DISASTER RISK REDUCTION AND MANAGEMENT GUIDE FOR

MICROFINANCE INSTITUTIONS

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Background

This guide was prepared as part of the *Disaster Risk Reduction and Mitigation Program for MFIs.* The program was established by a consortium composed of the Peace and Equity Foundation (PEF), Microfinance Council of the Philippines, Inc. (MCPI), PinoyMe Foundation, and National Consortium of Cooperatives (NATCCO) to enable MFIs to mitigate the impact of disasters on both their institutions and their clients. Peace and Equity Foundation provided funding support for the program.

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Abbreviations and Acronyms

ASHI	Ahon sa Hirap, Inc.
BSP	Bangko Sentral ng Pilipinas
CARD	Center for Agriculture and Rural Development
DRRM	Disaster Risk Reduction Management
FI	Financial Institution
MFI	Microfinance Institution
NDRRMC	National Disaster Risk Reduction Management Council
NWTF	Negros Women for Tomorrow Foundation
OCD	Office of Civil Defense
OFMPC	Omaganhan Multi-Purpose Cooperative
UNISDR	United Nations International Strategy for Disaster Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNDP	United Nations Development Program
WFP	World Food Program

Microfinance and Disaster Risk Reduction Terminologies

Capacities	Refers to individual and collective strength and resources that can be enhanced, mobilized and accessed, to allow individuals and communities to shape their future by reducing disaster and climate risk. This includes prevention, mitigation, preparedness and climate adaptation. (CORDAID)
Contingency plan	These are based on specific events or known risks at local, national, regional or even global levels (e.g. earthquakes, floods or disease outbreaks), and establish operational procedures for response, based on anticipated resource requirements and capacity. (IFRC)
Disaster	A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. (UNISDR)
Disaster risk	The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period. (UNISDR)
Disaster risk assessment	A process to determine the nature and extent of such risk, by analysing hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend. (UNDP)
Disaster risk reduction	A framework and tool that determines the degree of risk and describes measures to increase capacities and reduce hazard impact on the elements at risk so that disaster will be avoided. (CORDAID)
Disaster management	The organization and management of resources and responsibilities for dealing with all humanitarian aspects of

	emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters. (IFRC)
Duration	How long the hazard is felt – i.e. earthquake and aftershocks, days/weeks/months that area is flooded, length of military operations. (CORDAID)
Early warning	The provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response. (CORDAID)
Element(s)-at-risk	Population, buildings and engineering works, infrastructure, environmental features and economic activities in the area affected by a hazard. (NGI)
Hazard	A potential event that could cause loss of life, or damage to property or the environment. (CORDAID)
Loan loss reserves	That portion of a fund's earnings or permanent capital designated by the board of directors as a reserve against possible loan losses and, as such, unavailable for lending purposes. Generally accepted accounting principles governing for-profit and regulated financial institutions require that loan loss expense be deducted as an annual expense on an accrual basis and that the loan loss reserve be shown as a contra asset reducing loan assets. To date, no accounting convention has been established to govern loan loss reserve accounting for unregulated nonprofit institutions. The technical treatment is to establish the reserve through periodic charges against earnings, and actual losses, when and if incurred, and are charged against the reserve. For balance sheet purposes a loan loss reserve (should) be shown as a deduction from the loan portfolio to suggest that its true economic value should be reduced by the estimated loss exposure. Source: Renz and Massarsky
Loan portfolio	All outstanding principals due for all outstanding client loans. This includes current, delinquent, and renegotiated

	loans, but not loans that have been written off. It does not include interest receivable. (MixMarket)
Microfinance	The provision of financial services to low-income people. (CGAP)
Prevention	The activities designed to impede the occurrence of a disaster event and/or prevent the cause or origin of the hazard event.
Readiness	Group/community/organization functioning as a system which is prepared for any hazard that is going to happen.
Resilience	The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.
Vulnerabilities	The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

Introduction

Why disaster risk reduction in microfinance?

The Philippines ranked 4th on the 2016 Global Climate Risk Index (CRI) of the ten countries most affected by the impact of climate variability from 1995 to 2014. The CRI, developed by the Germanwatch, considered four indicating categories to include degrees of fatalities and economic losses in the past 20 years. The top ten countries with very high CRI, like the Philippines, are asked to seriously consider the CRI warning, accordingly.

Microfinance institutions (MFIs) ought to heed the same warning owing to climatic impact on clients and portfolio by the more pronounced hazards in recent years: Typhoons Pepeng and Ondoy (Ketsana, 2009), Sendong (Washi, 2011), Pablo (Bopha, 2013); Yolanda (Haiyan, 2014); earthquake in Bohol in 2013) and mudslide due to typhoon (Koppu, 2015).

After the onslaught of Typhoons Pepeng and Ondoy, MFIs played a role in the post-disaster recovery. Major source of financing for livelihood came from individuals and private lenders even if MFIs offered a relatively lower interest rate (IFC, 2011). Loss of assets and outstanding credits were included in clients' worries that contributed to decreased access to MFI loans. On the same study, some MFIs temporarily suspended the release of loans. On the other hand, clients who accessed MFI services appreciated the importance of the forced savings imposed by MFIs and the financial claims that they received from their insurance.

But the way MFIs respond to disasters evidently improved a few years later. After the deadly typhoon Haiyan in November 2013, affected MFIs, despite a huge affected loan portfolio, actively did their share in response and rehabilitation by keeping a continuous flow of credit in affected communities; implementing livelihood recovery programs in partnership with other non-government organizations; and facilitated a fast payout of microinsurance claims.

Disaster preparedness of MFIs is very vital to continue their roles. While limited resources hamper a comprehensive disaster response, operational structures and huge network of access to the poor are very vital channels for risk reduction programs and response management. Implementing a roster of programs that support disaster preparedness and a range of product lines that are adaptable to aid recovery appeared to be the more appropriate roles for MFIs. In a recent research commissioned by the Microfinance Council of the Philippines, Inc. (MCPI), 80% of Philippine MFIs recognize disaster risks in the top five list of global risks faced by the microfinance industry. It also identified five (5) common areas where MFIs are lacking and these are: 1) strategy to help clients recover faster from the impacts of a disaster; 2) increase MIS capability to track new and special products, and non-financial costs associated with disaster response; 3) prepare and execute a disaster-ready liquidity plan; 4) regular and systematic conduct of loan portfolio analysis; and 5) strategy to mitigate disaster – induced credit risk.

Disaster Risk Reduction and Disaster Management

In understanding the guide, it is important to understand the frameworks used and be able to distinguish the difference between disaster management and disaster risk reduction. Disaster Management (DM) can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters (IFRC). This is the earlier concept focused on minimizing the impacts of disasters rather than of hazards. This concept has later evolved into disaster risk reduction which is focused on preventing hazards from turning into disasters. Disaster Risk Reduction (DRR) aims to reduce the damages caused by natural hazards like earthquakes, floods, droughts and cyclones, through an ethic of prevention. Disasters often follow natural hazards. A disaster's severity depends on how much impact a hazard has on society and the environment (UNISDR). Thus, DRR is focused on preventing disasters from happening by focusing efforts on lessening the impacts of hazards. The guide is focused on disaster risk reduction mixed with resilience framework that is aimed directly at increasing MFI resilience as an institution and indirectly to communities where it operates.

Target Audience

The handbook was purposely designed for microfinance institutions. While some MFIs have already adapted sufficient DRR measures, the rest are not as prepared as the others and may need some direction and reference to start with. On the one hand, those who have already drafted their own DRR plans may still be lacking in some areas and might find the manual useful in improving it. On the other hand, non-microfinance practitioners may also find some areas useful for references.

Objectives of the Handbook

The main objective of the manual is to provide direction for microfinance institutions that have decided to design or integrate disaster risk reduction into their operations. It seeks to highlight relevant areas in microfinance operations that can be considered in crafting a disaster risk reduction plan.

Secondly, the manual seeks to provide a reference for microfinance institutions when drafting a disaster risk reduction management plan. The guide is designed to integrate disaster risk reduction management in microfinance operations. It features best disaster preparedness practices by microfinance institutions in the Philippines and around the world which can be benchmarked by the audience. The manual covers the following topics:

1. Disaster Risk Assessment
2. Disaster Risk Reduction Measures
3. Implementation
4. Measuring Resilience

Chapter 1. Disaster Risk Assessment

This chapter introduces risk assessment as a take-off point in programming risk reduction initiatives. It includes concepts and principles as well as activities that need to be carried out to identify the disaster risks that the institution faces as well as understanding the disaster risks that their clients encounter to be better prepared for it. Risk assessments are conducted on a regular basis to cover evolving changes in hazards.

UNDP (2010) defines risk assessment as a process to determine the nature and extent of such risk, by analyzing hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, properties, services, livelihoods, and the environment on which they depend. A comprehensive risk assessment involves the following:

1. Understanding the current situation, needs, and gaps. This is done to assess current capabilities, systems, available data, knowledge, and information to avoid duplication of what already exists and focus efforts on needs and gaps.
2. Hazard assessment. This is conducted to identify the nature, location, intensity, and likelihood of hazards to occur.
3. Exposure assessment. This includes taking a look at the population, livelihood activities, assets, and the environment that are likely to be affected if the identified hazards occur.
4. Vulnerability analysis. It gauges the capacity of the exposures to withstand the likely impact of hazards.
5. Loss/impact analysis. It estimates the value of potential losses based on their vulnerabilities to hazards.
6. Risk profiling and evaluation. This step evaluates available efficient options to reduce the risks involved.
7. Formulation/revision of DRR strategies and action plans. Given the result of the assessments, the strategies need to be updated or formulated into programs to ensure that risks faced by population, properties, livelihood, and environment are reduced.

To facilitate a simple but structured and systematic disaster risk assessment, the guide adapted the concepts used by Cordaid's *Building Resilient Communities*. Furthermore, this formula guides the entire risk assessment process:

$$\text{Disaster Risk} = \frac{\text{Hazard x Vulnerability}}{\text{Capacity}}$$

This equation shows that disaster risks are determined by factoring coping capacities of "element(s)-at-risk" to hazard and vulnerability. This further illustrates that regardless of hazard and vulnerability exposures, capacity is a critical determinant of disaster risks. For

instance, even if an element at risk is highly vulnerable and exposed to hazard if there is sufficient coping or mitigating mechanism in place, disaster risk tends to be lower.

a. Hazard Assessment

Hazard as defined by the UNISDR refers to "a potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation." Hazards can be man-made or natural that can turn into a disaster while disaster is a result of incapacity to cope with hazards. It is a common misconception however that hazard is similar to disaster and these are often used interchangeably. Examples of natural hazards are floods, landslides, drought while examples of man-made are war, fire, and other hazards that are caused by men.

Characteristics of hazard. Understanding the characteristics of hazards not only helps in identifying the same but helps in identifying proper or necessary measures to prevent its occurrence or mitigating measures if the occurrence cannot be prevented. To be able to carry out a proper hazard assessment, the following needs to be clearly identified:

1. **Cause** – origin of the hazard. What's behind the hazard?
2. **Force** – what will hit the organization? For instance, is it water, wind, fire?
3. **Warning signs and signals** – scientific and indigenous indicators that a hazard is likely to happen.
4. **Forewarning** – the time difference between the occurrence of warning signs and the actual hazard occurrence. One day? One week?
5. **Speed of onset** – rapidity of hazard arrival and impact. Slow? Sudden?
6. **Frequency** – how often does hazard occur? Seasonal? Annual?
7. **Period of occurrence** – the time of the year that the hazard normally occurs
8. **Duration** - the length of period of the hazard event.

Hazard assessment is focused in identifying the nature, intensity, and extent of hazards that have affected the organization in the past years to determine the likelihood of its occurrence. Historical data on hazards can be used in identifying hazards that are likely to affect the organization and the clients. The matrix that follows provides a guide to analyse the impact of hazard on the elements at risk and determine the risk levels.

Illustration 1: Hazard Assessment

Profile

Name of MFI: Philippine Microfinance Inc. (PMI)
Hazard: Conflict in Mindanao
Number of Clients in Mindanao: 10,000
Provinces Covered: Davao del Norte, Maguindanao, North Cotabato, Sultan Kudarat, Basilan, Sulu
Livelihood Activities of Clients: Rice and root crop farming, vegetable gardening, sari-sari store business, buy and sell of vegetables
Religious affiliation of Clients: Muslim, Christian, Indigenous Peoples, Others)

Table 1. Hazard Assessment

Characteristic of Hazard	Elements	Analytical Description of Hazard	Exposure Variables	
			Effect on the organization	Effect on clients
Cause	Resistance to central government control rooting from complex historical issues	Resistance to government control, growing resentment for increasing Christian settlers, and increased mining and logging activities were some of the sentiments of the Muslim communities in the area. Clashes between the rebels and government troops are unpredictable. The only indicators that a fire fight will erupt between the two opposing forces in a particular area are gun firing and visible troop movements or presence of at least one of the forces in the area. Upon a hazard occurrence, affected communities evacuate to nearby towns to keep safe from stray bullets. Displaced residents stay for at least two months in the area until their communities are declared safe. This affects not only the war site communities but the receiving communities who host the displaced population.	- Disrupted operations - No or Low collection - Loss of life risk for field staffs - Robbery	- Loss of life - Loss of productive assets - Livelihood disruption - Migration/ Displacement - Hunger
Force	Guns and bullets, bombs			
Warning signs and signals	Gun firing, troops (government or rebels) movement			
Forewarning	1-2 weeks			
Speed of onset	Fast			
Frequency	All year round			
Period of occurrence	January – December			
Duration	Two months or more			

Source of info: http://siteresources.worldbank.org/INTPHILIPPINES/Resources/socialassessment.pdf

b. Identifying Element(s)-at-Risk to the Hazard

A societal element is said to be 'at risk' when it is exposed to hazards and is likely to be adversely affected by the impact of those hazards when they occur (ADPC, 2006). In the case of a microfinance institution, loan portfolio is often but not automatically an element at risk to most hazards that are faced by the organization. Societal elements include:

- People – includes the lives and health of both employees and clients
- Community structures – household and community networks
- Facilities and services – schools, hospitals, banks,
- Infrastructure – roads, bridges, houses, buildings
- Livelihood and economic activities – jobs, productive assets, livestock, crops, farming equipment, fishing equipment
- Natural environment

Identifying the elements-at-risk is critical as it is the central point of the entire disaster risk reduction program. The assessment process and the risk reduction measures are all centered on capacitating the elements-at-risk. The failure to specifically define or identify the element(s)-at-risk leads to inaccurate risk assessments and adaption of inappropriate measures. A good start therefore includes a clear and definite identification of element(s)-at-risk.

c. Vulnerability assessment

Vulnerability as defined by UNISDR (2007) refers to characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. It further states that there are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors. This definition is explained further by the Asian Disaster Preparedness Center (ADPC) in its CASITA Project to mean that vulnerability is determined by the following conditions:

1. Resilience

   Resilience is about access to resources and capacities to recover from the impacts of a hazard. This could imply that it could take poor communities a longer period to recover to flood, for instance because of their economic conditions than richer communities do. After hazard occurrence, richer communities may easily bounce back since they have more resources; have buffers, and stronger social capital. . This suggests that capacity to cope with the effects of a hazard occurrence contributes to the vulnerability of the element-at-risk. In the same situation, a bigger MFI that has established contingency funds and developed disaster-ready products may easily restore or stabilize its operations right after a hazard occurrence compared to a smaller MFI that does not have the capacity to develop market-based products.

2. Susceptibility

   This is all about proximity and exposure to a potential harm. In this case, regardless of economic conditions, communities either poor or rich if they are located in a hazard zone, they are both considered vulnerable. A poor community located farther from a hazard zone is less vulnerable compared to a rich community that is located within a hazard zone. This suggests that unsafe location is the cause of vulnerability. For instance, a branch office that is located in a low lying area may be susceptible to flooding.

Considering the above definition, it suggests the presence of the two conditions to be considered vulnerable. This means that the elements at risk can be susceptible to hazard but not necessarily vulnerable if it is resilient. On the rich and poor communities in the case of susceptibility, even if they are both exposed to the hazard but the richer community built flood controls to protect the communities, then it is less vulnerable compared to the poor community. This again emphasizes access to resources or capacity as an important condition to determine vulnerability of the element-at-risk.

But the mathematical representation of disaster risk presented earlier in this chapter provides a different way of viewing vulnerability.

$$\text{Disaster Risk} = \frac{\text{Hazard x Vulnerability}}{\text{Capacity}}$$

The equation shows that capacity is factored not only on vulnerability but on the hazard as well. This suggests that vulnerability and capacity are two separate conditions and thereby limits vulnerability to unsafe location. Thus, conditions of the elements-at-risk are not factored in determining vulnerability. In the earlier case of rich and poor communities, if both are exposed to the hazard, regardless of economic conditions, both are considered as vulnerable.

To aid in the vulnerability assessment process, the following illustration may help using the same case:

Profile

Name of MFI: Philippine Microfinance Inc. (PMI)
Hazard: Conflict in Mindanao
Number of Clients in Mindanao: 10,000
Provinces Covered: Davao del Norte, Maguindanao, North Cotabato, Sultan Kudarat, Basilan, Sulu
Livelihood Activities of Clients: Rice and root crop farming, vegetable gardening, sari-sari store business, buy and sell of vegetables
Religious affiliation of Clients: Muslim, Christian, Indigenous Peoples, Others

Table 2. Illustrative Vulnerable Assessment

Hazard Profile	Elements-at-risk	Description of location	Grade			Why the element at risk is in that location
			High	Medium	Low	
Resistance to government control, growing resentment for increasing Christian settlers, and increased mining and logging activities were some of the sentiments of the Muslim communities in the area. Clashes between the rebels and government troops are unpredictable. The only indicators that a fire fight will erupt between the two opposing forces in a particular area are gun firing and visible troop movements or presence of at least one of the forces in the area. Upon a hazard occurrence, affected communities evacuate to nearby towns to keep safe from stray bullets. Displaced residents stay for at least two months in the area until their communities are declared safe. This affects not only the war site communities but the receiving communities who host the displaced population.	Clients and their families Farms crops Houses and farm equipment MFI Field personnel Loan portfolio	Located in the southern part of the Philippines, these are mostly on mountainous terrains.	✓ ✓ ✓ ✓	 ✓ 		Clients and their families have been living in the area since birth. Thus, they have established their livelihood activities in the same area. PMI extended loans to clients in the area and field personnel were assigned for such.

d. Capacity assessment

As mentioned earlier, capacity of elements-at-risk has to be taken into consideration to further analyze risk levels given their location and conditions. While location may expose an element-at-risk to hazards, the same might have sufficient coping capacity that can lower its risk level. In the examples earlier, richer communities may have houses built of stronger materials and higher structures compared to that of poorer communities. In this case, while both are vulnerable to flash floods, the earlier which have better capacity in terms of housing structure may be faced with lesser risks.

Capacity assessment looks at the ability and the available resources of the MFI to withstand the impact of hazards. These include human resources, finances, internal policies structures and processes, and strategies in terms of preparedness, response, and recovery. This involves looking at historical hazards to understand how the organization managed and recovered from similar situations as well as other coping mechanisms that were developed after going through the experience. This also includes mapping of internal and external resources which are available and which can be accessed by the organization in times of hazard occurrence.

Capacity assessment helps in determining the necessary measures that address the elements at risks' exposure to the hazard and capacity to cope, prevent, or mitigate the occurrence or minimize the impacts of a particular hazard. To further assess the capacity of the organization, it would help to identify the hazard prevention and mitigation measures that would lower the risks and compared with the existing measures within the organization.

Capacities addressing Hazard

1. Prevention Measures – these are actions related to preventing a hazard from occurring. In cases of natural hazards, prevention measures may not always be possible but not for hazards caused by humans.
2. Mitigation Measures – these are actions meant to minimize the impact of a hazard if it cannot be prevented from occurring. The impacts of hazards whether it is man-made or natural can always be minimized. There are cases however wherein the required capacity cannot be addressed by the MFI itself but by third parties and these are identified in the gaps.

The third illustration of the same hazard discussed earlier shows the capacity assessment:

Table 3. Capacities addressing hazards

Capacities addressing Hazard			
	Existing	**Required**	**Gaps**
Hazard Prevention Measures	On-going peace negotiations between the government and rebels	Peace agreements between government and rebels	Formal peace agreements between the government and rebels

Hazard Mitigation Measures	Evacuations happen only upon the eruption of gunfights	Pre-emptive evacuation (with alternative livelihood program in place), gun ban	Early warning signs and systems to be able to establish pre-emptive evacuation, the same system for the MFI to know whether to send their field officer to the community or to an evacuation center

Capacities addressing vulnerabilities

As reflected in the equation, vulnerabilities of the elements at risk can be addressed by capacitating the same. Similar with measures addressing the hazard, it is important to identify the existing and required capacities of the elements at risk to address their vulnerabilities. Capacitating vulnerabilities can be focused on either survivability or readiness. Survivability focuses on addressing individual capacities while readiness focuses on addressing community capacities. For instance, if the hazard is landslide and the office building is identified as one of the elements at risk since it is located in the path of a historical landslide area, building a protective wall on the side will reduce its vulnerability.

Table 4. Capacities addressing vulnerabilities

Capacities addressing Vulnerability			
Element- at-Risk	**Capacities**		
	Existing	**Required**	**Gaps**
Clients and their families	Training on emergency management	Life insurance, training on emergency management,	Life insurance coverage for clients and their families
Farm crops	None	Crop insurance,	Insurance coverage for clients' farm crops
Houses and farm equipment	None	Non-life insurance	Insurance coverage for client houses and farm equipment
MFI Field Staff	Accident insurance	Life and health insurance, training on emergency management	Life insurance and medical insurance provision for field staffs; provision of emergency management for field staffs
Loan Portfolio		Payment moratoriums,	Availability of risk-sharing mechanisms for loan portfolio exposed in conflict areas; clear policies for emergency cases

Service Providers and Potential Partners. After identifying the hazards and the vulnerabilities of both the institution and the clients, it is also important to consider current service providers

and potential partners in disaster cases. Service providers and potential partners may be contributing to the coping capacities of the elements at risk.

- The ability of the institution's service **banks** to operate even during hazard occurrence is very important as it might hamper the continuity of transactions. While banks are mandated to have a business continuity plan, it is still important to check the extent of their preparedness for various hazards.
- Consider the impact of the DRR activities or initiatives being offered by **non-banking institutions** on the activities of your organization. Community- managed DRR which may be offered by these organizations to the same communities where your operations are taking place may significantly contribute to DRR preparedness of your clients and you may be only duplicating the effort.
- **Relief agencies** who have been in the area and who will most likely set-up operations in the area after the onslaught of a disaster should be considered as well. It is important to take a look at the programs offered by these agencies as it can be included as a contingency measure. Try also to identify the areas for possible mutual cooperation wherein their programs might complement the activities that you will most likely be doing.
- **Donors** are important to consider in assessing the capacity of the MFI. These are the ones who are interested in your areas of operation and the sector being served by the organization. Donors may share or empathize with the risks surrounding the MFI or its clients and contribute to capacitating the elements at risk.

e. Risk assessment analysis

Given the hazards identified, the vulnerabilities, and the capacities of the elements at risk to cope, the risk assessment process now focuses on assimilating all the assessments and come up with a final evaluation of the identified risks. Various hazards have different impacts to elements-at-risk and these are identified in the risk analysis. This final step in the assessment process puts together the data gathered in the previous assessments. The entire risk assessment report results into the following:

1. Organizational profile (the organization including its operations or the communities where it operates)
2. Hazard, vulnerability, and capacity assessment. These are the findings from the previous assessments conducted.
3. Conclusion. This now sets the degree of risks based on the assessment data. The degree of risks is a representation of the outcome of the risk analysis as a result of the hazard assessment, vulnerability assessment, and capacity assessment. The levels of risks can also serve as a guide in prioritizing during action planning. It can be the following:

- Low risk – element(s)-at-risk are less vulnerable to hazards and has sufficient capacities to avoid or mitigate impact of hazards
- Medium risk – element(s)-at-risk are vulnerable to hazards but capacities are not sufficient to mitigate hazard impacts
- High risk – element(s)-at-risk are vulnerable to hazards and has very limited capacities to prevent or mitigate hazard impacts

4. Recommendations. These are the coping measures needed to increase the capacities of the elements at risk. Coping measures are hazard specific and do not necessarily apply to all types of hazards.

The following matrix may serve as a guide in analyzing the data:

Table 5. Disaster Risk Analysis

Disaster Risk Assessment					
Hazard Profile: Resistance to government control, growing resentment for increasing Christian settlers, and increased mining and logging activities were some of the sentiments of the Muslim communities in the area. Clashes between the rebels and government troops are unpredictable. The only indicators that a fire fight will erupt between the two opposing forces in a particular area are gun firing and visible troop movements or presence of at least one of the forces in the area. Upon a hazard occurrence, affected communities evacuate to nearby towns to keep safe from stray bullets. Displaced residents stay for at least two months in the area until their communities are declared safe. This affects not only the war site communities but the receiving communities who host the displaced population.					
Element at Risk	**Hazard**		**Vulnerability**		**Degree of Risk**
	Preventive Capacity gaps	**Mitigation Capacity gaps**	**Survivability capacity gaps**	**Readiness capacity gaps**	
Clients and their families	Pre-emptive relocation sites, formal agreements between government and rebels		Life insurance coverage for clients and their families		High
Farm crops			Insurance coverage for clients' farm crops		High
Houses and farm equipment			Insurance coverage for client houses and farm equipment		Medium
MFI Field Staff			Life insurance	provision of	High

			and medical insurance provision for field staffs;	emergency management training for field staffs	
Loan Portfolio	Pull-out operations in areas affected by conflict	Cover loan portfolio with credit insurance that includes conflict situations	clear policies for emergency cases in the MFI	Availability of risk-sharing mechanisms for loan portfolio exposed in conflict areas;	High

Summary of Findings:
Conflict hazards in the identified areas of operation cannot be prevented until the government and the rebels involved come up with peace agreements and enforce it. Clients and their families, farm crops, MFI field staffs, and loan portfolio are at high risk in this hazard while houses and farm equipment are face medium risks.

Recommendations: (Prioritize the elements at risk)
PMI needs to review its operations in the area while there are no formal agreements between the government and the rebels. Key viability factors in MFI operations are tagged as high risk. Both life and non-life insurance needs to be considered by the MFI to at least mitigate the impacts of the hazard. In addition, PMI also need to liaise with the LGUs for other measures that cannot be directly addressed by the PMI.

Source: Building Resilient Communities (Cordaid)

Chapter 2. Disaster Risk Reduction Measures

This chapter focuses on measures that an MFI can adapt or adjust in its existing operations to prepare the institution to be able to cope with hazard occurrences and prevent a disaster from happening. Thus, DRR measures are not 'one size fits all' but largely depend on the risks identified by the organization in its risk assessment process. It is therefore imperative that DRR measures that will be adapted by the MFI are built on the **current capacities** of the MFI as well as on the **availability of their resources**. Nevertheless, the chapter dwells more on best DRR practices which can be adapted by MFIs to hazard-specific risks.

a. Institutional Capacity

Capacity assessment is integrated in the risk assessment process. As a result, one of the areas that need sufficient measures is the capacity of the organization to be able to implement applicable measures in other areas. The existing capacities of the organization may need to be strengthened through the adaption of DRR measures to improve its resilience.

1. Institutional Preparation

Access to disaster information. Information is very important in planning. Forecasts or projections on hazard occurrences are readily available as well as historical records. But disaster information does not end with being updated on impending hazards or hazard histories but being knowledgeable of the impacts and potential damages that goes with it and knowing how to deal with it. On-going activities or initiatives on specific hazards are also important information that may help in DRR programming in the MFI.

Branch or office location. Based on risk assessments, identify which offices is high risk in terms of specific hazards. For instance, based on the risk assessment, the area where Branch A is located is susceptible to flooding. An example of a measure could be for management to include in its policies to choose upper floors as branch offices. On the other hand, Contingency plans can include cases when there is a forecasted hazard like flooding, to check which offices will be affected and have the people in these offices warned. This will also help the disaster response team to strategically position themselves for response and monitoring.

Infrastructure and equipment. Preparedness dictates that infrastructure and equipment should be disaster ready. Questions like the following should be considered:

- Are your filing cabinets fire-proof? Water proof?
- Are policies in place for office security?
- Are equipment evacuation plans in place?

- Is the office building disaster-ready?

One of the best ways of infrastructure and equipment preparedness is to have everything covered by insurance. Nothing might be saved on disasters like earthquake but if it's covered by insurance, the MFI has something to start with.

In cases when there is no institutionalized contingency plan, at least a certain warning system should be established like if there is an approaching hazard, send a warning to all the offices that are likely be affected to prepare in advance. If the approaching hazard is flooding and the office is located in a low lying area that is susceptible to flooding, there might be a need to evacuate all furniture and equipment including documents to higher floors.

Cash on hand and other financial assets. As a standard practice in risk management, all cash collections have to be deposited on banks at the end of the day. Some MFIs do collections up to a certain time of the day like 3pm only so that these collections are deposited before the office closes at 5pm. If not all collections made it to the cut-off time of the bank, at least it should only be a fraction and must be kept in a safe vault of the MFI office. Safety deposit boxes in banks are also a recommended practice to safeguard financial instruments and data backups.

Communications. Communication is a very important DRR measure. It is not limited to communication infrastructures but encompasses the systems by which the MFI manages information. This includes systems and protocols being used by the organization.

Land phones are likely the first to bug down in cases of extreme disasters. Cellular phones may even become useless. There might be a need to maintain satellite phones. Internet connection may not be available which happened during the Typhoon Yolanda when all means of communication failed. When a portable internet connection was installed by the government after a few days, the victims queued to reach their families and relatives outside of the devastated area through social media particularly 'facebook'. The MFI has to come up with alternative communication lines like assigning point persons who can monitor and report situations.

Access to clients. Regular client access is very important in an MFI's operations. This is a very important measure. It is therefore imperative that this has to be maintained even during hazard occurrence. Two-way radio is commonly used by barangay officials. MFIs can take advantage of this communication channel to reach their clients. If it is possible, the disaster team can make an actual visit to clients.

Insurance. It is best to ensure that the properties of the organization are covered by insurance. More importantly, the lives of everyone involved must also be insured including both staffs and clients. Term life insurance and health insurance can also be made available to clients through MBAs or partner-agent models.

Safety of human resources. Human resources are very vital in any MFI operations. Best practices include life and health insurance provisions for all staffs. Some practices include HR policies on other support provisions for staffs affected by disasters. Examples of other support provisions are food relief packs, emergency support funds, shelter support, etc.

It is also important for the MFI to equip its crisis team if they are required to do a site visit at the height of disasters. At the same time, all staffs involved in disaster response are properly trained before they are sent out.

2 MIS Preparedness

Data is critical not just in effectively managing loan portfolio but in disaster risk reduction as well. A good MIS captures and tracks down small transactions; can generate product-based and area-based portfolio reports; and more importantly, it is open for loan restructuring or product modification. At the same time, data storage needs to have a backup system to ensure data safety.

Data safety. MFIs that make use of an automated system that captures most data including client profile and all transactions maintain an offsite backup to ensure data safety and continuity of business transactions in cases of disasters. MFIs that make use of higher bandwidth are able to save their backup offsite while those with slower internet connection have to do a labour-intensive way of depositing backups to another geographical location.

In most cases, data are automatically transmitted to an MFI's headquarter and these are duplicated and saved in another geographical site. So if branches were hit by a disaster, the head office can simply furnish the branch a copy of the backup and business resumes as usual. But there are questions that need to be addressed in the disaster plan to ensure business continuity like the following:

- What's the alternative in cases when both head office and the branch were affected by a disaster?
- For MFIs using an online system, is it available for transaction recording in an offline mode and synchronizes data when an internet is available?

- What if there is no electricity? How will the MFI retrieve its data to resume operations?
- Are policies in place for data access and safety?

Human resources training for data gathering and data management. The capability of human resources to gather and process data is important. While data gathering forms or tools maybe available but staffs were not trained on using them, the results might not be very helpful. Data gathering in times of disaster is covered by the disaster plan. The following questions must be considered:

- Who is in-charge of data gathering?
- How will data gathering be conducted?
- What is the nature of the data that needs to be gathered? Does it require estimates?
- Who will be the data depository and who will consolidate and analyze the data?
- If the organization were to implement a restructuring, are people trained to input that in the system?
- Are people aware of the methods that will be implemented?
- Who will monitor the activities?

Adequate support resources. The structure of MFIs are generally ideal for real time monitoring of disaster activities but if there is no sufficient resources available, this will not be fully maximized. Communication devices for instance, even if human resources are trained on disaster response if there is no provision for communication devices, this remains a gray area. Cellular phones are generally available but if the signal is down, staff in-charge of data gathering or monitoring have to get back to the office to be able to provide monitoring updates. Power supply is another example. There has to be a stand-by generator to make computers work. Office supplies should be available as well. Contingency plans must be designed in a way that the MFI can immediately resume operations even in extreme disaster situations with the likes of Typhoon Yolanda.

Worst case scenarios or disaster scenarios should be considered in contingency planning in case the office location turns out to be high risk to very high risk. Questions such as the following should be considered:

- What if the entire branch office or in worst case scenario, the entire head office was demolished (which means there is no office supplies left), what should be done?
- Are staffs trained on evacuation?

3 Liquidity management

Liquidity is very important for MFIs or for any other business organization to keep operations going which explains the need to maintain liquidity at certain levels. In cases of disaster, liquidity will most likely be affected as cash inflows from collections are likely to decrease and cash outflows from savings withdrawal, necessary loan releases, and other disaster response measures are likely to increase. It is thus imperative that a liquidity plan is in place for the MFI to maintain a robust cash flow and be quick to get back on its operations and effectively respond to the needs of its clients.

Estimating cash flow needs. Cash flows are projected regularly to ensure that there is sufficient fund to cover scheduled loan releases and maturing obligations as well as operating expenses.

Table 6. An example of cash flow estimation

		Total
Outstanding loan portfolio		Php
Portfolio not affected by the disaster	%	
Repayment rate	%	
Monthly interest rate	%	
Monthly interest income		
Portfolio affected by the disaster	%	
Repayment rate	%	
Monthly interest rate	%	
Monthly interest income		
Duration of disaster period	Months	
Total monthly income during disaster period		
Total monthly income in normal times		
Monthly reduction in income due to disaster		
Shortfall in income over disaster period		**Php**

Source: BWTP

Identifying cash sources. Given the estimated cash requirement, the MFI needs to identify its fund sources in the disaster plan. The MFI is seen as a liquidity fallback for clients and it should be prepared to meet those cash needs. Common cash sources are:

a. *Donor funds* but some of them will take some time to access.
b. Immediate reactions are mostly to *postpone payment of obligations* like fund payments to creditors. Some creditors do provide loan payment moratoriums for a specific period of time.
c. For some MFIs, *staff salaries are not paid completely* although this can raise issues on staff morale especially if they were also affected by the disaster.
d. The best and most practical is still to maintain *disaster funds* however, not all MFIs can afford to do this.
e. Relatively larger MFIs can easily *transfer funds* from its other offices but smaller MFIs with limited number of branches will not be able to do the same.

Access to disaster funds. While it may take longer to access disaster funds, quick response funds are available. As part of the preparation, MFIs can already forge partnerships with disaster institutions that offer disaster support which can be activated in times of disaster. Disaster agencies including:

- *local government units*
- *the national government* (like NDRRMC, DSWD)
- *multilateral organizations* (like UN agencies, USAID, AusAID)
- *international non-government agencies* (like International Red Cross)
- *local non-government organizations* have existing disaster funds that they automatically mobilize in emergency cases
- For MFIs, *wholesale creditors* provide disaster support both for quick response and for long-term rehabilitation
- *Wholesale loans* which are specifically designated for disaster areas are made available by creditors as well as government-owned corporations such as the Small Business Corporation (SBC) and Landbank of the Philippines (LBP.

In the areas of WASH and livelihood recovery, international organizations and government agencies offer programs that are available through partnerships with local organizations. Although partnerships cannot be forged in advanced for disaster-related programs, these are made available right after the onslaught of a disaster. List of agencies can be accessed via the United Nations Office for the Coordination of Human Affairs.

Liquidity preparation. Liquidity of the MFI will always be affected in cases of disaster. To minimize the impact of disaster on liquidity, the following pro-active measures are recommended:

- *Geographic diversification*. MFIs with widespread operations are likely to cope easier with liquidity as they can easily mobilize resources from other offices compared to MFIs which operations are concentrated in one geographic location. In terms of liquidity, if one area is hit, cash inflows are still expected from unaffected areas so the impact on cash inflows is not as bad compared to MFIs with high concentration of operations.

- *Client diversification.* While the clientele comes from the poor segment of the population, the economic activities should vary to have a safety net in operations. For instance if all clients are farmers and the area gets flooded, the portfolio in the area is automatically at risk. Whereas, if the clientele is composed of farmers, sari-sari store operators, food handlers, and other businesses, the farmers may not be able to immediately cope but the other clients can easily resume their activities.

- *Seasonality of emergencies.* Hazard assessment is important to identify the frequency of emergencies occurring in areas covered by operations to ensure that products are suitably designed for such. Knowing the emergency seasons which affects loan portfolio movements also helps the MFIs in its financial projections by managing which months to boost loan releases and which months should they reduce loan releases.

4 Loan Portfolio Management

Loan portfolio is the largest and the most important asset of an MFI since it generates the most return to sustain its operations. Poor portfolio quality results to severe losses that also threaten the viability of the MFI. Disasters are a threat to maintaining good portfolio quality and slow down the turnover of loans thereby postponing revenue generation. Good loan portfolio quality even at the height of disasters are dependent on how the product was designed which ideally should consider the occurrence of disasters during its inception period.

Loan Portfolio review.

Periodic portfolio review is normally done by MFIs as part of performance monitoring using chosen indicators like area, branch, product, loan officer, and others. Loan portfolio review is a regular activity that should be done by the MFI and it makes no difference in times of disaster. Disaster preparedness dictates that MFI should look into its portfolio exposure in the areas that will likely be affected by an incoming disaster. Aside from geographic segmentation, the portfolio per product must also be taken into consideration to identify risk exposure in terms of products.

In loan portfolio review, it includes the following activities:

- Analyze loan portfolio according to geography (barangay, municipality, city/province), loan product, loan size, loan maturity. The portfolio spread gives an overview of the potential risks in a disaster scenario.
- Geographic spread or concentration easily identifies the portfolio that will likely be affected.
- Loan portfolio per product helps the MFI decide on the courses of action. Loan products that hardly recover from the onslaught of a disaster can be timed or suspended during emergency seasons.
- Loan size matters in deciding timing or increasing or reducing loan amounts. At the entrance of emergency seasons, MFIs can decide to reduce loan sizes for agricultural loans.
- Loan maturity is important in managing cash flows and projecting loan portfolio movements.

Portfolio-at-Risk (PAR) is an indicator of loan portfolio quality. Analyzing PAR by product and by area gives an overview of which products should be offered to areas that are mostly affected by disasters.

Estimating impact on loan portfolio**.** Estimating the impact of disaster on loan portfolio helps the MFI to manage its cash liquidity and maintaining loan portfolio quality. It is easier to estimate impact if the MFI maintain an MIS that analyzes portfolio per area. For instance, in cases of typhoon, the MFI can take a look at the areas that will be hit by the typhoon and estimate its loan portfolio. Impact on loan portfolio is not limited to the current portfolio that will be affected but to future transactions as well as it affects revenue generation.

Loan loss provisioning. Establishing loan loss reserves are important in loan portfolio protection. The PESO standards[1] provide a uniform loan loss provisioning for all types of microfinance institution in the country. MFIs can increase loan loss provisioning to factor in calamities. In the case of ASA Philippines, it increased its loan loss provisioning above the standard ratio as part of disaster preparation.

[1] The PESO Standard is a uniform set of performance standards for all types of microfinance institutions in the Philippines which serves as microfinance industry benchmarks.

b. Long Term Institutional Plan

Long-term measures look at strategic actions for the longer term. The DRR measures are integrated in development plans. In preparing the action plan however, it is important that the action points are based on the result of the disaster risk assessment conducted and must not be overlooked otherwise; the plan will not really be addressing the disaster risks-related issues.

Action Planning

Action planning provides specific actions that need to be undertaken by the MFI to reduce risks associated with disaster. The risk assessment should always serve as the basis for preparing a long term organizational action plan. The following are simple guidelines in action planning:

- ***Time frame can be divided into two parts: short term (3-6 months) and long term (1 year).*** Beyond one year can also be included for measures that can address or further improve medium to low risks.
- ***Build on the organization's existing programs***. Mainstreaming of DRR measures is easier if it is integrated on the current programs of the organization.
- ***Identify a critical need of your organization***. Prioritize the needs of the organization that requires immediate action.
- ***Develop a doable and realistic plan***. The plan should be dependent on the available resources and within the organization's responsibilities or objectives.
- ***Use simple and practical assumptions***.

In addition, the following are the questions that need to be addressed in preparing a DRR action plan:

1. What is the identified hazard?
2. Which elements at risk are tagged as high risk (high to medium vulnerability and low to medium capacity) based on the risk assessment conducted?
3. What are the options available to address the vulnerabilities and capacity issues of the elements at risk?
4. How are you going to implement the measures? What are the specific actions for the measure that you are planning for?
5. Are there sufficient resources to institutionalize the measures? Is there a need to partner with other organizations?
6. Are the measures within the scope of your mandate as an organization?
7. What are the other supports that you need for your plan?
8. What could hamper the implementation of your plan? How do you plan to overcome these?

Table 7. Illustrative action planning matrix

Background Information	Purpose and Objectives	Methods/ Procedures	Time Frame	Partner(s)	Potential Output/ outcome	Budget	Supporting Conditions	Potential challenges/Ways to address

Case Illustration: Adapting Viable DRR Measures

ABC Foundation identified flooding as a hazard that needs to be addressed to avoid disasters. Loan portfolio was identified as one of the elements at risk. When flooding occurs, clients exposed to the hazard whose only source of income is limited to fishing will not be able to repay their loans since they won't be able to fish. In addition, since it is a coastal area, their houses are also subject to flooding thus, it take months before they return to normalcy based on previous experiences. The MFI has 2,000 clients in coastal areas that are at high risk of flooding with a loan portfolio of P8,000,000. The MFI decided to include capability building programs for its clients to safeguard the loan portfolio with the following measures-at-hand to address the hazard and vulnerabilities:

- Introduction of a viable additional livelihood activity which will be financed by the MFI.
- Study possibility of loan release timing (e.g. not to release loans to coastal communities during rainy seasons)
- Possibility of financing for housing
- Community development with relocation possibility component

At a glance, the measures seem very simple, viable, and practical. In reality however, ABC Foundation's operating framework do not support the implementation of all these measures. With a 6% PAR and a total staff of 30, ABC Foundation is also suffering from high staff attrition. The foundation is also suffering from liquidity and funding problems for almost a year now. For one thing, ABC Foundation has an existing client base of 5,000. This is indeed a huge risk that needs immediate attention.

Contingency planning

Contingency planning has three components: an estimate of what is going to happen, a plan based on this estimate of what the response should be; and some actions identified to be best prepared (IFRC). For the MFI, the response and actions require standard operating procedures for such actions.

A contingency plan is necessary for a community to activate in the event of hazard occurrence even without the MFIs. Contingency planning at the client level can be carried out individually and as a community through their centers and groups. The role of the MFI is to provide lessons or tips on contingency planning since on a personal level, this is best done with the family. At the center or community level, the MFI can guide and facilitate the planning session. It is important to note however that the MFI has to have its own contingency plan apart from the contingency plan of its communities.

While it is important to have a contingency plan, the indicators must also be clear when to activate the plan. This means that the community and the MFI must be able to identify when a hazard turns into a disaster. This also means that there is a person responsible in the community and the MFI who will authorize the activation and implementation of the contingency plan

Table 8. An illustrative Contingency Planning Matrix

Disaster: Number of potentially affected clients: Background Information: Disaster Scenario:						
	Standard Operating Procedures	**Lead Department / Person**	**Budget Allocation**	**Fund Source / Partner**	**Time Frame**	**Potential Challenges**
Plan Activation						
Strategies						
Purpose and objectives						
Area of Intervention						
Emergency Assessment						
Management Structure						
Logistics						
Communications						
Information						

Business Continuity Planning

A business continuity plan (BCP) is linked to contingency plan but entirely different from the same. It outlines the courses of actions, the necessary resources, and policies to support continuing operations even at different levels of emergency situations. A business continuity plan normally includes the following:

a. Objectives of the plan
b. Emergency levels (varies according to the organizations) – identified hazards in each level
c. Key personnel – those who will be involved in the execution of the BCP
d. Alternate locations – if the affected office is declared in-operational, where will be the next business place
e. Emergency communications – what are the mediums of communication in cases when conventional mediums are impaired
f. Roles and responsibilities – who is in charge of what? If one is no longer available, who takes over the role?
g. BCP training – what are the training required to implement the BCP? How often should it be conducted?
h. Emergency drill – how often does an emergency drill needs to be done?
i. Emergency kit contents – what are the standard contents of an emergency kit? This should include supplies and materials to immediately resume business.
j. Meeting places – in cases when communication is impossible or when hazards occur outside of office hours, where will the employees or key personnel convene?

A business continuity and recovery plan integrates both operational continuity plan and post disaster recovery plan. But this is only possible when emergency levels define when an emergency case has already turned into a disaster. While this is a requirement for banks, MFI NGOs and cooperatives may need to have their own. The following matrix serves which forms part of a business continuity plan can be used as a guide in detailing the BCP:

Table 9. Illustrative Events and Plans Matrix

Emergency Level	Hazards	Effects	Duration	Timing	Required actions
1	Temporary power outage, high winds, minor earthquake, fire, flood, bomb threat, water damage or other unforeseen events	Building functions are temporarily suspended for less than a day. The entire building is closed for normal business activities but surrounding businesses, utilities, and transportation systems are not affected. Communication devices such as mobile phones and land lines are operational.	Office is closed for less than one day	Hazard occurs during **working hours**	Employees will exit the building through the assigned exit route and immediately meet at the pre-determined meeting place for a head count and re-enter the building when declared safe.
				Hazard occurs during **non-working hours**	Supervisors will contact their respective direct reports before the beginning of that day's work to provide instructions on how to proceed. Information on the status of the building and directions if it is safe to report for work will be communicated to all employees by email, text and/or phone by the HR personnel.
2	Extended power outage, gale force winds, earthquake, fire, flood, low intensity bomb detonation, water damage or other unforeseen events	Building functions are suspended for one or two days. The building is closed for normal business activities but the surrounding businesses, utilities, and transportation systems are not affected. Communication devices such as cell phones and land lines are operational.	Office is closed for one or two days	Hazard occurs during **working hours**	Employees will exit the building and immediately meet at the pre-determined meeting place for a head count and wait for instructions if it is safe to re-enter the building (Level 1 emergency) or go home instead (Level 2 emergency).
				Hazard occurs during **non-working hours**	Employees will be contacted by their immediate supervisors prior to the beginning of that day's shift to provide instructions on how to proceed. Information on the status of the building and information on if it is safe to report for work will be communicated to employees by email, text and/or phone by the HR personnel.
3	Typhoon, earthquake, fire, flood, bomb, water damage or other unforeseen events	The office building and buildings in the surrounding area are closed and/or cannot be accessed to normal business activities for several days or weeks. There is a major impact on transportation facilities in the Metro Manila area and cell phone service is unavailable for several days.	Office is closed for several days or weeks	Hazard occurs during **working hours**	Employees will evacuate the premises as soon as safely possible and attend to their personal safety and their family. When it is declared safe, Key Personnel are to report to one of the designated alternate locations. Employees will be notified by text message, email and phone (when available) when and where Key Personnel are located and how operations will be carried out during the emergency.
				Hazard occurs	When it is safe enough, Key Personnel are to report to one of the designated alternate locations. Employees will

				during **non-working hours**	be notified by text message, email and phone (when available) when and where Key Personnel are located and how operations will be carried out during the emergency.
4	Typhoon, major earthquake, fire, flood, bomb, water damage or other unforeseen events	The Metro Manila area is closed to normal business activities for an unknown and extended period of time due to a natural disaster such as a typhoon, major earthquake, flood, fire or a terrorist attack. All transportation facilities are closed for an indefinite period of time and cell phone service is unavailable for several days or weeks.	Office is closed for an extended period of time	Hazard occurs during **working hours**	Employees will evacuate the premises as soon as feasible and safely possible and attend to the personal safety of themselves and their family. When it is safe enough, Key Personnel are to report to one of the designated alternate locations. Employees will be notified by text message, email and phone (when available) when and where Key Personnel are located and how operations will be carried out during the emergency period.
				Hazard occurs during **non-working hours**	When it is safe enough, Key Personnel are to report to the designated alternate locations. Employees will be notified by text message, email and phone (when available) where Key Personnel are located and how operations will be carried out during the emergency period.

Source: ACF Philippines' Continuity of Operations Plan

Recommended for additional reading:

1. Contingency Planning Guide
   http://www.ifrc.org/PageFiles/40825/1220900-CPG%202012-EN-LR.pdf
2. Disaster Response and Contingency Planning Guide
   http://www.ifrc.org/Global/Publications/disasters/disaster-response-en.pdf

c. During Hazard Event

1 Rapid Response

This chapter discusses activities during hazard occurrence. In a way, it also encompasses disaster management concepts and measures in the event that hazards turn into disasters. Having identified the risks involved and the necessary preparations that need to be done, when a disaster strikes, the contingency plan of the microfinance institution is activated. Resources of microfinance institutions might be limited in this area but their operational structures present a more efficient support system that can be easily accessed by humanitarian agencies. In addition, all MFI disaster response initiatives, big or small, have to conform to the standards in humanitarian response. The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response[2] outlines recognized sets of common principles and minimum standards for the delivery of humanitarian emergency response.

The Rapid response help support life-saving, humanitarian activities in the initial stages of a sudden-onset crisis. This also should be used to respond to time-critical requirements or a significant deterioration in an existing emergency.

Assessment and Preparation

On the onset of the disaster, assessment is a vital element of the programme planning process. It provides the information a basis for decisions to be made. The aim of the assessment is to understand a situation in order to identify the problem(s), the source of the problem(s) and the consequences of the problem(s). Since the intervention will focus on rapid response, MFIs should focus on rapid assessment gathers information on the needs and existing capacities of the affected population, possible areas of intervention and resource requirements.

[2] Sphere Handbook is one of the major results of the Sphere Project launched in 1997 with the aim of developing minimum standards in core areas of humanitarian assistance.

The rapid assessment is seen as an instrument for making data available quickly to provide information on the impact of an emergency on affected population, so as to improve response planning and resource mobilization.

Preparation in the context of disaster response starts the moment a strong hazard is predicted to strike in MFI-covered areas. Project Noah of DOST's PAGASA provides accurate and real-time updates on typhoon-related movements. While the occurrence of earthquakes cannot be accurately predicted, PHIVOLCS through its Seismological Observation and Earthquake Prediction Division came up with the digital Valley Fault System atlas which outlines areas that will be affected by particular fault movements. Earthquake magnitude based on predicted fault movements were also provided. Even the Mines and Geosciences Bureau provides hazard maps in selected areas in the country.

Verify Scope of Disaster. The Philippines has a much-improved forecasting technology making it possible for the public to be warned ahead of impending hazard-strike and potential areas to be affected. In some coastal communities, for instance, early warning systems have been established. It is imperative for the MFI to check the geographical scope that will be affected by the hazard to be able to prepare ahead and effectively position response and monitoring efforts.

Convene Crisis Team.

The crisis task force is better composed of representatives from all departments with authority to make timely decisions and are available at all times.

Before going to the field, the crisis/task force leader ensures that team members are fully briefed on the terms of reference of the assessment to be done, which includes the objective, methodology, timeframe, logistics and security issues.

Rapid Assessment.

Right after the hazard strikes, the conduct of rapid assessment is very important to be able to identify whether a state of emergency exists and an external assistance is needed. For microfinance institutions, it needs to determine whether clients and portfolio are affected as both may require different responses.

The following principles are recommended during field assessment:

- **Consult the people affected.** Encourage the people affected by the emergency to explain how they view the situation. Even in rapid onset emergencies it is possible to seek the opinions of the local people.

- **Consider the particular needs of different groups and individuals** (men, women, the elderly, children, etc.). People will be affected differently by the emergency and their needs will differ accordingly.
- **Consider the reliability of information**. Information may be "fact" (definitely true), "opinion" (depend upon the perspective of the person giving the information) or "rumour" (based on unverified information).
- **Consider bias**. Everybody is biased. Analysis of information should take into account the potential bias of the informants and of those carrying out the assessment.
- **Seek out marginalized groups and ensure that their interests are taken into account**. Consider who has power and whose voice is not heard. Marginalization may be based on gender, social status and/or many other characteristics.
- **Look for changes and trends that affect society**. Try to understand what is causing these changes.
- **Consider the impact of certain issues on society as a whole**. For example HIV/AIDS is not just a health issue. In many parts of the world, it has a devastating social and economic impact.
- **Through the assessment, think about how the information will be used**. Ask yourself what sort of programme might be appropriate to deal with the issues being raised. Consider the potential positive and negative effects of a programme.
- **Time field visits carefully**. Try to avoid times when people are particularly busy or when there is a holiday or celebration. Some people are absent during particular seasons, and activities and vulnerabilities may vary from season to seasons.

Impact Assessment Activities:

- Onsite visual inspection. The crisis task force does an actual ocular inspection to see the visual condition of the area. Among the things that should be included in a report are conditions of houses, community infrastructure, livelihood activities, and conditions in evacuation areas.
- Interviews
- Sampling
- Relying on secondary sources

Assessment Tools:

- Checklists
- Gap identification charts
- Questionnaires

IFRC's Rapid Emergency Needs Assessment is a widely used tool and can be used by MFIs or in partnership with a humanitarian organization to conduct rapid assessment (Appendix A). But if the contingency and disaster response plan of the MFI is exclusive to its clients only, then, the nature of data that will be gathered should also be limited to its clients only.

Recommended additional reading materials:

1. Rapid Emergency Needs Assessment
   http://www.ifrc.org/PageFiles/95882/C.02.05.%20Emergency%20Rapid%20Needs%20Assessment%20Guidelines_DER.pdf

Review of Disaster Contingency Plan.

After conducting an impact assessment, it is important to review the organization's contingency and response plan to check the applicability of written policies, procedures, and specific roles with regard to the prevention of, preparedness for, response to, and recovery from disasters and major emergencies. Based on the assessment, the team must be able to identify which responses are appropriate to the case, at hand. It is best to follow contingency policies but in some cases, new policies might be needed for an effective disaster response.

It is recommended to base the Disaster Contingency Plan on the following premises:

- The emphasis would be placed on disaster reduction and management, and in particular policy, programmes, projects and activities which are linked to lessening the impact of known natural hazards.
- The most frequent and most probable natural hazards to the Philippines are tropical storms, typhoons, sea/tidal surges, drought and floods.
- That support plans are hazard-specific. The disaster reduction/management structure is subsumed and designed upon existing MFIs system and structures.

Monitor and establish communication with clients. As part of disaster preparedness, point person/s for disaster monitoring is appointed by the community center members. The disaster point persons can be contacted in times of disaster. In cases when centers or groups did not appoint a disaster point person, clients should have contact details in the MFI. Mobile phones are the easiest ways of communication but in cases when mobile networks are down, communication lines being used by disaster institutions or the local government is a good alternative to locate and monitor client situations. Bigger MFIs invest on satellite phones in preparedness for disasters so they can monitor their branches. In worst case scenarios, actual visit to at least a number of clients to establish connection will prove useful.

Undertake a rapid portfolio review. This step was already done in institutional preparedness but after an assessment is done and areas affected were already confirmed, it is important to review and assess the affected portfolio to make relevant recommendations on portfolio management. For instance, a high incidence of client displacement and clients with totally damaged houses may need a different repayment policy than an incidence with minimal client displacement and partially-damaged houses.

2. Product Modifications

Product modifications following a disaster is different but still holds a lot of similarities to a normal product development process. These may be temporary arrangement or deviations from its original design to facilitate recovery. Product modifications are made on a case-to-case basis, chiefly depending on the results of the post-disaster assessments.

Loan payment moratorium and moratorium on lending.

Payment moratorium is a temporary but well-defined period of relief in loan payments when the situation calls for it. . Additionally, this may be coupled with moratorium on lending, which temporarily freezes release of new loans until situations stabilize. Moratorium periods vary depending again on the severity of the disaster impact and may vary from area-to-area. It is a very important to take a careful thought when implementing a payment moratorium or a moratorium on lending/. Before opting to grant moratoriums, MFIs may consider the following:

- *Liquidity.* Payment moratorium means temporary suspension of cash inflows to the MFI and may result to liquidity problems. On the other hand, moratorium on lending may delay clients who may immediately want to restart their livelihood.
- *Delayed revenues.* No collection and no disbursement mean no interest income.
- *Policies.* How long will the MFI grant a moratorium? This is connected with how long the clients will be able to resume cash-generating activities.

Loan rescheduling. Loan rescheduling may be required post-disaster. This includes extending the terms of scheduled or required payments. Caution is taken that repayment rescheduling is already clearly defined and embedded in the general loan policy, even prior to its application, to avoid confusion and potential abuse of loan payments rescheduling policy use. The Disaster Management Measures of Microfinance Institutions in Sri Lanka (PJS Fernando) that analyzed the effectiveness of the current microfinance practices in Kalutara District, Sri Lanka specifically mentioned previous studies that recognize the importance of loan rescheduling in post disaster situations.

Before opting to reschedule loans, take into consideration the following:

- *Interests*. The MFI needs to decide whether to charge additional interests if the term is extended .
- *MIS.* The MIS can capture the changing repayment terms .
- *Liquidity.* Changing repayment terms affects projected cash flows. *Delayed revenues.* Rescheduling affects revenue generation as collection of interests are delayed or postponed.
- *Staff training.* Staffs involved are ideally trained on handling loan rescheduling. Loan officers more importantly understand and are able to explain it to clients.

Shift from group-based liability to individual liability.

If the MFI uses group liability in loan repayment, a temporary shift to individual liability might be necessary in post-disaster situations owing to varying individual coping capacities. Some clients receiving external support might be able to recover in a shorter period of time than others. Thus, this measure of individual-based treatment may help some clients who can better cope and can resume their loan activities much earlier than others.

This measure has its own risk as it might be difficult to effectively restore group-based liability in the longer term. Clients who were better able to repay their loans individually may not want to return to a group-based liability.

Loan write-off. This is a measure that totally releases a client from his/her repayment obligation. As much as possible, loan cancellations must be avoided in any circumstance. Loan cancellation impacts revenue generation and causes capital loss. This measure only comes as a last resort when it is no longer possible to recover the portfolio. This is a policy that should be well-defined in the organization's operations policies.

Provision of emergency loans. Additional capital infusion may be necessary to help restore economic activities of some clients. In Sri Lanka, it was observed that clients who did not qualify for loan rescheduling and emergency loans took their cash needs from informal lenders or by disposal of family assets, if any. It is important that the MFI is very careful in selecting clients who can avail of emergency loans. If client selection is not properly conducted, like clients with poor repayments were granted additional loans, the risk of increasing default might be likely high.

Modify compulsory savings product.

It is common policy for MFIs that compulsory savings may not be withdrawn so long as the client remains a member. MFIs requiring compulsory savings may, however, choose to open access of clients to their compulsory savings in post-disaster situations because for some clients these may be the only savings they have and have considered them as their fall back measures for emergency, as well.

Along with allowing clients access to compulsory savings, the MFI may also temporarily grant moratorium on compulsory savings together with loan payment moratorium to aid clients' recovery process.

A caveat, while this measure provides ease for the clients, this measure may deepen MFI's liquidity. It is therefore recommended to resort to this option with prudence and to cautiously consider liquidity measure when doing so.

3 Non-Financial Emergency Response

While MFIs are focused on safeguarding loan portfolio and ensuring continuing access to financial services of clients, some MFIs are already doing non-financial emergency responses. The provision of food relief packs is the most common practice among MFIs in the Philippines. The popular question, however, is 'Should MFIs get involved in humanitarian-like response'? There is no standard response to this question because the decision depends always on the resources and capacity of the organization, and the circumstances with which they are into. While it mostly recommended that MFIs should veer away from giving grants and donations directly to clients to preserve the culture of strict credit discipline, some MFIs can still manage to do non-financial response without breaking this culture but reinforcing it instead. Established MFIs who do not only have put up disaster funds but has also the capacity to coordinate relief efforts have proven that MFIs can play this role.

ASA Philippines' preparedness level for non-financial emergency response is remarkable for a microfinance institution. With clear non-financial food relief response guidelines, ASA Branches that are within the path of Typhoon Yolanda began stocking food relief items three days before the predicted landfall. Sacks of rice delivered to branch offices were covered with tarpaulins and plastics to prevent it from getting wet in case of flooding or water leaks. Food relief response in ASA is mandated to be done within 24 hours after a disaster strikes. All clients within the area regardless of the degree of disaster impact were given a standard food relief pack from ASA which sustains them and their families while waiting for other food packs from other organizations and the government. Typhoon Yolanda left the area devastated with all the destroyed houses and infrastructures, scattered cadavers in the streets, and people wandering in the streets looking for food. ASA staffs started to deliver food relief packs to their clients while other organizations are still looking for stores where they could buy food packs. Head Office personnel flew to the

affected areas to support relief distribution and support their affected staffs and clients. In areas that were not reached by other organizations, ASA provided more food packs.

The key to ASA's efficiency in responding to disasters is mainstreaming contingency and risk reduction measures into the entirety of its operations. Staffs deployed in the fields are from other provinces that their focus is concentrated on the tasks at hand and are not disturbed with concerns on the safety of their families. The Beneficiary and Program Support Fund provides sufficient food relief packs and other non-financial post disaster recovery support to clients like psychosocial counselling, medical missions, and other related recovery support. *(Information was taken from interview with ASA Philippines)*

Level of MFI participation. MFIs have to weigh the impacts of participating in non-financial disaster response on their reputation, image, and need. Experience has it that MFIs who do immediate response like food relief operations tend to leave an impression on the community that the MFI really care about the clients in contrast to MFIs who do not do relief operations. In some cases, MFIs operating in the area are the only ones who are in the position to help the community.

When MFIs found the circumstances compelling, the following must be carefully considered:

- *Economic resources*. Does the MFI have sufficient funding or have earmarked funds to fund "non-financial" response? But lack of funds should not hamper the MFI if the situation calls for it because it is possible to link with humanitarian institutions and to facilitate this kind of program through partnerships.
- *Human resources*. Even if the MFI has sufficient resources or has linked with a humanitarian/donor institution, the next consideration is, does it have enough manpower to allocate for this program? Are these people equipped with proper training?
- *Infrastructure and machinery*. Is the MFI equipped with the equipment and means to carry out a non-financial disaster response? In terrain- challenged and affected areas where relief operations can only reach the beneficiaries through air transport, for instance. ?
- *Length of non-financial response*. How long the MFI is going to engage in the non-financial response? Prolonged response will eat up the resources of the organization. The MFI may even be mistaken as a relief organization and this will eventually impact future repayments.
- *Loan portfolio safety*. Does financing this kind of program not predispose the loan portfolio and cash flow to risk? The MFI must safeguard its loan portfolio, its cash flows, before lending itself to humanitarian activities.

Identifying response-beneficiaries/Beneficiary selection**.** As soon as the MFI decided to involve into non-financial response, it has to define its beneficiaries. Does it involve the whole of the communities? Or only limited to clients and their families? If limited to clients only, what is its effect on the MFI's reputation in the larger community and potential/future clients? MFI needs to consider circumstances surrounding the disaster and explicitly specify response-beneficiaries when planning. But the extent whether to include the entire community is very possible if the MFI has partnership with other humanitarian organizations. For instance in the case of Omaganhan Famers Multi-Purpose Cooperative, the Post-Yolanda Rehabilitation project in partnership with MCPI was easily carried out as the cooperative maintains a record of affected clients and updates it from time to time whenever grants were awarded to these clients. This way, whenever it is contacted for project partnership, it can easily provide the assessment data required by donors.

Appropriate non-financial services**.** The MFI decided to involve in non-financial disaster response and identified its response-beneficiaries but not sure of the appropriate response to conduct. The following are the non-financial services commonly needed in disaster situations:

a. *Distribution of emergency supplies or relief goods*– extreme disaster situations are likely to require immediate support for basic necessities such as food, clothing, and medicines. Food items should be those that are ready-to-eat or easy-to-cook. For instance, distribution of relief packs in the form of food and medicines.
b. *Information dissemination* – gathering information (situation reports) and disseminating it to the disaster survivors and humanitarian agencies. It can be helpful to connect the survivors to the humanitarian assistance, and assists donors to find communities not assisted, yet.
c. *Training or orientation on risk awareness* – MFIs can do a basic training or orientation to survivors on health-related risks to security risks living in evacuation centers or temporary housing.
d. *Other non-financial responses* – MFIs can link with other agencies to be able to train and become a partner for these responses:
    - *Cash transfer programming*. Cash-for-work program is found to be an efficient disaster relief instead of basic goods especially when there is limitation in the transport of goods. MFIs are seen as potential for cash transfer programming because of its reach. Cash transfer is also helpful in maintaining cash flow but needs to be properly managed to avoid confusing clients on MFI's new role.
    - *Shelter provision.* Shelter is one of the main issues post-disaster. MFIs generally do not include shelter provision in their disaster fund allocations

but can always partner with disaster agencies providing emergency shelters.

- *Distribution of livelihood asset grants*. Linking clients with institutions specializing in asset transfer, a number is available post-disaster, can facilitate speedy resumption of economic activities.

4 Access to quick response funds

Post Disaster recovery and rehabilitation-related funding are lately available and, generally, the key to access these funds, is to be able to be ready with the rapid assessment data. Quick response funds which are microfinance specific might be limited but can be availed via the following:

a. *Government quick response fund*. Quick response funds in the Philippines form part of the government's annual budget, thus, it is integrated in every government agency's budget including the local government units. Government quick response funds are used to cover expenditures related to disaster preparedness, response, and rehabilitation. It is commonly disbursed by government offices but in a wide-scale disaster such as the Typhoon Haiyan, government agencies partner with non-government organizations for a speedy response.

b. *Multilateral organizations.* The United Nations has established a Central Emergency Response Fund[3] and other related funds in its UN system that enables them to provide immediate support to disaster affected areas. Most of the time however, these are distributed via the different UN Agencies such as the World Food Program (WFP), UNICEF, and IOM. But the response program is channeled through local and international organizations or via the national government. So MFIs just have to connect with UN agencies to access the fund. The CERF and the Country-based Pooled Funds are managed by the UN Office of Coordination and Humanitarian Affairs (UNOCHA) which can be contacted by MFIs for fund access. Other multilateral organizations such as the ADB, USAID, AusAID, and others implement response programs in partnership with local organizations depending on the areas that they are working.

c. *International financial institutions.* International organizations operating in the country also offer quick response funds to its conduits. The MFIs just have to make a request to explore partnership potentials to work on. For instance, the Oikocredit and the ICCO Cooperation have implemented some of their disaster response programs during the Typhoon Haiyan through microfinance institutions.

[3] UN's fastest and most effective support for rapid humanitarian response for people affected by natural disasters and armed conflict.

d. *Private sector funding.* Some corporations channel their funds through NGOs in disaster cases most of the time for relief purposes. The Philippines Business for Social Progress (PBSP) which pooled the private sector resources to respond to Typhoon Haiyan is now raising funds for the Microenterprise Disaster Assistance Fund for Resiliency (MIDAS) Program, a wholesale credit window which can be accessed by microfinance institutions in times of disaster.

D. Products

This section focuses on common disaster recovery practices in the humanitarian sphere and to selected MFIs. Long term rehabilitation starts a few months after the disaster when the disaster cycle moves from response to recovery, which focuses on supporting survivors. The contributions of microfinance institutions in recovery efforts are significant as its loan disbursements spur the reactivation of economic activities. But MFI contribution is not only limited to financial services but also in providing technical supports to livelihood recovery. This chapter includes adaptation of microfinance products and services to climate changes as a recovery mechanism and at the same time a disaster reduction or preparedness strategy.

1 Adaptation of Current Products

Products and services are reviewed on a regular basis to ensure its relevance to the needs of the clients and adapted to changing times. Product designs are very critical in ensuring good portfolio quality and maintaining or expanding client base.

Client-responsive loan products. Designing products that are responsive to clients' needs require a continuing research to identify their loan needs. It is important to note that clients are not homogenous and therefore have varied needs. Product designs that help clients diversify income sources also help mitigate the impact of disasters. Knowing their business activities help MFIs understand the seasonality of loan needs and come up with product designs that are fitted to these needs. For instance, there are seasons when clients need higher loans depending on the business that they are operating. For some clients engaged in seasonal businesses, they may need more loans to start additional income generating activities.

Programs directed at climate adaptation which can be financed by MFIs include renewable energy, crop rotation, and other environment related programs. Financing emergency needs is also a disaster response mechanism. Existing regular loans helps clients in disaster recovery. The MFI may just need to adapt some of its features but in some cases, it is not necessary and simply keeping the credit flowing is sufficient.

Forced savings products. While deposit-taking is restricted for banks only, MFIs are allowed to collect capital build-up as long as it is only compensatory to the loans. If the MFI is not offering forced savings, forced savings or compulsory savings can be designed as an emergency response to client needs in times of disaster. This means allowing the forced savings or a portion of it to be withdrawn as temporary relief for clients. This worked in the 1998 great flood in Bangladesh which lasted for more than two (2) months. Savings withdrawal however entails cash outflow and this must be carefully studied since it directly impacts the liquidity of the MFI.

The following needs to at least be considered in allowing forced savings to be withdrawn outside of the MFIs' existing policies:

- Does the MFI have sufficient funds to do this? Do cash flows projected the forced savings withdrawal in extra ordinary circumstances?
- Do the policies include forced savings withdrawal for emergency cases like post-disaster? At the onset, does MFI make a clear distinction between ordinary and extraordinary circumstances when forced-savings can be withdrawn?
- Is the MIS designed to capture the recording adjustment?

Voluntary savings products. If the MFI does not currently offer voluntary savings, this is another viable product to help mitigate disaster and other emergency impacts. Since this is an option, clients can make deposits during high income seasons and withdraw them in low income seasons. Savings facilities strictly for emergency purposes can also be an option where the savings can only be accessed on emergencies. While voluntary savings are seen as a disaster-impact mitigating strategy and increases the capital base of the MFI, it is also important to consider other factors such as operational policies and procedures affecting voluntary savings options, and to avoid potential fraud. The following needs to be considered:

- Is the MIS ready to capture changes in recording?
- Are loan officers well-oriented and trained for this feature?
- Is this captured by the accounting staffs? / Are accounting staffs knowledgeable of this?
- How much is the interest rate for the savings?
- Do your clients approved and considered this saving feature?

Insurance. Insurance services especially for low-income people help mitigate the impact of disasters. After the onslaught of Typhoon Haiyan, it was noted by experts that with the penetration rate of only about 20%, microinsurance performed well. Microinsurance Network, a non-profit organization that promotes effective and responsible insurance for the low-income group studied how microinsurance performed after the Typhoon

Yolanda. Results showed that Php 532M were paid in microinsurance claims and 98% of the 111,000 paid were calamity coverages. The partnerships and network relationships of insurance providers and the regulatory bodies resulted into flexible processes that made it possible to make insurance claims payments faster.

If the MFI is not currently offering insurance product, it might consider the option. Insurance products can be delivered to clients via partnerships or through a mutual benefit association (MBA). If the MFI does not have the necessary outreach to put up an MBA, then partnership with an insurance company or another MBA is an option. The partner-agent model works for most MFIs in the country. But the MFI can also act as an agent for an insurance company. This is a new product and may require technical capacity. To date, the range of microinsurance products offered by MFIs include the following:

- *Life insurance*. Term life insurance is cheaper and works for microfinance clients. In most cases, it's not only the client who is covered by the insurance but the families are included as well. Health insurance is however, more expensive. In most cases, MFIs partner with PhilHealth to provide this service while others design their own health insurance programs.
- *Non-life insurance*. Credit insurance, crop insurance, property insurance, and calamity insurance are some of the non-life insurance products offered by MFIs. Sometimes credit is combined with life insurance and these are covered by life insurance companies. A number of these non-life insurance products are available i.e., Mercantile Insurance Company, Inc., Pioneer Insurance & Surety Corp., Microensure, CLIMBS Life and General Ins., Country Bankers Insurance Corp., etc) MFIs can partner with Philippine Crop Insurance Corporation (PCIC) for high value crops or can also access the Agricultural Guarantee Fund Pool (AGFP).

2 Designing New Products

The MFI might realize after the onslaught of disaster that there is a need for new products to support the recovery of clients which in turn will help the MFI recover back unpaid loans. In addition, this can also be an opportunity to design new products that can address other needs of the existing client base or design products for potential clients. But it may not work for all MFIs. During the 1998 Bangladesh floods, some MFIs including Grameen and BRAC offered post recovery loan programs for asset replacement and other recovery building needs but other MFIs maintained their standard product lines but still managed to expand their post-flood portfolio (Brown and Nagarajan, 2000). While recovery loans may seem helpful to clients, offering new products even in a post-disaster setting still depend on the capabilities of the institution to manage risks associated with portfolio diversification and recovery.

Refinancing old loans concurrent with new loans. In cases when clients' businesses were totally destroyed during the disaster, simply extending terms and temporary payment suspension may not be enough. There might be a need for fresh capital for the clients to start anew their livelihood activities. This may be helpful in arranging repayments of both the current loans and a portion of their affected loans. However, while refinancing may give a fresh start to some clients, it might become a burden to others. This is again based on individual decision considering the client's capacity to pay.

Home improvement loans. MFIs can also opt to offer loans to help clients rebuild their houses, if there is a clear demand. In offering home improvement loans, it is however important to take a look at the clients' cash flows. This loan may be of help only to clients with stable sources of income but not for those who are staggering to get back on their livelihood activities. There might be a need for some time to let clients stabilize their livelihood activities and have a steady flow of income, first. This is not just to protect the MFI from the risk of non-repayment but also the clients from using their business capital to repay house repair loans, and worst, plunging into over indebtedness.

Microleasing. Microleasing can be offered by MFIs as an added product to recover lost equipment being used in production. This scheme provides an opportunity for these types of clients to operate at lesser costs and at the same time offers the possibility of letting them own such properties while using it. Asset replacement is best post-disaster (Nagarajan, 2001) according to a case of MFIs in Mozambique as it reduces client vulnerabilities and allows for income diversification. For instance, a MFI provides boats for lease to fisher folks. The fisher folks pay the rent every time they make use of the boat until such time that they have already paid the full purchase amount of the boat including the interest.

MFI Best Practices

1. MFIs offering medium-long term leases need to consider asset-liability management to control interest rate risk, liquidity risk, and foreign currency risk.
2. Leading MFIs in Latin America are profiting from offering medium-term equipment leases to completely new clients.
3. MFIs should insist on clients to put up a down payment or additional collateral to the equipment being loaned.
4. The terms should consider longer-term affordability benefit to clients and reduced risks and short-term diminished ALM problems for the MFI.
5. Equipment loan terms allow their costs to be spread over much more time so interests charged should be lower.
6. MFIs can finance virtually any equipment the client demands, including used equipment.
7. Leasing is a way to obtain equipment finance but the sale-and-leaseback transaction can be used to provide microentrepreneurs with working capital finance and they can leaseback the equipment.
8. Loan payments in monthly terms minimize transaction costs to both clients and the MFI but more frequent repayments in circumstances where the equipment is used in a business activity that generates frequent revenues. This is especially useful especially when client lacks credit discipline.
9. Flexible repayment plans should be used to address seasonality of income generation.
10. Clients should be treated individually when it comes to equipment loans instead of applying group guarantees as groups might be reluctant to do so because of higher loan amounts unless the MFI sets and amount that is no longer covered by group guarantee.
11. Aftersales services, property taxes, and insurance issues should be included in the program design to avoid issues.
12. A wider scale of equipment loan programs especially if the same equipment are requested by clients increases the negotiation powers of the MFI to avail sales benefits such as sales discounts, extended warranties, free or discounted aftersales services, and others.
13. Market valuation exercises might be useful for MFIs doing equipment loans to better off clients considering that equipment for this market are relatively expensive and the MFI is relying on the equipment as collateral.

Money transfer services. Remittances in the Philippines are noted for its remarkable contribution in the country's gross domestic product (GDP) which in 2014 was noted at 10%. For large MFI with widespread operations, they can consider accommodating remittances from dispersed family members of the clients

GSMA[4] (2014) in its research 'Mobile Money for the Displaced' found out that the impact of mobile money transfer to displaced populations are as follows:

1. Facilitate flows of remittances to and from displaced persons
2. Facilitate flows of remittances, to women in particular
3. Contribute to recovery, resilience, and return
4. Foster economic growth within and beyond displacement settings
5. Empower displaced populations
6. Improve the financial literacy of displaced populations
7. Increase the security of displaced populations and those implementing humanitarian programmes
8. Enhance the connectedness of displaced populations

Mobile money transfer services were made possible through partnerships by mobile network operators (MNOs) and humanitarian organizations. In the Philippines, there is the Cash Working Group[5], which is now recognizing non-bank institutions like microfinance organizations and co-operatives to be part of the financial services providers that will be utilized for CTP.

[4] Grupe Special Mobile Association or GSM Association is a group of mobile operators worldwide

[5] Cash Working Group in the Philippines became operational in November 2013 in response to Typhoon Haiyan and coordinated by the UNOCHA. This is participated by international humanitarian organizations doing cash transfer programming, local NGOs, and government agencies.

Chapter 3. Implementation and Resilience Building

This chapter focuses on reinforcing the MFI to build its resilience as well as contribute to build the resilience of its clients. It considers basic services, asset base, ecosystem, systems and procedures, and policies for an enabling environment. Resilience, being the end goal in doing disaster risk reduction initiatives, this chapter provides ideas and information on best practices being done by microfinance institutions as well as emerging ideas that are introduced in the microfinance sector.

a. Strengthening basic services

Basic services play crucial role in implementing DRR measures. It is therefore imperative that services help in building a resilient organization and resilient communities. Basic services offered by MFIs are not limited to financial products but also the non-financial services as well as they play crucial roles.

Livelihood Trainings**.** Livelihood trainings are provided both by the government and non-government organizations to enhance skills and knowledge of target communities, before or after disasters that may be responsive to current market demand.

For bigger MFIs, livelihood trainings are mainstreamed as a complementary service to microcredit, pre-disaster. This is integrated as part of the weekly activities provided to clients with the intention of providing technical support for the businesses of clients. This strategy hopes not only to ensure repayment rates but helps clients expand their new businesses or diversify into another business endeavor. To some, this is offered as a separate service called the Business Development Service to deserving clients with potential to upscale their livelihoods. To some MFIs, livelihood trainings with inability to provide training, tying-up with BDS providers may be an option.

Developing Community-Managed Enterprises

The municipality of Tanauan, Leyte was left in chaos after the onslaught of Typhoon Yolanda. Negros Women for Tomorrow Foundation, Inc. (NWTF) immediately conducted food pack relief operation and facilitated the release of insurance claims to affected clients. While relief goods and livelihood projects are pouring both from the government sector and from government organizations to fishing communities, farming communities were somewhat disregarded. ICCO Cooperation was also implementing a rehabilitation project through the Microfinance Council of the Philippines, Inc. to which NWTF is a member. NWTF qualified as a partner in the project to implement in the municipality of Tanauan. The main objective of the project is to provide income-generating assets to microfinance clients to be able to recover from the onslaught of the disaster. NWTF took this as an opportunity to diversify into community-based and community-managed enterprises among their farming communities in Tanauan. Instead of providing

productive assets to individual clients, they proposed that community assets should be provided instead as this will facilitate recovery for the longer term. This was approved both by MCPI and ICCO Cooperation and six communities were organized for the project. NWTF facilitated community organizing processes and orientations to formalize the group and help build their capacities. One community delved into a rice mill operation considering that the only rice mill in the area which also caters the nearby communities was destroyed by the recent typhoon. Another community chose a community retail store that would sell supplies of fertilizers and pesticides to the community as well as in adjacent communities. The others went into leasing of larger farming equipment like mud boat, thresher, and others. These asset grants are complemented by NWTF with community loans and continuing capacity building activities that will enable the communities to independently operate these social enterprises on their own.

Value chain development. Linking clients and communities to form both a supply and market chain helps in building resilient communities. Market systems contribute largely to household and community costs as market disruptions due to hazard occurrences signify loss of livelihood and income not just during the event itself but even post-hazard. Value chain development for disaster risk reduction when designed as a market-based solution and not the classic supply-driven chain reduces vulnerabilities of these systems by strengthening the same. This means that the risks associated with natural disasters of a market-based chain are not borne alone by the producers but shared and mitigated by the different players in the chain, as illustrated in the Chilli Value Chain in Bangladesh (inset).

Market Development for DRR: Chilli Value Chain in Kazipur Upazila, Sirajganj District, Bangladesh

Bangladesh is one of the most disaster prone countries in the world and the common relief provided are subsidies that do not consider market systems but instead distort market operations. Action for Enterprise (AFE) conducted a study that focused on the efficiency of market-oriented approaches into DRR efforts to increase benefits for the poor. Kazipur Upazila in the Sirajganj District was chosen as a pilot study as it is very prone to flooding and soil erosion. Traditionally, the char dwellers can predict the timing of rains and flooding, and were able to adjust the planting of their crops to avoid these flooding seasons. However, the season became unpredictable that their crops are caught in the flooding.

Mapping out of the economic chains and market systems, Chilli, an important cash crop, was chosen as one of the economic chains in Kazipur which has been exposed to the

hazard. Bangladesh is not able to meet the demand for Chili both in the local and national market which presents a viable market for expanding chilli production. Kazipur's chilli produce is consumed locally although a margin is exported. Char dwellers preferred red chilli since it presents a more lucrative market being a preferred choice among consumers. The hazards however affect the yields as well as the quality of the product. Farmers are inclined with the traditional farming misconception that the more fertilizers and pesticides, the higher the yield and the better the quality. This therefore means that the yields of local varieties are dependent on how much finances the farmers can manage. Hybrid variety suppliers however insist that hybrid varieties can yield more than the local varieties and the qualities are more resilient at younger ages to cold weather compared to local varieties thereby generating higher yields even when faced with flooding hazard.

Mapping out the actors in chilli value chain, it includes the following:

a. Input suppliers – composed of suppliers of seeds and fertilizers. It was observed that there is a low demand for hybrid seeds and local varieties are mostly purchased by the farmers.
b. Producers – 10,000-12,000 chili farmers produce chili as cash crop and their main source of income. Producers in Kazipur however recognize that the varieties that they are using are more susceptible to cold weather thus; yields are affected during rainy seasons. Green chilli is immediately sold while red chilli are dried and sold at later dates. Capital is a common concern among producers whenever their crops are affected by hazards. The logical step after hazard occurrence is replanting but in smaller quantities since they are already constrained with lack of funds.
c. Collectors and bulkers – the middle men or the traders classified in three: a) the small scale traders who buy directly from the producers and transport the products to local markets and sell it directly to consumers or to medium and large traders; b) the mid-sized traders who buys the chilli from the small scale traders as well as minimal sizes directly from producers and sells to large scale traders; and c) large scale traders who buys chilli from small and medium traders and minimal amounts directly from chilli producers and sells it in the national wholesale market. Common issue among traders are: lack of capital, transportation of goods, and inconsistency of quality and quantity of chili produced especially during hazard occurrence.
d. Processors – chilli processors buy the products from the traders and minimal amounts directly from the producers. They supply the local and national market.
e. Supporting actors – this is a group which can support both the suppliers and the traders. There are no banks or microfinance institutions that can provide the needed capital to maintain production.
f. Enabling environment – support from both the local and private sector is limited which is probably one of the reasons why hybrid varieties are not introduced or

known among chilli producers. Traders who face the same funding dilemma, transportation issues, and robbery along the way. Local government have increased patrols and development organizations are developing hybrid varieties to be introduced to char producers.

Based on this value chain analysis, the study was able to analyse the areas of vulnerability and recommended market-based solutions and potential facilitation activities. An example is the vulnerability of varieties used by producers in replanting flooded crops. A recommended market-based solution is access to hybrid varieties that are resistant to cold, dews, etc. and facilitation activity recommended is to help promote hybrid variety suppliers promote the seeds as well as farming technologies.

Technology improvements. Supporting recovery through technology improvements is one of the things that can be done to increase the resilience of communities to hazards. Technology improvement involves support through asset grant, training, and a mix of both. They may include farming technologies for farmer clients, disaster preparedness trainings, information on disaster resilient housing, and others. For farming communities, trainings on integrated farming systems, climate-smart agriculture, and other similar technologies may also be helpful to help them engage in disaster-resilient livelihood activities. These do not have to be solely done by the MFI but with the help of other organizations that specialize into these. It is important to note that the main purpose of these is to aid clients in their recovery as well as to increase their capacity to withstand impact of hazards.

b. Strengthening asset base

Disaster preparedness involves the entire community. The resilience of an MFI cannot be established at the organization alone but extends to the clients who holds majority of the MFI's assets. The operational models of MFIs provide an effective and efficient structure to easily facilitate capability building activities for communities. MFIs are in fact in a better position to facilitate community-managed disaster risk reduction initiatives towards building resilient communities. Simple disaster preparedness lessons and simulations can be conducted via the center or group activities or meetings. On the one hand, MFI staffs are also part of the important assets of the organization that needs further strengthening. MFIs however, may not be trained on these lessons but it can engage the LGUs through their local risk reduction counterparts who are trained on these activities to do it for them. Non-government organizations both local and international are also focusing resources to build disaster resilient communities and these can be tapped by MFIs for partnerships.

Disaster preparedness orientation and training for clients

Community-managed disaster risk reduction is a process within a community and for the community; which means that activities and actions vary from one community to another. This involves a process wherein solutions to issues are identified by the community which makes it effective most of the time as they are aware of the local resources they can tap. The sustainability of these initiatives however needs concerted efforts from different stakeholders to involve in the process and monitor the activities.

Some MFIs may require the presence of an expert to do the training. However, though simple lessons on disaster preparedness that can be downloaded online can be conducted during center activities or group meetings. The Philippine Disaster Risk Reduction Management Act of 2010 (also known as Philippine Disaster Act of 2010) mandates a proactive disaster mitigation and preparedness measures among national government agencies and local government units. It allocates 70% of LGU calamity funds for building resilient communities and the remaining 30% for disaster response measures. NDRRMC through its local counterparts in the community are promoting disaster risk reduction and MFIs can just link with them. There are non-government organizations as well who are committed to community capacity building in disaster preparedness through partnerships with local NGOs.

Coping Mechanisms of Poor Households. Disasters impact the poor on a greater magnitude as it causes loss of lives and livelihoods. During the Microdis Asian Symposium in August 2010, Yasuyuki Sawada presented 'How do Households cope with Natural and Human-made Disasters that summarizes the empirical results from the case studies he did for the financial crisis in Korea; Chuetsu and Kobe earthquakes in Japan; Indian Ocean Tsunami disaster in India; Avian Influenza in Vietnam; Sichuan earthquake; and typhoon Milenyo in the Philippines. In his research, borrowing was the 'effective' coping strategy in all the disaster cases. Other risk coping strategies identified were: reallocation of consumption, dis-saving, labor adjustments, income transfers, and others that include insurance. For the Philippines in the same case study, the identified coping strategies include occupation, public transfers, borrowing and private transfers, consumption and reallocation, and government support. In comparison with regular shocks, the common coping mechanisms identified were 'own income and savings' and 'help from relatives'. Coping mechanisms in prior typhoons and with that of the Milenyo were almost the same but noted that consumption reallocation significantly increased after the typhoon Milenyo.

Zoleta-Nantes (2000) mentioned several disaster coping strategies of urban communities which she grouped in three (3) namely wealthy villages, urban poor in slums and squatter areas, and street children. In general, the study argues that wealthy villages have wider choices compared to poorer communities with limited options to cope with flooding. Street children on the other hand had the narrowest options and mostly limited to personal survival. The study reveals that poor communities need considerable government support and intervention. The most dependable source of help are the network of friends, relatives, and neighbours but there is no community-wide hazard network for longer and sustainable measures. Finding a source of livelihood is still the primary option for survival among these poor communities.

Tibig (2003) also listed various coping strategies practiced by some indigenous communities from various parts of the Philippines to prevent and minimize the impact of natural disasters. The strategies were generally categorized as follows:

1. Forecasting and prediction techniques through indigenous ways
2. Early warning systems
3. Storage/stockpiling of food and emergency supplies
4. Carefully choosing settlement sites (hazard mapping)
5. Building flood-and-typhoon-resilient houses and/or strengthening houses, infrastructures
6. Easy mobility
7. Crisis-adaptive agricultural practices
8. Agricultural/engineering interventions or countermeasures
9. Organizing themselves and through the "bayanihan" spirit, establish self-sufficiency efforts for a more profitable livelihood than farming or when farming becomes untenable
10. Setting up guiding principles by the tribe elders, specifically the empowerment of the tribes with primary right over the management of the ancestral domains together with tenured migrant settlers (i.e. sustainable harvesting of products, hunting only those destructive to crops, planting indigenous species, etc.)
11. Conservation of forest cover of the watersheds
12. Preparing/implementing comprehensive land use plan to protect watersheds
13. Proper maintenance of the catchment areas and rational/proper utilization of all available natural resources
14. Organizing women of the tribes as a support group when natural disasters occur

Financial management. Financial management also needs strengthening to ensure that the inception of DRR programs does not negatively affect the financial standing of

the organization. Fiscal policies may also need certain adjustments to support DRR measures. In addition, budgetary requirements may also be needed to accommodate necessary safety nets.

Asset and liability management (ALM) refers to the management of the spread, or the positive difference between the interest rate on earning assets and the cost of funds. Strengthening this area of finance is important as it is a measure itself. Successful management of assets and liabilities controls risks related to interest rate, foreign exchange, liquidity, and credit.

Efficiency is another important area for financial management which is also one of the challenges in the microfinance industry. To increase the efficiency of an MFI, the following are recommended:

- Increase outreach to reach greater economies of scale
- Streamline systems to improve productivity
- Reduce costs

Human resource management. Employees are the most valuable asset of an MFI. Human resource policies ideally include risk reduction safeguards not necessarily against natural disasters but from other risks as well including institutional risks. Policies and activities of the MFI must support each employee to become successful in their own jobs and be able to reach the objectives of the organization.

Building a resilient MFI includes capacitating staff to:

- Be able to identify themselves with the mission and objectives of the organization
- Understand their roles in resilience building and how they can contribute to that mission
- Know and understand specifically what is expected of them
- Build their own resilience by exploring their capacities, providing resources, and creating an environment for such.
- Develop and improve performance by providing encouragement, constructive feedback, and opportunities for such

Suggested Reading Materials:

1. Human Resource Management for MFIs Toolkit http://www.microsave.net/files/pdf/1371122783_Human_Resource_Management_Toolkit.pdf

c. Strengthening ecosystem

Environmental preservation or protection is vital to disaster risk reduction. While microfinance is not directly involved in taking care of the ecosystem, the nature of its operations provides opportunities and avenues to advocate and lead activities towards taking care of the environment. One of the triple bottom lines that are common among microfinance organizations includes planet or the environment. While this is common in most MFIs, this is only a statement supported by practices but not mainstreamed in organizational strategies and operations that makes it unmonitored.

Green Microfinance

The European Microfinance Network (2013) defined green microfinance to mean any environmentally friendly initiatives implemented by an institution that provides microfinance services. For instance, initiatives could be: the establishment of an environmental policy; programs to reduce energy consumption within the institution; clients' environmental risk assessment; microcredits for environmentally-friendly technologies, such as: renewable energy systems or interventions for the improvement in energy efficiency; microcredits for environmentally friendly activities, such as: organic productions, ecotourism, agroforestry, recycling; and, environmental awareness-raising actions or provision of trainings for environmental activities, etc.

MicroWorld.org on the other hand defines green microfinance as a financial service which tries to improve the environmental conditions by creating incentives for the poor. It provides the poor with microfinance that encourages them to use more sustainable environmental-friendly practices. This means that financing is directed intentionally for enterprises and business activities that are geared towards the environment. But in MixMarket's *Assessing Green Microfinance*, it continued the definition with "MFIs have the option of implementing a broad spectrum of green strategies, ranging from "do not harm" policies to "positive environmental impact" initiatives at the portfolio and institutional levels." It also outlined four strategies or essential practices in green microfinance as follows:

Managing internal environmental risks	The MFI works consciously to reduce ecological footprints in its offices by setting mechanisms to manage paper, water and energy consumption, reduce or treat wastes, or reduce carbon emissions linked to transportation. It usually requires efforts in raising staff awareness of good practices. Commonly, this is the MFI's first step when making its foray into environmental management. However, the MFI's internal ecological footprint is not limited to its physical offices: most of its environmental impacts are indirect and are linked to the portfolio of financed activities.
Managing	The MFI seeks to reduce the environmental risks of the activities

external environmental risks	financed through its products. For this purpose, the MFI can decide whether to use an exclusion list, condition access to a subsequent loan with the aim of reducing environmental risks, or raise client awareness on mitigation solutions.
Fostering green opportunities	The MFI aims to generate positive environmental impacts by offering specific financial or nonfinancial services to promote environmentally – friendly businesses (such as recycling activities), practices (like agro-forestry, use of organic fertilizers and seeds) or the acquisition of clean energy technologies (solar-photovoltaic solutions, bio-digesters, improved cooking stoves, efficient fridges, among others).
Formal environmental strategy	Encompassing any or all of the three strategies above, the MFI can also integrate environmental issues at a strategic level by embedding environmental concerns in its mission or vision, adopting a formal environment al policy, appointing a person to manage environmental issues, reporting on environmental performance, etc.

In the Philippines, renewable energy financing is being explored for research and scaling at the micro level. MCPI is currently piloting an RE financing model for microfinance institutions in partnership with some of its members. Financing for environment- friendly enterprises are however limited and mostly on a project basis and again an area for further exploration.

Suggested reading materials:

1. Green Microfinance and Sustainable Agriculture in Sierra Leone http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-green-microfinance-and-sustainable-agriculture-in-sierra-leone-new-perspectives-and-synergic-actions-may-2013.pdf
2. Sustainable Energy for the Poor: *The Future of Microfinance* http://ecocivilization.info/sitebuildercontent/sitebuilderfiles/greenmicrofinancefiveyearbusinessplan.pdf

Community Development Activities

Some of the microfinance institutions in the Philippines are already involved in the promotion of environment-friendly activities and these are embedded in their community development activities. Awareness-raising is the most common among Philippine MFIs as these are again embedded in regular center or group activities. Among these activities include tree planting, organic farming, re-greening programs, and others. On the one hand, MFIs also exert efforts to contribute to energy conservation and

environmental cleanliness like less use of paper or recycling. This is formalized in the triple bottom line of some organizations and thus integrated in their strategic direction.

Going Green at Ahon sa Hirap, Inc. (ASHI)
(an excerpt from SPI4 Report on ASHI, 2015)

Green Microfinance considers the role of MFIs to their clients in an environmental perspective. The indicators to green microfinance performance depend on three standards – formal environmental strategy, green opportunities, and environmental risks management. ASHI's commitment to environmental consciousness is instilled from the top management down the ranks to the clients.

In terms of a formal environmental strategy, ASHI has expressly committed itself to environmental awareness. Headed by the President, Ms. Mercedes Abad, environmental consciousness was dignified through its inclusion in one of their Key Result Areas where they prescribed different environmental targets and planned community activities geared at promoting environmental preservation. This has been displayed by the efforts in promoting environmental-friendly enterprises, advocating energy preservation efforts, and strengthening linkages with LGUs and other agencies.

With regard to environmental risks management, ASHI provides house repair loans along with the rehabilitation mechanisms that they have set for their clients. They also work in cooperation with local government units (LGUs) and the academe to train their clients and personnel in calamity-preparedness. However, it can still be better improved by incorporating 'environmental preservation' clauses in loan contracts, classifying activities that affect the environment and the degree and extent to which they affect the same, regulating environmentally-dangerous enterprises, and enforcing disincentives to businesses that deal irreversible damages to the environment. It is also recommended that there be established mechanisms that monitor environmental compliance and achievement.

In the efforts toward realizing their green opportunities, ASHI also encourages environmental preservation across their management to the clients. In every loan application, clients are asked to plant one tree. And if lots are unavailable, they reuse plastic containers as plant pots. Branches are also encouraged and incentivized to plant fruits and vegetables. ASHI's concern regarding improper garbage disposal motivated them to facilitate a garbage recycling procedure. Regarding health and sanitation, ASHI, in partnership with Unilever for Pure-it, provides water-purification loans where they provide the equipment to purify water for human consumption. An area of improvement is found in consolidation of their available programs for their clients in order to achieve greater environmental results. An example is the agricultural-program from ASHI which has been found to be complementary with the goal of independent energy production absent the raw materials that also pollute the environment.

Apprised by the findings, it is concluded that the general areas of improvement include compliance and monitoring systems of their environmental program achievements and progress, comprehensiveness of the scope and sweep of their incentive structures, and full utilization of current programs and opportunities that may supply the operational demands of the environmental framework ASHI wants to further commit to.

ASHI is one of the more mature MFIs that included the environment in its triple bottom line and have mainstreamed such in the organization as well as in their programs and strategies.

d. Strengthening systems and procedures

DRR measures need clear systems and procedures. Existing processes do not necessarily need to be changed but may be adjusted to accommodate the implementation of DRR measures. Sometimes DRR measures are already integrated in the organizational policies but not in the processes. Efficient and effective processes have to be maintained even when adapting DRR measures. This ensures achieving objectives at the lowest possible cost.

In a research conducted by Rojas and Serpa on *A Consensus of the Strategies for the Strengthening of Non-Governmental Organizations*, the following are some of the recommended practices for NGOs:

- **Develop capacity building strategies based on organizational characteristics to be able to develop programs that are effective and efficient.** DRR measures including implementation strategies must again be built on the existing capacities and resources of the MFI.
- **Facilitate Board of Trustees' adoption of accountability and transparency measures to respond to external stakeholder (clients, government agencies, donors) demands.** DRR programs also need an organizational buy-in to ensure that everybody participates in the process.
- **Support and promote the implementation of performance measures, accountability, and transparency processes.**
- **Promote the integration of evaluation as an integral part of process improvements.** Evaluation in DRR programs help in improving not just the program but also the implementing guidelines and procedures. This is further discussed in the next chapter.

Suggested reading materials:

1. Governance and Internal Control for Non-governmental Organizations http://www.icac.org.hk/filemanager/en/Content_1031/ngo_e.pdf
2. Improving Internal Control: A Practical Guide for Microfinance Institutions https://centerforfinancialinclusionblog.files.wordpress.com/2011/10/improving-internal-control-a-practical-guide-for-microfinance-institutions.pdf

e. Enabling policy environment

In some cases when hazards turn into disasters, some actions even with available resources are not carried out due to policy restrictions. Appropriate policies in place help reduce disaster risks.

1 Risk-sharing Mechanisms

MFIs are financial intermediaries and, as such, by location, are inherently absorbing the risks from both the lender (FIs) and user (MFI client. In extreme hazard event, significantly-impacted MFIs stand to lose substantially, if risks-sharing arrangements with the FIs and other government agencies are not institutionally arranged.

Government guarantees and insurance schemes. The government offers some sort of risk-sharing mechanisms to encourage credit outreach to specific sectors. These are however very limited.

An example of a risk-sharing mechanism provided by the government is the Agricultural Guarantee Fund Pool (AGFP)[6]. It provides cover of up to 85% of loans released for agricultural purposes with the objective of encouraging credit outreach to small farmers and small fisher folks. The guarantee covers all risks except fraud on a minimal fee. When a hazard event turns into a disaster, enrolled loan portfolio which were validated and declared as 'beyond recovery' are transferred to AGFP who in turn pays the MFI in cash. In return, the MFI continues to collect the subjugated portfolio for AGFP at a certain fee. In this case, the risk of lending to this sector is shared by all the stakeholders. While the client still needs to pay the loan transferred to AGFP, sufficient time is provided and he/she starts farming again with the new loans from the MFI.

The Philippine Crop Insurance Corporation (PCIC)[7] is another government corporation that provides crop insurance. The mandate of the agency is to provide insurance for farmers against disasters arising from natural calamities, pest infestations, and plant diseases. The coverage extends from the crops to damages/loss of machineries, transport facilities, equipment, and other related infrastructure.

Credit Surety Funds. Bangko Sentral ng Pilipinas (BSP) led the establishment of Credit Surety Fund (CSF) across the country with the aim of increasing the creditworthiness of MSMEs and be able to access banks for capital necessary for growth. The fund is a

[6] AGFP is led by the Department of Agriculture with the LandBank of the Philippines as institutional manager to mitigate risks in agricultural lending by providing credit to the agriculture sector.
[7] PCIC is a government owned and controlled corporation that implements the government's agricultural insurance program.

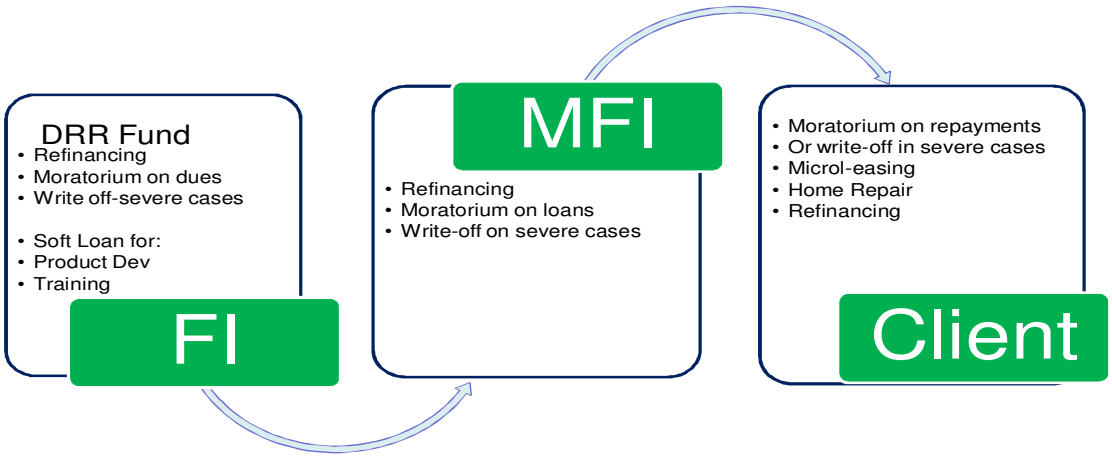
contribution from member-cooperatives, non-government organizations, local government units (LGUs), and from partner institutions such as the Landbank of the Philippines, Development Bank of the Philippines, Industrial Guarantee and Loan Fund, and other interested parties. The fund serves as guarantee for loans extended to MSMEs who have limited access to formal credit due to lack of acceptable collaterals, unstable cash flows, lack of business experience or track record, and low paying capacity. In 2015, Senate Bill 2909 was recently passed by the House of Representatives and the House of Senate which pushes for the establishment of Credit Surety Fund Cooperatives. While these policies are not specifically designed as a risk-sharing mechanism, it provides a certain level of safety net that enable fund access.

Suggested reading materials for credit surety funds:

1. Primer on Credit Surety Fund
   http://www.bsp.gov.ph/downloads/Publications/FAQs/CSFPrimer.pdf
2. Credit Surety Fund: Concept and Creation
   http://www.bsp.gov.ph/downloads/publications/faqs/csf.pdf
3. S.B. No. 2909
   https://www.senate.gov.ph/lisdata/2198918717!.pdf

Risk-sharing mechanisms with financial institutions. In the Philippines, risk-sharing mechanisms with financial institutions are very rare especially on mainstreamed loan products. Capability-building supports are likewise dependent on the loan agreement of the FI and the MFI. Risk-sharing mechanisms are made available on pilot implementation for innovative loan products such as energy loans. A specific example is the Palawan New and Renewable Energy Livelihood Support Project. Negotiations with wholesale lenders remain as the sector practice in cases of hazard occurrences.

The MFIs may make the initial move, being the risk absorber, to develop a mechanism in the sector where risks are amply shared by both the source of funds (FIs) and the intermediaries. An example of a proposed risk-sharing initiative is shown in Figure__. The proposed mechanism embeds a coherent risk management from the source of funds to the intermediary and to the end-user.



2 Policy Development

Depending on the risk assessment and the chosen DRR measures, existing policies of the MFI might need to be adjusted or new policies might need to be developed to support the implementation of the measures.

Policies are written rules that set boundaries or limits which also serve as guide for decision-making. It originates from the changes that organization would like to see versus what already exists and what are the necessary actions that need to be done to achieve such objectives. In other words, this is aligned with the strategy of the organization.

3 Strategy development. The theory of change is a tool that provides a clear framework for strategy development. It clearly outlines the objectives and the frameworks that will be used to attain such objectives. This can be used in long term planning as well as in policy development. In microfinance, social performance management or simply SPM is the more common framework that is being used in strategy development.

Social Performance is defined by the Social Performance Task Force (SPTF)[8] as "the effective translation of mission into practice in line with accepted social values." Social Performance Management refers to "the systems that organizations use to achieve their stated social goals and put customers at the center of strategy and operations." SPM is being used as a strategy development tool that helps MFIs align their practices with their goals and objectives. The Universal Standards for Social Performance Management[9] makes it also possible for MFIs to monitor their performance against global best practices in the industry and make improvements in their organizations. The Universal Standards are divided in 6 dimensions:

1. Define and monitor social goals
2. Ensure board, management, and employee commitment to social goals
3. Design products, services, delivery models and channels that meet clients' needs and preferences
4. Treat clients responsibly
5. Treat employees responsibly
6. Balance financial and social performance

[8] SPTF is a global organization composed of practitioners, researchers, practitioners, donors and investors, national and regional networks, technical assistance providers, rating agencies, academics and researchers, and others to develop, disseminate and promote standards and good practices for social performance management and reporting.

[9] USSPM is a comprehensive manual of best practices that helps MFIs manage their social performance

The SPM tool encompasses risk reduction measures that prevent the risk of mission drift as well as other related disaster risks. Hazard specific measures based on risk assessments can easily be integrated in an MFIs strategic objectives using this framework.

Suggested reading materials

1. From Mission to Action
   http://www.microfinancegateway.org/sites/default/files/mfg-en-toolkit-from-mission-to-action-management-series-for-microfinance-institution-strategic-management-toolkit-handbook-2007.pdf
2. Assessing and Managing Social Performance in Microfinance
   http://www.ifad.org/ruralfinance/pub/performance.pdf
3. Embedding Social Performance Management in Financial Service Delivery
   http://www.cgap.org/sites/default/files/Brief-Embedding-Social-Performance-Management-May-2014.pdf

Chapter 4. Measuring Resilience

The main objective of a disaster risk reduction program is to build resilience and in this case the MFI. It is therefore important to ensure that the risks identified during the risk assessment have been properly addressed by implementing sufficient DRR measures. The main objective is to determine whether the measures adapted to mitigate the risks were effective or have provided sufficient capacities for the elements at risk to reduce their vulnerabilities or mitigate the impacts of hazard occurrences at the very least. Furthermore, it also provides an avenue to identify areas that still need more measures as well as measures that may have some implementation issues.

Monitoring and Evaluation. Monitoring and evaluation is very critical to measure the results of the DRR implementation. As the objective of the DRR is to increase the resilience of the MFI, M&E seeks to validate or verify if the MFI's resilience have indeed changed as a result of the implementation of DRR measures. Monitoring and evaluation requires data from inception, implementation, and end of period which will serve as the basis in evaluating changes. As such, the following are very important:

- Baseline data. The conditions or status of the MFI as reflected in the risk assessment report is critical as it serves as the starting point and at the same time a basis of comparison after program implementation.
- Real time data. Data management is critical for monitoring as it may require immediate decisions. Gathering and processing data from events as they occur may help in avoiding unnecessary delays in the implementation. At the same time, real time information that may prompt management to immediately suspend implementation helps prevent costs associated with the program.

Evaluation. Evaluation is a process of judging value on what a project or programme has achieved particularly in relation to activities planned and overall objectives (Bartle, 2007). It further explained that "it involves value judgement and hence it is different from monitoring (which is observation and reporting of observations)."

The purposes of evaluation are as follows:

- Identify constraints and bottlenecks in project implementation and the corresponding solutions to such.
- Enables the identification of costs and benefits of the project that accrues to the recipients or beneficiaries
- Draws lessons from the project implementation that can be adapted in other project implementations.

- Provides a clear picture of the extent of objectives that were achieved from the implementation.

Monitoring. Monitoring is important once a project or an undertaking started implementation. The main factors or indicators that need monitoring are outputs, outcomes, and impact. Outcomes and impact maybe challenging to measure but it presents the ultimate effects that the DRR implementation has generated.

Components of the monitoring and evaluation framework based on the UNDP Handbook on Planning, Monitoring, and Evaluation:

1. Narrative component. This is a description of the monitoring and evaluation accountabilities of individuals and stakeholders involved in the M&E activities. It also includes the evaluation capacities as well as necessary measures to improve capacities of those involved in the monitoring and evaluation activities.

2. Results framework. The results framework outlines the desired activities, outputs, outcomes, and impacts based on the planning conducted. It details the results indicators with the corresponding baseline data, target, means of verification, and risks and assumptions. This is anchored on the objectives based on the risk assessment conducted.

Table 10. Results-Based Framework Matrix

Results	Indicators	Baseline	Target	Means of Verification	Risks & Assumptions
Impacts Statements (ultimate benefits for targeted population)	Measures of progress against impact				Assumptions made from outcome to impact. Risks that impact will not be achieved.
Outcome statement (Short- to medium term change in development situation)	Measures of progress against outcome				Assumptions made from outputs to outcome. Risks that outcome will not be achieved.
Outputs (Products and services—tangible and intangible—delivered or provided)	Measure of progress against output				Assumptions made from activities to outputs. Risks that outputs may not be produced.
Activities (Tasks	Milestones				Preconditions for

undertaken in order to produce research outputs)	or key targets for production of outputs				implementation of activities.

Source: UNDP

Impact statements traces back to the objectives of the DRR Program which is anchored on the results of the disaster risk assessment process. It is a reflection of the goals of the organization. Outcome statements are results that the DRR program wants to achieve in the immediate and medium term. For instance, what would the program want to achieve in the next two years? Outputs are the programs and interventions that were implemented. These include the DRR measures and policy changes that were adapted. It can be products, services, policy changes and adjustments, and other relevant measures. Activities are the actions that were carried out to produce the outputs.

Indicators on the one hand are performance measures to know how far have the MFI gone with its DRR program. Means of verification includes processes, data sources, and evidences to qualify the results. The following illustration shows an example of a monitoring framework from the illustrations made in the disaster risk assessment.

Table 11. Illustrative Results-Based Monitoring Framework

Indicators	Baseline	Target	Means of Verification
IMPACT 1: Credit access for conflict areas			
Outcome 1: Loan portfolio exposed in conflict areas will be provided with sufficient cover.			
Output 1: A special fund will be set-up to cover portfolio in conflict areas			
1.1 Percentage of loan portfolio covered by credit fund	2016: 20%	2020: 100%	Balance Sheet
1.2 Percentage of credit fund to loan portfolio	2016: 5%	2020: 50%	Balance Sheet
Output 2: A certain amount will be charged to clients which will be recorded in the special fund.			
2.1 Additional Fees			Policy manuals, disbursement documents
2.2 Policies on the administration of the additional fees			Policy manuals, disbursement documents

3. Planning matrices for monitoring and evaluation. It consolidates the information required for monitoring and evaluation for easy reference.

Table 12. Illustrative M&E planning matrix

Results	Indicators	M&E Event with Data Collection Methods	Schedule / Frequency	Responsibilities	Means of Verification	Data Source and Type	Risks

Source: UNDP

Recommended reading materials

1. Tips in Conducting a Participatory Evaluation
   http://pdf.usaid.gov/pdf_docs/PNABS539.pdf
2. The Most Significant Change Technique
   http://www.mande.co.uk/docs/MSCGuide.pdf

Knowledge generation. Whether objectives were met or results are different from the expected or projected results, the learning derived in the process is equally important. Learning from monitoring and evaluation is the very essence of the process as it serves as a basis for future programming or changes in the implementation or scaling of the program. For the MFI, learning can be mainstreamed into the organization by integrating it into the processes and systems of the organization.

Using knowledge in planning and programming:

- Project revisions. The learning gathered by monitoring and evaluation serves as a basis in revising implementing guidelines or the DRR measure itself that is being implemented. Systems and processes are adjusted to avoid further costs.
- Replication and upscaling. Lessons learned are integrated to the program prior to replication or before mainstreaming the program in the organization. Processes or systems that did not work are revised or changed before the program is scaled in the whole organization.

http://web.undp.org/evaluation/evaluations/handbook/english/documents/pme-handbook.pdf