a disaster.

Governments, the financial sector and international agencies need to deepen their understanding of the opportunities that exist for them to invest in disaster mitigation. Wider discussion of the issues should be supported by dissemination of technical knowledge and should refer to the increasing body of sound practice. Since disasters represent covariate risks, the most effective response was unlikely to result from the activities of any single sector but would require the formation of partnerships that were both international and cross-sectoral.

Yasemin Aysan, who moderated the first session, emphasized the need for reducing the vulnerability of poor households to natural hazards. She noted that there were many factors contributing to vulnerability, and an effective strategy for disaster risk reduction must address all of the underlying concerns.

Microfinance, was emerging as an instrument with significant potential to reduce poverty in developing countries. Microfinance should be recognized as one of a series of measures and instruments that should comprise a comprehensive disaster risk management strategy designed to assist poor households. Vulnerability had been shown to affect different social groups and genders disproportionately and strategies would need to give specific attention to activities that reduce the vulnerability of women and children.

The thematic focus for the colloquium was provided by Dr. Suvit Yodmani who described a paradigm shift that had taken place in disaster planning over last few decades. Disaster mitigation had evolved from an

initial focus on relief and contingency planning, through later emphases on technical preparedness, and structural solutions to a comprehensive approach placing greater stress on reducing social and economic vulnerabilities and in investing in long-term mitigation activities.

Formal sector mechanisms risk bypassing the poorest households since these mechanisms are often oriented to the informal sector. Microfinance has the potential to provide informal and flexible financial instruments and to play an important role in integrating disaster mitigation at the community-level and within the informal economy. Yodmani also discussed the need to develop community disaster mitigation programs based on these financial instruments.

Prof. Mark Pitt addressed the possible applications of microfinance for disaster risk reduction. Targeted microfinance programs have been able to reduce the idiosyncratic risks faced by the poor households and could also be applied to help reduce the impact of natural disasters. An important attribute of microfinance is its ability to help households diversify their income sources.

Microfinance helps increase a household's income-earning and asset-building opportunities (often giving women a fuller economic role) and it is these opportunities that help make households less reliant on a single asset-type and consequently better able to deal with disasters. Prof. Pitt spoke about the potential of microfinance to provide explicit and implicit insurance to the households, and offered examples from the Grameen Bank's experience, whilst cautioning that practical applications of these programs had achieved mixed results.

Microfinance can also play a role in large-scale disasters by allowing loan forgiveness/ rescheduling in the areas affected by disasters, better targeting of relief programs through established microfinance networks, better flow of information among the clientele of microfinance organizations, and through the empowerment of women. An important feature of microfinance is its capacity to build social capital as expressed in specific mitigation measures.

Prof. Pitt also identified some of microfinance's limitations of as a risk reduction mechanism. These limitations arise from the issues of moral hazard, inadequate monitoring of credit programs after large spatial shocks, and reduction in informal insurance arrangements provided by social networks. There is also a possibility of governments committing much less to relief programs in the wake of a disaster, if the affected communities are served by microfinance institutions. Small microfinance programs without access to reinsurance may financially collapse in a natural disaster. Where disasters have effects on a national scale international reinsurance is a necessity for even the largest microfinance networks.

The issue of whether microfinance could be used as a social safety net in the wake of disaster was taken up again by Joan Parker and Geetha Nagarajan. Joan Parker suggested that there are certain institutional advantages associated with microfinance institutions, which could be harnessed for disaster preparedness and response: a strong network of clientele, based on group lending and peer monitoring, and the emphasis of Microfinance organizations on poverty reduction.

However, some of these areas -- such as providing emergency loans and loans for the purpose of disaster rehabilitation -- are relatively new for the microfinance organizations. The organizations have not yet acquired broader financial skills often understanding little about insurance, and less about re-insurance. They do not provide full coverage for poor communities, and exclude those activities for lending which they consider poor risks.

Recently, some microfinance organizations have started recognizing disaster mitigation as an important focus for their activities. Immediately after a disaster, there is a heavy demand for withdrawal of savings from the clients and particularly in the demand for house reconstruction loans. These demands pose a serious threat to the liquidity of microfinance organizations. In Bangladesh a number of organizations were seriously affected by the floods in 1998 unable to maintain necessary levels of savings, credit repayment, and cash availability. Bigger Microfinance organizations that have greater capitalization and are better prepared for the effects of disasters can cope better. Smaller less prepared organizations are often casualties of the disasters they were established to mitigate against.

There is now recognition of the need for providing a financial cushion for the unexpected. It could be provided through a Central Reserve Fund / Emergency Fund, and bigger microfinance organizations like Grameen Bank are setting aside a part of their funds for meeting the contingencies of natural disasters.

There are new products in offering such as emergency loans, housing loans and asset replacement loans. There is also recognition of the different stages of recovery and rehabilitation, where access to credit would be most useful. However, some of these services require involvement of apex institutions, commercial banks, training and motivation of staff, and communication technology for disseminating information.

An important concern for the Microfinance organizations is to maintain their capability to provide a range of appropriate financial services to poor communities over the long term. In order to achieve this goal, they must resist the tremendous pressures they face continuing to observe financial discipline and maintain their transaction costs at affordable levels.

Microfinance organizations could be considerably strengthened in dealing with natural disasters by providing them a better knowledge of mitigation alternatives and how they might be financed. Alternatively partnership with insurance and reinsurance companies could expand their risk-sharing arrangements and make them more resilient to the economic effects large-scale natural disasters.

Microfinance organizations find it difficult to provide insurance to their clients - a difficulty shared by the formal insurance. Paul Freeman discussed some of the difficulties in extending the insurance coverage for covariate risks of natural disasters to the poor. These difficulties arise from uncertain probabilities of natural disasters, absence of hazard zone identification, size of risk pool, the affordability of insurance products, and the low insurance culture.

Freeman also mentioned that formal insurance is unlikely to provide income protection for the poor. The moral hazard problem is particularly difficult for income replacement insurance programs. However, large public infrastructure projects could be covered by insurance contracts taken out in international insurance markets.

To provide insurance to the low-income households for their income and assets, there must be long-term investment in capacity-building of insurance institutions, increasing the coverage and penetration of insurance sector, and developing a regulatory framework in which this market could operate. One of the emerging insurance products is the catastrophe bond, a financial instrument that could be cashed by the purchasers following a "trigger event".

Peter Hazell discussed some of the new approaches to insurance for the poor. Insurance products needed to be both affordable and accessible, and must avoid the problems of moral hazard and adverse selection. One of these products could be 'rainfall insurance', where a drop in the rainfall below a certain level could entitle the policyholders to get insurance benefits. Since the data regarding annual rainfall is available in most of the countries, insurance could easily be indexed to the rainfall. The insurance would be universally available and independent of a purchaser's exposure to risk. As long as the event was triggered those insured would receive a standard equal payment with the scheme taking on the characteristics of a national lottery. The World Bank is now helping to introduce the idea of rainfall insurance in Nicaragua.

There was a general agreement that informal insurance arrangements that existed for risk-sharing among the poor are inadequate for dealing with natural disaster risks. Small schemes with low capitalization cannot respond since natural disasters affect an entire community simultaneously. Hans Hoogeveen spoke about the alternatives provided by diversification of means of income, irrigation for land, food for work programs, transfers and insurance. A number of these alternatives have been employed in different situation with varying degrees of success.

Hoogeveen mentioned that public works program has been one of the standard programs for disaster recovery. Since targeting in public works program is easy, these programs have been very successful in smoothing consumption of the poor. They are also helpful in building social capital. However, these programs are expensive, and the expansion of these programs will depend upon the availability of public funds. They also do not provide for asset replacement at the individual level.

Insurance is one of the options provides one option but needs to overcome the problems of moral hazard and adverse selection. In addition insurance is essentially a commercial function which requires a competitive market that is well regulated. In many developing countries these prerequisites are not in place and in general, insurance has very low penetration outside the world's more developed economies.

Other options could be offered through savings, off-farm employment, and new technologies that could help poor households with income - and consumption-smoothing. None of these alternatives are likely to be universally applicable and prevailing circumstances in each country will determine the likelihood of their success.

Paul Siegel discussed the need for new approaches to social risk management. If the informal risk-sharing arrangements are not efficient in dealing with risks of natural disasters, it is essential that financial and insurance markets are improved, formal and / or 'hybrid' finance and insurance arrangements are developed and safety nets established. Given the weaknesses of informal insurance arrangements, it is expected that there will be a shift towards formal sector mechanisms.

Dealing with these risks, however, requires a broad consideration of the risk factors. The framework should be built around empowerment, security and opportunity for the poor. It should aim to reduce risk, mitigate against disasters and enhance coping strategies. The interventions should be taken up at macro-, meso-, and micro levels, and draw upon the strengths of financial mechanisms of credit, savings, and insurance. Siegel concluded that an important way of dealing with these risks is to increase the size of the risk pool, something that could be achieved by developing broader inter-sectoral and inter-spatial linkages.

Risk management options are heterogeneous, and so are the asset portfolios and income-generating activities of the poor households. Instruments to manage risks include compensatory finance, commodity price management and insurance, disaster risk management through catastrophe bonds, international reinsurance markets.

Rural financial institutions and microfinance organizations could provide a range of formal and informal insurance products. An important consideration in providing financial resources to the poor households is easy accessibility to the network, timeliness of the help offered, and the dependability of these institutions. Inclusion and the affordability of these financial products are other factors that determine the effectiveness of these mechanisms.

Along with the financial products, services, and incentives, an important component of disaster risk reduction strategy is community-based mitigation programs. Jelena Pantelic summed up these presentations in the plenary discussion. The social and community resources that could be seen in microfinance networks could also be utilized in building these mitigation programs. A number of presentations were made on these community projects. The Asian Disaster Preparedness Center (ADPC) has been in forefront of organizing community-based disaster mitigation programs.

In Cambodia the ADPC is working with the Cambodian Red Cross for taking up small scale works such as foot bridges, sluice gates, raising dikes, etc. One of the important concerns of the ADPC has been to build sustainability of these programs. The ADPC is also working with CARE in Bangladesh to explore how microfinance networks could be utilized for mitigation activities.

Mihir Bhatt talked about vulnerability reduction in terms of livelihood security. The issue of subsistence for the poor is very important, and it must be secured through a series of interventions. It is important that some of the basic issues affecting the poor such as food security, water security, and fodder security are insured. He cited a number of experiments in Gujarat where community-based mitigation efforts have been driven by the financial products of microfinance organizations, and argued for creating social funds with multiple purposes.

Jan Vermieren spoke about the Caribbean Disaster Mitigation Project (CDMP) which provided an opportunity to practice micro-financing approaches in St. Lucia and Dominica. The Organization of American States (OAS) organized community outreach, construction training, and home-retrofitting loans through the NGOs. However, there was little demand and, therefore, the OAS tied the loans to individual home improvements. The revolving loan fund ran out ending the project. The repayment of these loans was nonetheless encouraging. However, the main problem has been to find low-interest financing for the revolving funds which requires substantial subsidization and significant efforts reach out and inform the community.

In the Dominican Republic OAS/CDMP created an NGO that has continued beyond the project. It made contributions to leverage other external resources for community flood mitigation projects. Now the municipal governments are using this approach. All but one of the community flood control works withstood flooding from hurricane Georges.

There were a number of suggestions for creating Vulnerability Reduction Funds, Social Funds and Revolving Funds that could support community mitigation programs. These community programs could build social assets such as schools and roads. The role of the public sector in supporting these initiatives was emphasized by many of the participants.

A number of financial mechanisms and instruments were identified in course of the day-long deliberations. These included social funds, microcredit, microinsurance, rainfall insurance, savings, and catastrophe bonds. Each of these instruments could be tested individually and in combination with other instruments. There was also recognition of the need for emergency draw down funds which could be accessed by governments for dealing with natural disasters.

Some of the suggestions for pursuing this agenda through inter-sectoral participation have been as follows:

1. A meeting should be organized for some of the leading microfinance organizations to discuss specific instruments for applying to disaster risk reduction and mitigation.
2. Microfinance organizations must be oriented and trained in disaster preparedness. These organizations may acquire sufficient knowledge of hazard conditions to advise its clientele about the most efficient way of investing in mitigation.
3. The feasibility and cost effectiveness of ex ante mitigation investment compared to the investment in disaster recovery and rehabilitation may also be studied for developing suitable financial products and instruments.
4. A meeting of leading insurance and reinsurance industry should be organized to discuss the development of microinsurance for disaster risks.
5. One of disaster-affected areas in developing countries could be taken up on a pilot basis for the application of microfinance instruments, and its impact could then be evaluated. Prof. Mark Pitt and Shahid Khandker are currently conducting a research study investigating how the poor cope with the natural disasters, based on their experiences of 1998 floods in Bangladesh. Another study is being conducted by Jelena Pantelic and the Disaster Management Facility of the World Bank for examining the usefulness of microfinance instruments in dealing with natural disasters. The results of these studies could be published and disseminated.
6. Regional initiatives could be organized that allow microfinance institutions, disaster management professionals, insurance and reinsurance organizations and governments to come together, discuss these issues and share experience.

There was also a wide agreement that there are significant knowledge gaps in the area of disaster mitigation that justify research. It would be important to establish which attributes of microfinance are most important for disaster mitigation, and what new innovations are likely to be most effective. Some of these questions require data collected before and after a natural disaster. As disasters are by definition unpredictable, it is difficult to get a survey into the field within a reasonable amount of time. It was agreed that the discussion initiated in this colloquium must be continued through a series of initiatives at the regional and international levels.

The colloquium ended with a vote of thanks to all the speakers and participants.