EFFECT OF MICRO FINANCING ON DISASTER MITIGATION

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ABSTRACT

This research paper examined the effects of micro-financing on Disaster Mitigation. The research methodology applied consisted of both secondary and primary data. The major objective of the research study includes is to study the impacts of micro-financing on disaster mitigation and the dealing of micro-financing institutions with the disaster risks. The study found that the victims particularly women are most affected as a result of natural disasters while constituting 63% and 36% of males received relief from micro-financing institutions. The study further demonstrates that 5% of the victims receive support from and family and friends whereas 25% of the victims remain uncovered from support and relief. Furthermore, it was also determined that 90% of the victims who availed the facility of relief loan have returned back with required interest. On the basis of research findings, the paper suggested that MFIs should ensure disaster management in order to benefit all the victims form the relief products and services they are delivering. In this regard, Microfinance Institutions should attempt to develop special loan products and services for disaster victims. It was also analyzed that MFIs apply different strategies and frameworks such as DRM (Disaster Risk Management) to lower the risk of loan default.

Keywords: Disaster management, microfinance, beneficiaries, disaster risk management, impact.

INTRODUCTION

It is evident that disaster management is vital in terms of the wellbeing of society and is accompanied by the hold of microfinance institutions in order to eradicate poverty from the society. Disaster management institutions are always in search of an improved reaction to the needy societies affected by the disaster. In addition, society always reestablished back if they have access to microcredit. An evacuation support during a disaster is most appreciated to enhance the business opportunities. The effect of the disaster is mostly on women as loan rescheduling will indulge female reimbursement system. Usually, the impact of a disaster is indeed huge in society leaving the affected communities to be supported in order to become self-sufficient to recover the economic activities. It is a fact that microfinance institutions play a significant role during the disaster in terms of self-reliance of evacuees while humanitarian agencies have also been altering their policies to reevaluate the provision of relief in an emergency for long-term development plans. This research paper aims to discuss the effects of micro-financing in disaster mitigation.

Historical Perspective

The frequency and effect of disasters across the world have increased exponentially over the last few decades. Historically, the role of microfinance institutions in controlling the disaster risks can be demonstrated during the 1998 flood in Bangladesh which is considered to be the worst floods in the history during July to September 1998. Bangladesh is mainly a flat deltaic country based on the systems great river the Ganges, the Brahmaputra and the Meghna. A huge loss of property, human and animal lives were recorded in the coastal areas of Bangladesh and about 4 million affected people with this flood while thousands of livestock perished and one million homes were fully damaged. A number of microfinance institutions responded to this extraordinary disastrous situation and the rescue workers even used boats to make sure that contacts among all the members were maintained. Moreover, the 2004 tsunami disaster in Sri Lanka is also one of the most dangerous and worst natural disaster experienced in the history with a recorded loss of about 35,000 casualties and 800,000 displaced people. According to an estimate by RADA, about 150,000 people lost their lives and 80% of the affected people lost their major source of income (Penuel & Statler, 2011). While there were many issues that the microfinance sector is facing, it has been varied with high penetration by several types of institutions applying a range of microfinance models and techniques. Majority of the microcredit is subsidized through government banks and subsidized credit which is unbearable.

Research Aim

The aim of the research is to evaluate the effects of micro-financing in disaster mitigation.

Research Objectives

- To study the impacts of micro-financing on disaster mitigation.
- To analyze the dealing of micro-financing institutions with disastrous situations.

Research Questions

- What are the impacts of micro-financing on disaster mitigation?
- How have micro-financing institutions usually dealt with disaster risk?

Problem Statement

Disaster mitigation is a serious concern for nations to prevent the consequences of disasters. Unfortunately, natural disasters are considered to be the greatest threats for the economic growth of a country. However, micro-financing works to mitigate the effects of disastrous situations in countries to raise the living standards of affected people economically and socially. There have been different models and methods used by microfinance institutions through systematics observations and the analysis of dusters. The effects of micro-financing on disaster mitigation should be able to improve procedures for prevention, preparedness, mitigation and recovery.

LITERATURE REVIEW

The conceptual framework uses the application of natural disasters, vulnerabilities and livelihood outcomes. Growing evidence in terms of risks and vulnerability makes the poor community more vulnerable as their livelihood is adversely affected as a result of natural disasters. In order to mitigate this situation, they adapt managing strategies and afterword recovery measures leading to enablement. During the disaster, mitigation and response measures are required through Microfinance Institutions to provide backup funds such as urgent demand, repayment payments, interest rate cuts, revaluation of credit methodology and insurance coverage (Auboin & Engemann, 2012). As a result, the victims of the disaster are capable of restoring housing and buying action and income-generating wealth.

Microfinance Institution is a monetary institution specializes in banking services particularly for Low-income individuals. These institutions facilitate them with account services to small account holders which are not generally accepted by traditional banks. In addition, they offer transaction services for smaller amounts with average fees by conventional financial institutions. The CGAP (Consultative Group against Poverty) carried out a survey regarding the industrialization of nations and populations while significantly influencing the spread of MFIs (Chirkos, 2014). The application of the services of MFIs along with their behaviour will result in distinct outcomes and impacts on their lives (Banerjee et al, 2013). The Study of business products is intended to satisfy the needs of the customers rather than producing to deliver the market is confirmed by Castaldo et al (2009) who said that the exceptionally poor who are ignored in their society and expelled from monetary services have special financial needs.

In the situations of disaster, the access to the resources of mitigation becomes of great value. MFIs especially become significant in helping the poor with appropriate mechanisms of insurance in order to adjust the risks (Linnerooth-Bayer & Hochrainer-Stigler, 2015). The theoretical literature recommends that microfinance delivers an effective and efficient risk handling method. In addition, direct and indirect ways in which microfinance institutions can participate to help households in becoming less susceptible to adverse tremors of the disaster. In order to achieve the objectives, several different views and perceptions can be classified into three major concepts which are a risk, risk management and vulnerability which have brought a collected and common framework known as the DRM (Disaster Risk Management) framework. These ideas have been defined inversely by different disciplines such as economics, geography, sociology environmental studies and disaster management. According to this framework, the risk is the possibility that an adverse event will happen and will affect several components of the system such as a household, a society, country or the microfinance sector (Moss, Neubaum & Meyskens, 2015). The key stages of the DRM framework include;
Preparedness – It attempts at creating an emergency response and management capacity before the occurrence of a disaster in order to ensure an adequate response. Additionally, preparedness assists in mitigating the disaster impacts.
Response – It entails the actions which are taken immediately during and the after the disaster to save human lives and the damage to property while improving the effectiveness of recovery. This stage not only deals with the physical effects but also to mitigate the new possible factors of risk as a result of the disaster.
Recovery – It includes the activities which are short-termed and are essential to restoring the systems of support and long-term activities to bring life to normal. The measures of mitigation, prevention and resources can take a long time or even years.
Prevention –It refers to the policies and activities to be put in place before the occurrence of a disaster. Mitigation involves structural and nonstructural activities and measures.

Overview of Disaster Impacts

The main sources of economic and civil conflicts in terms of natural disasters aggregate shocks to society which can result in an increased poverty. In developing countries, the death toll is generally high while capital losses in absolute terms which tend to be lower as compared to developed countries. The related and total impact of disasters is extremely significant. Furthermore, the effects of the disaster are not felt by all the population affected. The analysis of Allison et al (2009) demonstrates that comparisons at the national level appear to be the poorest who may suffer the most in relative terms.

According to Cavallo & Noy (2009), disasters cause damages which are direct while destroying fixed assets partially or totally. In addition, disasters also cause indirect losses by affecting the flow of goods and services such as microfinance and delivery of service. This type of losses can lead to direct damages towards social and economic infrastructures while affecting the production capacity. While indirect losses also involve the present outlays and increased expenses in the provision of services as a result of a disaster event. Although it is impossible to measure, households indirectly affect such human suffering and insecurity. These effects also strengthen by temporary shortages and raw materials for agricultural and industrial production and disruptions in water supply and hygiene. Also, affects the fundamental necessities such as electricity, communication and transport services. Disasters occur fairly frequently and tend to affect the distribution of income among regions and groups (Strobl, 2012).

Particularly, the effects are directly on the physical integrity of the household which is reflected in fatalities, sufferings, injuries and other forms of losses due to a reduction in terms of income and increase in the consumption and expenditures of healthcare. Consequently, MFIs works to reduce the poverty in order to deal with some of the major problems like increasing productivity with the creation of employment opportunities and developing the human capital (Bateman, 2010). One important way in this is regard is to increase the efficiency and productivity of the poor on the basis of economic growth. This economic growth makes sure a more inclusive contribution in terms of development with the provision of widespread opportunities for employment. Furthermore, agricultural development provides economic growth opportunities which are broad-based. However, a substantial expansion of employment in agriculture might not appropriate as agriculture already is providing almost 70% of employment in most of the low-income countries (Trostle, 2010).

METHODOLOGY

This section intends to explain the methods for conducting the research study. The research involves the application of both primary and secondary data. This study also looked at the effects of micro-financing on mitigating the disasters and how victims are able to repay the microcredit facilities and how the strategies of disaster management can be employed to mitigate the human sufferings. These strategies include designing new loan products, liquidity management and risk management.

Research Philosophy

A research philosophy can be termed as a belief in terms of collecting the data for a specific phenomenon in order to be analyzed and applied. An appropriate research philosophy for the given research study is positivism. In order to study the effects of micro-financing on disaster mitigation in an effective way, this eventually proved the significance of the research philosophy as it emphasizes on a well-defined structure during the research studies and discussions through the determination of reliable research outcomes.

Data Sources

The research study used both primary and secondary data. Primary data was collected through a survey in order to gather data form microcredit beneficiaries and non- beneficiaries in the chosen financial institutions. While secondary data on disaster mitigation and the selected MFIs is also gathered from the research literature, articles and journals.

Instruments

In collecting the primary data, face to face interviews is done in order to collect data from microfinance beneficiaries of the chosen MFIs. Secondary data on disaster mitigation is also collected for the purpose of the study.

Inclusion Criteria

The inclusion criteria involve the selection of relevant data regarding the reach study. For the given research study, the studies were chosen to determine the effects of micro-financing on disaster mitigation. The critical evaluation to consider the inclusion criteria assists in the exploration of the specific components which are essential to determine the effects of micro-financing on disaster mitigation.

Search Strategy

A search strategy is of great importance in a research study which is based on literature. In addition, it helps in extracting the relevant information from studies. A search strategy seeks to integrate the basic ideas of the research to attain the desired outcomes. In this given study, the search strategy is based on keywords and search terminologies which are related to the effects of micro-financing on disaster mitigation.

Ethical Considerations

Ethical considerations are critical in research. While ethics are values and standards for conducting the difference between right and wrong, they also help to determine the difference between satisfactory and unsatisfactory behaviours. The major reason for this is that ethical values and standards prevent the fabrication of data thus; it promotes the pursuit of information and truth which should be the primary goal of the research. The objectives of the research study were made clear before the collection of data making it sure that it will not raise any expectation of help. The data collected was to be used for research and academic purpose only.

RESULTS

This chapter presents the results of the research study with the help of statistical representation. The result of the analysis demonstrates the fundamental demographic information for MFI and disaster victims. The results show the effects of micro-financing of female victims as they constitute 63% while the percentage of males constitutes 36%. It is evident from the results that 40%of the victims were supported and provided with relief from MFIs, 30% from other organizations and 5% received support from family and friends. 25% of the victims did not receive any assistance. In addition, the analysis shows that 90% of the victims who availed the loan facility have paid back.

Gender	Frequency	Percentage
Male	62	36.9
Female	105	63.1
Total	167	100

Figure 1: Gender of MFI Beneficiaries (The impact of microcredit of poverty reduction, 2018)

Disaster Mitigation Strategies

From the analysis, it has been analyzed that local MFIs can undertake a variety of corresponding activities in order to mitigate the disaster situation. Therefore, they can contribute to making sure that emergency responses to be more community based and sustainable. The role of MFIs is important in promoting disaster risk and vulnerability evaluations of their clients. There are several factors which appear to influence the effectiveness of MFIs during the disasters. One important factor in dealing with disaster mitigation is the institutional leadership, comprehensive financial management and accounting and an efficient level of disaster preparedness manage to respond quicker and faster in response to a disaster situation (Waugh, 2015). For instance, rapid access to money can be made available in the form of emergency relief funds and the efficient transfer of external funds are particularly acute.

Results show that several banks in different parts of the world have set up a comprehensive to deal with disaster mitigation on the basis of three basic levels namely the group level, centre level and institutional level. Each of the group created an emergency fund towards each member paying 5% of the loan. Borrowers, however, have to contribute around 25% of the total interest they owe in a centre disaster fund. These strategies can be represented as;

	Preparedness	**Mitigation and Reduction**	**Response and Recovery**
Systematic documentation and reduction of disaster risks By MFIs			
	• Identification and evaluation of disaster risk and vulnerability • Formation of Institutional Disaster Response Plan	• Protection of financial and historical records • Relocation of vulnerable equipment and facilities.	• Carry out a disaster and need evaluation in order to assist people affected
Incorporation of disaster risk into entire Risk Management System			
Institutional Risks	• Ensure a balance between humanitarian and financial health • Development of effective information management systems	• Reinforce financial visibility of the products and services	• Minimize reputation risk by providing adequate help to the clients
Operational Risks	• Form Disaster Response Plan • Provide flexibility in lending criteria	• Development of clear and structured policies in terms of savings and withdrawals	• Control and regulate security risks
Financial Risks	• Estimate possible needs of the cash flow	• Ensure the availability of funds	• Monitor efficiency levels

	• Organize savings	• Prevent over-reliance on savings to fund loans	• Prevent subsidized interest rates
Formation of products and service to the affected in Disaster Risk Management			
	• Mobilize savings • Create disaster awareness • Train clients on disaster emergency response	• Promote natural resource management • Deliver insurance and saving products	• Maintain credit flow and allow debt restructuring • Promote mitigation practices

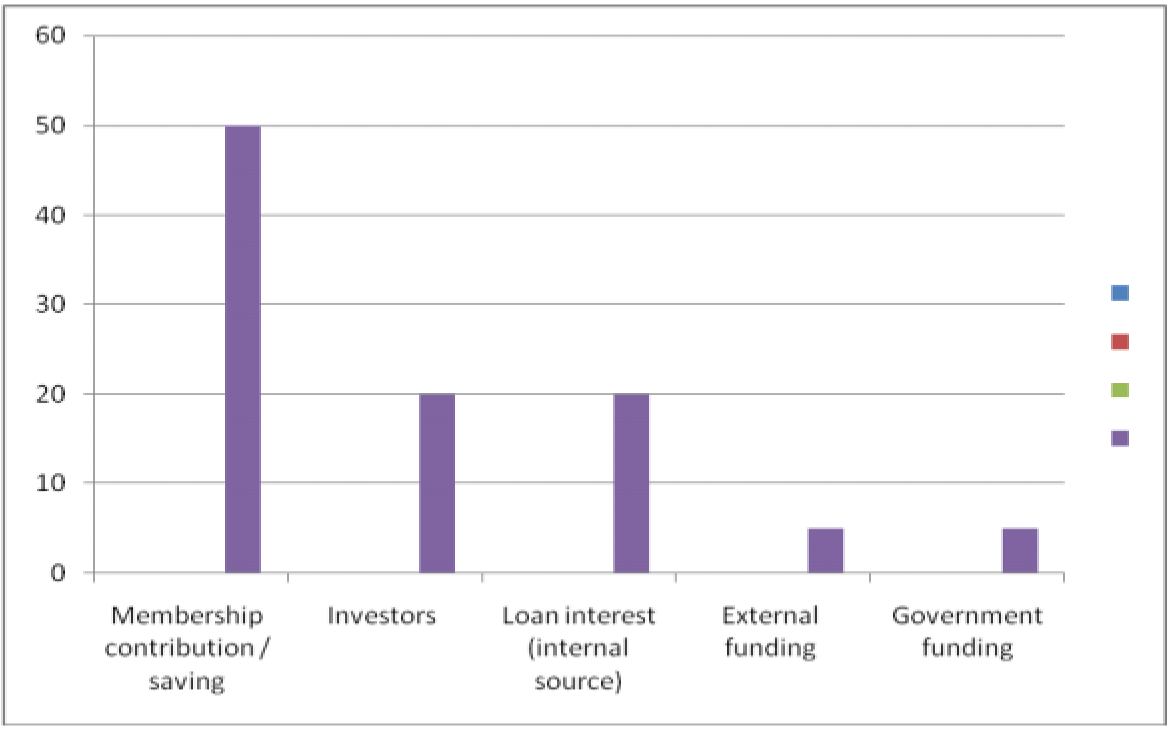

Figure 2: MFI Funding (The effect of Credit Risk Management, 2018)

MFIs are commonly owned by membership donation with the aim of saving and obtaining loans are the competitive rate to the clients. There are rare cases where governments open a microfinance institution for people, However, MFIs showed dynamism about their major sources and effects in terms of disaster mitigation shown in the above graph.

DISCUSSION

Microfinance institutions provide financial services on small scale to the victims of the disaster situation and are excluded from the formal banking sector and conventional financial systems. Dokulilova, Janda & Zetek (2009) states that MFIs are operating in developing as well as emerging countries, their increased growth rate has specialized in offering small-scale loans to the disaster victims posing positive impacts on individuals to start small businesses. Particularly, in the rural areas of developing countries where the financial systems are often poor and not fully merged. Additionally, the research study found that females appear to be the largest victims of the disaster constituting about 63% while male constitutes around 36%.

The study also established almost 25% of the disaster victims did not receive any relief and support at all. Furthermore, the study revealed that 90% of the victims who availed the facility of the loan have paid back with the required interest.

In terms of application, the services of MFIs could result in a number of outcomes and impacts on the lives of victims. Moreover, there are certain frameworks of disaster management in terms of economy and geography that will affect several components of the financial system such as households, society and the microfinance sector. In this regard, Disaster Risk Management is of great value which helps with proper mechanisms for adjusting the risks. The findings show that microfinance interventions have a positive impact on client's particularly female victims of the disaster situations. The study Cavallo & Noy (2009) in the literature explained that disasters caused damages which are damages which are direct and damaging fixed assets by affecting the flow of goods and services of microfinance. On the basis of findings, it is recommended that disaster management must ensure the benefits and relief for disaster victims. This will assist to improve the suffering of the victims and also to make sure that no victim will remain uncovered. MFIs should also endeavour to develop strategies as mentioned in the findings of the research such as mobilize savings, development of disaster response plan and simplifying the lending criteria while promoting the mitigation practices. The policymakers, development planners and the private sector to be implemented through corrective measures to assist microfinance beneficiaries during natural disaster situations.

The management of MFIs should increase the range of products and services in order to cater to the needs and requirements of poor and rural communities (Ledgerwood, Earne & Nelson, 2013). Also, the management of MFIs should work to extend the repayment period. In terms of promoting the strategies of Disaster Risk Management (DRM), governments and donors have a significant role to play in the microfinance sector. The results can be evaluated in order to maintain applicable policies and methods. MFIs can employ the important functions in terms of preparedness, mitigation and risk transfer, coping and recovery. The provision of technical management is an obvious requirement in order to achieve the objectives for taking disaster reduction into consideration.

CONCLUSION

To conclude, a disaster is indeed an unexpected event which can affect people at any instance of time. One cannot avoid it completely at the occurrence. It has been a significant tool for reducing the reducing the poverty through improvement of microenterprises. This research study examined the effects of micro-financing on disaster mitigation, the findings of the study demonstrate that the services microfinance has positive impacts on savings, income and investment of the recipients in terms of credit facility. Furthermore, there are several strategies and frameworks describing how micro-financing institutions deal with the situations of natural disasters by evaluating the relationship of micro-financing and disaster mitigation through the creation of employment opportunities. On the basis of relevant literature, microfinance could help in alleviating poverty from grass root level of the society.

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