



DISASTER MICROCREDIT: A MECHANISM FOR RECOVERY

September 2010



Prepared for the Interagency Biological Restoration Demonstration Program, a program jointly funded by the Department of Defense, Defense Threat Reduction Agency and the Department of Homeland Security, Science & Technology Directorate.

PNNL-19748

Prepared for the U.S. Department of Energy
under Contract DE-AC05-76RL01830

Disaster Microcredit: A Mechanism for Recovery

LW Loving
JA Sandusky

September 2010

Acknowledgements

This report was developed in support of the Interagency Biological Restoration Demonstration (IBRD), a collaborative regional program jointly funded by the U.S. Department of Defense (DoD)-Defense Threat Reduction Agency and the U.S. Department of Homeland Security (DHS). IBRD was designed to develop policies, methods, plans, and applied technologies to restore large urban areas, DoD installations, and critical infrastructure following the release of a biological agent. The author would like to thank the DHS Homeland Security-Science, Technology, Engineering, and Math Summer Internship Program for arranging the internship with the Pacific Northwest National Laboratory, which enabled this research project. The author is also indebted to all of the interviewees who took the time to share their expertise and experience in this field.

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor Battelle Memorial Institute, nor any of their employees, makes **any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.** Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or Battelle Memorial Institute. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

PACIFIC NORTHWEST NATIONAL LABORATORY

operated by

BATTELLE

for the

UNITED STATES DEPARTMENT OF ENERGY

under Contract DE-AC05-76RL01830

Printed in the United States of America

Available to DOE and DOE contractors from the

Office of Scientific and Technical Information,

P.O. Box 62, Oak Ridge, TN 37831-0062;

ph: (865) 576-8401

fax: (865) 576-5728

email: reports@adonis.osti.gov

Available to the public from the National Technical Information Service,

U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161

ph: (800) 553-6847

fax: (703) 605-6900

email: orders@ntis.fedworld.gov

online ordering: <http://www.ntis.gov/ordering.htm>

Contents

Executive Summary	v
1.0 Introduction	1
2.0 Approach and Considerations.....	2
3.0 Microfinance and Disaster Assistance.....	3
3.1 Review of Microfinance.....	3
3.2 Review of Disaster Assistance	4
3.3 Challenges for Microfinance Use in Disasters	5
3.4 Target Businesses.....	6
3.5 Regional Loyalty	6
4.0 Meeting the Needs of Small Businesses.....	8
4.1 Cash Flow.....	8
4.2 Existing Markets	8
4.3 Training	9
4.4 Communication	9
4.5 Infrastructure	9
4.6 Security	10
5.0 Recommendations	11
5.1 Microcredit.....	11
5.2 Regional Loyalty.....	11
6.0 Conclusion.....	13
Appendix A: Acronyms	14
Appendix B: Interviewees.....	15
Appendix C: Interview Template.....	16

Executive Summary

Disasters, whether natural, accidental, or intentional, pose one of the greatest threats to any economy. Historically, disasters have affected all levels of a region's economy; however, the small business community is typically the hardest hit.

Microcredit has not been widely used in the developed world and has rarely been used expressly for disaster relief. Yet, despite the lack of historical support, microcredit could be a good candidate for use as a disaster relief mechanism.

This report documents a study to survey of available literature and interview a variety of professionals in related fields to determine the potential for using microcredit as a disaster relief tool. The study identified both challenges and benefits of microcredit as well as the types of businesses most likely to be aided by a microcredit system.

Some challenges involve the need to identify prerequisites to microcredit success, such as business viability in the wake of a disaster, physical security, and population density. Other challenges involve the massive disease burden, scope of program operations, and uncertainty associated in using microcredit in disasters. Businesses that are more likely to recover quickly are those that are highly mobile and that provide goods or services that will be in high demand after a catastrophic incident like an anthrax attack or a major earthquake or businesses that are highly technology oriented, needing only telephone or internet service to operate. Small businesses will need cash flow, access to markets, training, infrastructure, and security to recover. They will also need information about microcredit to evaluate its feasibility and apply for programs.

Based on the research conducted, microcredit is a viable option for disaster relief. The characteristics of microcredit make it well suited to provide relief to small businesses in need of recovery assistance. However, some changes are needed for microfinance to be a successful disaster relief tool. One of the most important changes will be to focus a sense of regional loyalty that results in business retention.

1.0 Introduction

Recovery after a disaster is difficult for a community, region, and government. While most recovery efforts focus on maintaining public health and rebuilding infrastructure, restarting the economy of a devastated region is one of the most challenging yet necessary steps towards recovery. Past disasters have shown that active efforts by businesses and the outside community, as well as the government, are critical to restore a post-disaster economy to some semblance of normality. Mega disasters like Hurricane Katrina and the 2004 Indian Ocean tsunami have compelled the exploration of new ways to help disaster-affected regions. In addition, the recognition in the United States of weapons of mass destruction as a threat following the attacks of September 11, 2001, in New York and Washington, D.C., has led those in the disaster planning field to pursue multiple avenues for disaster relief.

Recent catastrophes have shown that more specialized help is needed for disaster-stricken businesses. In particular, small businesses in disaster zones have a very high attrition rate. Communities hit by disasters typically lose about 25% of their small businesses.¹ Considering that small businesses employ just over half of all private sector workers, helping these businesses recover quickly can be key to resilient communities.²

Many avenues can support economic recovery; however, using microloans³ to help disaster-affected businesses is relatively untried. Microfinance has been used in developing countries but has only recently been applied to the developed world⁴ and never widely used for disaster recovery. Microloans may support the objectives of economic recovery by providing small businesses with a source of cash that is both prompt and easy to access.

This report looks at the challenges and advantages of microloans in disaster recovery as well as the needs of the small business community based on a literature study and interviews with stakeholders. The information in this report may be useful to leaders in the business community, non-governmental agencies, and various levels of government who implement policy on disaster recovery. The problems small businesses face after a disaster are most effectively solved by these entities, both private and public, at every level of disaster recovery.

¹ Institute for Business & Home Safety, "Open For Business." 2006. <http://www.ibhs.org/docs/OpenForBusiness.pdf> (accessed 8/3/2010).

² Small Business Administration, "Frequently Asked Questions." 2009. <http://www.sba.gov/advo/stats/sbfaq.pdf> (accessed 8/3/2010).

³ This report distinguishes between the words microloan and microfinance. Microloans (or microcredit) are small amounts of money loaned to a client. Microfinance refers to a wide variety of services provided by a microfinance institution including savings, advice, and microloans.

⁴ Traditional microloans of just a few dollars are not effective in the developed world. Instead, the dollar amount of a microloan in the developed world can reach as high as \$40,000.

2.0 Approach and Considerations

The study documented in this report started with the creation of an interview template, which was crafted to allow for flexibility when talking to people with different expertise. The next step was to identify and contact small business owners and other interviewees. Emphases was placed on businesses that were highly mobile, offered high-demand goods or services useful in emergencies, and would retain their customer base during recovery because these businesses may have a better chance at recovery, as discussed later in the report.

Between June 30 and August 1, 2010, eight individuals were interviewed. An additional individual provided written information in lieu of an interview. Interviewees represented a wide range of expertise and occupations, including small business owners, risk consultants, insurance professionals, non-profit organizations, and government officials. From prior experience with natural disasters, these individuals understood the daily necessities of a small business. The interviews were semi-structured and were non-remunerated. The interviewees were granted anonymity for their opinions and, therefore, all quotes in this report are unattributed. Appendix A lists those who consented to be named in this report. Appendix B contains the interview template (each interview was customized and did not follow the script exactly).

In addition to these interviews, a literature search provided background information regarding the use of microloans in the developing world, the limited use of microloans after a disaster, and the current systems in place for helping businesses after a disaster. Sources included newspaper articles, government websites, and scholarly journals. All sources contributed to a better understanding of microfinance and its uses.

Because the work was conducted in support of the Interagency Biological Restoration Demonstration (IBRD) project, the effort focused on a wide-area anthrax release as its scenario to examine short- and long-term recovery from a biological terrorist incident. While anthrax is explicitly mentioned in several sections, this report is designed to explore the possibility of microfinance as a tool for relief in all types of disasters, natural, accidental, and intentional.

3.0 Microfinance and Disaster Assistance

The following subsections summarize information gained from the literature review on microfinance and disaster assistance as well as the challenges and target businesses for a microfinance program for disaster recovery. Also addressed is the potential affect of regional loyalty on the success of any microfinance program.

3.1 Review of Microfinance

Microfinance is typically defined as “the supply of financial services of many varieties to the poor.”⁵ It was originally developed in the 1970s by Muhammad Yunus in Bangladesh. His Grameen Bank serviced the poor and unbanked, reaching out to an important part of the local economy that had been denied credit. The objective of the microfinance provided by Grameen Bank was to bring people out of poverty one step at a time by working with them to build savings and repay their microloans on time. Microfinance has both supporters and detractors, but no one can deny it has had at least some success. Some microfinance institutions (MFIs) report loan repayment rates as high as 98%.⁶ Microfinance is now used in dozens of developing countries all over the world. In 2006, Yunus received the Nobel Peace Prize for his pioneering work in microfinance.

Microfinance, particularly microcredit, has not been as widely used in developed countries in large part because of the perception that microcredit, while good for the poor, is not readily profitable for lenders. This perception has prevented many of the large banks in the U.S. from pursuing microcredit. Recently, the profitability of some MFIs has led some independent microfinance groups to spring up in the United States. Such changes bring hope that microfinance, and by extension microcredit, can play a role among small businesses in the developed world.

More importantly to this study, microloans have been used after disasters, even those that are massively devastating. The 2004 tsunami saw microcredit used to help small farmers and business owners start again. After the 2010 earthquake in Haiti, many small business owners thought they would have no choice but to close their businesses. Yet, while traditional banks scrambled to get online, microloans were delivered by local MFIs to these business owners as soon as a few days after the quake. This quick response was a direct result of action by major banks in the United States, which sent funds that could be loaned by local microcredit groups. This sort of action would be necessary for microcredit to work in the wake of a major disaster. Funding of some kind must make its way into the hands of MFIs so they can in turn lend that money to small businesses. If resources are delivered quickly, microloans may prove to be useful in the wake of a major disaster.

Microcredit has several potential benefits for those small businesses looking to recover after a disaster. MFIs determine when to give loans based on recent history and potential to succeed, not on collateral. In addition, microcredit is usually most attractive to those who have poor or no credit and thus may have a more difficult time obtaining traditional loans. Many small businesses rack up huge credit card bills in an attempt to finance without bank loans. Businesses that use this method often have bad credit and therefore would be good candidates for microcredit in a time of emergency when credit cards

⁵ Kiva, 2010. <http://www.kiva.org/about/microfinance> (accessed 8/3/2010).

⁶ Kiva, 2010. <http://www.kiva.org/about/facts> (accessed 08/11/2010).

may be overburdened. Lastly, microcredit is fairly streamlined compared to other loan processes. Small businesses rely heavily on cash flow. If this flow is interrupted for even a short time, small businesses are more likely to fail. Having a loan delivered quickly after a disaster is imperative to a small business' recovery.

3.2 Review of Disaster Assistance

Disaster assistance can come from many sources. For the purpose of this report, the term refers only to those entities that deal with small businesses after a disaster. Major entities like the Red Cross are very important in helping individuals and families but do not focus on small businesses. For this reason, the Red Cross and other major non-government organizations are not discussed.

The two major entities focused on providing disaster assistance to small businesses are the Federal Emergency Management Agency (FEMA) and the Small Business Administration (SBA). FEMA is usually involved in immediate disaster relief. It can provide some short-term help to small businesses, but its role in providing business relief is small. Because of this, FEMA works hand in hand with the SBA to provide assistance where needed. FEMA has nothing in the way of long-term or short-term loans for small businesses given that this is not a part of its mission.

The SBA, on the other hand, is the entity the federal government tasks with providing financial aid to small businesses after a disaster. It administers two loan programs designed to relieve the effects of a major event on small businesses. The first is a Physical Disaster Loan that is used by business owners to repair or replace any business properties, including buildings that are damaged. The second program is an Economic Injury Disaster Loan, which provides capital to small businesses to assist them in disaster recovery. The SBA guarantees both loan programs and works with banks to keep interest rates artificially low so business owners don't have to bear the full cost of the loan.

The SBA has had successes as well as some challenges in providing timely disaster assistance to small businesses. Programs are well-structured and have been proven to work for those who receive loans. However, the SBA programs have some drawbacks. For one, the loan system works much like traditional loans and often requires good credit history and an amount of collateral determined by the bank. Small businesses may have neither after a disaster. A more pressing concern is the time it takes for the SBA to approve loans. While the SBA has recently improved its system to provide loans in around three weeks, this timeframe is not always the standard. After Hurricane Katrina, the SBA was severely criticized for being slow in approving disaster assistance loans. This delay was mostly a result of the unprecedented number of loans combined with many business owners that lacked the qualifications and necessary credentials to receive a loan.

Another major form of disaster relief is business insurance. Often, however, coverage may not include disasters. Even if disasters are covered, the insurance may underestimate damages. Insurance companies also may refuse to cover such events as terrorist attacks because the risk associated with the event is difficult to know and therefore price. These problems leave many small businesses more exposed than expected. On the other hand, some small businesses cannot afford insurance or choose not to purchase it. These businesses are at risk because the only assistance they can receive would come from government agencies. If government assistance proves inadequate, their businesses may be forced to shut down.

3.3 Challenges for Microfinance Use in Disasters

Microloans are not a complete solution for small businesses after a disaster. Small businesses need more than just loans to continue operations. They also need technical assistance and marketing advice. They need restoration of their cash savings, security to go about daily business operations, and infrastructure and health care for owners and employees.

Several things must be in place for microcredit to be effective:

1. Businesses must be able to repay the loan. If a business is no longer viable after a disaster, it cannot be helped by a microloan because it cannot hope to repay its loan.
2. Regions employing microcredit must have a certain level of physical security. A lawless and ungoverned region cannot expect to have loans approved because there are no mechanisms to enforce repayment.
3. Population density must be sufficient to allow businesses to recover. Microcredit is usually more applicable in places with higher population density. Regions with sparse populations do not reap the same benefits from microcredit because of a lack of demand from fewer markets.

Disease burden⁷ can also hamper the positive impacts microcredit can have on a community. In the case of anthrax, microloans employed in the early stages of disaster recovery will have to overcome a high disease burden because health concerns will be present long after an initial attack. This burden could prevent small business owners from repaying loans because of high healthcare costs for the owner and the employees. Some businesses may be capable of paying back their loans, but this number will be far less than when the disease burden is much lower.

Another great challenge with microfinance is scope of operations. During the interviews, one interviewee felt that scope was very important in determining whether microcredit would be effective. The scope problem can basically be eliminated if the disaster is relatively small and contained. But a much larger microloan program would be needed for a larger disaster. This type of program may not be sustainable by the current microcredit infrastructure. One possibility is to “piggy back” microloans with other disaster relief entities like the Red Cross, but the development of this partnership will likely take time. The size of the event will most likely dictate whether microloans can be employed successfully.

Microloans are often not intended to be long-term solutions. Most microloans are short-term and are meant to be repaid relatively quickly. In the traditional sense, microloans are meant to help small business owners build up credit so they can eventually start an account with a traditional bank. This concept may be an important one to translate when using microloans as a disaster relief tool. Microloans may be best used as bridge loans until larger financial institutions can be reopened in the affected area. In essence, small businesses affected by a disaster could use microloans to stay afloat in the short term and move to a traditional bank once cash flows are steady.

⁷ In this report disease burden refers to all the costs incurred by an individual that are related to contracting a disease. This burden covers everything from lost employee production to cost of healthcare to time and resources lost.

Perhaps the other great challenge with microloans as a form of disaster relief is the uncertainty. Microloans in this capacity are untried and unproven. While microcredit has seen success in other situations, a disaster scenario may drastically alter microcredit's ability to help small businesses recover. If microloans are used as a disaster recovery mechanism, they need to be flexible and adaptable to the ever-shifting circumstances.

3.4 Target Businesses

Some businesses will be most ready for immediate recovery and thus can most benefit from microloans. In the case of an anthrax attack, these businesses will have very specific characteristics. Many service-based businesses will not be able to immediately recover because of lack of mobility.⁸ As an example, a restaurant located in the immediately impacted area of a disaster will have to wait for its building to be decontaminated and even then it must have customers return to remain viable. Because the impacted area in a wide-scale anthrax incident is unlikely to be heavily populated for several years after such an attack, a restaurant in the zone will not be in the first wave of businesses to recover.

The businesses that are more likely to recover quickly are those that are highly mobile and that provide goods or services that will be in high demand after a catastrophic incident like an anthrax attack or a major earthquake. This category includes carpenters, plumbers, construction personnel, window cleaners, and exterminators. These businesses can easily move outside the immediately impacted area and resume operations. In addition, they will retain a sufficient number of customers because many people outside the immediately impacted area will need standard maintenance. These types of businesses may also be included in the decontamination effort with appropriate training.

Another type of business that may be a good candidate for microloans is one that is highly technology oriented, needing only telephone or internet service to operate. These types of businesses may operate anywhere because their main function is often to provide services to other regions or countries. In the immediate stages after a catastrophic anthrax attack, these businesses may be some of the easiest to restart after the required infrastructure has been reestablished.

Over time, other businesses will become candidates for microloans. As areas are decontaminated and people return, other, less mobile, service-based businesses can return. Some of these businesses may be able to use insurance to recover quickly. MFIs should target those businesses that have no insurance or inadequate coverage. MFIs should also focus on those businesses that have lost much of their property because of the incident. These small businesses may not have the collateral necessary for a traditional loan and would be good candidates for microcredit. Expanding the uses of microcredit over time to suit the needs of newly recovering businesses could yield very positive results.

3.5 Regional Loyalty

Some of those interviewed shared that some citizens feel a strong regional loyalty. These citizens are more likely to stay in a devastated region and attempt to rebuild because they feel a personal connection with the area. They will take on hardships avoided by other people not as connected to a devastated

⁸ Mobility in this case refers to the ability of a business to shift its operations outside of an affected area. Businesses who are inflexible with their location and resource needs may not be good candidates for early microloans.

region. Cultivating loyalty and connectedness to a region may in fact help the region recover more quickly from a disaster.

Loyalty can be cultivated in a number of ways. Community events and festivals would certainly help people feel more connected to the region. In addition, learning more about a region's history may contribute to a sense of connectedness. Loyalty is an important prerequisite to microcredit success. In developing nations, microcredit performs the best when it is used in a close-knit community. Grameen Bank actually fosters this community interconnectedness because bankers know their loan programs will be more effective if communities are tightly woven. In an anthrax-devastated region, this connectedness may be a factor as to who applies for and receives a microloan. Those who have close ties to the region may be better candidates for loans because they are more willing to get their business back on track within the affected area.

4.0 Meeting the Needs of Small Businesses

The interviews helped determine the necessary conditions for a small business to return after a disaster. Participants repeatedly raised several issues regarding the needs of small businesses. The major issues of cash flow, existing markets, training, communication, infrastructure, and security are discussed below. Some of these issues could be addressed by employing the use of microloans in the aftermath of a disaster. Others require some government or non-governmental organization coordination to properly service small businesses. All of these considerations are important when trying to help small businesses recover. In some instances, all of these criteria must be met for successful economic recovery.

4.1 Cash Flow

Small businesses thrive on cash flow. Interview participants were in consensus that cash flow was the most important aspect for a small business. After a disaster of any sort, small businesses need cash quickly to get reestablished. Most MFIs do not process loans quickly, because they generally deal with new startup businesses. There is, however, a precedent to believe that MFIs can distribute loans quickly in emergencies. Following the January 2010 earthquake in Haiti, MFIs were able to provide loans in a matter of days. MFIs in the United States may be able to replicate this process if current clients and funding sources can be coordinated in advance.

If cash flow can be established quickly through microloans, much of the mass business exodus expected after a major disaster can be stemmed. With cash flow, businesses can continue operations, perhaps without any stoppage. Microloans could fill several other needs in the wake of a disaster. Businesses able to relocate could be provided with funds to move equipment and personnel to new locations near the disaster zone. Organizations could continue to pay salaries and other benefits necessary to keep employees on the job. New goods for sale can be purchased by those who have had their previous supplies damaged or contaminated by the incident. In all these cases, microcredit can make a critical difference in providing cash flow to those businesses that need it.

4.2 Existing Markets

The issues anthrax poses, especially morbidity, underscore the loss in demand many markets will face. This loss in demand will limit use of microloans to only those businesses that can remain viable immediately after the attack. As indicated above, these businesses would have to be mobile and important to daily life. Additionally, internet-based companies have a distinct advantage. Whatever the case, microloans can only be successful if applied to businesses with a market. Similarly businesses will stay despite a disaster if their customer base is still viable.

Over the long term, many business markets will be re-established. Because remediation from an incident requires such a long time, particularly in the case of anthrax, a business may be able to relocate temporarily to a better location until demand for its services returns to the affected region. To meet this challenge, microloans could be applied in stages. They could initially be distributed to businesses that are immediately viable. As recovery continues, microloans can be distributed to small businesses whose markets have regained viability. The key to this staged approach is simply to focus on markets. If a

market is no longer viable after an attack, then microloans for businesses that use the market won't be effective.

4.3 Training

A major of need of small businesses after a biological event will be training. Many business markets will evaporate, and businesses may have to look elsewhere to survive. One way to keep small businesses in the region is to retrain their personnel to help with the remediation and recovery of the city. In the case of a hazardous materials incident, this training could include decontamination training, like in the Gulf of Mexico following the British Petroleum oil spill. Retraining would give small businesses a temporary market and enable them to stay in the area for the short term. The end goal would be for them to return to their previous business after remediation is completed.

Interviewees expressed interest in being trained for such a cleanup role, because it would allow them to expand their business during the turbulent economic times following a catastrophic biological incident. Some businesses would need to retrain their staff to deal with anthrax attack-related problems, such as responding to possible contamination and keeping workers safe from disease. At the very least, all businesses would have to be given enough information to understand risks. Governmental agencies or contractors already licensed to perform decontamination could provide training programs. Businesses will need a way to pay for training; microcredit could be an option for those businesses facing retraining costs. A microloan could provide bridge funding for those who retrain their workers and move into the decontamination field. Even if microloans are not used for this purpose, businesses will still need training to have a hand in the decontamination process.

4.4 Communication

Communication is useful for promoting recovery goals and opportunities to the business community. As with all other recovery assistance, microloans would need to be marketed to those in the business community both before and after any sort of disaster. This communication would need to cover the availability, application process, and benefits of microloans, which would be relatively new concepts to most businesses. Small business owners often get intimidated and confused by government lingo, so any communication about recovery programs should be given to them in clear and concise statements. Local, trusted members of the business community who are familiar with the audience could help convey this message. Using an effective communication and marketing plan will help many more businesses know and understand the benefits of a microloan even if they opt not to apply for one.

4.5 Infrastructure

The effectiveness of microloans will be limited if infrastructure is not in place for small businesses to operate. For example, many businesses cannot operate without power. In addition, having access to a phone line and a solid internet connection can mean the difference between success and failure for those who operate businesses from an online platform. Physical infrastructure is important as well. If roads or bridges are shut down for inspections or because of damage, small businesses that deliver services to their customers will have a hard time operating. Though microloans can have little effect on rebuilding

infrastructure, it is important to note that the quality of infrastructure will have a major effect on microcredit's effectiveness.

4.6 Security

Security after any disaster is of paramount importance for safety reasons and outside perceptions. After any major disaster looting and increases in violent crime are always possible. Keeping necessary infrastructure such as hospitals and bridges secure will go a long way to making small businesses feel comfortable re-establishing and help microloans achieve their maximum potential. In addition, several interviewees mentioned the security of their families as a factor in deciding whether to continue doing business in the area. Knowing their families will be safe, both from crime and disease will be a major comfort to those business owners who can continue to operate after an event. Security for employees is also required. In places where microloans are currently used, areas with high crime and disease burden face the most challenges with repaying loans. Thus, in a post-disaster environment, the success of microcredit hinges on the security and health of the population. Like infrastructure, microcredit may not be able to widely affect security, but security is required for microcredit to be successful.

5.0 Recommendations

The subsections below contain recommendations based on the results of the interviews and the literature search. The information is intended to be used as guidelines when considering methods for small business recovery after a disaster. Recommendations are not concrete statements but rather flexible suggestions in pursuing microcredit as a disaster relief tool.

5.1 Microcredit

Based on the research conducted, microcredit is a viable option for disaster relief. The characteristics of microcredit make it well suited to provide relief to small businesses in need of recovery assistance. However, some changes are needed for microfinance to be a successful disaster relief tool.

Currently MFIs are not equipped to provide loans at a rapid pace; however, given the experience with the earthquake in Haiti, rapid loan approval is possible. Currently, most MFIs are not faster than banks, as one interviewee mentioned. In fact, MFIs are often slower because they take time with each loan to fully evaluate its potential. This evaluation process means that MFIs will have to be organized to respond quickly in case of a disaster. MFIs could be organized as part of a separate program, but this organization could take time. Instead, it may be more efficient to coordinate MFIs with non-governmental organizations that already deal with disaster relief. Coupling MFIs with the Red Cross or another relief group could be a way to streamline the process of preparing MFIs for disaster relief roles.

In addition to preparing for a rapid response, MFIs will need additional funds to approve a larger volume of loans. The funding could come from the federal government, but this change puts a higher burden on taxpayers. An alternative is to model a disaster microloan system after Kiva. Kiva is a non-profit group that uses microloans as a way to reduce poverty around the world. Their model uses private donations to backfill microloans made by MFIs in various countries. This system has seen a lot of success, allowing Kiva to backfill loans of over \$150 million. This amount could be even greater in the wake of a major disaster. After Hurricane Katrina, over \$2 billion was donated to the Red Cross. If even a small part of this money had been used for microloans, some businesses might have received the relief they needed.

Of course, such a model has to be advertised to the public to be effective. The more businesses know about microcredit, the more they can trust that the system will help them restart their businesses quickly. Trust and transparency will be key elements in recovery from any disaster. An anthrax attack will cast a shadow of doubt over the whole region. Everyone will question the safety of cleaned areas. Many will consider leaving. Having systems in place that can be trusted to provide relief in a disaster will be critical to recovery.

5.2 Regional Loyalty

An unexpected discovery made during this study was that loyalty to a certain region will play a large role in whether small businesses decide to remain in an area after a disaster. Those businesses that have a strong connection to the local community will be less likely to move out of the region than those businesses that have little connection. According to interviewees, the more a community is interwoven,

the better it will rebound from a disaster. The interviewees relayed that people who had deep roots within a community are less likely to abandon their homes in an emergency. The same feeling can be extrapolated for businesses. If employees and owners are thoroughly connected to a community, even if that connection is social, they will be less likely to abandon a disaster-stricken area in search of a new location. Their connection to the area will give them an incentive to help rebuild.

6.0 Conclusion

This report provides an overview of the possibilities for microcredit as a tool for disaster relief. It also gives a brief look at the needs of small businesses and suggests ways to cultivate regional loyalty. Small businesses make up 99.7% of the estimated 29.6 million businesses in the United States.⁹ They have a large economic role and must be considered a central focus point when discussing disaster relief. It is the authors' hope that this report will in some way provide an additional mechanism to help disaster-stricken communities learn and recover.

⁹ Small Business Administration, "Frequently Asked Questions." September 2009. <http://www.sba.gov/advo/stats/sbfaq.pdf> (accessed 8/3/2010).

Appendix A: Acronyms

DHS – U.S. Department of Homeland Security
DoD – U.S. Department of Defense
FEMA – Federal Emergency Management Agency
IBRD – Interagency Biological Restoration Demonstration
LLC – limited liability corporation
MFI – microfinance institution
SBA – Small Business Administration

#

Appendix B: Interviewees

Annie Searle
Annie Searle & Associates, LLC
6017 Roosevelt Way
Seattle, WA 98115

Lyle Morris
Interior Floor Designs
12060 Lake City Way
Seattle, WA 98125

Patrick Marcham
U.S. Department of Homeland Security – Federal Emergency Management Agency
130-228th Street SW
Bothell, WA 98201

Sam King
Silver Fern Chemical, Inc.
2226 Queen Anne Ave. N
Seattle, WA 98109

Dennis Hamon
Gene Johnson Plumbing and Heating, Inc.
10011 Greenwood Ave. N
Seattle, WA 98133

Harold Davis
Seattle Economic Development Association
1437 S Jackson St, Suite 201
Seattle, WA 98144

Catherine Thomas
United Way of Southwest Louisiana, Inc.
715 Ryan Street, Suite 102
Lake Charles, LA 70601

Shelby Edwards
Pemco Insurance
325 Eastlake Ave. E
Seattle, WA 98109

Appendix C: Interview Template

Financial and Economic Recovery after Natural Disasters or an Act of Bioterrorism: Microloans Interview Protocol

Please Return To:

**Law Loving
Northwest Regional Technology Center
1100 Dexter Ave North, Suite 400
Seattle WA 98109
Fax: 206-528-3552
Lawrence.Loving@pnl.gov**

Name: _____
Title: _____
Affiliation/Organization: _____
Address: _____
Tel. _____ Email: _____
Date of contact: _____

Purpose [Check one]: Small Business Owner Local/County State Federal

Organization Type:[Check one]

Private Government-Federal
 Government-Local Other NGO
 Government-State

Introduction/Purpose: The purpose of this interview is to:

- Understand the current governmental mechanisms for providing economic recovery after a disaster.
- Determine the necessary conditions for a small business to return after a disaster.
- Assess the small business owner’s knowledge of potential recovery sources including the knowledge of microloans.
- Explore whether a privately funded microloan system is feasible in conjunction with current loan sources.

I will not attribute or quote anything directly to you—we are just trying to get a sense of what you, and other people working in similar capacities, are thinking.

There may be questions that are not applicable to you. During this project, we are interviewing a range of people from different institutions, and consequently not all the questions are relevant to every interviewee. Feel free to skip any question that you think is not relevant.

Questions:

Disaster Relief

1. Does your business or organization have a disaster recovery plan? If so, does it include a plan for economic recovery?
2. After a disaster, which federal, local, and state organizations would you call on for recovery help?
3. Have you had any experience with the various forms of disaster loans backed by the government? If so, what is your perception of these loans?
4. Are you familiar with the Small Business Administration? If so describe your perception of the SBA.
5. Are you familiar with FEMA and the role it plays after a disaster? If so describe your perception of FEMA.

Microcredit

Introduction: Microcredit is a form of credit most commonly used in developing nations around the world. The purpose of microcredit is to extend credit to low income entrepreneurs who would not normally have access to credit from standard banks. In general, microloans are given in cases where an entrepreneur has little collateral and could not otherwise get a loan from a bank. Microloans are often for small amounts of money and are intended to get low income entrepreneurs into a stable financial position so that they can receive regular loans from a standard bank. There is reason to believe that a microloan system may be beneficial to a developed nation, especially in the case of a major disaster scenario.

1. Do you think a privately funded microcredit system would be useful after a major disaster? Do you think it would be compatible with current forms of loans?
2. If a privately funded microcredit system was put in place, would you use such a system to help with economic recovery after a disaster?
3. If a privately funded microcredit system was put in place, do you think it would encourage businesses to stay in the region? If not, what would help?
4. What would be the deciding factor(s) in making a move outside of the region after a disaster? Health, infrastructure, financial backing etc.?

5. Would you prefer to receive post disaster economic help from the government, a private source, or a combination of the two?
6. Do you have any other comments or concerns about post disaster economic recovery you'd like to share?
7. Would it be alright for me to put your name in list of interviews appended to the report, or would you prefer for this to be completely anonymous?
8. Would you like a copy of my report when I finish it?

Name
Organization
Address
City, State and ZIP Code

Organization
Address
City, State, and ZIP code



Pacific Northwest
NATIONAL LABORATORY

902 Battelle Boulevard
P.O. Box 999
Richland, WA 99352
1-888-375-PNNL (7665)
www.pnl.gov



U.S. DEPARTMENT OF
ENERGY