



# **Repayment Performance of Nepali Village Banks**

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## Abstract

In recent decades, microfinance – small-scale financial services to low-income households – has given the promise of improving the lives of hundreds of millions of people across the world. The literature on microfinance identifies outreach, impact, and sustainability as the three goals of microfinance institutions. This thesis focuses on repayment performance – an important subject that has received little critical attention in the literature on microfinance. Repayment performance is important because it is a necessary, though not sufficient, condition of sustainability. Repayment performance is also an important indicator of the performance of microfinance institutions, although other measures such as profitability, financial management, and efficiency also measure performance. Repayment performance also deserves attention because high repayment rates have often been presented by microfinance institutions as evidence of their success.

This study examines the repayment performance of nine village banks (informal financial institutions of 25-30 women) in Nepal and finds results that both corroborate and contradict results previously found on repayment performance of microfinance institutions. It corroborates previous results in that these village banks have had no defaults – irrecoverable loans – in their roughly three-year life-span. Microfinance institutions generally present default rates as the measure of their repayment performance. However, using default rates to represent repayment performance is misleading since they can mask delinquencies – delayed payments – which are much more frequent than default rates.

Distinguishing between defaults and delinquencies is crucial. All defaults begin as delinquencies, but since defaults are much more infrequent than delinquencies, delinquencies are generally not reported by microfinance institutions. Delinquencies, however, can endanger microfinance institutions by slowing the rotation of their portfolio, causing them to lose credibility and discipline, and threatening their long-term institutional viability.

Among the nine village banks in this study, less than a third of the loans of village banks with weekly repayment schedules and less than half of the loans of village banks with lump-sum repayment schedules were found to have timely repayment records. The rest of the loans had either missed payments, incomplete payments, or were rescheduled. Surprisingly, this study found that village banks tolerate delinquencies and do not see them as threats. We can understand this puzzling finding if we realize that village banks serve as much of a social purpose as they do of a financial purpose. Members of village banks are confident that none of the loans that they give out will be irrecoverable because of the close interactions that they have with other members. They feel that delaying payments on loans is acceptable as long as the loans are eventually repaid. However, village banks seem to be generally unaware of the pressures delinquencies can put on the institutional viability of the institution in the long run; therefore, this study concludes by saying that more attention should be given towards reducing delinquencies.

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## Acronyms

NGO.....	Non-governmental Organization
VB.....	Village Bank
WEP.....	Women's Empowerment Program
MFI.....	Microfinance Institution
SDI.....	Subsidy Independence Index
INGO.....	International non-governmental organization
PACT.....	An INGO based in Washington, DC

## Chapter 1

# Introduction

### 1.1. Why Microfinance?

Rural financial markets are prime examples of departures from the perfectly competitive models of the economy that we religiously study in introductory economics. Information in these markets is not perfectly available to all economic agents (Ray, p.530). In credit markets, outside creditors would have difficulty not only in knowing personal characteristics of borrowers, but also in monitoring the loans in that they give out. Unlike in perfect markets, where transactions are impersonal and independent of each other, transactions in rural markets are often interlinked. A money-lender is often also the landlord or shopkeeper who uses transactions in one market to dictate the terms in other markets. In insurance schemes, outcomes are often difficult to verify because insurers often do not have intimate knowledge of their clients to decide whether the outcome was because of systemic risk (such as weather) or personal negligence.

In addition to these market imperfections, there are two reasons why investments by private financial institutions on projects catering to low-income households are risky (Matin, et al., p.3). *Firstly*, savings, credit, and insurance transactions are so small that the per-unit administrative costs can be too high for the private sector to make any profits from these transactions; thus making it hesitant to enter such transactions. *Secondly*, low-income households are often prone to high levels of insecurity and risk. Agriculture – the predominant profession of low-income households – is prone to vagaries of nature such as floods and droughts, which are often systemic, thus making diversification of risks difficult for insurance agents. Banks do not want to enter these markets because their prospective clients often lack the necessary collateral that they can use in case of defaults.

Low-income households – like everyone else – need credit and insurance because their economic activities are often spread out over time. Productive activities require fixed and working-capital that need to be invested before returns are obtained from them. Households also need credit to meet life-cycle needs such as marriage and illness to invest in productive opportunities, or to smooth consumption through time. They also want to save safely so they can use them in the future.

Despite the fact that the private sector does not cater to their financial needs, low-income households have devised strategies to meet their credit needs and provide them with risk-sharing mechanisms. Informal moneylenders, traders and landlords often end up as the source of credit for the poor because they not only have a lot of personal information about the poor but also use the interlinkage with the poor through transactions in different markets such as credit, food, or labor. The problem, however, is that these lenders charge very high interest rates that often precludes borrowing large sums of money for investment in productive purposes (Robinson, p. 15). This, in turn, often hinders the ability of the poor to improve their standard of living and is the motivation behind microfinance.

Having discussed the motivation behind microfinance, we can finally define what it is. *Microfinance refers to small-scale financial services provided to low-income households*. It includes programs that are solely credit-based or those that provide both

savings and credit services, those that rely on group contracts and those that rely on individual contracts, those that cater only to women and those cater to both men and women, and those that are run by governments or those that are run by non-governmental organizations(NGOs).

## 1.2. Microfinance Institutions (MFIs)

The idea of alleviating poverty through banking is not a new idea. In fact, cheap credit was the centerpiece of the development strategy of governments in low-income countries from the 1950s until the 1980s. The excitement about cheap agricultural credit, however, waned through time, because these programs had very low repayment rates, the costs of subsidies were very high, and credit was often diverted away from the targeted recipients (Von Pischke, et. al., p.1-7).

As criticism of subsidized agricultural credit was increasing, the 1970s and 1980s saw a wave of institutional innovations in Bangladesh, Bolivia and Indonesia. These institutions, which we now call *microfinance* institutions, share the commitment to provide financial services to clients that have been excluded from the formal sector. These institutions are different from their predecessors in that they are generally run by the non-governmental sector (thus avoiding the corruption prevalent in government-subsidized schemes), often focus on group-lending, and allow higher interest rates than existed in government schemes(Matrin et. al., p.16).

Grameen Bank, the best-known of this new crop of MFIs, was founded by Muhammed Yunus, who had noticed that most villagers were unable to obtain credit at reasonable rates, so in 1974 began to lend them money from his own pocket, allowing the villagers to buy materials for projects like making bamboo stools and pots (Morduch, p.1575). Soon he had set up a bank which lent exclusively to groups of poor households. The groups consisted of 5 people each and were formed voluntarily. The unique thing about these groups was that although money was lent to an individual, everyone in the group was held responsible for repayment. In other words, only one or two members were given loans at a given time. If they defaulted on their weekly repayments, everyone else in the group would be denied subsequent loans. Grameen Bank's contracts with its clients take advantage of local information and social assets that were at the heart of local enforcement mechanisms. Since villagers know each other well, they only include members in their groups who they trusted would repay the loans. Also, they had informal relations in other aspects of social life that they could leverage in order to make sure that no one in the group would default on loan payment.

Although Grameen relies on group contracts, other kinds of MFIs have sprung up that lend to individuals, or to clients of different income-level. Morduch (1999, p.1574) summarizes the diversity of these MFIs as follows:

Leading Microfinance programs <sup>1</sup>					
	Grameen Bank, Bangladesh	Banco-Sol, Bolivia	Bank Rakyat, Indonesia	Badan Kredit Desa, Indonesia	FINCA Village Banks
Membership	2.4 million	81,503	2 mn borrowers, 16 mn depositors	765,586	89,986
Average Loan balance	\$134	\$909	\$1007	\$71	\$191



Typical loan term	1 year	4-12 months	3-24 months	3 months	4 months
Female members	95%	61%	23%	-	95%
Group lending contracts	Yes	Yes	No	No	No
Collateral required	No	Yes	Yes	No	Yes
Voluntary savings	No	Yes	Yes	No	Yes
Repayment schedules	Weekly	Flexible	Flexible	Flexible	Weekly
Target clients	Poor	Largely non-poor	Non-poor	Poor	Poor
Nominal interest rate on loans	20%	47.5-50.5%	32-43%	55%	36-48%

<sup>1</sup>Source: Morduch (1999, p.1574)

### 1.3. Village Banking<sup>1</sup>

Village Banks (VBs) are community-managed credit and savings associations that were pioneered in the mid-1980s by the Foundation for International Community Assistance (FINCA), a U.S.-based nonprofit organization that specializes in rural credit. The village banking model assumes that poverty, especially for women, exists because of a low perception of personal capabilities and opportunities, limited access to external resources, and low or nonexistent personal savings. Village banks provide the tools to enable people to break out of poverty, including loans for income-generating activities, incentives to save money, and a mutual support group of twenty to fifty members.

Most village banking programs are based on the model designed by John and Marguerite Hatch and presented in “The Village Banking Manual” (1989). According to this manual, the financial operation of VBs begins when sponsoring agencies lend seed capital to newly established VBs, which then on-lend this money to their members. The first loans are typically the local equivalent of \$50, for a term of four months, and have to be repaid in weekly installments. The loans usually finance short-term working capital investments. VBs charge an interest rate that is equivalent to most commercial rates – generally between 12% and 36% per year. The group’s internal fund accumulates through members’ weekly savings, interest on loans, fines charged to members, and profits from VB investments.

When members repay their first loan on time, they can get a second loan – whose size depends on the savings the member has accumulated during the first loan period through weekly contributions. The methodology anticipates that members will save a minimum of 20% of the loan amount per cycle. Members’ savings stay in the VB and are used to finance new loans or collective income-generating activities. No interest is paid on savings; instead, members receive a share of profits from the VB’s re-lending activities or other investments. Members work toward building sufficient savings that will allow them to borrow up to \$300 in loans. Once a member has this level of savings, he/she graduates from the program. This \$300 loan limit is designed to prevent wealthier members from gaining disproportionate access to VB capital. This model assumes that \$300 is a sufficient sum to allow members to self-finance their income generating activities and seek other sources for additional financing.

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<sup>1</sup> This section relies primarily on Holt (p.156-184).

Although VBs independently keep their own records and monitor their own loans in the long run, they are generally established by a sponsoring agency. This promoter of VBs initially helps set up the VB. In the initial weeks, the promoter helps elect officials, start the savings process, establish rules, and trains the officials on how to keep records. After the initial weeks, the original Hatch model foresees a drop in visits by promoters.

VBs are managed by an elected committee of at least a president, secretary, and a treasurer. The committee runs weekly meetings, decides who gets loans, how big the loans are, and when they can be repaid. It also supervises loan repayment, receives savings deposits, and keeps up-to-date records. Since record-keeping is transparent, all members are aware of the status of the loans of the bank. In a sense, the members are active decision-makers, bankers and business managers, all at the same time. Although VBs are called “banks,” they are essentially informal financial institutions. Since they are informal institutions, the operational procedures and rules vary according to the locality they are in, the economic mix of the group-members, the organization that helped establish them, and the age of the bank.

All VB transactions are made on the “Banking Day” when members submit regular savings, takes loans from the bank, or repays loans. While some VBs allow voluntary savings, others do not do so in order to simplify record-keeping. While some VBs require payments to be made on every banking day, others require that loan payments be made every month or at the end of the loan cycle. Loan size generally increases as the group gets older and accumulates more funds. The loan period is mostly between one and six months and repayment mostly at the end of the period, unless the group meets every week and is located in trading centers with lots of economic activity.

VBs also have a policy on whether or not they will lend to people outside of the group and what to do with the money in the cash-box – whether to deposit it in a local bank or to leave it in the cash box. If the demand for loans is greater than the availability, the group-officials decide who gets the loans, after discussing who needs the loan more. Loans are only given to members of the bank, although often members take loans for their family-members or neighbors whom they trust.

#### **1.4. Village Banking vs. other models of microfinance**

VB share have several features that are in common with other models microfinance institutions. Unlike the government-led credit programs in the 1950s-70s that emphasized rapid disbursement of cheap loans to targeted sectors, these programs insist on repayment. Like other MFIs, VBs charge higher interest rates than earlier government-led programs that so that they can cover the costs of credit-delivery. Perhaps most importantly, they provide financial services to the people who are not served by formal financial institutions. Those institutions are reluctant to serve low-income households partly because such households do not own collateral, and partly because there is imperfect information in rural credit markets<sup>2</sup>.

The biggest difference between VBs and other models of microfinance is that VBs are savings-led rather than credit-led. VBs do not get funding from outside sources, except for the seed money that sponsors lend some VBs at the beginning of the VB’s

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<sup>2</sup> Chapter 2 deals with imperfect information in more detail and how that affects rural credit markets.

formation. Savings mobilization has only recently been recognized as an important component – the “forgotten half” – of financial intermediation. Although financial institutions in the past thought that the poor had low capacity to save and thus did not demand deposit facilities, they are now recognizing that if the savings products are appropriately structured, low income households will save (Fiebig et. al, p.1). Incorporating savings is crucial for the sustainability of the microfinance institutions for they will not anymore need to rely on external organizations for their loan fund. Also, savings-led MFIs are more likely to have a better governance structure than credit-led MFIs because their leadership do not answer to a long chain of government officials and donors – but directly to their depositors and borrowers.

Since VBs are primarily savings-led, they need to rely very little on external subsidies. Essentially, the only outside help that VBs require is for training when they are established. The biggest costs of a village banking program occur during the start-up phase when VBs need to be trained and monitored. Once VBs have established their rules and their officials know how to keep records, the outside agency can stop visiting them. Since the VB methodology requires limited ongoing administrative support, some have called it a “minimalist” service-delivery model (Holt, p.159). Self-sustainable microfinance programs like village banking are desirable in the long run because they do not need to rely on the whims of the donor agency or fads in the development practice.

VBs and cooperatives are similar in the sense that both microfinance programs are member-based. Member-based organizations screen their members before they are admitted into the group; through a greater understanding of the local context and its residents, they overcome information asymmetries that exist in rural financial markets (Paxton et. al., p. 138). Although cooperatives are run by management staff that are not necessarily members of the cooperative, VBs are self-managed, with officials elected from the members. This means that VBs have even more knowledge about its members. All members of VBs are required to attend and participate in their regular meetings. This participation gives a sense of ownership that does not exist in cooperatives or other models of microfinance.

## **1.5. Major issues in microfinance**

Much of the literature in microfinance revolves around the trade-offs and synergies between three overarching policy objectives – financial sustainability, outreach to the poor, and the welfare impact – also called the “triangle of microfinance” (Zeller et al, p.3). There has been as much debate about the meaning of these terms as there has been discussion about which of these goals is more important and how we can achieve them. I will borrow Navajas et al’s (p.154) definition of *outreach* as the social value of the output of MFI in terms of depth (how poor are the clients), worth to users, cost to users (transaction costs and interests), breadth (number of clients), length (how long will the client be served), and scope (variety of financial products). *Sustainability* signifies how permanent the MFI will be. *Impact* measures the benefits to the clients of microfinance programs.

A vigorous debate has continued between those who consider *outreach* and others who consider *sustainability* to be the main goal of microfinance programs. According to Rhyne (p.6), the difference underlies differing opinions on the role of the government,

donors and the private sector. The “sustainability camp” believes that the private sector should lead the microfinance sector in the long run. This camp feels that donors are often prone to fads, will not support microfinance programs indefinitely, and are not generous enough to support these programs on a major scale. On the other hand, the private sector has enough resources to invest in microfinance and will do so if it sees that microfinance is profitable. The “poverty camp” is wary of microfinance programs being led by for-profit organizations and believes that the government and non-profit organizations should lead the microfinance sector. This camp also believes that the private sector could easily ignore the poorest clients because they are riskier and the scale of their financial transactions is not high. Although the choice between impact and outreach is not necessarily exclusive many have argued that a trade-off exists between these two goals Morduch (1998).

Once we recognize that outreach, impact, and sustainability are the three goals of microfinance programs, the more difficult task is to measure them. Impact-assessment studies have measured changes in consumption levels, income levels, school enrollment of children, assets, improved health outcomes, and women’s empowerment. Assessing impact is challenging because of the difficulty of selecting rigorous control groups and selecting unbiased samples so that the perceived impact can be attributed to microfinance programs. Morduch et al (2003) mentions several studies which, after addressing issues of biasness, show that the availability of financial services has significant impact on the lives of low-income households.

Participation in microfinance programs has been found to reduce poverty by significantly improving clients’ incomes and reducing their vulnerability to consumption and income shocks. Clients of microfinance programs appear to have much better nutrition, health practices, and health outcomes than non-clients. Microfinance programs have also proven to make women more confident and more likely to participate in family and community decisions. Although these results are indeed encouraging, we should not take them with face value since we do not know what impact we would have received had we invested in other programs such as health and education.

Outreach is often proxied by the sex or poverty-level of borrowers, the size or the terms of loan contracts, the price and transaction costs borne by users, the number of users, the financial and organizational strength of the lender, and the number of products offered. Despite the appeal of these variables, interpreting them is no easy task. Depth of outreach has been a goal of many microfinance programs, couched in the form of “reaching the poorest of the poor.” Navajas et al (p.152-169) examine the issue of depth of outreach of five microfinance institutions in La Paz, Bolivia and find that although those institutions did generally well in terms of depth of outreach, their impact on social welfare (which outreach ostensibly measures) was unclear. They claim that even when microcredit does reach the poorest of the poor, it might not increase income as it smoothens consumption and diversifies income. In essence, although depth of outreach is an appealing goal, microfinance programs with deep outreach will not necessarily improve social welfare.

There is as much debate surrounding sustainability as there is around outreach and impact. The goal of sustainability is not to have permanent MFIs *per se* but to maximize the social value of the MFI minus the social opportunity cost of the resources used, both discounted over time (Navajas et al, p.154). In principle, sustainability is not necessary or

sufficient for social optimality – since some societies might prefer present consumption to future consumption. Sustainability will make clients more willing to join a MFI and make them more willing to entrust their savings with it. Following the studies done at Ohio State University and other institutions in the 1980s, practitioners of microfinance generally accept that a microfinance institution will only be sustainable if it can cover its costs; i.e., if it can exist successfully in the long run without any external support.

Measuring financial sustainability is not an easy task, however. Subsidy Dependence Index (SDI), operational self-sufficiency (OSS) and financial self-sufficiency (FSS) are common measure of financial sustainability. SDI was proposed by Yaron (1992) and has become a very common tool among microfinance practitioners. SDI is defined as the ratio of subsidy received by a development finance institution to revenue from loans to the target group (Schreiner et al, p.44):

$$SDI = \frac{Subsidy}{Revenue\ from\ lending}$$

$$= \frac{Subsidy}{Average\ Loan\ Portfolio \times yield\ on\ loans}$$

SDI indicates whether the institution receiving subsidy could compensate society for the opportunity cost of public funds used in a short time frame and still show a profit (Schreiner et al, p.4). In other words, it is the yield on loans that would make subsidy zero. An SDI of 1.00 means that an increase in the revenue from loans of 100 percent would wipe out subsidy and make the SDI equal zero. An SDI of zero or less means the DFI could compensate society for its opportunity cost and still show a profit.

OSS refers to the ability of an institution to generate enough revenue to cover its direct operating costs such as operating expenses and a provision for lost loans. FSS measures an institution’s ability to generate enough revenue to cover both its direct and indirect costs. Indirect costs include adjust cost of capital, i.e. the cost of maintaining the value of the institution's equity relative to inflation and the cost of accessing commercial funding rather than concessional loans<sup>3</sup>.

## 1.6. Outline of chapters

This thesis focuses on repayment performance – an important subject that has received little critical attention in the literature on microfinance. Repayment performance is important because it is a necessary, though not sufficient, condition of sustainability. It also deserves attention because it is an important indicator of the performance of microfinance institutions has often presented by microfinance institutions as evidence of their success.

Chapter 2 discusses how repayment performance relates to sustainability and why we should be concerned about it. It will look at the theoretical literature on microfinance and talk about why repayment rates should be high for MFIs. It will present different methods to calculate about repayment rates and how repayment rates are generally calculated by MFIs.

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<sup>3</sup> [http://www.fdc.org.au/programs/130\\_microfinance/20020404\\_50.html](http://www.fdc.org.au/programs/130_microfinance/20020404_50.html)

Chapter 3 focuses microfinance in Nepal – where the field-work for this study was done. After giving an overview of microfinance in Nepal it will discuss the Women’s Empowerment Program that was run by PACT, Nepal to establish village banking program that this thesis focuses.

Chapter 4 presents the results of the field-study. We will see that the results found in this field-study both corroborate and contradict results previously found on repayment performance of microfinance institutions. Very few of VBs’ loans, if any, have been irrecoverable, but VBs have very high rates of delinquencies – loans that have not been repaid on time.

Chapter 5 explains the results found in the field study. It first presents the perspective of VB members as to why they have low defaults but high delinquencies and whether high delinquencies are a problem to the VB. It will argue that although VBs do not see a high rate of delinquencies as a danger, they should try to minimize delinquencies. The chapter will also suggest policy implications that arise from this study.

## **Repayment Performance: Theory and practice**

### **2.1. Why study repayment rates?**

Repayment rates feature prominently in the discussion and literature on microfinance. Since most MFIs are not backed by physical collateral, unpaid loans could jeopardize the capital of a financial institution in the long run. The lost loans of an MFI have to be paid for from the loan-loss provision, which is an expense that reduces the profits of an MFI. Since losses cannot be recovered from collateral, they have to be paid for by the MFI's capital. MFIs also need high repayment rates if they want clients to feel comfortable depositing their savings and conducting other financial transactions in the long run. To be sustainable, an MFI needs to be independent of subsidy, but it can't be independent of subsidy unless it can cover all of its costs from its operations. Good repayment rates are a necessary, though not sufficient, condition for the sustainability of an MFI (Von Pischke, p.232). Virtually all credit programs face some bad debt losses, so it is unreasonable to expect perfect repayment rates. But knowing the extent of these bad loans is a crucial requirement for setting the appropriate rate of interest and designing loan products that are consistent with clients' needs along with the survival and growth of the MFI (Von Pischke et. al, 1998, p.177).

For sure, repayment rate is limited in what it can tell us about the performance or the sustainability of a MFI. Profitability, financial management, efficiency and productivity are important indicators of the performance of an MFI, but portfolio quality is perhaps the biggest source of danger (Abate et. al, p.1). SDI is a more comprehensive and more robust measure of the sustainability of an MFI since it takes into account the market opportunity cost of the funds spent on it. SDI might be a better measure of the sustainability of an MFI, but not its self-sustainability. To be self-sustainable, an MFI should be able to cover all of its costs without external help. Good repayment rates are necessary to be self-sustainable, but so are low transaction costs and appropriate interest rates. Despite all these shortcomings of repayment rate, it is still a crucial indicator of the performance and the self-sustainability of a MFI.

We also need to put careful analysis and thought into repayment rates because they are used extensively as the evidence of the purported success of microfinance institutions. Repayment rates that are close to 100% are included in the program statistics that are submitted to donors and practitioners of microfinance. Boundless articles that have chronicled the success of microfinance programs in magazines and newspapers across the world report that the impressive repayment rates are what make these programs stand out. Although most microfinance practitioners realize that repayment rate has its limitations as to what it can tell us about the health of an MFI, it has been used to sell microfinance programs to the general public. It is for this reason that we need to critically examine how MFIs calculate the repayment rates that they use so often as their publicity tool.

## 2.2. Theoretical predictions about repayment rates of MFIs

Group-lending contracts (such as the Grameen bank, Village Banking, or Rotating Savings and Credit Associations) have received a lot of attention from economists in recent years since they believe that these contracts solve the information asymmetry in rural financial markets. The common theme in the literature is that since groups that participate in these programs are formed voluntarily, group members have a lot of information about each other than would an external organization. Microfinance programs use peer selection, peer monitoring, dynamic incentives, regular repayment schedules, and collateral substitutes to help maintain high repayment rates<sup>4</sup>.

**Peer selection** is one of the biggest advantages of group-lending. Asymmetric information rural financial markets gives rise to adverse selection – formal financial institutions cannot distinguish the risk-type of its clients although it has to charge them the same rate of interest. Since the clients do not have any assets to put up as collateral, the bank has to set high interest rates in order to break even. If the bank charges high interest, investors will not invest on safe projects since they have lower rates of return too. At equilibrium, the bank will charge a very high interest rate and safe investors will stay out of the market. If the bank allows its client to self-select into different groups according to their risk-type and requires joint liability among its groups, it will end up charging the same nominal interest rates and liability payment – payments other members of a group have to make if one member defaults on a loan – to all of its clients but different rates according to their risk types (Morduch 1999, p.1981). In essence, safe investors will enter the credit market and the interest rates will be lowered.

**Peer monitoring** in group-lending schemes lowers equilibrium interest rates and increases repayment rates. Since all borrowers have a joint liability, i.e. everyone has to pay off another member's loans if he/she defaults, they will exert peer pressure when selecting projects. Risky projects will give lower expected utility to borrowers than safe projects (assuming that all borrowers are risk-averse), thus they will always select safer projects (ibid, p.1982). Since the chances of borrowers losing money on investment projects will go down, the bank will be able to lower interest rates and the expected repayment rate will also go up.

Another feature of many group-lending programs is that they offer **dynamic incentives** to their members aimed to improve repayment rates. Members can only borrow small amounts at the beginning but can borrow larger amounts as they build a good credit-history. The repeated nature of the interaction and the credible threat to cut off future access to loans can be effective in reducing defaults. However, more and more programs are finding out that these dynamic incentives will not work if there is competition among MFIs. Clients can always switch to other MFIs, which are often eager to increase their membership, if a previous one cuts off access to loans (ibid, p.1982).

Unlike traditional loan contracts with banks, MFIs generally require borrowers to repay loans in regular installments rather than at the end of the loan period. This has several advantages. Firstly, a **regular repayment schedule** screens out bad borrowers since it requires a lot of discipline. Secondly, MFIs get heads-up on loans that look like they might be defaulted on; this allows the MFI to take some action before it is too late. Thirdly, by requiring regular payment of loans, MFIs are effectively lending against the

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<sup>4</sup> The rest of this section relies on Morduch (1999, p.1579-1590).



households' diversified sources of income. Since investments require time to give payoffs, the only way borrowers can pay back loans is by relying on additional sources of income.

Most MFIs cannot collect collateral from their clients because their clients just do not have enough assets to use as collateral. However, most MFIs have devised **substitutes for collateral**. Some programs have an "emergency fund" that is generally 0.5% the size of the total loan lent portfolio. This fund provides insurance to the group in cases of default, death, disability, etc. Some groups also take off an additional 5% of the loan taken out in the name of group tax that goes into the group fund. This is also used as a means to enforce savings. Members can withdraw their portion of the group fund when they leave the group. But it acts as collateral in case the member defaults on a loan.

### 2.3. How should repayment rates be calculated?

Section 2.2 painted a very optimistic picture of MFIs' ability to recover their loans – peer selection, peer monitoring, dynamic incentives, and regular repayment schedules will all ensure that clients of microfinance organizations will repay their loans on time. As it turns out, showing that this is true is much more complicated than it appears. No clear standards of measuring delinquency in MFIs exist yet (Rosenberg, p.1) and too often MFIs publish numbers without giving much information about the measuring rods that they use. This section will describe the different standards for measuring how well MFIs ability to recover their loans and their applicability of these different measures in different circumstances.

Since the terms that are used to describe how well MFIs recover their loans are often ambiguous, we should start with definitions. A **delinquent** loan is a loan which is partially or fully overdue (CGAP, p.4). A **defaulted** loan is a loan that a borrower cannot or will not repay (CGAP, p.6). A defaulted loan is essentially a delinquent loan that the MFI thinks it will not be able to recover. **Delinquency indicators** are measures that have a numerical value and describe how successful an MFI is in recovering its loans. There are three commonly used categories of delinquency indicators (Rosenberg, p.2). **Collection rate** (also called **recovery rate** or **repayment rate**) measures amounts actually paid against amounts that have fallen due. **Arrears rate** measures overdue amounts against total loan amounts. **Portfolio at risk** measures the outstanding balance of loans that are not being paid on time against the outstanding balance of total loans.

We can use the following criterion to judge whether or not an indicator is a good measure of the loan recovery capacity of an MFI by using the following criteria (Rosenberg, p.4):

- a) **Red flag test:** Can the indicator clearly and quickly alert day-to-day repayment issues?
- b) **Fire-bell test:** Can the indicator reveal the seriousness of delinquency problems?
- c) **Bottom-line test:** Can the indicator give us a reasonable basis for estimating likely loan losses as a proportion of the MFI's outstanding portfolio<sup>5</sup>?

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<sup>5</sup> The outstanding portfolio is the total amount of loans that are overdue at a given point in time. For example, if a bank has 100 loans of \$100 each that are to be repaid in 10 installments of \$10. If the age of the loan is uniformly distributed, the average outstanding loan at any given time is \$55,000. The outstanding portfolio can also be calculated using the following formula (Rosenberg, p.3):

- d) **Smoke and mirrors test:** Can the indicator be made to look better through inappropriate rescheduling, refinancing of loans, or manipulation of accounting policies?
- e) **Cash-flow test:** Can the indicator help the MFI predict the flow of cash flow in and out of the portfolio so that the MFI can avoid running out of cash?

Now that we have a yard-stick to measure the performance of indicators, we can examine how the different indicators perform. Collection rate is calculated using the following formula:

$$\frac{\text{Amounts collected}}{\text{Amounts that have fallen due}}$$

Collection rate is the most commonly reported indicator of loan recovery since it can be calculated from elementary information that most MFIs can easily keep track of. The above formula is vague since it is not explicit about what exactly the numerator and the denominator represent. An MFI collects installment payments on loans that are overdue, on time or early, but the numerator in the above formula does not explicitly state the kind of repayment it covers. The denominator could also represent cumulative loans that have been due or only the loans that have been due in the present period. Based on the different kinds of denominators and numerators, we can have four kinds of collection rates (Rosenberg, p.6-10):

- a) On-time Collection Rate tracks a MFI's success in collecting payments when they first became due. It can be calculate for each period using the following formula:

$$\frac{\text{amounts that were paid on time during this period}}{\text{amounts that were due for the first time during the period}}$$

- b) Asian Collection Rate, so called because money-lenders in Asia often use this method, is calculated using the following formula:

$$\frac{\text{total amounts that were paid during this period}}{\text{amounts that were overdue in this and previous periods}}$$

- c) Current collection rate is calculated using the following formula:

$$\frac{\text{total amounts that were paid during this period}}{\text{amounts that were due for the first time during the period}}$$

- d) Cumulative collection rate is calculated using the formula:

$$\frac{\text{total amounts that have been paid so far}}{\text{amounts that were have been due so far}}$$

The collection rate appears to complement the delinquency rate: an MFI with a 95% collection rate was not able to collect 5% of its loans. But this simple relationship can be very misleading because it does not take into account the length of the loan

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$$\frac{\text{Original principal} + \text{amount of principal in one payment}}{2}$$

(Rosenberg, p.4). If we take the collection rate and the length of the loan in to account, and assume that the outstanding portfolio is equal to one-half of the amount originally disbursed, we can come up with the following formula (Rosenberg, p.20):

$$\text{Annual Loan Loss Rate} = \frac{1 - \text{Collection Rate}}{\text{Loan Term in Years}} \times 2$$

According to this formula, the following will be the annual loan loss rates for different collection rates and different loan terms:

**Table 2.1**

Collection Rate	Average portfolio lost annually on loans of		
	2 months	4 months	1 year
99%	12%	6%	2%
95%	60%	30%	10%
90%	120%	60%	20%
80%	240%	120%	40%

As we can see clearly, a MFI might be collecting 95% of its loans but if the term of their loans is 2 months, they will be losing 60% of their portfolio!

**Arrears rate** is the second most common measure of microfinance delinquency after collection rates (Rosenberg, p.11). It can be calculated using the following formula:

$$\frac{\text{Late payments}}{\text{Total loans}}$$

Arrears rate captures the risk that the payment in question might never be paid, but is often misleading because it measures the amount of overdue loans to the total amount of loans (and not the total amount of overdue loans). This can be problematic for MFIs that allow loans to be paid in a large number of installments. For example, a bank may have yearly loans that have to be paid on weekly installments. If borrowers miss the first five weeks of the payment, the arrears rate will only be 10% but the danger of losing the loan will be very high. MFIs can also artificially lower arrears rate by relaxing the standard for what is counted as a late payment. Some MFIs count loans not collected within 30 days as late, whereas others use 90 days as a standard – and these two standards could give drastically different arrears rate.

**Portfolio at risk** is the international standard measure for bank loan delinquency (Rosenberg, p.12). It is calculated using the following formula:

$$\frac{\text{Outstanding balance of loans with overdue payment(s)}}{\text{Total outstanding balance}}$$

The portfolio at risk measure works only for loans that are paid in installments. If an MFI gives out loans that can be repaid in a lump-sum at the end of loan-period, the portfolio at risk will be 100% no matter how many loans are overdue since the outstanding balance of loans with overdue payments will be the same as the total outstanding balance of loans. The good portfolio report would separate the loans according to how late they are in repayment, for example (Tucker, p.9):

**Table 2.2**

	Amounts (\$)	%
Current outstanding balance	155,000	77.5%
Portfolio at risk		
1-30 days	10,000	5.0%
31-60 days	15,000	7.5%
61-90 days	6,000	3.0%
>90 days	14,000	7.0%
Total outstanding balance	200,000	100%

Table 2.3 is an example of how we can get different delinquency indicators can give us completely different signals. The example used is a VB loan of 6000 that should be repaid in 16 installments of 375 each. Delinquency indicators have been calculated for each week. The most striking result is for week 11, where the collection rates range from 33.3% to 90.3%!

**Table 2.3. Calculating delinquency indicators in a VB<sup>1</sup>**

Week	Capital due	Capital paid	Loan balance	Total arrears <sup>2</sup>	Delinquency indicators						
					On-time collection rate <sup>3</sup>	Asian collection rate <sup>4</sup>	Current collection rate <sup>5</sup>	Cumulative collection rate <sup>6</sup>	Arrears rate <sup>7</sup>	Portfolio at risk <sup>8</sup>	
0			6000								
1	375	375	5625	0	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	
2	375	350	5275	25	93.3%	93.3%	93.3%	96.7%	0.4%	0.5%	
3	375	375	4900	25	100.0%	93.8%	100.0%	97.8%	0.4%	0.5%	
4	375	325	4575	75	86.7%	81.3%	86.7%	95.0%	1.3%	1.6%	
5	375	250	4325	200	66.7%	55.6%	66.7%	89.3%	3.3%	4.6%	
6	375	325	4000	250	86.7%	56.5%	86.7%	88.9%	4.2%	6.3%	
7	375	375	3625	250	100.0%	60.0%	100.0%	90.5%	4.2%	6.9%	
8	375	350	3275	275	93.3%	56.0%	93.3%	90.8%	4.6%	8.4%	
9	375	450	2825	200	120.0%	69.2%	120.0%	94.1%	3.3%	7.1%	
10	375	350	2475	225	93.3%	60.9%	93.3%	94.0%	3.8%	9.1%	
11	375	200	2275	400	53.3%	33.3%	53.3%	90.3%	6.7%	17.6%	
12	375	300	1975	475	80.0%	38.7%	80.0%	89.4%	7.9%	24.1%	
13	375	500	1475	350	133.3%	58.8%	133.3%	92.8%	5.8%	23.7%	
14	375	375	1100	350	100.0%	51.7%	100.0%	93.3%	5.8%	31.8%	
15	375	292	808	433	77.9%	40.3%	77.9%	92.3%	7.2%	53.6%	
16	375	808	0	0	215.5%	100.0%	215.5%	100.0%	0.0%	0.0%	

<sup>1</sup> Numbers for the first five columns of this table were taken from Tucker, p.5. The rest were calculated by the author using formula presented by Rosenberg.

<sup>2</sup> Total arrears = (capital due – capital paid + previous arrears).

<sup>3</sup> On-time collection rate = capital paid *on time* this period / capital due.

<sup>4</sup> Asian collection rate = capital paid / (capital due + arrears)

<sup>5</sup> Current collection rate = capital paid this time / capital due. This is the same as on-time collection rate in this example since the data does not distinguish between amounts paid on previous, present, or future loans.

<sup>6</sup> Cumulative collection rate = total capital paid so far / total capital due so far

<sup>7</sup> Arrears rate = total arrears / initial loan balance

<sup>8</sup> Portfolio at risk = total arrears / (capital not yet due + total arrears)

Obviously, delinquency indicators have their own strengths and weaknesses. Table 2.4 gives a summary of how the indicators perform (Rosenberg, p.19). If time and resources allow, MFIs should use more than one delinquency indicator so that they can get an accurate picture of the portfolio quality.

**Table 2.4**

Report Card on Common Delinquency Indicators <sup>1</sup>					
Indicator	Red Flag	Fire Bell	Bottom Line	Smoke and Mirrors	Cash-flow
On-time collection rate	++	+	-	-	-/+
Asian collection rate	-	-	-	-	+
Current collection rate	-	+	++	+	+
Cumulative collection rate	-	-/+	+	+	-/+
Arrears rate	+	-	-	-	-
Portfolio at risk	+	+	+	-/+	-

<sup>1</sup>Source: Rosenberg, p.19

## **2.4. How repayment rates are generally calculated**

In the recent past, MFIs all over the world have reported astonishing repayment rates as a part of their project reports and used it as evidence of the success of their programs. However, rarely do they report the methodology that they used to arrive at those numbers. After an extensive survey of literature, the author did not find a single MFI that reported how it calculated its repayment rate or delinquency rate. Pischke et al. (p.151) suggest some reasons for why this is the case. Most attempts to quantify donor-assisted projects encounter measurement difficulties. Records may not be timely or clearly kept, disclosure of financial and other reports is selective and sanitized, and arrears are often refinanced to mask borrowers' failure to repay. Also, donors do not closely monitor the collection performance of the MFIs that they fund. Although most donors require that the MFIs report their financial data, donors rarely use this data to manage relationships with the MFIs. This inattention on the part of donors diminishes incentives for MFIs to provide timely and accurate reporting.

In a typical performance review of VBs, Painter (2000) states that the six-year old FINCA Uganda VB program had a monthly on-time repayment rate of 98.90% and an overall historical repayment rate of 99.98%. These rates are characteristic of the amazing repayment rates reported by MFIs all over the world as an evidence of their success. Although Painter does not state explicitly how the repayment rate was calculated, a close examination to how repayment rates are calculated is long overdue and might teach us some valuable lessons about the sustainability of VBs and other MFIs alike.

A rare study that reports repayment rates in detail is on a program in Bangladesh called the RD-12 or the Rural Development Project-12. The research design was funded

by the World Bank and published by Khandker et al (1995). Surprisingly, the study does not even mention loan recovery or quality of portfolio in its discussion of financial viability (Khandker et al, p.44). The study, however, does talk about recovery rates when it discusses borrower viability and presents recovery rates for borrowers in different professions. It tracks repayment rates during 1989-1994 and finds that annual repayment rates improved with time and were mostly between 90-95% in 1994. The study mentions that data it obtained from Bangladesh Rural Development Bank but does neither define the “recovery rate” nor mention how it calculated those rates. To supplement its discussion of recovery rate, Khandker et al provide a regression analysis to determine factors that influence repayment rates. They find that among other things, age of the borrower, primary school density, road density, predicted pay of the manager, and predicted pay of bank manager are statistically significant predictors of recovery rate. But it does not discuss how those high repayment rates are being achieved or what dangers the MFIs in its study are facing.

The rest of this thesis will examine delinquency rates in a Village Banking program in Nepal that was established and funded by USAID and run by PACT, Nepal. The next chapter will describe the current state of microfinance in Nepal and briefly discuss the Village Banking program established by PACT, Nepal before describing the local context of the program. The following chapter will describe the field study that was done to gather data for this study and present results from the field study. The final chapter will try to make sense of the results from the field study and suggest some policies.

## **Microfinance in Nepal**

Microfinance in Nepal was started with the establishment of the government-sponsored Small Farmer Development Program in 1975. This program organized farmers into small groups throughout the country and provided them with credit that was backed by group guarantee. Because of bureaucratic inefficiency and lack of training and motivation of its staff, this program was doing very poorly by the 1990s, with repayment rates falling to 58% by 1995-6 (Conroy, et al, p. 200). This program was transformed into the Small Farmer Cooperative Limited in 1997 with the hope of making them self-sustaining and more efficient by allowing them to be owned and managed locally.

The Intensive Banking Program introduced in 1981 by the central bank required commercial banks to devote 12% of their portfolios to finance the priority sector (defined as cottage industries, agricultural industries and services), including 3% which was supposed to go to the hard-core poor. The 1980s also saw the introduction of a gender-based microfinance program called Production Credit for Rural Women in cooperation with the United Nations Children's Fund in 1982 that organized women's groups so that they could borrow under the Intensive Banking Program. This was the first government-sponsored program that involved NGOs.

The 1990s saw an acceleration in microfinance activities in the country. Between 1992 and 1997, the government sponsored five replicas of the Grameen Bank called Regional Rural Development Banks. The government also passed the Cooperative Act in 1992 that allowed the formation of credit cooperatives. By 1998, more than 4,400 cooperatives were registered under the Act and were providing savings-only or savings and credit services in the country. The government also established the Rural Self-Reliance Fund in 1991 that provided funds to microfinance intermediaries.

Currently, every imaginable model of microfinance practiced in Nepal. INGOs and NGOs run both credit-only and savings-and-credit programs either as stand-alone programs or as parts of multi-faceted development programs including literacy, health, income-generation etc. Five regional Grameen replicas still operate under the government. Besides the Grameen replicas, the government also supports credit-only, savings-and-credit programs, women-only programs and programs geared for both men and women. Numerous private savings and credit cooperatives have also emerged all over the country, which are required to operate under regulation from the government.

### **3.1. Village Banking in Nepal**

Despite the variety of microfinance projects currently running in Nepal, VBs did not exist in Nepal until PACT (an international non-government organization headquartered in Washington, D.C.) introduced the Women's Empowerment Program (WEP) in 1999 with funding from USAID. The status of women in Nepal is very bleak, with only 14% who are literate, and have infant mortality, malnutrition, life expectancy, and maternal mortality that are among the worst in the world. PACT introduced WEP order to increase the influence of women in household decision-making, to increase

women's spending on family well-being, and enable women to initiate collective action (Odell, p.2). In order to achieve this WEP had three components:

- Literacy program
- Legal advocacy
- Village banking

WEP lasted from 1999 to 2001 and the project involved, 125,000 women that included about 6,500 savings and credit groups all over Nepal. Those groups were categorized into VBs (the strongest of the groups), economic groups (weaker groups that received comparatively little support from WEP), and other groups that were associated with cooperatives and microfinance organizations (see Table 3.1).

Table 3.1

<b>Group</b>	<b>Number</b>
Village Banks	1,200
Economic Groups	2,800
Cooperatives/MFIs	2,500
<b>Total</b>	<b>6,500</b>

The groups were not established by PACT but by 245 local NGOs. The process was competitive since proposals for many more than 6,000 groups were submitted to be included in WEP. The groups were narrowed down according to size, proximity to each other and commitment of local NGO to support them. In other words, many of the 6,000 groups had already begun to mobilize savings and loans by the time they joined WEP in 1999, although many of them had primitive record-keeping until then. Although all groups started with basic savings and credit programs, the 1,500 stronger ones among them were trained to become VBs that kept records according to VB standards. Some VBs were also formed by combining two or more groups.

The local NGOs were the liaison between PACT and the 6,000 groups. The role as the liaison involved arranging logistics for regular training on the literacy, banking and advocacy programs, and evaluating groups and recruiting mobile staff to monitor the groups. The mobile staff recruited by the local NGOs visited the groups at regular intervals to answer their questions about record-keeping and group policies. All the groups became independent at the end of the project in June 2001. Although some groups and VBs still receive informal support from the NGOs that established them, most are on their own. PACT claims they are independent since they were trained by WEP to keep records and follow the principles of a good banking system.

### **3.2. Performance of Nepali VBs**

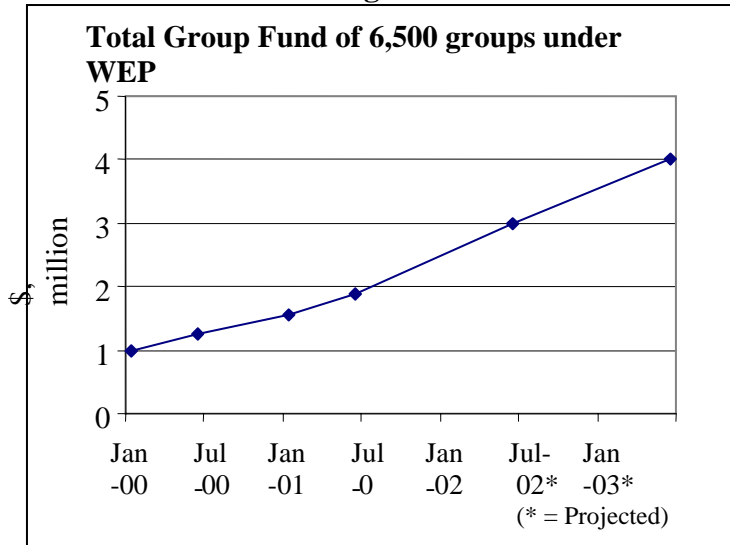
Unfortunately, not much data is available on VBs in Nepal since very little research has been done on them. Perhaps representative of many donor-funded development programs, the only publicly available data on WEP is in the form of a midterm and final project reports that have sparse data on the VBs. The final report of WEP (which was a 3-year program) published by PACT in 1998 says that savings



mobilization was the most remarkable aspect of WEP. It claims that the total savings of the 6,500 groups had increased by 190% between January 2000 and June 2001 (see Figure 1) and were projected to increase to \$5 million by 2004. By June 2001, more than 45,000 women had borrowed loans from their groups. By June 2001, 82% of the groups were keeping their own records without any external help.

Astoundingly, only 4% of the groups had made loans that defaulted. The default rate of VBs under WEP is not surprising relative to the low default rates of microfinance programs across the world. However, there are reasons why we would expect default rates to be higher than found in the survey. Firstly, groups under WEP have not had a long history of loans. Default rates are more likely to increase with the age of the group. Secondly, the report mentions that 2% of the groups were disbanding every 6 months. One of the reasons behind the disbanding could be high rates of default. Since disbanded groups were not a part of the survey, a sampling error could have given the impression of few defaults.

**Fig. 3.1**



The report also summarized the group characteristics as following:

**Table 3.2**

<b>VBs under WEP</b>	
Average group fund (June 2001)	\$613
Members with loans	46%
Average loan size	\$46
Savings in outstanding loans	98%
Average loan term	3.9 months
Frequency of loan payment:	
Weekly/biweekly	20.0%
Monthly	38.1%
End of loan period	41.7%
Groups with no late payments on current loans	88.1%

Groups with no defaulted loans since joining WEP	95.5%
Members who attended the last meeting	89%
Officers complete records without outside assistance	88%
Groups where one or more member has an external loan	14.3%

### **3.3. Interesting questions about VBs**

The apparent success of Nepali VBs raises interesting questions worth exploring further. Are savings-led microfinance programs more effective in reducing poverty than credit-led organizations like Grameen Bank? Do savings-led microfinance programs have greater chances of financial sustainability because members in these groups have more of a sense of ownership of their organization than their credit-only counterparts? How is it possible that 95.5% of groups have had no loan defaults and that 88.1% of the groups has no late installments on current loans? High repayment rates do not guarantee but are a necessary pre-requisite for the financial sustainability of microfinance organizations. Can these extraordinary repayment rates be sustained or are they going to diminish with time? If repayment rates diminish over time, what are the causes? Answers to these questions can indeed be very instructive for practitioners of microfinance.

### **3.4. Country context**

#### **3.4.1. Geographical characteristics**

Geographically, Nepal is a very diverse country – it rises from 100 meters above the sea-level to 8848 meters within 100 miles. However, almost all of Nepal’s VBs established under WEP are in the southern belt of the country called Terai. The southern belt of the country is a flat river-plain and is called the Terai. Terai occupies a quarter of the country’s area and about 50% of the country’s 26 million people live here. All of the four field study-sites – Chitwan, Nawalparasi, Jhapa and Nepalgunj – are in Terai. The East-West highway, which is the main artery for transportation in the Nepal, lies in Terai and passes through all the four field-study sites. All the four locations have are located along the highway. Some VBs are located in the towns but most are located outside of them but within a few miles of the highway.

**Map 1. Nepal in Asia**



**Map 2: Locations of field study: Nepalgunj, Nawalparasi, Chitwan, and Jhapa**



### **3.4.2. Economic background**

Terai is economically the most active region part of the country, by virtue of its fertile soil, flat topography, and access to water for irrigation. Since all the VBs are located near the highway, they have access to a market for the goods their members produce. However, agriculture (which employs 80% of Nepali population) is still the predominant occupation of all of these districts and across the VBs. Agricultural labor and petty trading are also common professions among VB members.

### **3.4.3. Political background**

Since 1991, Nepal has not only been a constitutional democracy but has also seen a lot of devolution of power to local authorities. Although the government in the capital Kathmandu has not been stable and a Maoist conflict has been raging in the north-

western part of the Kingdom, the Terai has been mostly unaffected by this turmoil. Since the guerilla tactics of the Maoists are ineffective in the plains relative to mountainous areas, their presence has been relatively sparse in Terai. Moreover, since VBs are self-reliant and donor-independent (in the long run), they have not generally been a target of Maoists. Business is as usual in the Terai and its VBs.

#### **3.4.4. Institutional background**

Nepal has been receiving US \$ 2-300 million per year in foreign aid since 1990. On top of this, international non-government organizations have also been pouring money into development programs in rural areas. Therefore, we should not be surprised to see these village banks receive support from other donors. Although all VBs were also supported by local non-governmental organizations (NGOs) while WEP was active, these organizations have been withdrawing their support since WEP ended in June 2001 mostly because of a lack of funds. As such, unless the local NGOs were able to bring development projects to VB groups, these groups have been on their own since 2001.

#### **3.4.5. Group formation**

Despite the fact that VBs are completely self-reliant in the long run, they are usually established with the help of some form of external intervention, be that government, local/international non-government agencies. In the case of Nepali VBs, the external intervention was from local NGOs that PACT had partnered with to deliver WEP. As with any informal organization, the sustainability of the organization depends largely on the commitment of the group members and group-cohesion. Realizing this, local NGOs that helped establish VBs gave group-members a lot of leeway in selecting group members setting the rules of the VB.

Since all VBs in Nepal are located in rural Nepal, where transportation is difficult but population is dense, VB members generally belong to the same neighborhood: the farthest member often lives less than 15 minutes away (on foot) from the meeting-place. Since PACT designed WEP for women, all VB members were strictly women. While most VBs require that all members be married and that no more than one woman from a family can be a member of the group, that rule is often broken. Group size also varies significantly, from 15 to 40 or more members.

Each VB has four officials: the President, the Treasurer, the Secretary, and the Controller. The President is usually the wife of a well-respected man in the society and the regular VB meetings take place in her house. The Treasurer is usually the most-well educated person in the group and the most important person since she keeps all the financial records of the group. Although PACT recommends that the officials be elected every year, groups rarely change officials, unless one of the officials migrates or is involved in some misbehavior (inside or outside the VB) that the rest of the group disapproves of.

During their meetings, members also decide on the penalty for late for missed savings or repayment. It is up to them to decide how much they will save every month and the size of the largest loan. They also collectively decide on the VB's savings and credit policies. VBs Once a week (or month, depending on the VB) the VB has a

“Banking Day” where all the members meet to save, take loans, make loan payments, and complete all the financial transactions. VBs also define their own procedures on how to conduct keep records, how to handle money and how to conduct banking operations. For example, groups generally specify that transactions must be made in front of all group members. They limit the amount of cash that can be stored in the cash-box. They also generally require that the records and cash be stored in a box that has three locks with keys held by the different VB officers. All the members have their own passbooks that are filled out during the banking day.

#### **3.4.6. Social cohesion**

Since VBs rely on social cohesion to maintain financial discipline, they place a lot of value in social interaction. The Banking Day is often an opportunity for members to chit-chat and catch up on others in the group. VBs often conduct group activities such as going to picnics, setting up a common stall in the *haat-bazaar* (temporary open-air markets that open only once a week), or going to each other’s social ceremonies such as marriage and cremation. If a group member complains that her husband is abusive or is planning to marry a second wife, the whole group goes to reprimand the husband. Therefore, VBs are much more than financial institutions: they are in essence social institutions whose social interaction helps to make its financial interaction sustainable. The disadvantage of social interaction is that rules are not always as followed objectively. Since the members empathize with each other’s plight, rules of VBs are often not strictly followed.

#### **3.4.7. Interest Rates**

One really interesting feature of VBs is that despite the fact that they can make their rules, almost all of them charge an interest rate of 24% per year. This is really anomalous because we would expect interest rates to be unique to each group because it results from the bargaining between individual group-members. The most frequently observed interest rates after 24% was 18% and 36%. The reason behind the numbers being a multiple of 6 is that doing so makes calculation of interest easier; a 24% interest rate is equivalent to Rs. 2 per Rs. 100 month. The loans vary from Rs. 500 to Rs. 10,000 (US\$1 = Rs.80) and if the loans are rounded off to the nearest 100, calculating the interest is made very simple. Ease of record-keeping is especially crucial in places where female literacy is very low.

## Chapter 4

### Field-study

#### 4.1. Data-collection

##### 4.1.1. Choice of sites:

The field work for this study was done in summer 2002. The first two weeks of the study were spent in Kathmandu, meeting with PACT officials, reading up on WEP, and, and arranging logistics for the field study. The actual field work was done in four locations in Nepal – Chitwan, Nawalparasi, Jhapa and Nepalgunj. Of the four locations, three weeks were spent in the first location, Chitwan and one week each for the three remaining sites. Chitwan and Nawalparasi were chosen partly because PACT was still conducting the last phase of WEP in these two districts. Since PACT had field officers in these two locations, contacting field VBs would be much easier. Jhapa and Nepalgunj, which lie at opposite ends of the country (see. Fig. 3.3), were chosen so that the field sites would be geographically well-distributed. Since Chitwan and Nawalparasi were chosen because PACT is still active in these two districts (unlike the other two sites), the repayment results of this study might be slightly better than typical VBs under WEP.

##### 4.1.2. Methodology

In Chitwan, the author lived in the guest house of a local NGO which had partnered with WEP to start, train, and monitor VBs during. One local woman who had previously worked for WEP as a trainer was hired for two weeks to take the author to different VBs in the area. In Nawalparasi and Jhapa, the author stayed with the managers of the local NGOs that had established, trained and monitored VBs during WEP. The managers themselves took the author around to different VBs for the first visit. Follow-up visits were done by the author alone. In Nepalgunj, the author stayed at a local hotel and was taken around by a local PACT contact to different VBs for the first visit.

The author visited each group at least twice. The first visit was generally with group officials and was used for introduction and to learn about the group's policies, history. The first visit was also used to glance at the records and borrow them so that they could be photocopied. The second meeting was with more members of the VB and was used to gather demographic data of group members and to ask any questions the author had about repayment. Where required, some officials and members of the VB were contacted for individual follow-up interviews.

Summer-time is also monsoon in Nepal. Because of the rains, monsoon is also the busiest time of the year in Nepal, where most people are farmers. Therefore, the group visits and interviews were made in the early morning or in the evening time when women were relatively free.

#### 4.1.3. Choice of sample size

The only criterion for choosing VBs for this study was that they had to have well-kept and complete records of their past and present transactions. Although VBs can generally keep very good records of their transactions, not all VBs had preserved all of their records since the first cycle of the group. PACT is partly to blame for this because it distributed loose-leaf forms, rather than bounded books, to train VBs on how to keep their records. Most VBs were still using the forms that PACT had distributed, although many were not diligent about storing previous records.

This constraint drastically lowered the number of VBs that could be included in this study. All the sites visited, first visits were made to at least ten VBs but could not be followed up with because they did not have complete repayment records of previous cycles. This is also the reason why only one group from Nepalgunj and one from Jhapa are included in this study.

#### 4.1.4. Data Tabulation

Repayment data from VBs included in this study was collected by initially photocopying all of their loan records. Since the groups were generally a few years old, copying the records was difficult but not prohibitive. The data from the photocopied records was then transferred into Excel spreadsheets. A spreadsheet was made for each group with as many rows as there were loans and columns such demographic data, loan size, time taken for repayment, age of group when loan was taken out, etc.

The study includes detailed data for 9 VBs which have 308 members and 1,937 loans that have been given out (and repaid) by them.

#### 4.1.5. Definition of delinquency rates

The VBs in the study were divided into two groups by whether they have weekly or lump-sum repayment. Except one group, four of the nine groups in this study that saves every week also requires weekly repayment. Repayment data was calculated separately for the two categories because of the difficulty of finding a common definition for repayment rate.

For a VB that requires repayment of loans in **weekly installment**, “**on time**” repayment is defined percentage of loans that were repaid in complete installments during every single week of the period of the loan. “**Official delinquency**” is defined as the percentage of loans that were not repaid by the end of the loan-period. “**Unofficial delinquency**” is defined as the percentage of loans that were repaid by the end of the loan period, *but* some of its installments were missed or were incomplete. This is an important distinction to make because a missed or an incomplete installment means that other members will not be able to borrow a new loan. An “unofficial delinquency” can also increase chances of the loan not being repaid since the member will have to repay larger installments in the future. Also, the morale of the group can also be lowered if they feel that the loan discipline of the VB is not being maintained.

For a VB that allows **lump-sum repayment** of loans, “**on time**” repayment and “**official delinquency**” have the same meaning as for VBs that meet weekly. “Unofficial delinquency,” however needs a slightly different definition. Since borrowers in these VBs can repay their loans in lump-sum at the end of the loan-period, calculating delinquency in terms of missed or incomplete repayment does not make sense. Therefore, those loans were considered “**unofficially delinquent**” which were repaid at the end of the loan-period but were borrowed

the same day. Although the record shows that the member repaid the loan, often times the woman borrowed money from another member or an outside source to repay loan for the day. This distinction is essential to make because an immediate borrowing of a repaid loan increases chances of the member not repaying the loans. Doing so also avoids other members from borrowing the loan and can cause discord between group members if more loans are demanded that day than are repaid.

## 4.2. Results

Firstly, it is important to emphasize that *none* of the nine VBs had any loan that it could not recoup<sup>6</sup>. This is indeed an astounding result and in some sense corroborates the findings of evaluations of microfinance programs all over the world because most microfinance programs financed and operated by the government in previous years had a lot of irrecoverable loans. However, upon closer inspection, we realize that the results are not as rosy as have been presented by microfinance programs all over the world (see appendix for detailed repayment data on each of VB):

<b>Repayment Data for VBs with Weekly Repayment</b>			
VB	On time	Unofficial delinquency <sup>1</sup>	Official delinquency <sup>1</sup>
Jagriti VB	44.7%	43.6%	<b>11.7%</b>
Subhakamana VB	5.7%	86.9%	<b>7.4%</b>
Srijanshil VB	31.3%	55.0%	<b>13.8%</b>
Average	27.2%	61.8%	11.0%

<sup>1</sup>As calculated from the group's loan records in this study. See p. 51 for definition of "official delinquency" and "unofficial delinquency."

<b>Repayment Data for VBs with Lump-sum Repayment</b>			
VB	On time	Unofficial delinquency	Official delinquency
Aama VB	49.7%	42.3%	<b>8.0%</b>
Sauraha VB	19.8%	77.8%	<b>2.2%</b>
Shiva Shakti VB	76.3%	11.9%	<b>11.9%</b>
Tharu Mahila VB	60.0%	10.0%	<b>30.0%</b>
Prakash VB	34.5%	15.5%	<b>50.0%</b>
Samjhana VB	33.3%	50.1%	<b>16.7%</b>
Average	45.6%	34.6%	19.8%

<sup>6</sup> Of the roughly 40 VBs visited by the author in the field study, only *one* VB had a loan that was not repaid at all. That case was in Jhapa, where the member was not a permanent resident of the locality (in fact, was an Indian citizen). The member had borrowed Rs. 15,000 (~US\$ 200) for investment in the carpentry shop that she worked with her husband. The business was not doing well and the family decided to run away to India. The loan was never repaid, but the VB since has a new policy that all of its members should be Nepali citizens.



The result that leaps out of these tables is that a lot of loans are not being repaid on time. 11% of loans of weekly VBs and 19.8% of loans of monthly VBs were not repaid by the end of the loan period. By any definition of delinquency, these loans would be considered delinquent. These rates in themselves are very high in comparison to the 95-98% repayments that have been published by most MFIs. If we consider delinquent loans those loans that had a missed or incomplete repayment or were immediately borrowed after being repaid, the number shoots through the ceiling. If we were to calculate on-time repayment as loans that were repaid in complete installments and not borrowed instantly, the repayment rate for weekly-VBs would be 27.2% and 45.6% for monthly-VBs.

<b>Group data on VBs</b>								
	Members	Interest rate (per year)	Loan maturity (months)	Type of saving	Age of group (months)	Group Assets (Rs) <sup>1</sup>	Savings per month (Rs)	Voluntary Savings
Prakash VB, Chitwan	27	24%	4	Weekly	59	150,000	60	No
Tharu Mahila VB, Chitwan	16	24%	3	Monthly	56	100,000	100	No
Aama Samuha VB, Chitwan	25	24%	3	Monthly	33	94,000	50	No
Sauraha Mahila VB, Chitwan	43	24%	1	Monthly	49	153,000	60	No
Shiva Shakti VB, Chitwan	30	24%	3	Monthly	42	14,300	100	No
Samjhana VB, Nawalparasi	35	24%	4	Weekly	26	89,000	60	Yes
Srijanshil VB, Nawalparasi	31	24%	4	Weekly	19	55,000	80	Yes
Jagrati VB, Jhapa	33	24%	4	Weekly	20	450,000	100	Yes
Subhakamana VB, Banke	38	24%	4	Weekly	26	166,700	80	Yes

<sup>1</sup>Rs. 77.70 = US \$ 1 (July 2002)

<b>Loan data on VBs</b>				
	Average loan period (months)	Average loan size (Rs.)	Number of loans per person <sup>1</sup>	Loans disbursed and repaid so far
Prakash VB, Chitwan	5.2	3,562	6.2	161
Tharu Mahila VB, Chitwan	3.5	2,868	3.7	59
Aama Samuha VB, Chitwan	2.8	4,224	7.4	202
Sauraha Mahila VB, Chitwan	1.0	2,923	24.3	1,020
Shiva Shakti VB, Chitwan	3.02	2,803	1.87	56
Samjhana VB, Nawalparasi	2.83	3,214	3.09	96
Srijanshil VB, Nawalparasi	2.78	2,323	2.58	80
Jagrati VB, Jhapa	2.45	11,128	3.0	94
Subhakamana VB, Banke	2.75	5,307	3.21	122

<sup>1</sup>Throughout the life of the bank.

Demographic data on VBs								
	Land holding <sup>1</sup>	Average Education <sup>2</sup>	% with education <sup>4</sup>	Married members	Other groups <sup>3</sup>	Average age	Caste distribution	Profession <sup>3</sup>
Prakash VB, Chitwan	8	0.92	15%	93%	56%	33	100% Chaudhari <sup>4</sup>	Agriculture 74%, Day-labor 11%
Tharu Mahila VB, Chitwan	15.5	7.7	19%	94%	38%	33	100% Chaudhari	Agriculture 81%, Day laborer 19%
Sauraha Mahila VB, Chitwan	14.7	1.9	23%	98%	74%	38	56% Chaudhari, 26% Brahmin	Shop 23%, Agriculture 16%, Agribusiness 16%
Shiva Shakti VB, Chitwan	12.3	3	30%	100%	77%	32	Chaudhari 70%, Brahmin 23%	Agriculture 40%, Shop 20%, Day labor 17%
Samjhana VB, Nawalparasi	6.1	5.6	59%	77%	46%	27	80% Brahmin	Agriculture 26%, Agribusiness <sup>3</sup> 23%, Shop 9%
Srijanshil VB, Nawalparasi	5.1	4.1	52%	94%	13%	34	Brahmin 39%, Chhetri 26%, Newar 16%	Agriculture 29%, Shop 23%, Day labor 23%
Jagriti VB, Jhapa	NA	8.7	90%	85%	45%	31	27% Brahmin, 39% Newar, 12% Chhetri	Shop 52%, Clerk 9%, 6% Agriculture
Subhakamana VB, Banke	NA	4.9	58%	92%	45%	32	Brahmin 68%, Chhetri 10%	Agribusiness 37%, Shop 18%, Agriculture 11%

<sup>1</sup> Average land holding in katthas(1 kattha = 0.08 acres).

<sup>2</sup> Average years of education of members with formal education

<sup>5</sup> Nepal's adult literacy rate is 40 % (1999).

<sup>3</sup> Percentage of members in other microfinance organizations.

<sup>4</sup> Chaudharis are indigenous to Chitwan and are considered lower caste.

<sup>3</sup> The percentages don't add up to 100 because some members are housewives while others students, teachers, clerks, etc.

<sup>3</sup> Agribusiness: poultry, dairy, goat-raising etc.

<b>Repayment rates of Jagriti VB, Jhapa.</b>		
<b>Policy: Weekly repayment, max loan maturity: 16 weeks</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Repaid all installments on time	42	44.7%
Unofficially delinquent <sup>1</sup>		
a. Only missed repayment (average missed installments = 29%)	41	43.6%
b. Only incomplete repayment	0	
c. Missed repayment and incomplete repayment during loan period	0	
<b>Total unofficially-delinquent</b>	<b>41</b>	<b>43.6%</b>
Officially-delinquent <sup>1</sup> (unable to complete repayment on time)	11	11.7%
Average length of overdue loans: 2.18 weeks		
<b>Total loans</b>	<b>94</b>	<b>100.0%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<b>Repayment rates of Subhakamana VB, Banke</b>		
<b>Policy: Weekly repayment, max loan maturity: 16 weeks</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Repaid all installments on time	7	5.7%
Unofficially delinquent <sup>1</sup>		
a. Only missed repayment (average missed installments = 60%)	77	63.1%
b. Incomplete repayment (but didn't miss any installment) avg incomplete: 14%	6	4.9%
c. Missed repayment and incomplete repayment during loan period	23	18.9%
<b>Total unofficially-delinquent</b>		<b>86.9%</b>
Officially-delinquent <sup>1</sup> (unable to complete repayment on time)	9	7.4%
Average length of overdue loans: 2.89 weeks		
<b>Total loans</b>	<b>122</b>	<b>100.0%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<b>Repayment rates of Srijanshil VB, Nawalparasi</b>		
<b>Policy: Weekly repayment, max loan maturity: 16 weeks</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Repaid all installments on time	25	<b>31.3%</b>
Unofficially delinquent <sup>1</sup>		
a. Only missed repayment (average missed installments = 48%)	10	12.5%
b. Incomplete repayment (but didn't miss any installment) avg incomplete: 47%	12	15.0%
c. Missed repayment and incomplete repayment during loan period	22	27.5%
<b>Total unofficially-delinquent</b>	<b>44</b>	<b>55%</b>
Officially-delinquent <sup>1</sup> (unable to complete repayment on time)	11	13.8%
Average length of overdue loans: 3.18 weeks		
<b>Total loans</b>	<b>80</b>	<b>100%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<b>Repayment rates of Samjhana VB, Nawalparasi</b>		
<b>Policy: Lump-sum repayment, max loan maturity: 16 weeks</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Loan repaid on time and not renewed	32	<b>33.3%</b>
Unofficially delinquent <sup>1</sup>		
a. Repaid on time but same amount loaned immediately	11	11.5%
b. Repaid on time but lower amount loaned the same month	16	16.7%
c. Repaid on time but higher amount loaned the same month	21	21.9%
<b>Total unofficially-delinquent</b>	<b>48</b>	<b>50.1%</b>
Officially delinquent <sup>1</sup>		
a. Not repaid on time but not renewed	10	10.4%
b. Not repaid on time, renewed immediately (average delay: 3 wks)	6	6.3%
<b>Total officially-delinquent</b>	<b>16</b>	<b>16.7%</b>
<b>Total loans</b>	<b>96</b>	<b>100.0%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<b>Repayment rates of Shiva Shakti VB, Chitwan<sup>7</sup></b>		
<b>Policy: Lump-sum repayment, max loan maturity: 3 months</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Paid in 3 months or less and not renewed	45	<b>76.3%</b>
Unofficially delinquent <sup>1</sup>		
a. Repaid in 3 months but same amount loaned the same month	2	3.4%
b. Repaid in 3 months but lower amount loaned the same month	3	5.1%
c. Repaid in 3 months but higher amount loaned the same month	2	3.4%
<b>Total unofficially-delinquent</b>	<b>7</b>	<b>11.9%</b>
Officially delinquent <sup>1</sup>		
a. Repaid after 3 months but not renewed	7	11.9%
b. Repaid after 3 months and renewed	0	0%
<b>Total officially-delinquent</b>	<b>7</b>	<b>11.9%</b>
<b>Total loans</b>	<b>59</b>	<b>100%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<b>Repayment rates of Aama VB, Chitwan</b>		
<b>Policy: Lump-sum repayment, max loan maturity: 3 months</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Paid in 3 months or less and not renewed	94	<b>49.7%</b>
Unofficially delinquent <sup>1</sup>		
a. Repaid in 3 months but same amount loaned the same month	18	9.5%
b. Repaid in 3 months but lower amount loaned the same month	35	18.5%
c. Repaid in 3 months but higher amount loaned the same month	27	14.3%
<b>Total unofficially-delinquent</b>	<b>80</b>	<b>42.3%</b>
Officially delinquent <sup>1</sup>		
a. Repaid after 3 months but not renewed	9	4.8%
b. Repaid after 3 months and renewed	6	3.2%
<b>Total officially-delinquent</b>	<b>15</b>	<b>8.0%</b>
<b>Total loans</b>	<b>189</b>	<b>100%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<sup>7</sup> Although Shiva Shakti VB is 42 months old, it does not have data on its transactions between the 20<sup>th</sup> month and the 33<sup>rd</sup> month.

<b>Repayment rates of Tharu Mahila VB, Chitwan</b>		
<b>Policy: Lump-sum repayment, max loan maturity: 3 months</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Paid in 3 months or less and not renewed	30	<b>60.0%</b>
Unofficially delinquent <sup>1</sup>		
a. Repaid in 3 months but same amount loaned the same month	2	4.0%
b. Repaid in 3 months but lower amount loaned the same month	3	6.0%
c. Repaid in 3 months but higher amount loaned the same month	0	0.0%
<b>Total unofficially-delinquent</b>	<b>5</b>	<b>10.0%</b>
Officially delinquent		
a. Repaid after 3 months but not renewed	12	24.0%
b. Repaid after 3 months and renewed	3	6.0%
<b>Total officially-delinquent</b>	<b>15</b>	<b>30.0%</b>
<b>Total loans</b>	<b>50</b>	<b>100.0%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<b>Repayment rates of Sauraha Mahila VB, Chitwan</b>		
<b>Policy: Lump-sum repayment, max loan maturity: 3 months</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Paid in 1 months or less and not renewed	195	<b>19.8%</b>
Unofficially delinquent <sup>1</sup>		
a. Repaid in 1 months but same amount loaned the same month	314	31.9%
b. Repaid in 1 months but lower amount loaned the same month	208	21.1%
c. Repaid in 1 months but higher amount loaned the same month	244	24.8%
<b>Total unofficially-delinquent</b>	<b>766</b>	<b>77.8%</b>
Officially delinquent		
a. Repaid after 1 months but not renewed	18	1.8%
b. Repaid after 1 months and renewed	4	0.4%
<b>Total officially-delinquent</b>	<b>22</b>	<b>2.2%</b>
<b>Total loans</b>	<b>983</b>	<b>100.0%</b>

<sup>1</sup> See page 51 for definitions of different rates.

<b>Repayment rates of Prakash VB, Chitwan</b>		
<b>Policy: Lump-sum repayment, max loan maturity: 4 months</b>		
<b>Category</b>	<b># of loans</b>	<b>Percentage</b>
Paid in 4 months or less and not renewed	48	<b>34.5%</b>
Unofficially delinquent <sup>1</sup>		
a. Repaid in 4 months but same amount loaned the same month	7	5.0%
b. Repaid in 4 months but lower amount loaned the same month	0	0.0%
c. Repaid in 4 months but higher amount loaned the same month	14	10.1%
<b>Total unofficially-delinquent</b>	<b>21</b>	<b>15.1%</b>
Officially delinquent		
a. Repaid after 4 months but not renewed	38	27.3%
b. Repaid after 4 months and renewed	32	23.0%
<b>Total officially-delinquent</b>	<b>70</b>	<b>50.0%</b>
<b>Total loans</b>	<b>139</b>	<b>100.0%</b>

<sup>1</sup> See page 51 for definitions of different rates.



### 4.3. Comparison with previously published results

PACT's Women's Empowerment Program (WEP) has received a lot of acclaim in the development industry in the recent years. Its promotional brochure (PACT 2002) for WEP published in July 2002 summarizes the successes of WEP by claiming that between 1998 and 2001:

- 89,000 women participated in WEP under 6,000 economic groups, 1,500 of which were village banks<sup>8</sup> (VBs).
- No more than 4% of the groups experienced default
- Total savings increased from \$0.72 million to \$1.8 million
- Total annual income increased from \$1.2 million to \$10 million
- The number of women who could read and write within the program tripled
- Over 40,000 grassroots campaigns were carried out on social issues

PACT's report does not specify how the magical 4% was calculated; neither does it specify the definition of default it uses. Presumably, PACT calculated these numbers from its periodic evaluation reports that it receives from the field. The author got hold of some of these periodic evaluation forms for Chitwan. Of the evaluations of sixteen VBs, fifteen reported they did not have *any* over-due loans. The sixteenth VB did not give any number. Five of the sixteen VBs whose field evaluations were obtained are included in this study but none of them has a repayment rate that is nearly close to perfect.

In August 2000, Jeffrey Ashe (Visiting Scholar at the Institute for Sustainable Development at Brandeis University) wrote a mid-term evaluation of WEP, in which he says that of the 41% of 123,493 women under WEP had taken out loans and that "97.4% of those women were paying them on time" (Ashe 2000, p.3). Ashe does not mention how the repayment rate was calculated except that his report is based on seven days of field work with ten VBs and ten days of interviews with other staff of PACT and the Central Bank of Nepal. However, the repayment rate is proposed as one of the outstanding features of VBs in Nepal.

In October 2001, Jeffrey Ashe and Lisa Parrott (Technical Advisor in Microfinance at Freedom from Hunger) published the final impact evaluation of WEP. Ashe and Parrott estimated the following numbers on loan performance:

<b>Repayment data from Final Report of WEP, October 2002</b>	
Percent of groups with defaulted loans since joining WEP	4.5%
Percent of groups with late payments on current loans	11.9%

These numbers were collected from a survey of 200 VBs that were selected pretty much randomly. As we can see, the repayment data is not too detailed and were responses to the following questions:

1. How many loans that the group ever made have never been repaid?

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<sup>8</sup> The difference between economic groups and VBs is that VBs are the stronger (in terms of group unity, savings and repayment performance). Unlike economic groups, VBs also received formal training from PACT on record-keeping.

2. Of the current loans, how many women are behind schedule in repaying loans?

The questionnaire does not clearly define “late repayment” and “default”; neither does it ask what *percentage* of the VB’s loans have been repaid late. Although 4.5% of groups have had defaults, the magnitude of total defaults could be much higher if some of those groups have high default rates.

## Chapter 5:

# Discussion and Conclusions

### 5.1. Interpretation of results

The results of this study both corroborate and contradict previous studies on delinquency rates of VBs and other MFIs. On the one hand, this study supports results that other studies have found – that VBs rarely, if they ever do, lose their loans. All the nine groups in this study had **defaults rates** – percentage of loans that were irrecoverable – of 0%. If the “repayment rates” of 90% and above published by most MFIs represent the percentage of loans that were recovered, the results of this study are perfectly congruent with, perhaps stronger than, those results. On the other hand, this study discovered a pattern that no previous study has noticed. Although the VBs in this study have never lost loans, they have very high **delinquency rates** – percentage of loans whose (installment or complete) payments were not made on time. It has found that recovery rates of 100% may mask a completely different reality. This chapter will explore the causes behind and the dangers of high delinquency rates and what we can do to lower delinquency rates.

In a sense, we do not have much to worry about: the savings of the poor are safe with VBs since all the loans they issue are recovered sooner or later. But we need to be concerned about delinquencies in VBs much more than in other MFIs. VBs are informal institutions that are not supported by external organizations; they can only survive in the long run if their members are happy with their service and so have an interest in sustaining them. AVB with high delinquencies will lose credibility among its members. Delinquencies will also slow rotation of the loan portfolio – disappointing some members because they do not have access to loans as much as others do. High delinquencies can create discord among members and even threaten the break-up of the VB. And of course, a delinquent loan also has increased chances of defaulting.

How are we to make sense of this study’s contradictory findings: that the VBs have extremely high delinquencies but no defaults? Perhaps a good place to start would be to hear what the members of VBs themselves have to say. Only when we hear their perspectives can we understand why this finding makes sense. In the next section of this chapter, I will present the perspectives of VB members towards repayment and delinquencies. We will see that they see these issues in a completely different light than we do. Specifically, we will see that VBs are social institutions in addition to financial institutions. Once we realize this fact, we will begin to understand why VBs have high delinquencies and tolerate them.

## 5.2. The VB perspective

### 5.2.1. Why do VBs have no defaults?

The biggest reason why VBs do not have many defaults is that the members have interactions beyond their financial transactions in the VBs. A VB's members live very close to each other – generally within a mile of each other. Some of them are related and others are just neighbors whom they have known for a long time. Since agriculture is the major profession of most VB members, they help each other during the planting and harvesting seasons. They go to each others' homes to celebrate festivals or for marriages, births, and deaths. They seek each other if someone in their family is sick or when they need financial help. In essence, they share so much of their lives with other members of the group.

Since members have so many interactions with each other, they care a lot about how other members of the society perceive them. If other members consider someone to be untrustworthy, she might be ostracized and excluded from all social interactions. They are careful about their own actions because if their actions are incongruent with social standards, they might lose the privileges of their membership in the society. The biggest danger for women is to lose face in society. And defaulting on a loan does exactly that: makes a member lose her shame in society. Nirmala Chaudhari of Sauraha VB, Chitwan put it:

“What I am most afraid of is losing face in society. Once I borrowed a loan for my brother from our VB but he didn't return it to me on time. I couldn't sleep the night before the VB meeting. I was really embarrassed at the VB meeting because I didn't have an answer for why I couldn't repay the loan. I went back to my brother and told him that I felt really ashamed in front of the group; he returned the money the following month.”

Members of a VB are also generally permanent residents of the locality – they either have a house or a permanent job in the area. As such, members not only know each other very well, but they also know that no one will not run away without paying the loan. If the group senses that they might lose a loan, they all go in a group to confront the person. Padam Kumari Adhikari of Shiva Shakti VB, Chitwan recalls an incident when they had to do that:

“We had given a loan of Rs. 5000 to the husband of a member because he came to our VB meeting and told us that he wanted to buy a license to drive. But it turned out, he drunk away that money and never bought a license. Even 11 months after the loan was taken out, he still didn't pay the loan. But the wife was the one who had to repay the loan [since she was the member of the VB], so she came to the group and requested us to scold her husband. All of us in the group went to the husband's home and told him that he would lose face if he didn't repay the loan. We told him that the money belonged to the group and not to any individual. There was no way he could run away from the village so he soon gave money to his wife to repay the loan.”

Of course, VB members get concerned that someone will not repay loan because they would lose their savings if that happened. But they are also concerned that if members do not repay the loans, their group might fall apart. Laxmi Chaudhari of Mahila Utthan VB in Chitwan says:

“We make sure that the loans are repaid on time because that is the rule of the group. If people stop repaying the loans, our group will break-up.”

VB members often have a feeling of solidarity with other members and feel that they get a lot by being a member of the VB. They get to hear about what is happening in the outside world. They get a break from their household chores when they attend the VB meeting and when they can borrow loans for their husbands or other members of the family, they feel that they get more respect at home. Since women see all these benefits from being a member of the group, they want to make sure that the group lasts as long as it can. They will do whatever they can to make sure that no one defaults on loans because if someone does so, the group will break up in discord.

The fact that all the funds of a VB comes from its members’ savings means that the members have an added incentive to make sure that no loans are defaulted on. As one member of Milijuli VB, Chitwan put it:

“We have saved our money with so much difficulty. How can we let someone just run away with it?”

Herein lies a big difference between VBs and other MFIs – members have a much bigger stake in their performance and sustainability. Women in Nepal generally do not save for the future partly because they are not the ones in control of the financial resources of a household and partly because no reliable institutions exist to keep their savings. One great thing about VBs is that they have given women a chance to take a more active role in allocating the financial resources of their home and also provided a place to put their savings. Since members do not want to lose their coveted savings, they will employ whatever tactics they can to make sure that a borrower will not default on a loan.

### **5.2.2. Why do VBs have high delinquencies?**

Economists give two standard explanations for why borrowers do not repay loans in rural financial markets: because borrowers are genuinely unable to repay their loans, or because it is not in their interest to repay the loans (Ray, p.529). However these reasons alone do not sufficiently explain the high rates of delinquencies in this study. The problem with the standard economic explanation is that it assumes that borrowers themselves use the loans that they borrow. But in rural societies, individuals do not alone decide how the loan is going to be used; relatives, spouses and other members of the family often decide how the loan will be used. In addition, we have to realize that the VBs that they belong to are institutions that are prone to weaknesses. Therefore, this section will examine their social sphere and institutional aspects of VBs, in addition to the individual characteristics of borrowers, to try to explain why VBs have high delinquencies.

Perhaps we should start with the borrowers themselves – who often have to *unintentionally* miss payments on loans. This unintentional delinquency could be caused by several things. Unless an investment project is completely safe (which it rarely is), there are probabilistically bound to fail some times and succeed other times. When investment projects fail (and their source of income is not diversified), borrowers have no other option but to miss a payment on the loan. Sometimes, borrowers invest on projects that will not give payoffs immediately. Agricultural investment is an example. A farmer might borrow a loan to buy fertilizer for her fields, but she will not be able to repay the loan until the crop is harvested several months later. Unless the farmer has other sources of income, she is bound to miss some payments on her loan. Another interesting case is that of loans that are spent on “unproductive causes” such as consumption, repaying previous loans, or even education. Although these things might not generate immediate income, they are valuable from borrowers’ perspective; nevertheless, they will have to miss payments on the loans that have to be paid in the immediate run.

Women in VBs also *intentionally* miss payments on loans. The danger to VB members of missing payments is that they may not be given loans in the future if they do so. However, most women belong to more than one VB or other similar institutions that lend them money<sup>9</sup>. Therefore, the threat that borrowers will not get access to loans in the future if they miss payments is not credible. What is more interesting, women in VBs often miss loans *because* they know each other so well. As an official of Sungabha VB, Banke put it:

“It is really difficult for us to ask [members who are our] neighbors to repay on time because they are often our relatives and women older than us. Sometimes we also know why they can’t repay on time. We don’t want to speak harsh words with them, although we know that doing so is necessary to collect loans.”

All of this assumes that women themselves are the ones who decide how the loans are used; they either cannot or will not repay the loans. However, this assumption is incorrect in rural societies where decisions to use financial resources are often made in consultation with other members of the household. Baisakhiya Chaudhari, who is a member of Tharu VB in Chitwan, is a typical example. Baisakhiya is 24 years old and lives with her two children, parents-in-law, and brother-in-law. Her family’s primary occupation is agriculture. Baisakhiya saves regularly in the VB by asking her elders for money or by selling their farm products. Since she is a member of the VB, she is also responsible for ensuring that the loans she borrows are repaid on time. However, she always borrows her loans in consultation with other members of her family. The first loan that she borrowed from the VB was meant for her brother-in-law, who wanted to take karate lessons in the city. She took out her second loan for her husband who was going to go abroad for employment. She repaid the first loan by selling grains from her farms and intends to repay her second loan once her husband starts sending money.

Knowing that women are the ones who save but do not always make the decision to use the loan is disappointing for a program that is named Women’s Empowerment

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<sup>9</sup> The common microfinance programs in the areas where the field study was done are replicas of Grameen Bank, rural development banks run either by the government or NGOs, and other microfinance programs geared towards women and run by the Nepali Ministry of Women and Social Welfare.

Program. A lot of women are frustrated themselves, and Bidhya Timilsina, who herself is a member of a VB and was once employed by PACT to train other VBs says:

"After we set up the bank, women themselves have been able to borrow. But most of the time, the loan is used in consultation with the male members of the family. Even when that happens, it is women who are responsible for repaying the loans."

Although women often borrow loans for other members of their household, they often get betrayed by them and have to default on their loans. Indira Chaudhari of Prakash VB faced such a situation:

"I borrowed a loan for my brother-in-law. But when the time for repayment came and I asked him for the money, he said 'I don't have the money to repay the loan.' I talked to my husband but he told me, 'Go talk to him [my brother]. He is the one you borrowed the money for. I eventually managed to repay the loan although I could not repay it the first time it was due.'"

Although the individual and social context of VBs are important in understanding the repayment scenario of VBs we should also study the institutional strengths and weaknesses of VBs to get a complete picture. Three factors determine the institutional strength of VBs: the morale of its leadership, the quality of its record-keeping, and strictness with which its rules are followed. Weakness in any of these aspects could increase delinquencies in the VB.

The officials of a VB – president, treasurer, secretary, and the controller – play a vital role in the day-to-day functioning of the VB. They enforce the rules of the VB and keep track of loans disbursed, loans collected, savings deposited, and savings withdrawn. They are the first people to notice any delinquencies and to do something about it. Therefore their morale is crucial to the performance of the VB. However, none of the officials are paid for their work. Officials of some VBs were okay with the fact that they were not being paid since they felt that they were doing service to their group. By being elected an official, they were also being recognized as valuable members of society. In essence, they felt honored to be working as officials of the VB. The guidelines of Village Banking suggest that the officials be re-elected every year. However, this is rarely the case since few members of VBs are capable of writing and keeping good records (which all officials have to do). Many officials that the author talked to were disappointed with the fact that they were not being replaced and that they had to spend a lot of time keeping the records without being compensated. An official of Jivan Jyoti VB in Banke vented her frustration saying:

"We asked other members to help out but no one comes up, even if they are capable of helping. When we tell them that we should have elections, they tells us 'why should we have elections since we will vote for you anyway?!'"

When asked why they did not ask to be paid, officials often responded that members wanted to save as much of the savings as they could. Although economic theorists predict promising rewards of peer-monitoring, they neglect the fact that

monitoring is very costly. Monitoring every single payment of every single loan in a VB of 25 people can be very time-consuming for VB members. What ends up happening is that members allow some members to get away with delinquencies. Other members (and the officials) speak up only when they notice that the loan has been delinquent for a long time and is in danger of being lost. As explained in 5.2, members are confident that their loans will not be irrecoverable; when this confidence is combined with the cost of monitoring delinquencies, the result is that VBs have lots of delinquencies.

Another determinant of the strength of a VB as an institution is its record-keeping. A VB can monitor its loans only if its officials have an accurate picture of the VB's loan portfolio, which requires that all the records of the VB are neatly stored and easily accessible. However, most VBs that this author visited neither keep good records nor store previous records safely. This has several causes. VBs do not have designated offices where they conduct their transactions and keep their records; they meet at the most convenient place and the treasurer usually stores the records at her home. An official of Jagriti VB, Banke expressed a commonly-held attitude towards record-keeping:

“We didn't feel the necessity to keep old records because there wasn't enough space to store it safely. If office-bearers change, we'll tell them the credit history of each member.”

Many VBs do not even have appropriate forms with which to keep their records. Using computers to store their records is out of question because these VBs have few transactions and people who can use computers are difficult to find in the local area. PACT trained VBs to keep records in forms that they printed and provided to VBs while WEP was active. VBs are running out of these forms but cannot buy registers to keep their records in the market. This has meant that VBs often do not keep as many records as they were trained by PACT. PACT is partly to blame for this because it neither foresaw this nor prepared VBs to deal with this. The consequence of this has been that VB officials cannot track all loans well to identify and follow up on delinquencies.

The rules of any institution determine how well it is run; a VB that does not penalize delinquencies heavily is bound to have many delinquencies. Most VBs in this study do not have strict rules against delinquencies, partly because they did not expect that delinquencies would become a problem when the group was established. And making new rules is difficult because delinquent members who will be penalized by the new rules may be upset. Sumnima VB, Jhapa had very low delinquencies when the VB was young but the problem increased as the VB became older. The officials wanted to make the rules strict to discourage delinquency, but one of the officials says:

“Some time ago, we wanted to penalize members who missed payment on their loans, but the members who were late that week objected by saying ‘why do you have to implement new rules the very time that I am late?’ We ended up sticking to the old rules.”

Groups vary drastically according to how strict their rules are towards delinquencies, but a VB is likely to have high delinquencies if the penalty of delinquencies is not high or if the officials do not implement the rules strictly.



### 5.2.3. Are high delinquencies a problem?

The tables in pages 59-60 show that the VBs in this study have pretty high delinquency rates. Less than a third of VBs with weekly repayment schedules and less than a half of VBs with lump-sum repayment schedules have perfect repayment records. The rest either had missed payments, incomplete payments, or were rescheduled. These are indeed surprising results and are different from previously-published evaluations of VBs and other microfinance programs.

If these VBs were measured according to the most commonly measures of loan collection rates, only 11% loans of weekly VBs and 20% of loans of monthly VBs would show up as delinquent. However, upon closer scrutiny, we notice that more than 60% of the loans of weekly VBs have had incomplete or missed payments. Also, 35% of the loans of monthly VBs show up as having been repaid on time but were actually lent out the same day as they were repaid. VBs are completely aware of this “instant re-lending” phenomenon. Members borrow money from their neighbors, relatives, or other sources for a day, or even a few hours, to repay their loans. VB officials are very strict in implementing the rule that cash be paid, so that they can keep their records clear, although they allow members to re-borrow the same amount. This way, both officials and borrowers are happy: officials do not need to mark delinquencies in their records while borrowers can extend their loans without being labeled delinquent.

Now the question arises: are VBs concerned that most of their members are missing installments, making incomplete installments, and instantly re-borrowing? As it turns out, the answer is no! There are two reasons why members and officials of VBs do not consider these issues as problematic and dangerous to the threat to the existence of the VB in the long run. *Firstly*, everyone is confident that they will recover their loans; and they tolerate delinquencies as long as the loans are not lost. *Secondly*, members of VBs consider that the cost of delinquencies worth bearing given the benefits that they get from the VBs’ existence.

Officials of VBs often feel that it is not right to be very strict on members of their VBs who miss their loan payments. We saw in section 5.2 why women are unlikely to borrow on VB loans. Since VB officials are fully aware of this, they are often lax about collecting delinquent loans. As Saraswati Chaudhari, the president of Tharu Mahila VB, Chitwan put it:

“Everyone faces difficulties [in repaying loans] sometime or other. If we don’t help each other out in the village, who will?”

Officials of VBs see tolerating delinquencies as helping other women in need. When members have to miss payments or have to reschedule their loans, the officials often reasons why the member is doing so. Some member of the borrower’s family might be sick, her business could have done badly, or she might just be waiting to reap her harvest in a few more weeks. Chandrakala Neupane, expresses her dilemma as the treasurer of Subhakamana VB, Banke in the following way:

“There is a practical and social side to these things. We could collect the loans on time if we really wanted. But everyone in the village is living a difficult life. And we are all like sisters.”

Another reason why VBs tolerate delinquencies is because their members see the VBs as serving primarily a social purpose rather than a financial purpose. VB members do not see the necessity to follow the exact rules of village banking or to maintain the highest standards of banking since they are getting a lot of value out of the VBs already. Becoming members of the VBs has helped women become more active members of their families by making them financially independent. Becoming members of the VBs has given them a sense of solidarity; they feel empowered not only personally but also in the socially. When an 11-year-old girl was raped in Chitwan a few years ago by two men (one of them a relative) local women from the Mahila Utthan VB caught the two men, tied them up and hired two tractors to bring them to the police. In Dumkibas, women from the Bhrikuti VB are working with another nearby women's bank to improve the dirt road that passes through their village because heavy trucks have ruined it. Stories of empowerment like this can be heard in almost every VB; and these stories of success of VBs in the social sphere have made them tolerant of financial dangers such as high delinquency rates.

### **5.3. The danger of high delinquencies: Shiva Shakti VB**

The previous section stressed the differences between defaults and delinquencies, saying that a defaulted loan cannot be recovered, while a delinquent loan is a loan that not been repaid on time but may or may not be recovered. As stark as this distinction may sound, a thin line separates a default from a delinquency. A defaulted loan is in fact a delinquent loan that has not been repaid for a long time and thus is considered irrecoverable. Different organizations make this distinction differently. For example, the Grameen Bank defines a default as a loan that has not been repaid for two years. Using this definition, it has often presented its default rate to be less than 5%. But Pearl et al (2001) find that if a less lenient standard were used – i.e. if a loan were considered a loan that was one year overdue – Grameen's default rate would surge to 19%.

This study found that although VBs had very high delinquency rates, these rates were generally tolerated by VBs. Section 5.2 suggested reasons why delinquencies occur and why VBs tolerate them. It explained why VB members are confident that they will let any loan be irrecoverable. However, it did not explain what the cost of recovering defaulted loans would be. If everyone in the VB felt that a loan was not going to be recovered, they would all have to go to the house of the delinquent member to scold her and perhaps confiscate whatever object of value she has in her home. They would have to place sanctions on the member as explained in section 5.2.1. These sanctions may penalize the defaulter and warn other members not to default, but these sanctions will definitely create disharmony in the group. Not every member might agree that the loan will be lost. The members of the VB might put the blame on the officials for not being strict enough on the rules. The delinquent member might also be angry at other members if she feels that they are being unnecessarily harsh on her. If many delinquent members are unhappy with the VB, they might even threaten to separate from the group and start

another VB. All of this will not only place huge social costs on the VB, but will also threaten the survival of the VB itself.

Shiva Shakti VB is a perfect example of how negligence to collect loans can cause discord among the VB's members and even lead to its break-up. Shiva Shakti VB is located in Tandri, a trading town of about 30,000 inhabitants. Agriculture is the profession of almost half of its members, while a fifth of its members own shops and another fifth are day-laborers. The group was established at the encouragement of a local NGO called National Indigenous Development Society. According to one of the officials:

“We saw a lot of people around us establish VBs so we wanted to establish one too. We thought that saving regularly in a VB would make our life easier in times of financial difficulty. We would also be trained by NIDS in lots of things<sup>10</sup>.”

The VB started really off really well. All members were excited about the VB. They put up a stall to sell traditional food in the local carnival and raise funds for the group. They also bought soap and washing powder in bulk so that the members could buy it in at a lower price. The group also received training from NIDS to grow mushrooms and collectively farmed mushrooms in a member's backyard and sold the mushrooms to raise money for the group. Members met every month to save and borrowed loans that they repaid at the end of three months.

Everything seemed to be going well until one member had to miss a payment on a loan. The group did not have rules that penalize members who delayed payments on loans; the VB rescheduled the delinquent woman's loan and she repaid the loan after three months. Another member had to delay payment on her loan a few months later, when a member borrowed a loan for her husband to buy a driver's license so that he could earn a living as a driver (see page 65-66 for the detailed story). The woman could not repay the loan for several months so some members went to her husband to scold him. The husband ultimately repaid the loan but as soon as he repaid the loan, another delinquent loan had surfaced.

This time it was the treasurer of the VB herself! She was a housewife who did not have any source of income of her own. Her husband had gone abroad and she lived with her parents-in-laws. She borrowed the loan without the consent of her in-laws and used to buy a golden necklace which she had wanted to wear for a long time. However, she could not repay the loan because she did not have her own source of income; other members of the VB became suspicious of her and went to her parents-in-law to ask them to repay the loan. But the parents-in-law told them that they were not aware of their daughter-in-law borrowing the loan thus were unwilling to repay for her. Members of the VB started scolding the treasurer and she in return stopped going to the VB's meetings and keeping its records. There was a lot of discord between the members of the VB. The treasurer told the author:

“I felt that people in the group were pervading my private life [by coming to my home and talking to my parents-in-laws]. I stopped going to the VB and keeping its records for a few months.”

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<sup>10</sup> Besides the training on keeping records, NIDS also provided training to VBs on income-generating activities such as mushroom farming.

Other members of the VB also began to miss repayment since the treasurer herself had not repaid the loan she had taken. The members increasingly became frustrated and became worried that they would lose their savings. Therefore, they decided that all everyone would have to repay the loans by a certain date and they would distribute the funds of the group and break up. However, the VB did not break up for good. They decided to begin saving again, with most of the people in the group. What is different now is that their rules are *much stricter*.

This example is instructive because it shows that delinquencies, although few can cause a lot of discord between members and even cause the break-up of the group. Shiva Shakti VB did not have an alarming delinquency problem: 76.3% of its loans were repaid on time, 11.9% of its loans were repaid after 3 months and another 11.9% were rescheduled<sup>11</sup>. Nevertheless, delinquencies had a strong impact on the VB and even caused the VB to break up. If the group had established and implemented strict rules for delinquencies, the sad outcome would perhaps not have occurred.

#### **5.4. Explanation of results.**

Unfortunately, the literature on microfinance does not explore this relationship between delinquency and default, although few authors have noticed that some microfinance programs are having repayment problems. Prominent among these has been an article published by Pearl et al on the *Wall Street Journal* on November 27, 2001, which says:

“But Grameen’s performance in recent years hasn’t lived up to the bank’s own hype. In two northern districts of Bangladesh that have been used to highlight Grameen’s success, half of the loan portfolio is overdue by at least a year, according to monthly figures supplied by Grameen. For the whole bank, 19% of loans are one year overdue. Grameen itself defines a loan as delinquent if it still isn’t paid off two years after it’s due.”

Although Grameen officials do not admit that Grameen is having repayment problems, Pearl et al claim that repayment rates have never been as good as have been claimed and is in fact. The repayment scenario is in fact deteriorating because of competition from other microlenders. Grameen itself has become conscious of this issue and has recently made major changes to its program, renaming itself “Grameen II”. Grameen II allows much flexible repayment policies because its promoters feel that the poor will always pay back on their loans so “there is no reason for a credit institution ... to get uptight because a borrower could not pay back the entire amount of a loan on a date fixed at the beginning of the disbursement of the loan” (Yunus, 3).

Stuart (2001) also noticed high rates of delinquencies in Women’s Thrift Cooperatives in Andhra Pradesh in India. He noticed that accountants often underreport delinquencies. WTCs have little financial pressure to report the correct delinquent amounts; since they have generally surplus funds, WTCs do not need to be concerned

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<sup>11</sup> The percentages do not include repayment data for 12 months (out of 42 months) which the author could not access.

about illiquidity that delinquencies could cause. WTCs are also often confident that their delinquencies will not result in default rates; thus making them more complacent about delinquencies. Stuart predicts that delinquency management will be one of the major concerns that WTCs will have to deal with.

Pischke et al have also found evidence of declining repayment performance of donor-funded credit programs in Malawi, Pakistan and Bangladesh and suggest reasons for the trend that they have discovered. Lenders often give a lot of attention to borrowers at the beginning of the program; thus they put a lot of effort into ensuring that the program has a good loan repayment performance. But as the initial enthusiasm peters out and the lender gives less attention to borrowers, the repayment performance of the MFI begins to decline. Similarly, age also makes lenders willing to take on more risky clients and borrowers willing to take on risky investment projects. While initial decisions made by both of these actors will be relatively less risky at the beginning, these actors will be inspired by the success of initial projects to take on more risky decisions. As an MFI gets older, the size of loans it gives to its members also increases; and as members borrow larger loans and invest them on new, riskier projects, the chances of delinquency also increase. Pischke et al also claim that “in microfinance promotion there seems to be no clear vision of risk or no industry-wide concern about means of addressing it” (p.171). Lenders are also more concerned with outreach and meeting administrative costs than planning for deterioration in loan repayment.

In her Ph.D. dissertation, Paxton (1996) studies countervailing pressures against successful repayment in group-lending schemes. She finds that the **domino effect** and the **matching problem** often lower repayment performance. The domino effect is manifested when delinquencies by some allows incentives for other members of the MFI to be delinquent too. Therefore, the more members are delinquent in an MFI, the greater will be the chances that other members will be delinquent too. The matching problem occurs when members of a MFI may be more likely to repay the loan in their first credit cycle rather than in subsequent loan cycles since in the first time period, each member has explicitly sought a loan and agreed to the terms and conditions. However, as loan cycles pass, some individuals may continue with the group and accept the subsequent terms and conditions even if they do not match their individual preferences.

## 5.5. Policy Implications

The primary goal of my research has been to understand the importance and methodology of measuring the repayment performance of MFIs, specifically VBs. I first studied the literature of microfinance to learn what others have said about the role repayment performance in sustainability and how repayment performance can be measured. I then conducted a field-study of VBs in Nepal to study their repayment performance; repayment performance is more crucial for VBs than other MFIs since VBs receive no support from external organizations after an initial training-period. The motivation of the research has been to find out whether VBs will sustain themselves without external support in the long run and how we can improve their design for replication in other parts of the world.

My research has found that repayment performance of VBs have been nowhere as good as they have been presented by promoters of village banking. Indeed, very few loans have been irrecoverable, but a tremendous percentage of loans are behind in

repayment. Delinquencies will increase the possibility of defaults, increase the chances of illiquidity of VBs, and also lower VBs' self-discipline in monitoring its loans. Although I VBs tolerate delinquencies because of social reasons, we should minimize delinquencies since they may increase discord among VB members and even threaten the survival of the VB itself.

The findings of this research provide lessons for VBs, promoters of VBs, governments, and students of microfinance. Perhaps we should begin with VBs since they are the subject of this study. This study found out that expecting immaculate repayment performance from VBs is not possible because of the social climate in which they function. Some VB member will have to miss payments on their loan because of all the systemic and idiosyncratic risks that their activities are subject to; VBs should adapt themselves to accommodate this reality. However, they should not be too lax on repayment because members may lose trust on the discipline of the VB and disharmony may arise among VB members.

In order to maintain this fine balance between allowing delinquencies but not letting them go out of control, VBs should make sure that they establish ground rules about repayment and follow them strictly. No singular set of rules apply to all VBs; VBs themselves have to design rules that make sense to them and follow them rigidly. Many VBs have not re-elected their officials annually, as the guidelines for VBs recommends. As a result, officials often feel over-worked. Thus, they should either be paid or should be replaced frequently. If VBs want to keep delinquencies under control, they should also keep good loan records and evaluate their performance frequently. Most VBs do not keep records because keeping detailed records is time-consuming, but it will pay-off for the VB in the long run. Especially, clear records of the delinquency history of its members will help the officials clearly see the credit history of its members and identify delinquencies before it is too late. Another reason why VBs have high delinquency rates is that they do not have the right loan products for their members. VB members borrow loans not just to invest on projects that generate immediate payoffs but also on agriculture, which generally takes several months to generate payoffs. Members will also have difficulty repaying their loans on a weekly basis if they invest on projects that take several months to give payoffs. VBs should have different kinds of loan products so that members can repay their loans at intervals that suit them the best.

This study also gives insights to promoters and designers of village banking programs all across the world, who have used the self-sustainability as one of the selling points of VBs. This study shows that if left alone, VBs will not follow many guidelines that they encouraged: re-election of officials, strict control of delinquency, and keeping good loan records. Promoters could help avoid these things from happening by providing better training to VBs on delinquency-management and leadership-training. But a better solution would be for the promoter of VBs to give ongoing support to VBs. This support could take the form of adult-literacy, income-generating activities, or simply advice on VB management. This kind of support would be especially helpful if the VB wants a third party to arbitrate on how it should deal with loans that have been delinquent for a long time since the third party would not have any biases about particular members in the group. Providing ongoing support to VBs is also important because they are entrusted with savings by a lot of women; ensuring that the VB does not collapse is crucial even if it is costly to the VB.

This study has important lessons for students and researchers of microfinance too. Often, they are too concerned with gathering data on microfinance in order to provide empirical evidence of the outreach, impact or sustainability of microfinance programs. Quantitative studies may allow us to make generalizations but will not let us understand the reasons why the generalizations are true. Quantitative studies may allow us to make statistically reliable results, but they will not help us understand the processes that are making the results possible. Using quantitative tools, this study found that although VBs have no defaults, they have lots of delinquency. However, it relied on interviews with VB members and officials to understand why these results make sense and what we can do to address them.

My research does *not* answer many important questions about Nepali VBs. As stated in Chapter 1, outreach and impact are as important to MFIs as sustainability. This study cannot answer any issues regarding outreach and impact, although evaluations of WEP done by Ashe (2001) and stories that have appeared frequently in the media suggest that WEP has not only been successful in reaching women of all social and income levels. These sources also give us strong reasons to believe that VBs have had a tremendous impact on the lives of rural Nepali women. If, in fact, VBs have impressive outreach and impact, we might be willing to forego sustainability. But this study shows that in order to answer to answer these questions, we need to study these issues more rigorously by trying to understand the perspective of VBs themselves.

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### **Electronic Resources**

Microfinance Gateway: [www.microfinancegateway.org](http://www.microfinancegateway.org)

Micro-Save Africa: [www.microsave-africa.org](http://www.microsave-africa.org)

Consultative Group to Assist the Poorest: [www.cgap.org](http://www.cgap.org)

Grameen Bank: [www.grameen-info.org](http://www.grameen-info.org)

Accion International: <http://www.accion.org/>