

# **Disaster Loan Funds for Microfinance Institutions:**

## **A Look at Emerging Experience**



Widening the circle, moving ahead

### **MICROENTERPRISE BEST PRACTICES**

Development Alternatives, Inc., 7250 Woodmont Avenue, Suite 200, Bethesda, MD 20814 USA



A USAID-funded project, implemented by DEVELOPMENT ALTERNATIVES, INC. in collaboration with ACCION International, Foundation for International Community Assistance, Harvard Institute for International Development, International Management and Communications Corporation, Ohio State University Rural Finance Program, Opportunity International, and the Small Enterprise Education and Promotion Network



# Disaster Loan Funds for Microfinance Institutions: A Look at Emerging Experience

by

Warren Brown  
Geetha Nagarajan

Calmeadow

October 2000

This work was supported by the U.S. Agency for International Development, Bureau for Global Programs, Center for Economic Growth and Agricultural Development, Office of Microenterprise Development, through funding to the Microenterprise Best Practices (MBP) Project, contract number PCE-C-00-96-90004-00.

*Warren Brown worked with the Research and Policy Unit at Calmeadow from May 1999 to November 2000. During his time at Calmeadow, Mr. Brown was responsible for managing and conducting research for the Ford Foundation and USAID's MBP Project on the current state of the practice in microinsurance. Previously, he worked as a consultant for Monitor Company, an international strategy consultancy. While at Monitor, Mr. Brown worked with Canadian financial services clients in areas such as new market assessment, customer research, and product development. Mr. Brown is currently the Director of the Research and Development Department at ACCION International.*

*Geetha Nagarajan works for Calmeadow in Washington, D.C., where she manages the microbanking standards project that establishes performance standards and benchmarks for the microfinance industry. She has been researching microfinance and institutional risk management focusing on areas affected by conflicts and natural disasters for the past four years. Dr. Nagarajan has consulted with the ILO, IADB, and USAID on these projects, and her reports have been widely disseminated among policy makers and practitioners. In addition, Dr. Nagarajan has been engaged in research on Africa and Asia on rural financial issues for the past 10 years. She is the author of the MBP publication "Microfinance in the Wake of Natural Disasters: Challenges and Opportunities."*

## ACKNOWLEDGMENTS

The information for this report was gathered through conversations with the individuals responsible for developing each of the disaster loan funds discussed herein. We are greatly indebted to Mosharrof Hossain and Zakir Hossain from BURO Tangail (Bangladesh), S.N. Kairy from the Bangladeshi Rural Advancement Committee, Carlos Ani and his staff from CARE Bangladesh, Wiltold Szwajkowski and Agata Szostek from Fundusz Mikro (Poland), Maria Victoria Saenz de Lleras from the Inter-American Development Bank, and Fazul Kader from Palli Karma-Sahayak Foundation in Bangladesh. All of these individuals took the time to explain the details of their funds to us and were very willing to collect and share information as needed.

The information in this report is based entirely on the work that they have done. All of these organizations deserve recognition for the creative and innovative responses that have been developed under difficult circumstances. While we have conveyed the information gathered in our conversations and field visits as accurately as possible, any errors or omissions are the sole responsibility of the authors.

We also would like to thank Emrul Hasan and Zulkarin Jahangir from the South Asia Network of Microfinance Institutions in Bangladesh for their assistance throughout our trip.

The content of the report has benefited greatly from the thoughtful comments of Joan Parker of Development Alternatives, Inc. (DAI), Anicca Jansen of USAID, and Gary Woller of Brigham Young University. Funding for this report was provided by the U.S. Agency for International Development's Microenterprise Best Practices Project, managed by DAI of Bethesda, Maryland.



## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>ix</b>
<b>CHAPTER ONE</b>	
<b>INTRODUCTION</b>	<b>1</b>
WHAT IS A DISASTER LOAN FUND? .....	2
WHO BENEFITS FROM A DLF? .....	3
<b>CHAPTER TWO</b>	
<b>DLF STRUCTURES</b>	<b>5</b>
STRUCTURE ISSUES AND IMPLICATIONS .....	7
<b>CHAPTER THREE</b>	
<b>DLF ACTIVITIES</b>	<b>9</b>
INITIAL INJECTION OF FUNDS.....	9
Initial Injection of Funds—Issues and Implications.....	9
DAMAGE ASSESSMENT.....	10
Trigger Mechanisms .....	10
Allocation Mechanisms—MFIs and Affected Households .....	11
MAKING DLF LOANS: LOAN TERMS AND CONDITIONS .....	14
Terms and Conditions: Implications for Affected Households .....	15
Terms and Conditions: Implications for MFIs.....	16
Terms and Conditions: Implications for the DLF .....	17
ADDITIONAL CAPITALIZATION .....	17
Capitalization—Issues and Implications .....	19
MONITORING .....	21
What to Monitor.....	21
Monitoring—Issues and Implications .....	22
<b>CHAPTER FOUR</b>	
<b>SUMMARY AND OUTSTANDING ISSUES</b>	<b>23</b>
<b>LIST OF SOURCES</b>	<b>27</b>



**LIST OF TABLES AND FIGURES**Table

1	Differences in DLF Structures	5
2	Summary of Terms and Conditions of DLF Loans	15

Figure

1	Generic Outline of DLFs	2
2	Structural Variations in DLFs	6
3	Illustrated Loan Disbursal and Repayment Process—CARE and IADB DLFs	7
4	Hypothetical Growth Projections Using Different Capitalization Mechanisms	18
5	Modeling Different DLF Investment Strategies	20





**LIST OF ACRONYMS**

ASA	Association for Social Advancement
BRAC	Bangladeshi Rural Advancement Committee
DLF	disaster loan fund
IADB	Inter-American Development Bank
MFI	microfinance institution
PKSF	Palli Karma-Sahayak Foundation
SANMFI	South Asia Network of Microfinance Institutions



## EXECUTIVE SUMMARY

Rapid-onset natural disasters—such as floods, hurricanes, or earthquakes—have the potential to cause significant damage to the livelihoods of clients of microfinance institutions (MFIs) and to MFIs themselves. In response, MFIs and donors in Bangladesh, Central America, and Poland have experimented with the development of *disaster loan funds* (DLFs) to reduce their exposure to disaster-related losses. DLFs are financial reserves, usually established by an initial donor grant, held against the occurrence of a disaster. When disaster strikes, money in a DLF is made available to MFIs so that they can make loans to affected households to help them cope with the effects of the disaster.

This paper describes the DLFs developed by Bangladeshi Rural Advancement Committee (BRAC),<sup>1</sup> BURO Tangail, CARE, and Palli Karma-Sahayak Foundation (PKSF)<sup>2</sup> in Bangladesh after the 1998 floods; the Inter-American Development Bank (IADB) in Central America after Hurricane Mitch; and Fundusz Mikro in Poland after the 1997 floods. Although all of these funds are new and relatively untested, they do provide useful material to open the debate on whether and how DLFs should be developed for a broader range of MFIs. The information in this paper provides information and material to fuel these debates and begins to frame some of the issues to be discussed further as more experience with DLFs emerges.

### PURPOSE OF DLFs

Although some DLFs also provide financial benefits to MFIs, the primary purpose of these funds typically is to meet affected households' immediate demand for cash rather than to cover any unexpected losses experienced by MFIs themselves. The intention in developing these funds is to improve the capacity of clients, MFIs, and donors to respond to disasters. In theory, clients benefit from increased access to cash at a time of need, MFIs benefit from reduced loan defaults and improved customer loyalty, and donors presumably benefit from improved efficiency in disbursing needed funds and the development of a proactive, ongoing mechanism to deal with disasters rather than trying to constantly react and respond in emergency situations.

---

<sup>1</sup> At the time of writing, BRAC's DLF was awaiting final disbursement approval from its donors and, thus, had not yet begun operation. All discussion of the BRAC DLF refers to its *planned* use of funds.

<sup>2</sup> PKSF is a government-sponsored apex organization that provides loan capital at subsidized rates of interest to 172 partner MFIs in Bangladesh. PKSF also provides a limited range of management training courses for its partners.

## DLF STRUCTURES

The DLFs examined have been structured in three different ways:

- **MFI Managed—Single Institution.** Under this structure, a donor provides the MFI with an initial injection of funds to be lent out to affected households and maintains some level of responsibility for monitoring the results of the fund; however, the MFI is essentially responsible for all of the remaining activities. BRAC's planned fund and those developed by BURO Tangail and Fundusz Mikro are all examples of this.
- **Separate DLF Management—Multiple Institutions.** The CARE and IADB funds serve multiple MFIs and have each created a separate organization to handle the management of the DLF. This separate entity is responsible for the management of most of the activities of the fund. After a disaster occurs, these entities assess applications for funds from affected MFIs and disburse loans to affected MFIs, which then on-lend these funds to affected clients. Likewise, in the repayment of loans, clients repay their loans to the MFI, and the MFI subsequently repays its loan to the DLF.
- **MFI Managed—Multiple Institutions.** A third variety, best illustrated by PKSF in Bangladesh, falls somewhere in the middle. It serves multiple MFIs, but rather than creating a central entity to manage the DLF (or managing it itself), it provides the initial funds to each participating MFI as a one-time grant, giving the MFI responsibility for managing the funds on an ongoing basis.

No one structure is inherently better or worse than another. Each has its relative strengths and weaknesses. In considering the most appropriate structure for a given DLF, it is useful to consider four factors:

- **Control.** How effectively can the DLF control the use of its funds?
- **Existing Capabilities.** Can the DLF use systems and structures already in place within stakeholder institutions? Or will new capacity have to be developed?
- **Speed of Disbursal.** How does the DLF structure affect the ability of MFIs to disburse loans in a timely fashion? Ultimately, whatever structure is chosen needs to be able to disburse the DLF loans relatively quickly if they are to serve their intended purpose.
- **Accessibility of Participating MFIs.** What structural changes are required for DLFs that cover multiple MFIs versus DLFs that serve just a single MFI?

## KEY COMPONENTS OF DLFs

In addition to how the actual funds are structured, there are five basic components involved in a DLF:

1. **Initial Injection of Funds**—the provision of the initial capital base that forms the foundation of the fund. All of the DLFs examined were initially funded by a one-time donor grant in the frantic period immediately following a disaster. DLFs designed before a disaster should have the luxury of considering whether alternative forms of funding (loans versus grants, MFI contributions, and so forth) would perform as well or better than a one-time donor grant.
2. **Damage Assessment**—the policies and procedures used by the DLF to assess damages and determine how DLF funds will be disbursed once a disaster has occurred. Four issues should be considered under this process: (1) what event or situation will trigger a release of funds from the DLF; (2) how the amount of funds to be disbursed will be determined; (3) who the DLF will serve; and (4) how rapidly the funds need to be disbursed. In addition, the questions of which MFIs should receive funds present another important issue. DLFs are not intended to be used to prop up an MFI with an already troubled loan portfolio, nor should they be intended as a permanent solution to an MFI's vulnerability to disasters.
3. **Making the Loans**—the terms and conditions of the loans, loan disbursement, and loan collection. The key decisions to be made center on the terms and conditions of the loans and include loan interest rate, loan term, grace period before repayments start, and share of repayments re-contributed to the DLF. Different DLFs have adopted very different terms and conditions, with terms ranging from four to six months to two years and interest rates ranging from 0 to 15 percent. A DLF that creates a separate entity to manage the fund, like CARE and the IADB, have the additional challenge of setting the interest rate and term of the loans made from the DLF to the MFIs, which on-lend the funds on different terms and conditions to affected clients.
4. **Additional Capitalization**—the mechanisms used to sustain and grow the DLF's capital base over time. If a DLF wants to become an ongoing protection mechanism against future disasters, it must incorporate mechanisms to grow the size of the fund from its initial grant base. The four factors that contribute to the growth of a DLF include retained principal, retained interest, invested capital, and additional contributions. In general, additional capitalization mechanisms should balance the desire to grow the fund as quickly as possible with the need to maintain a high degree of liquidity, so that funds are indeed available when a disaster strikes.
5. **Monitoring**—the processes and systems put in place to monitor how DLF funds are being used and to ensure they are used as intended. Monitoring is typically conducted by the organization providing the initial funds (for example, the donor agency) or the organization managing the DLF fund. Several commonly tracked variables include: when funds are disbursed (is it in accordance with the rules of the fund?), who has received the

loans, performance of the loan portfolio, impact of the loans, and how the DLF funds are being invested. The key issue in monitoring is to find a balance between achieving 100 percent verification of the results and minimizing the cost of monitoring. The DLFs examined have used incentive structures, existing reporting relationships, and decentralization in their efforts to manage this balance.

## SUMMARY AND OUTSTANDING ISSUES

There is still much to learn about when, whether, and how to design DLFs to support MFIs and their clients in disasters. The DLFs discussed in this paper are all quite new and have, at most, been tested only once. Although the DLF concept meets a real need of MFIs and their clients and these experiments appear to be progressing well, several questions should still be asked before donors and MFIs rush to develop DLFs. In particular, the following should be considered:

- **Do all MFIs need DLF protection?** It is not necessarily true that all MFIs will experience liquidity crises and capital losses following a disaster. Larger MFIs that maintain adequate reserves should be able to generate sufficient funds internally to provide clients with relief loans or other forms of assistance.
- **Will DLFs create disincentives for MFIs to take preventative measures against disaster-related losses?** Loans disbursed from DLFs provide short-term financial support after disaster-related losses occur. Although MFIs cannot prevent disasters from happening, they can develop products and services that reduce, for both clients and MFIs themselves, the severity of these potential losses. Does external financial support in the form of DLFs enhance or replace potential MFI efforts?
- **Should DLFs be designed as a perpetual disaster-protection mechanism, or should they have finite life cycles?** Four of the six DLFs examined in this paper are intended to continue into perpetuity—provided that loans continue to be repaid and additional capital contributions continue to be made. Further investigation is required into the relative value of DLFs as one-time versus ongoing structures. As a third alternative, externally funded DLFs with finite life cycles could protect clients in the short run, while building incentives for them to develop self-protection measures for the medium and long term.
- **How appropriate are DLFs for different types of disasters and areas with less disaster exposure than Bangladesh?** Most DLFs have been developed to deal with floods in a region that faces the threat of serious disaster each year. To be relevant in other contexts, DLFs may need to focus on providing coverage of a wider range of disasters for MFIs over a larger geographic area. However, further effort is needed to more fully understand the issues related to extending DLF protection outside of Bangladesh.

Although the experiences discussed in this paper are still quite new, through their creativity and innovation, these organizations have opened an important new discussion in the debate over how MFIs can best cope with the disruption in business created by natural disasters.





## CHAPTER ONE INTRODUCTION

Rapid-onset natural disasters<sup>3</sup> affect households in low-income areas more severely than those in wealthier areas. The poor live in disaster-prone geographic areas, build shelter of less robust materials, and have fewer financial resources to draw on when disasters strike. Therefore, as microfinance institutions (MFIs) expand their outreach into progressively lower income communities, they are likely to serve a clientele at greater risk of natural disaster. When a disaster strikes, their clients may lose their sources of income, have assets destroyed or damaged, and face deteriorating health conditions. For MFI clients, this state of emergency translates into a period of suspended loan repayments, simultaneous with an increased demand for cash held in savings accounts or emergency loans. If many clients are severely affected by a disaster, this quickly translates into a liquidity crisis for the MFI. How can it meet the immediate needs of its clients for financial resources at exactly the time when loan repayments have slowed dramatically?

In response to this problem, MFIs and donors in various countries have developed or are proposing the development of *disaster loan funds* (DLFs). DLFs are financial reserves, usually established initially by a donor grant, held against the occurrence of a disaster. When disaster strikes, funds are made available from the DLF to allow MFIs to make loans to affected households to help them cope with the effects of the disaster.<sup>4</sup> Although some DLFs also provide financial benefits to MFIs, the primary purpose of these funds typically is to meet the demand of affected households for cash rather than to cover any unexpected losses experienced by MFIs themselves.

The DLFs discussed in this paper were created in the aftermath of specific recent disasters: the 1998 floods in Bangladesh, Hurricane Mitch in Central America in 1998, and the 1997 floods in Poland. Because they were initially created under emergency conditions and because they are relatively new to the microfinance landscape, there has been little documentation of DLFs to date. Therefore, this paper intends to provide an initial description of DLFs based on six cases: BURO Tangail, Bangladeshi Rural Advancement Committee (BRAC),<sup>5</sup> CARE, and Palli Karma-Sahayak Foundation (PKSF)<sup>6</sup>—all in Bangladesh—

---

<sup>3</sup> For the purposes of this paper, rapid-onset disasters include floods, earthquakes, and tropical storms (typhoons, cyclones, and hurricanes).

<sup>4</sup> It is important to note that DLFs provide only one choice to households in the wake of disaster: the assumption of additional debt to bridge the emergency or reconstruction period. Many households may choose to avoid additional debt, or they may have financial alternatives such as personal savings, loans from family or friends, or post-disaster remittances from relatives in other areas.

<sup>5</sup> At the time of this writing, BRAC's DLF was awaiting final disbursement approval from its donors and, thus, had not yet begun operations. All discussions of the BRAC DLF refer to its *planned* use of funds.

<sup>6</sup> PKSF is a government-sponsored apex organization that provides loan capital at subsidized rates of interest to 172 partner MFIs in Bangladesh. PKSF also provides a limited range of management training courses for its partners.

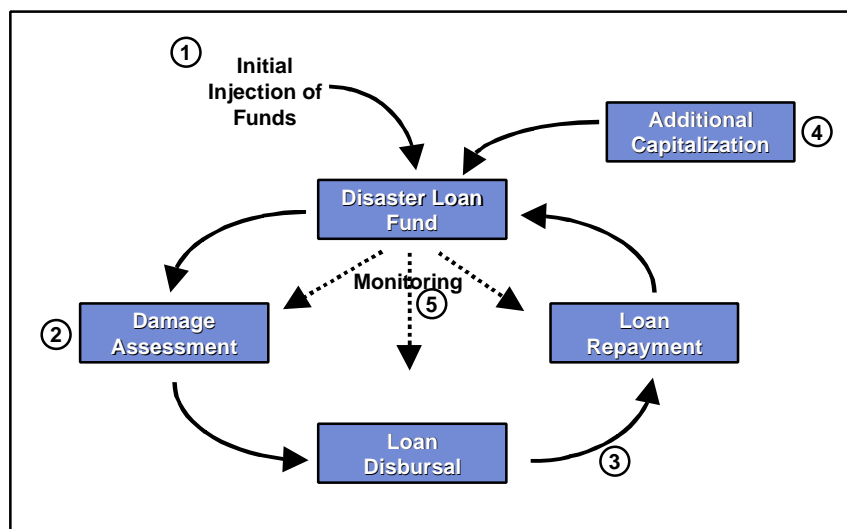
Fundusz Mikro in Poland,<sup>7</sup> and the Inter-American Development Bank (IADB) in Honduras and Nicaragua.

This paper does not strive to provide detailed analyses of any of these efforts. Instead, it seeks to clarify design choices and to highlight implications of selecting certain design options over others. Tracking the contributions and stability of these DLFs under future disaster conditions will be essential, along with a careful ongoing assessment of the costs and benefits of DLFs to clients and MFIs.

## WHAT IS A DISASTER LOAN FUND?

Although there are many differences between the different DLFs examined here, they all share a similar basic structure. Figure 1 summarizes the basic activities involved in operating a DLF, which are briefly outlined here and then described in detail in Chapter Three.

**Figure 1: Generic Outline of DLFs**



- (1) **Initial Injection of Funds.** The starting point for all DLFs is the initial injection of funds. These funds are set aside in some highly liquid form of investment to be available to MFIs immediately after a disaster strikes.
- (2) **Damage Assessment.** Once a disaster occurs, the DLF and participating MFIs assess the number of affected households and the severity of the damage.
- (3) **Loan Terms and Conditions.** Based on the damage assessment, the funds in the DLF are disbursed to affected households according to the allocation rules established between the MFI and the DLF. Affected households are then responsible for repaying the loans according to the terms and conditions on which they were provided.
- (4) **Additional Capitalization.** To ensure the ongoing protection provided by the DLF against future disasters, there is a mechanism for maintaining or growing the amount of funds in the DLF.
- (5) **Monitoring.** Throughout this process, there are measures for monitoring damage assessment, loan disbursement, and loan repayment to ensure that funds are being used for their intended purpose.

<sup>7</sup> Fundusz Mikro DLF in Poland was a one-time fund in response to the 1997 floods and is no longer in operation. Likewise, the IADB fund is a one-time program now under consideration to become an ongoing concern.

## WHO BENEFITS FROM A DLF?

The intention in developing DLFs is to improve the capacity of three stakeholders to respond to disasters: clients, MFIs, and donors. For clients, DLF loans are intended to replace income lost because of the disaster; to provide funds for basic food, medicine, or shelter; and to assist the household in rebuilding businesses, homes, or other assets.

In turn, MFIs benefit from a reduced risk of loan default if affected clients are better able to cope and recover from the disaster after receiving DLF loans. The rapid injection of liquidity from the DLF also allows MFIs to respond in a more timely fashion to the needs of clients without having to wait for slow-to-disburse donor funds. DLFs are not intended to prevent or discourage MFIs from establishing reasonable and prudent reserve policies to protect themselves against unexpected situations such as disasters. Instead, DLFs may be an effective short- to medium-term protection mechanism, particularly for smaller MFIs.<sup>8</sup>

For donors, creating a permanent disaster-response tool reduces the need for repeat bailouts of MFIs, particularly in highly disaster-prone areas. By setting up a DLF in advance of a disaster, donors also have an opportunity to develop a thoughtful and balanced system while not under the extreme time pressure brought on by a disaster.

With this basic description in mind, the sections that follow take a closer look at each of the components of the DLFs studied, describing how different funds have been designed and identifying some of the potential implications of these differences.

---

<sup>8</sup> Larger MFIs that maintain adequate reserves should be able to generate sufficient funds internally to provide affected clients with relief loans or other forms of assistance. For example, because of its size (more than 1.5 million clients), the Association for Social Advancement in Bangladesh expects to be able to handle the liquidity needs of clients affected by future floods by transferring funds and reserves from relatively unaffected branches or districts to those who need them most.



## CHAPTER TWO DLF STRUCTURES

Before looking in more detail at how the DLFs implement the activities outlined in Chapter One, it is important to consider the differences in the overall structure of the funds studied. Although all of the DLFs examined follow the same basic outline described earlier, the details of how each fund is constructed reveal important differences that are likely to affect the functioning of and the results achieved by the DLFs.

Two important dimensions define the differences between the funds:

- **Number of MFIs Served.** DLFs have been designed to support a single MFI or many MFIs. This choice affects all aspects of how the DLF operates, from how damage assessment is conducted, through loan disbursement and collection, to the additional capitalization mechanisms built into the funds.
- **Division of Responsibilities.** DLFs also have been designed with differences in how responsibility for each of the activities outlined earlier (damage assessment, monitoring, etc.) is divided among the donor, MFIs, and households involved.

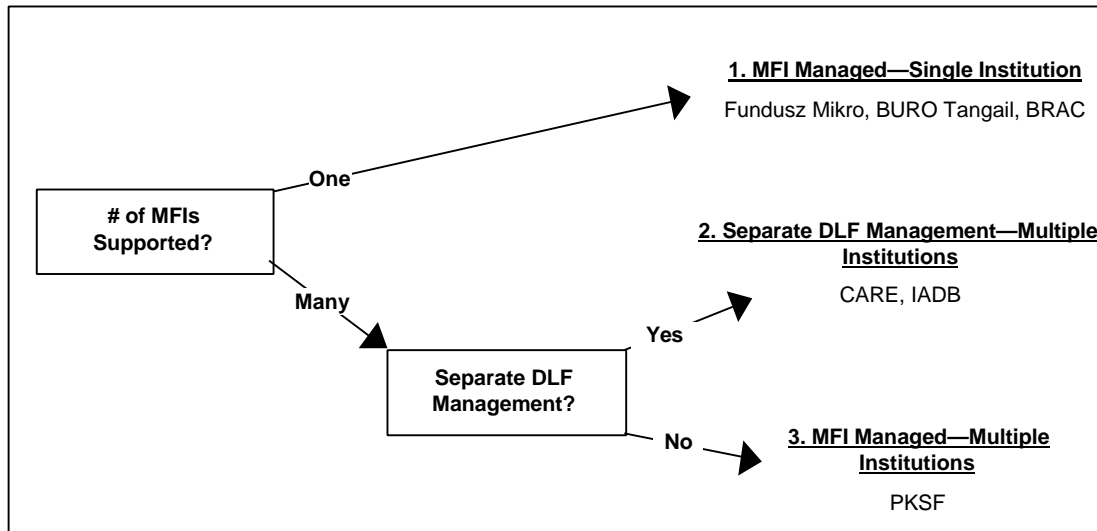
Table 1 summarizes the differences between the DLFs in this study in these two dimensions.

**Table 1: Differences in DLF Structures**

	BURO Tanggai	BRAC	Fundusz Mikro	PKSF	CARE	IADB
<b>Number of MFIs Supported</b>						
MFIs	1	1	1	>20	22	34
<b>Responsibility for</b>						
Damage Assessment	MFI	MFI	Clients	MFI	MFI and DLF management	MFI and DLF management
Loan Disbursement	MFI	MFI	MFI and clients	MFI	MFI and DLF management	MFI and DLF management
Loan Collection	MFI	MFI	MFI	MFI	MFI and DLF management	MFI and DLF management
Monitoring	Donor and MFI	Donor and MFI	MFI	MFI and PKSF	MFI, DLF management, and donor	MFI, DLF management, and donor
Additional Capitalization	MFI and clients	MFI	None	MFI	Clients and MFI	N/A

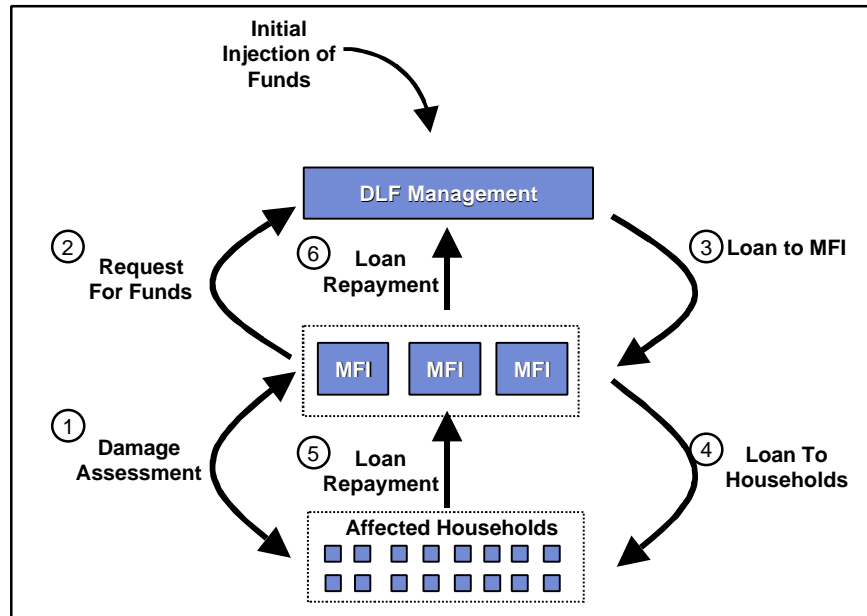
From Table 1, three structural variations emerge, as shown in Figure 2.

**Figure 2: Structural Variations in DLFs**



- (1) **MFI Managed—Single Institution.** As Table 1 and the figure indicate, the three DLFs that support a single MFI all are structured similarly. The donor provides the MFI with an initial injection of funds to be lent out to affected households, and the MFI is generally responsible for all of the remaining activities. Note that the Fundusz Mikro DLF included two variations on this basic model. First, the clients themselves were given responsibility for damage assessment and some of the loan disbursement process. This is discussed in more detail in the damage assessment section below. Second, although Fundusz Mikro managed the entire process, from damage assessment to loan repayment, the funds that were repaid have since been transferred to the local government, which is responsible for ongoing fund management.
- (2) **Separate DLF Management—Multiple Institutions.** The CARE and IADB funds serve multiple MFIs and have each created a separate organization to handle the management of the DLF. In CARE's case, this "separate" organization is currently housed and run from within CARE's Bangladesh office, but it is envisioned that it will be formally established as a separate entity over time. Similarly, the IADB created temporary coordination units in each country where affected MFIs were located. In both of these cases, these entities are responsible for the management of most of the activities of the fund. The creation of these entities adds an additional step in the basic DLF process described earlier. After a disaster occurs, these entities assess applications for funds from affected MFIs and disburse loans to affected MFIs, which then on-lend these funds to affected clients. This additional step is also evident in the repayment of the loans, as clients repay their loans to MFIs and MFIs subsequently repay their loans to the DLF. Figure 3 illustrates this process. As is described in more detail later, the terms and conditions of these different loans have significant cost implications for MFIs and the households receiving loans.
- (3) **MFI Managed—Multiple Institutions.** The PKSf structure combines some of both structures. It serves multiple MFIs, but rather than creating a central entity to manage the DLF (or managing it themselves), PKSf provides the initial funds to each participating MFI as a one-time grant, giving the MFI responsibility for managing the funds on an ongoing basis. PKSf has built in a number of mechanisms (discussed in detail in later sections) to ensure that MFIs manage these activities responsibly, but ultimately MFIs are responsible for everything from damage assessment to additional capitalization.

Figure 3: Illustrated Loan Disbursal and Repayment Process—CARE and IADB DLFs



### STRUCTURE ISSUES AND IMPLICATIONS

Based on our knowledge of DLFs, there is no ideal or “best” structure. Each structure appears to have advantages and disadvantages, and each will be more or less appropriate depending on the circumstances and the organizations involved. However, organizations developing DLFs should consider at least the following four factors in structuring their funds:

- **Control.** Responsibility for different activities should be divided so that the potential for abuse or misuse of funds is minimized. For example, one of the reasons CARE chose to take responsibility for fund management activities in its DLF was to ensure that its partner MFIs would not loan out the DLF funds in non-disaster times, leaving nothing available for when a disaster strikes. PKSf, on the other hand, attempts to control usage of DLF funds through the threat of reduced access to future funding of the core loan portfolios of MFIs. PKSf gives its partner MFIs responsibility for fund management activities, but it retains some control because it also is the primary source of loan capital for these MFIs. If an MFI does not manage its DLF responsibly, PKSf can cut off access to future capital.
- **Existing Capabilities.** Division of activities also should take into account the capabilities of the organizations involved in setting up the DLF. Leveraging these capabilities reduces the up-front investment and ongoing operating costs of the DLF and can result in an improved allocation of resources. CARE and PKSf, for example, already receive regular financial reports from their partner MFIs regarding their ongoing operations. Consequently, it was a relatively straightforward transition to take on the monitoring



activities for their DLFs. Similarly, CARE's partner MFIs have limited capability to manage their own DLFs, which led CARE to take on this responsibility.

- **Speed of Disbursal.** One of the key objectives of any DLF is to ensure that funds are available to households that need them most as soon as possible after a disaster occurs. The allocation of responsibility for damage assessment and loan disbursement will have a significant impact on the ability of organizations to meet this objective. If responsibility for these activities is too far removed from the disaster location, it will inevitably slow down and reduce the effectiveness of the disbursement process. The desire to achieve rapid loan disbursal is, in part, what led Fundusz Mikro to give responsibility for damage assessment to the affected households themselves, providing a single loan to a group of affected households and leaving the group members to determine how to divide the loan amount among themselves.
- **Accessibility of Participating MFIs.** DLFs with multiple participating MFIs have to take into account how accessible these institutions are to the organization managing the DLF for monitoring and disbursal purposes. MFIs that are spread over a wide area or that lack easy communications access will have greater difficulty in communicating disbursement requests to the DLF, while, at the same time, the organization managing the DLF will have greater difficulty monitoring how the funds are being used.

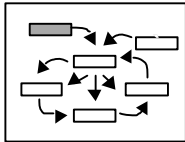
The choices organizations make in structuring a DLF have profound implications for each of the various activities involved in operating such a fund. As the next chapter describes, each fund examined performs each of the five activities highlighted earlier in different ways.

## CHAPTER THREE

### DLF ACTIVITIES

Following on the discussion of the different DLF structures in the last chapter, this chapter delves into more detail by examining differences at the level of each of the five component activities and highlighting the issues and implications that result from these differences. The small graphics at the start of each section refer back to Figure 1 on page 2, providing a roadmap between the text and the overall DLF components.

#### INITIAL INJECTION OF FUNDS



The initial injection of funds into the DLFs studied has been relatively straightforward. Funds are provided either directly to MFIs (as with the BURO Tangail, BRAC, Fundusz Mikro, and PKSf funds) or to the separate entity that will manage the fund (as with CARE and IADB). These funds are then lent directly to affected clients (in the former case) or to MFIs for on-lending to affected clients (in the latter case). For all of the DLFs studied, the initial injection of funds was made as a grant after a disaster had occurred. The mechanism for determining how large the initial injection should be varied from one DLF to another.

For Fundusz Mikro, BURO Tangail, and CARE, the amount of funds was set by what their respective donors could make available in a timely fashion. BRAC assessed the extent of the damage and the cost of replacing damaged or destroyed client assets so that it could determine the amount to be injected into its fund. Similarly, the IADB made a quick assessment of the damages from Hurricane Mitch to determine the initial grant amount. PKSf had a limited amount of total funds available (10 million taka, or US\$196,000) and chose to divide these funds among its smaller partners based on a percentage of each MFI's loan portfolio. Larger partners were excluded because it was believed that they would either be able to manage on their own or would have better access to other donors for assistance.

#### Initial Injection of Funds—Issues and Implications

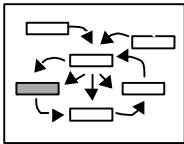
These experiences raise issues in three areas:

- Timing of DLF Establishment.** All of the DLFs studied received initial funding after a disaster occurred with a view to providing immediate assistance and, at the same time, establishing an ongoing protection mechanism. The need to disburse these initial funds quickly may have limited the ability of donors, MFIs, and others to consider how best to provide the initial funds for a DLF and how the size of the initial contribution should be determined. For other organizations considering developing a DLF, it is certainly preferable to design and develop the fund, including determining the amount of the initial injection of funds, in advance of a disaster.

- **Source of Initial Capitalization.** All of the DLFs studied used donor grants as the initial source of capital. For future DLFs, it may be worth exploring whether and how some of the initial capital might come from the MFIs themselves or whether it should come in a form other than a grant.
- **Determining the Size of the Initial Injection.** There are certainly tradeoffs between the different mechanisms used to determine the amount of initial capital to be provided. The IADB and BRAC methods are more rigorous but also more time consuming. As of January 2000, a year and a half after the flood, BRAC was still negotiating with donors to finalize the initial disbursement of donor funds into its DLF. DLFs designed in advance of a disaster should have the luxury of defining an initial contribution mechanism based on a thoughtful estimation of the potential need for funds. This analysis would consider, for example, the potential number of clients at risk, the amount of damages the fund is intended to cover, and the rate at which the fund will grow based on its investment and additional contribution policies.

It is unclear, at this stage, what impact alternative methods for injecting funds into a DLF will have on the functioning of the fund. Experiments with DLFs in the future will have to test different options and track the results.

## DAMAGE ASSESSMENT



There are three key decisions to be made in designing the damage assessment mechanisms for a disaster loan fund. The first relates to the events or circumstances that trigger a release of funds from the DLF. The second two relate to the allocation of funds once a disbursement has been authorized.

### Trigger Mechanisms

The choice of the trigger mechanism for a DLF determines the scope of protection provided by the fund. The goal in setting the rules and regulations regarding when MFIs can access funds in a DLF is to find an appropriate balance between (1) the desire to quickly disburse funds when they are needed and (2) the need to ensure that access to the DLF is not abused. Most of the DLFs studied use external trigger mechanisms, such as a regional or national declaration of a disaster, to ensure DLF funds are used only in disaster situations. In contrast, PKSF allows its partner MFIs (which each have control over the funds in its individual DLFs) the discretion to determine when the DLF will be accessed. MFIs can certainly access the funds following a declaration of a disaster, but they also have discretion to access the funds for more localized disasters. PKSF protects against abuse of the funds through a variety of control mechanisms.

### **DLF Trigger Mechanisms at PKSF**

In addition to protection against nationally declared natural disasters, PKSF has designed its disaster loan fund to provide protection against “individual” disasters that affect only a single or small number of households. PKSF’s partner MFIs can choose to make loans out of their DLF accounts in either case. However, the interest rate on these loans is set by PKSF at 0 percent, meaning that MFIs earn no revenue from making DLF loans, despite incurring disbursement and collection costs. Consequently, partner MFIs have little incentive to use the DLF unless they truly believe that their clients need assistance. PKSF retains further control over the use of the funds by requiring that for any DLF loans made outside of declared states of emergency, its partners must provide a detailed report on why they decided it was necessary to access the DLF. PKSF also has the added threat of halting future access to regular loans if a partner institution misuses DLF funds.

### *Trigger Mechanisms—Issues and Implications*

Given that most MFIs and low-income households are capital constrained, if either have absolute discretion over when a DLF can be accessed, it is likely that the funds will be loaned out more often than just in disaster situations, especially if the disbursement terms and conditions are favorable relative to regular loans (see the section on disbursement below). If DLF funds are on-loaned when a disaster strikes, they will be unavailable for their intended purpose. As a result, the use of external trigger mechanisms seems justified.

There are, however, two limitations to using declarations of disasters as trigger mechanisms. First, formal declarations may come days or weeks after a disaster first affects households. Waiting for a formal declaration can increase the time between when households are affected by a disaster and when they have access to DLF loans. Second, many events that result in localized disasters, such as unexpectedly cool weather in tropical climates, do not result in disaster declarations, although the impact on affected households can be just as severe as with declared emergencies. In this regard, trigger mechanisms like those used by the PKSF fund seem quite appropriate. Further experience and evidence from PKSF’s partners will be needed to understand how well this system works over time.

### **Allocation Mechanisms—MFIs and Affected Households**

Once a decision has been made to release funds from a DLF, mechanisms are needed to assess the severity of the damage and decide how the available funds will be allocated among the MFIs participating in the DLF and among the clients affected by the disaster.<sup>9</sup> The decision rules applied in allocating available funds are particularly important because most DLFs, especially in their early stages, will have less cash available than is needed by affected households.

<sup>9</sup> For DLFs dedicated to a single MFI, like those operated by BURO Tangail and Fundusz Mikro and planned by BRAC, there is no need for an allocation mechanism to divide funds among MFIs; however, a mechanism is still needed to determine how the available funds should be distributed among affected households.

## *Assessing Damages*

The Bangladeshi DLFs in operation have opted for a quick, efficient approach to assessing damages. Once participating MFIs conduct a brief assessment of the number of clients severely affected by a disaster, loans are disbursed in standard amounts (US\$10-US\$40) among severely affected households. If any funds are left over, less severely affected households may also receive loans. It is important to note that a systematic assessment of the capacity of clients to repay was not, in the initial disbursement of DLF funds in 1998, included in determining who received disaster loans. Although repayment rates on these loans were 100 percent in all cases, there is a need to consider how capacity to repay can be included in the assessment process.

In contrast, the IADB required MFIs to conduct their own assessment of damages, and then submit this assessment to the temporary coordination units responsible for managing the DLF. In some cases, DLF management also chose to visit the MFI directly to verify the damage assessment before disbursing a loan. Through this process, DLF management discovered that damage assessments conducted immediately following Hurricane Mitch were often exaggerated, leading initially to over-inflated estimations of how much of the DLF would need to be disbursed. By waiting and following up with more detailed assessments, DLF managers were better able to assess the true extent of the damage. Whether an MFI received funding and the amount they received were based on this second damage assessment.

Finally, Fundusz Mikro elected to use the noticeably different approach of allowing the clients themselves to assess their own damages.

### **Allocating Funds at Fundusz Mikro**

Fundusz Mikro elected to distribute its DLF funds as group loans to groups of five victims formed by the flood victims themselves. Within each group, the five borrowers were responsible for assessing who had suffered the greatest losses and thus for determining how the group loan should be divided among them. In this way, Fundusz Mikro was able to enjoy the administrative benefits of standardized loans, while still allowing some degree of targeting funds toward those most affected. In addition, Fundusz Mikro followed a policy of considering loan applications in order, from the smallest amount requested to the largest. Consequently, potential borrowers had the incentive to ask only for the minimum amount needed to increase their chances of receiving a loan.

## *Determining Who to Serve*

The question of who a DLF will serve can be considered at both the household and MFI levels. At the household level, a DLF can choose to support only affected households that were clients of the MFIs before the disaster or to also include non-clients severely affected by the disaster. The Bangladeshi and IADB DLFs have elected to focus exclusively on existing MFI clients. With limited funds, these DLFs recognize that only a portion of households can be reached, and existing MFI clients are easier and less costly to locate and more likely to repay loans. In contrast, Fundusz Mikro elected to distribute its loans to both clients and non-clients. Referrals from existing clients were used to identify affected non-clients. Fundusz Mikro elected to trade off the risk of higher defaults on loans (Fundusz

Mikro's repayment rates were 93 percent versus almost 100 percent for the Bangladeshi institutions) against providing assistance to those most in need, regardless of their previous affiliation with the MFI.

At the MFI level, DLFs that provide funds to more than one MFI need to have criteria for determining which MFIs will receive funds and how much they will receive. In screening potential MFIs, the PKSf, CARE, and IADB DLFs considered some of the following factors:

- **Historical Performance of the MFI.** The IADB DLF allowed funds to be distributed only to MFIs with low historical arrears rates (less than 7.5 percent) and the capability of systems to identify the financial results of affected areas relative to the overall institution.
- **Size of the MFI.** Both the PKSf and CARE DLFs focus exclusively on serving smaller MFIs because larger MFIs are less likely to be as severely affected by a disaster as smaller ones. With a wider spread of operations and a larger client base, large MFIs are less likely to have a significant portion of their client base affected by a single disaster, while for small MFIs this is a very real threat. With less of their total client base affected, large MFIs also are better able to transfer resources internally from less affected to more affected areas, thereby reducing their need for external injections of capital from a DLF.

### *Allocation Mechanisms—Issues and Implications*

Ideally, the organization managing a DLF would have a complete understanding of the number of households affected by a disaster and the severity of the damage. It would then allocate loans to those most in need (and most able to repay), with the size of each loan based on each household's situation. In practice, however, the desire to target those most in need must be traded off against the desire to distribute funds quickly and efficiently.

Standardizing loan sizes and simplifying the damage assessment procedures, as the Bangladeshi DLFs have done, reduce the time required for loan disbursement and the administrative complexity in managing the loan portfolio. When loans are intended to assist households in surviving the initial period after a disaster, several days or a week can have a severe impact on whether affected households are able to survive.

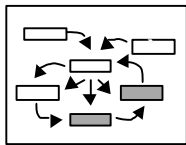
The Bangladeshi experience, however, runs counter to the experience of the IADB, which suggests that waiting until a more detailed assessment of actual damage can be conducted has its benefits. It seems likely that the appropriate strategy will vary depending on the nature of the disaster, the type and severity of the damage, and the role DLF funds are intended to play. If the funds are intended to cover the cost of immediate food and medical needs, DLFs may have to rely on early damage estimates, but if the funds are to be used for post-disaster reconstruction, there seems to be some benefit in delaying disbursement until a more careful damage assessment can be conducted.

The Fundusz Mikro approach suggests that DLFs may be able to achieve both objectives—efficient disbursement that also reaches those households most in need—by giving affected

households some responsibility for determining who has been most affected and setting the size of the loans themselves. Moreover, the Fundusz Mikro experience provides an example of how including non-clients can increase outreach in a time of need and can potentially result in post-disaster benefits for the MFI, since many non-clients who received DLF loans from Fundusz became regular clients after the flood.

The eligibility criteria used by the DLFs supporting multiple MFIs highlight an important issue. DLF funds are not intended to be used to prop up an MFI with an already troubled loan portfolio. Controls against disbursing DLF loans to MFIs with portfolio problems should be considered by all DLFs. In addition, DLFs may want to consider adopting eligibility criteria, such as requiring MFIs to track and reduce the risk exposure in their portfolio or to build up their own reserve funds over time. MFIs that continue to abide by these eligibility criteria would gradually develop their own internal reserves to cope with disasters, eventually eliminating the need for the support of a DLF.

### MAKING DLF LOANS: LOAN TERMS AND CONDITIONS



With clear rules regarding when funds can be released and how they should be divided among potential recipients, the next activities involved in operating a DLF relate to making the loans. The key decisions to be made center on the terms and conditions of the loans, including:

- Loan interest rate;
- Loan term;
- Grace period before repayments start; and
- Share of repayments re-contributed to the DLF.

Table 2 summarizes the key loan terms and conditions for the DLFs examined in this report. It is important to note that there are two levels of terms and conditions: (1) between the DLF and the MFI and (2) between the MFI and the individual client. As is evident from Table 2, significant variation at both levels exists among each of the different funds.

**Table 2: Summary of Terms and Conditions of DLF Loans<sup>a</sup>**

		CARE	PKSF	BURO Tangail	BRAC	Fundusz Mikro
Loan/Grant to MFIs	Interest Rate <sup>b</sup>	2%	Grant	Grant	Grant	Grant
	Term	24 months				
	Grace Period	2 months on principal only				
Loan to Households	Interest Rate	4%	0%	5%	15%	10%
	Term	3-12 months	Negotiable with borrower	24 months	12 months	24 months
	Grace Period	Up to 2 months on principal only	N/A	1 month	N/A	1 month
Repayments to DLF		MFI principal and interest payments retained in DLF	All repaid principal returned to DLF	All repaid principal returned to DLF	Ongoing interest payments on principal to be returned to DLF	All repaid principal and interest held in DLF
Location of DLF Funds during Non-Disaster Times		Funds held in separate CARE bank account. Intend to create a registered “trust” fund that will ultimately manage the funds	Funds held in separate bank accounts by PKSF affiliates	Funds held in separate bank account by BURO Tangail	Funds to be held in separate bank account by BRAC	Funds held and managed by local government

<sup>a</sup> Detailed terms and conditions for the IADB DLF are under revision.

<sup>b</sup> All quoted interest rates are annual rates.

### Terms and Conditions: Implications for Affected Households

The impact of the terms and conditions of DLF loans on affected households will vary depending on households’ existing level of debt, the duration of the disaster, and the intended purpose of the loans. For example, a household with a significant outstanding pre-disaster loan balance that receives a relief loan to help it survive through a long-duration disaster, such as a flood, is unlikely to benefit significantly from the loan without a longer grace period and loan term and a lower interest rate. In contrast, households with little outstanding debt that receive loans after a disaster for the purpose of rebuilding are likely much better positioned to benefit from and repay loans without a grace period, over a shorter term and with higher interest rates. Thus, the appropriate loan terms for DLF loans to affected households will vary from situation to situation. Interestingly, preliminary evidence from Bangladesh and Poland indicates that, for disaster loans, the interest rate charged does not appear to have a significant impact on the ability or willingness of households to repay. PKSF’s partner MFIs report near 100 percent repayment on their interest-free disaster loans,



while at the same time MFIs charging near market rates for similar loans also report 100 percent repayment. Further study is needed to better understand the reasons behind this apparent contradiction.

### **Terms and Conditions: Implications for MFIs**

The terms and conditions of DLF loans also determine the benefits and costs to the MFI of providing DLF loans. DLFs that charge interest on the loans to households allow MFIs to recover their costs and, if the rate is high enough, even earn a profit from providing disaster loans. MFIs that have received funds as a loan from a central DLF (as with CARE and IADB) receive additional benefits if the term and interest rate of the DLF-to-MFI loans are more favorable than the MFI-to-household loans. For example, the 2 percent difference in interest rates between loans made by the CARE DLF to MFIs and the relief loans made to affected households (4 - 2 percent = 2 percent) allows participating MFIs a margin to cover their costs,<sup>10</sup> and the 12- to 19-month difference in loan terms gives MFIs the opportunity to temporarily use the DLF funds to grow their loan capital. Similarly, the IADB program developed for MFIs affected by Hurricane Mitch provides funds to MFIs as a 5- to 10-year loan at reduced interest rates and allows MFIs to loan these funds out at market interest rates and standard loan terms (less than 12 months), thereby giving them the potential for significant profit.

In contrast, the PKSF fund expects MFIs to bear the full cost of making relief loans and provides no direct benefit to the MFIs' loan capital.<sup>11</sup> BRAC's planned fund fits somewhere in the middle. BRAC will be responsible for the cost of providing loans because all of the interest earned on loans made using the initial injection of capital must be set aside into the DLF. However, BRAC will benefit because once the initial round of DLF loans has been repaid, BRAC will have use of the principal portion as additional capital for its loan portfolio, although it must always contribute the interest earned on these regular loans into the DLF, allowing the fund to grow over time (see the next section for further detail on DLF capitalization mechanisms).

Overall, the financial impact on MFIs of providing a DLF loan creates a range of incentives for MFIs regarding when and how they use the funds. Allowing MFIs to benefit financially from providing disaster loans encourages them to disburse as much of the fund as possible, as often as possible, thereby putting pressure on the trigger and damage assessment mechanisms to ensure that funds are being used only for their intended purpose. When MFIs benefit financially from providing disaster loans, there is a greater risk that the reported number and severity of affected households will be overstated in an effort to receive more funds.

In contrast, DLFs that do not give MFIs the opportunity to cover their costs create an additional cost for MFIs during disaster times and, as a result, encourage MFIs to request

<sup>10</sup> Remember also that the incremental cost of providing an additional loan to existing borrowers is likely to be less than the full cost of providing a regular loan.

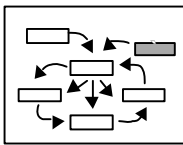
<sup>11</sup> The MFI would benefit indirectly if relief loans allowed regular borrowers who would otherwise have defaulted on their loans to survive through difficult times and continue repaying their regular loans.

funds only when they are definitely needed. If MFIs receive no compensation for making disaster loans and still have to incur the operating costs associated with disbursement and collection, they will presumably choose to access the DLF only when their clients are truly in need of additional funds.

### Terms and Conditions: Implications for the DLF

In setting the interest rate, term, and other conditions of DLF loans, organizations also need to take into account the impact of these details on the ongoing size of the fund. In general, the higher the interest rate and the greater the share of interest and principal repaid into the DLF, the faster the available balance in the DLF will grow. This topic is discussed in more detail in the next section.

### ADDITIONAL CAPITALIZATION



One of the objectives in developing a DLF is to create an ongoing or growing support mechanism for MFIs against future disasters. To achieve this objective, DLFs need to be able to maintain and increase their capital base over time. The ongoing capitalization of a DLF is determined by four factors:

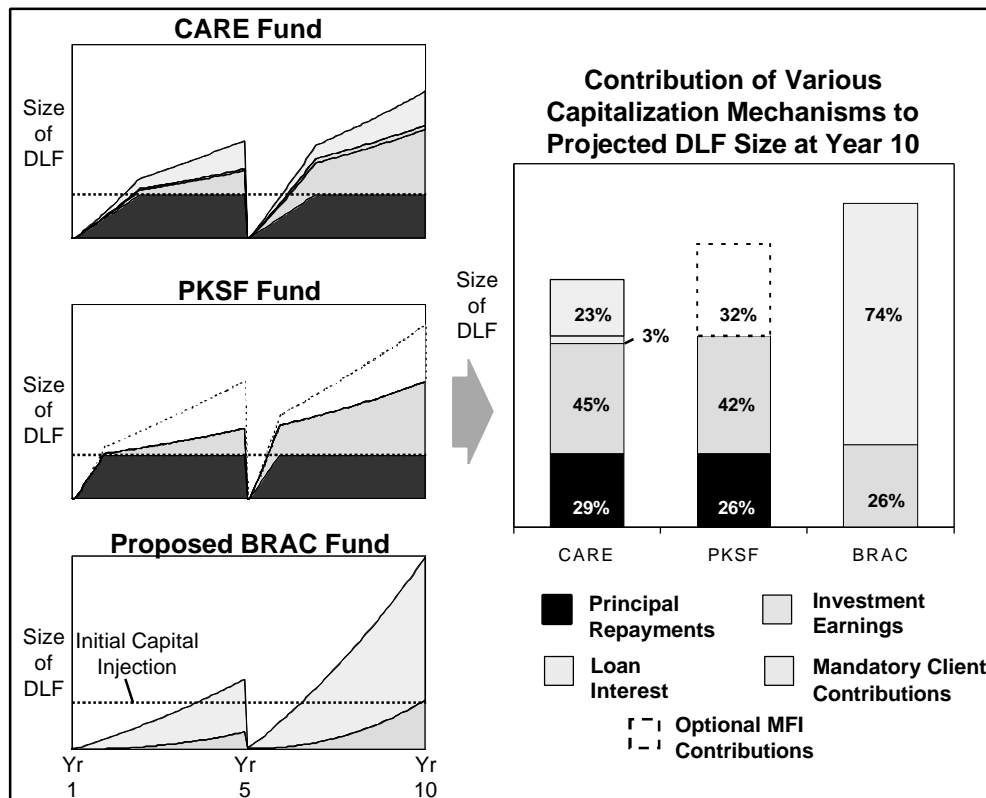
- **Retained Principal.** As disaster loans are repaid, the principal is generally re-contributed to the DLF.<sup>12</sup> This ensures that the DLF at least maintains its original capital base, provided this is not eroded by loan defaults or DLF operating expenses.
- **Retained Interest.** DLFs that retain a portion of the interest received on repaid loans, such as CARE and BRAC, grow each time the funds are loaned out. However, the resulting increase in the capital base from this source is relatively limited unless the interest rates retained by the DLF are quite high and the funds are loaned out quite frequently. For example, retained interest will grow the capital base of the CARE DLF only by 4 percent over the two years following a DLF loan disbursement and will not increase the capital base again until another disaster occurs. The BRAC fund, on the other hand, intends to achieve most of its growth from this source because the initial injection of capital will continually be recycled as part of BRAC's regular loan portfolio, with the full 15 percent interest being contributed to the DLF each time the regular loans are repaid.
- **Invested Capital.** When DLF funds are not on loan, they can be invested in savings accounts, government bonds, and other liquid investments to grow the capital base. Currently, the investment strategies of the DLFs are quite conservative, with the funds

<sup>12</sup> The BRAC fund is the only exception to this practice. When operational, the principal portion of DLF loans will not be re-contributed into the DLF. Instead, BRAC will add the DLF principal repayments to its revolving loan fund and lend these funds out as part of its regular loan portfolio. In lieu of contributing the principal, the interest on these regular loans will continually be added to the DLF.

generally being maintained in simple bank savings accounts. However, several funds are considering whether to invest some of their DLF funds in the regular revolving loan portfolios of participating MFIs. The dangers of this approach are discussed in more detail below.

- Additional Contributions.** As part of the initial agreement to establish the DLF, MFIs or their clients can be required or asked to make additional contributions to the fund to increase its capital base. Clients of MFIs participating in CARE’s fund, for example, are required to contribute 48 taka per client per year into the DLF. PKSf, on the other hand, requires MFIs participating in its DLF to make an ongoing contribution to the DLF from surpluses generated by their regular loan operations. Although the amount of this contribution is not fixed, two of the partner MFIs studied had more than doubled the size of their DLF within two years.

**Figure 4: Hypothetical Growth Projections Using Different Capitalization Mechanisms<sup>a</sup>**



<sup>a</sup> Hypothetical scenario created using the following assumptions: disasters resulting in the complete disbursement of available DLF funds occur at the start of Year 1 and Year 5; loan terms and conditions for each DLF are as described earlier; interest earned on deposits = 12% annual; additional contributions for CARE and PKSf are estimated based on current experience, but actual amounts could vary widely depending on the number of clients at MFIs participating in CARE’s DLF and on each MFI’s contributions for PKSf’s DLF.

The relative emphasis placed on each of these factors is entirely up to the organizations designing the DLF. As the hypothetical projections in Figure 4 show, many different combinations of these factors can result in similar rates of fund growth over time, if the returns on the invested portion of the portfolio are as expected and disasters occur only every five years or so. However, the projections also indicate that different combinations of capitalization mechanisms will be more or less sensitive to unexpected changes. After its initial disbursement, the BRAC fund, for example, will reach its original size only after approximately four years. If another disaster occurs one, two, or even three years after the original disaster, the BRAC fund will have less than its original amount of funds available to be lent out. The BRAC fund also is highly dependent on the interest earnings from the regular loans that BRAC makes with the original DLF capital. If BRAC's default rates were to increase, or if market interest rates decline, these returns will also decline. Similarly, both the PKSF and CARE funds are dependent on additional contributions for up to one-third of the funds in their DLFs. If, for whatever reason, clients or MFIs are unable or unwilling to make these contributions, the potential growth of these funds will be diminished.

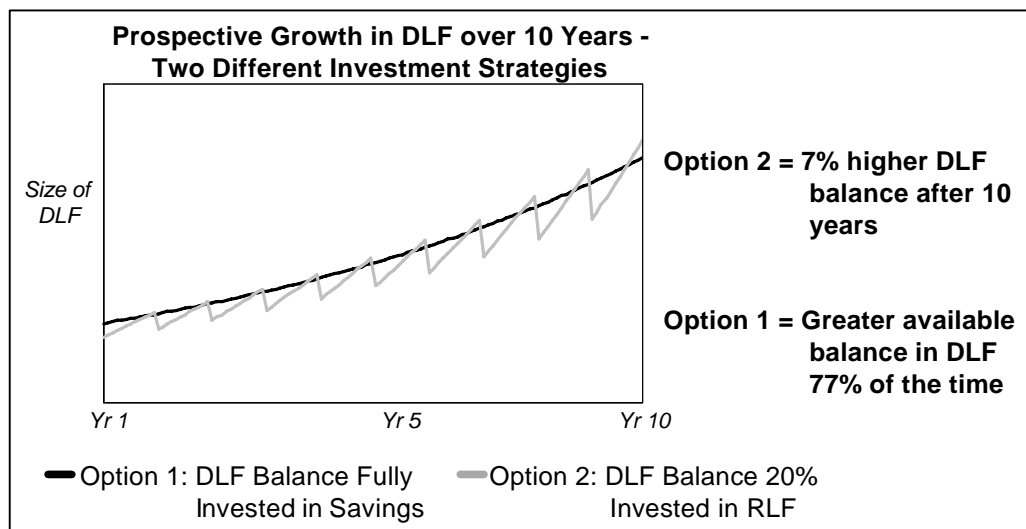
### Capitalization—Issues and Implications

Although many different investment strategies can result in similar fund growth over time, it is important to consider more than just this single variable in determining how a DLF will grow its capital base. Other variables that should be taken into account in designing the capitalization structure of a DLF are:

- **Cost for Affected Households.** Organizations may be tempted to adjust the terms of disaster loans (raise interest rates, shorten loan terms) or to push for increased contributions from clients so that they can capitalize a DLF more quickly. This desire needs to be balanced against the resulting cost for affected households. Charging and retaining higher interest rates or shortening the terms of disaster loans may increase the amount of capital available to make DLF loans in the future. At some point, however, these changes reduce the effectiveness of the loan in achieving its ultimate objective: helping affected households cope with disaster-related losses.
- **Incentives for MFIs.** If the DLF does not retain the principal or interest earned from DLF loans, they become a part of the MFI's regular operations. As described in the previous section, MFIs that earn income from making DLF loans can use this income to cover their costs. However, if the financial benefits are too great, they may be tempted to loan out DLF funds more often than needed or to force DLF loans on clients who may not need them so that they can increase their own profitability.
- **Availability of Funds.** There is strong temptation for the organization managing a DLF to allow a portion of DLF funds to be included as part of MFIs' loan capital during non-disaster times. Because regular loans earn greater revenues than the returns earned on liquid savings instruments (savings accounts, government bonds, etc.), it is argued that investing DLF funds in microcredit will increase the size of the fund faster than if the funds are only left in a savings account. Although investing DLF funds in microloans

may increase net annual returns,<sup>13</sup> the net funds available to be lent out from the DLF will actually be lower for most of the year because once DLF funds have been lent out as standard microloans, those funds are not available again until loans have been repaid. Figure 5 provides an example of this situation. Over the first 10 years of operation, a DLF investing 20 percent of its funds in regular loans earning 15 percent (flat) interest and the remainder in a 12 percent per year savings account will experience a growth in funds available in a disaster as illustrated by the jagged, gray line. In contrast, the smooth black line represents the funds available from a DLF investing 100 percent of its assets in a liquid savings account. Although the first fund earns a higher annual return, it will actually have less funds available to disburse more than three-quarters of the time over the first 10 years.

**Figure 5: Modeling Different DLF Investment Strategies**



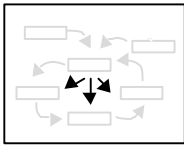
- **Enforcement.** If the capitalization mechanisms in a DLF are to function as designed, the organization responsible for the DLF must have sufficient enforcement capability. For example, PKSf’s system of allowing MFIs to invest their own funds and to determine how much of an additional contribution to make each month relies on the effectiveness of the threat that PKSf will stop funding an MFI that “breaks the rules.” Although the results to date are encouraging, only time will tell if this “indirect” enforcement will be strong enough to ensure prudent fund management by participating MFIs.
- **Cost of Operations.** The cost of the ongoing operations of a DLF acts as a deduction against its available funds. Capitalization mechanisms that require substantial expansion of organizations’ existing operations create additional expenses that reduce a DLF’s available capital. For example, a DLF might earn an additional 5 to 10 percent return by

<sup>13</sup> The expected return to be earned on DLF funds invested in an MFI’s loan portfolio also has to reflect the MFI’s cost of providing loans. If an MFI has not yet achieved operational sustainability, the return earned on regular loans is, by definition, negative, and DLF funds invested in such a loan portfolio are actually being eroded over time.

investing available funds in an MFI's regular loan portfolio. However, some or all of this additional return may be absorbed by the increased costs involved in monitoring and managing this investment.

Designing the capitalization mechanisms for a DLF may at first seem relatively straightforward. However, as the previous discussion highlights, many factors and stakeholders must be taken into account in the process.

## MONITORING



To ensure that all of the components of DLFs described above are operating as designed, DLFs incorporate a monitoring function into their activities. Monitoring is typically conducted by the organization providing the initial funds (for example, the donor agency) or the organization managing the DLF.

### What to Monitor

The range of variables monitored will vary. Several commonly tracked variables include:

- **Disbursement of Funds.** Particularly for DLFs where individual MFIs manage the funds themselves, monitoring is used to ensure that DLF funds are used only to make loans according to the rules established by trigger and damage assessment mechanisms.
- **Loan Recipients.** DLFs monitor who receives loans to verify that the fund's target market is being served.
- **Loan Performance.** As with regular loans, repayment of principal and interest is monitored to track portfolio performance and to identify and correct problems as they occur.
- **Impact.** Despite the difficulties in measuring impact, some DLFs attempt to monitor the income levels of DLF loan recipients relative to their pre-disaster levels.
- **Investment of Funds.** Monitoring of the organization responsible for managing the funds in the DLF account—whether it be an MFI or an apex organization such as CARE—attempts to ensure that, when not on loan, funds are invested in appropriate instruments.

In addition, DLFs that support multiple MFIs need to have pre-disaster monitoring mechanisms to ensure that MFIs continue to meet the minimum participation requirements, such as portfolio quality, that were discussed earlier.

## Monitoring—Issues and Implications

The key challenge in monitoring is to find a balance between verifying 100 percent compliance with the DLF's rules and objectives and minimizing the cost of monitoring. The greater the detail required by a DLF's monitoring system, the greater the expense in terms of time and money required to collect and analyze the information. These expenses reduce the funds available for a DLF to lend out in disaster times. Three ways that DLFs have encouraged compliance while minimizing costs are:

- **Use Incentives.** Rather than relying entirely on direct verification that funds have been disbursed correctly or that loan recipients are indeed those in need, DLFs can design incentives into the terms and conditions of the fund to encourage compliance without the need for direct monitoring. For example, by not allowing its partner MFIs to charge interest on loans made with DLF funds, PKSF provides no incentive for its partner MFIs to use the funds except when they are truly needed.
- **Integrate Monitoring into Existing Information Reporting.** If the organization conducting the monitoring has regular contact with the MFIs participating in the DLF, there may be potential to integrate DLF monitoring into existing information reporting systems, thereby reducing the cost of DLF monitoring.
- **Decentralize Monitoring.** The IADB DLF faced the unique challenge of providing funds to, and monitoring the activities of, MFIs in four different countries (Honduras, Nicaragua, Guatemala, and El Salvador). To facilitate this process, responsibility for monitoring was given to local country offices, rather than being managed centrally.

Finding an effective balance between verifying compliance and minimizing costs, whether by using these ideas or new ones, will be an important aspect of the design of any DLF.

## CHAPTER FOUR

### SUMMARY AND OUTSTANDING ISSUES

There is still much to learn about when, whether, and how to design DLFs to support MFIs and their clients in disasters. The DLFs discussed in this paper are all quite new and have, at most, been tested only once. Further tracking of the results of these funds through multiple disasters will be needed to fully understand their relative strengths and weaknesses. The results to date are at least somewhat encouraging. At the time of the disaster, funds from the DLFs allowed MFIs to assist households that they would not have been able to assist otherwise.<sup>14</sup> Repayment rates on these loans have been at or near 100 percent (even Fundusz Mikro achieved 93 percent repayment despite lending largely to people who were not existing clients), and the ongoing capitalization mechanisms employed have increased the total amount of funds available to be disbursed against future disasters. Detailed client-level data on these funds are not yet available; however, DLFs in some form do seem to have the potential to provide benefits to affected clients.

Before pushing for DLFs that broadly cover MFIs in multiple situations, several important questions should be addressed:

- **Which MFIs need DLF protection?** It is not necessarily true that all MFIs will experience liquidity crises and capital losses following a disaster. Larger MFIs that maintain adequate reserves should be able to generate sufficient funds internally to provide affected clients with relief loans or other forms of assistance. For example, as a result of its size (more than 1.5 million clients), the Association for Social Advancement (ASA) in Bangladesh expects to handle the liquidity needs of clients affected by future floods by transferring funds and reserves from relatively unaffected branches or districts to those that need it most. Because ASA's client base is geographically dispersed, it is very unlikely that a majority of its clients will be affected by any given disaster—even the massive 1998 floods affected less than half of its clients. The situation should be similar for other large MFIs. Thus, developing reasonable reserve practices and mechanisms to facilitate internal transfers of funds may be more effective and appropriate than DLFs as a way for larger MFIs to deal with disasters. For smaller MFIs, DLFs will likely still be an appropriate disaster response.
- **Will DLFs create disincentives for MFIs to take preventative measures against disaster-related losses?** DLFs are in place to cover financial emergencies resulting from natural disasters that clients themselves cannot cover. At the same time, there is the danger that access to a DLF will reduce MFI and client incentives to take preventative action before disasters strike. For example, accessible, voluntary savings accounts allow clients to accumulate balances that can be used, instead of loans, in times of disasters. Providing access to these sorts of products allows clients to protect themselves against disasters, rather than relying on MFIs for emergency assistance. (See the separate MBP

---

<sup>14</sup> The BRAC DLF is an exception since it is still pending final approval from donors and has yet to be launched.



publication, Brown and Nagarajan (2000), “Bangladeshi Experience in Adapting Financial Services to Cope with Floods: Implications for the Microfinance Industry,” for examples of some of these products). Increasing the size and scope of DLFs may unintentionally create disincentives for MFIs to invest in developing longer term preventative solutions implemented by MFIs or clients themselves. The challenge is to combine judicious use of DLFs with other techniques to help clients and MFIs prepare for disasters of all kinds.

- **Should DLFs be designed as a perpetual disaster-protection mechanism? Or should they have a finite life cycle?** Two of the DLFs in this paper—that of the IADB and Fundusz Mikro—were temporary funds. The remaining DLFs are intended to continue into perpetuity—provided that loans continue to be repaid and additional capital contributions continue to be made. Further investigation is required into the relative value of DLFs as one-time versus ongoing structures. As a third alternative, externally funded DLFs with a finite “life cycle” could protect clients in the short run, while building incentives for them to develop self-protection measures for the medium and long term.
- **What is the appropriate scale for a DLF?** DLFs have been, or are being, developed for individual MFIs, for groups of MFIs in a single country, and, most recently, for a group of MFIs across several countries. It is unlikely that there is a single “best” response to this question, but further consideration of the relative strengths and limitations of each approach is warranted to improve the design of future DLFs.

Because most of the DLFs to date have been developed in Bangladesh, a country that is highly exposed to a particular type of disaster (floods), further thinking is needed to consider the appropriateness of the lessons from Bangladesh for areas that are exposed to different types of disasters and areas with less disaster exposure. Initial evidence based on a comparison of the Bangladeshi experiences with those of the IADB and Fundusz Mikro suggests the following:

- **Potential need to increase the range of “disasters” covered in low-exposure areas.** In areas with low disaster exposure, DLFs may have to be designed more like the PKSF fund to cover a wider range of disasters. If only serious national calamities are covered, the funds in the DLF will seldom be utilized, which decreases the motivation of donors and MFIs to contribute to the funds. DLFs that can be accessed for a wider range of group or individual emergencies may be more appropriate in these circumstances, provided they have strong protections against abuse of the available funds.
- **Increased geographic scope as a potential response to low-exposure areas.** Increasing the geographic area covered by MFIs participating in a DLF increases the likelihood that the funds will be utilized and, at the same time, reduces the amount of additional contributions needed from each MFI to build the capital in the DLF. In essence, as the geographic scope of a DLF increases, it begins to create an insurance-like risk pooling mechanism for MFIs.

Although the experiences discussed in this paper are still quite new, through their creativity and innovation, these organizations have opened an important new discussion in the debate over how MFIs can best cope with the disruption caused by natural disasters to MFIs and clients.



## LIST OF SOURCES

### SOURCE INTERVIEWS

Bangladeshi Rural Advancement Committee (BRAC). S.N. Kairy, Chief Accountant; Syed Masud Ahmed, Senior Medical Officer (Research). BRAC Centre, 75 Mohakhali C/A. Dhaka, Bangladesh. 1212. Bracamr@bdmail.net

BURO Tangail. Mosharrof Hossain, Finance Director; Sirajul Islam, Program Director; Zakir Hossain, Executive Director. Bapari Para, Bazitpur Road, Tangail, Bangladesh 1900. Bt@bdmail.net

CARE Bangladesh. Carlos Ani, Sector Coordinator, SEAD Sector; Md. Harun-Or-Rashid, Assistant Coordinator; Pranesh C Banik, Program Development Officer. House 60, Road7a, Dhanmondi R/A, Dhaka, Bangladesh 1209. Carebang@bangla.net

Fundusz Mikro. Wiltold Szwajkowski, Chief Executive Officer; Agata Szostek, International Relations Director. Zurawie 22, 00-515 Warszawa, Poland.

Palli Karma-Sahayak Foundation (PKSF). Md. Fazlul Kader, Deputy General Manager. House #31/A Road #8, Dhanmondi R/A, Dhaka, Bangladesh 1205. Pksf@citechco.net

South Asian Network of Microfinance Initiatives (SANMFI). Huda, Managing Director; Emrul Hasan, Training Coordinator. Sanmfi@bangla.net

### SOURCE MATERIALS

*BRAC Proposal to the European Commission for a Financing Decision under Article B7-3030 of the Budget.* Bangladeshi Rural Advancement Committee, BRAC Centre, 75 Mohakhali C/A. Dhaka, Bangladesh. 1212. Bracamr@bdmail.net

*CARE Disaster Loan Fund Proposed Policies.* CARE Bangladesh, House 60, Road 7a, Dhanmondi R/A, Dhaka, Bangladesh 1209. Carebang@bangla.net

Fundusz Mikro Newsletter Number 1, January 2000. *Flood 1997.* Fundusz Mikro Sp. z o.o., Zurawie 22, 00-515 Warszawa, Poland. Fm@funduszmikro.com.pl

Nagarajan, Geetha, Joan Parker, and Nhu-An Tran. (1999). *MBP Rapid-Onset Natural Disaster Briefs.* Microenterprise Best Practices Project, Development Alternatives, Inc. Bethesda, MD. www.mip.org