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# *Improving Agricultural Microfinance*

## *Barriers to the supply of agricultural lending in the Philippines*

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in partnership with  
**PinoyME Foundation,**  
**Benigno S. Aquino, Jr. Foundation**  
and  
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## List of Acronyms

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ARB	– Agrarian Reform Beneficiary
ARDCI	– Agriculture and Rural Development for Catanduanes, Inc.
ASKI	– Alalay Sa Kaunlaran, Inc.
CAFSA	– Credit Assistance for Sustainable Agriculture
CARP	– Comprehensive Agrarian Reform Program
CB	– Cantilan Bank, Inc.
CBU	– Capital Build-Up
CIBI	– Credit Investigation/Background Investigation
ECLOF	– Ecumenical Church Foundation, Inc.
FVB	– First Valley Bank
ISAPA-PPP	– Isa-Isang, Sama-Samang Pag-Unlad, Pangsakahan at Palaisdaan Project
KVBT	– Kapatagan Valley Bank Trading Company
MB	– Micro-Business
MFI	– Microfinance Institution
MIA	– Micro-insurance Agency
MIS	– Management Information System
NFA	– National Food Authority
NGO	– Non-Government Organization
NWTF	– Negros Women for Tomorrow Foundation, Inc
PAG-UMA	– Programang Agrikultura alang sa UMA aron mo asenso
PAR	– Portfolio at Risk
PBC	– People’s Bank of Caraga, Inc.
PCIC	– Philippine Crop Insurance Corporation
RFL	– Rice Farming Loan
VRB	– Valiant Rural Bank

## Introduction

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Microfinance has experienced a rapid growth over the last few decades and has become a popular development tool among policymakers. While the success of outreach by microfinance institutions to poor entrepreneurs has been remarkable, the evolution of microfinance in the agricultural sector has been limited. This is largely because of the irregularity of cash flow in agricultural households and unique and uncontrollable risks, such as weather and input prices, inherent to agricultural activities.

In the Philippines, there is an increasing interest among practitioners and policymakers in expanding microfinance to agricultural households. While recent surveys show a relatively mature microfinance climate in the Philippines, the 2004 National Anti-Poverty Commission (NAPC) Report cautions that more than two-thirds of the poor households in the Philippines still do not have access to financial services, and that poor farmers disproportionately fall into this group.

In this paper, Innovations for Poverty Action, in partnership with PinoyME, the Microfinance Council of the Philippines, and the Hanns Seidel Foundation/Germany, documents the challenges faced by eight microfinance institutions that are currently offering agricultural loans across the Philippines. This project is meant to complement existing studies on agricultural microfinance by the Microfinance Council of the Philippines that investigate the demand side of agricultural loans by interviewing farmers and conducting case studies. Our paper focuses on the supply side by interviewing MFIs offering agricultural loan products.

The objectives of this study are to document the current status of the microfinance services available to farmers and to understand the challenges that have held up the expansion of such services. In particular, we attempt to answer the following questions:

1. What are the risks that MFIs face in offering their agricultural financial products?
2. How do the MFIs deal with these risks? What product designs are currently in use, and how effective are they at meeting the needs of MFIs and farmers?
3. What are the payback rates and other outcomes of agricultural loans?
4. What innovations are being considered by MFIs to improve the performance of their agricultural lending portfolios?
5. What kind of management information system is used at the MFIs to administer agricultural loans?

The first section of this report elaborates on four major challenges faced by agricultural lending programs, as well as some more minor ones that are not unique to agricultural loans. The second section describes several financial product designs currently being employed by MFIs, and discusses how they attempt to cope with challenges associated with agricultural loans. The next section introduces the eight financial institutions studied in this report, and summarizes their approaches and outcomes. Finally, the report concludes with a discussion of product innovations that could potentially reduce risk and expand the reach of agricultural lending, as well as suggesting areas for further study.

## Methodology

### *Documentation strategy*

To collect reliable information about the product designs and implementation, we conducted a series of interviews with branch managers, product managers, and field officers of eight microfinance institutions, operating in different regions of the country, between November and December 2008. As shown in Table 1, half of the MFIs are rural banks and half are NGOs, of varying size and tenure.

The interviews were guided by a survey instrument covering topics such as target market, product features, add-in services, client selection procedure, and program status (Appendix 3). Initial interviews were conducted with the branch or field staff in person, followed by phone conversations and email exchanges to gather additional information. We also obtained official financial and performance reports from each institution.

**Table 1. Profile of Micro-Finance Institutions**

	Region	Office Interviewed	Legal status of MFI	Year of Agri-loan Program Established	Number of Branches	Number of Branches Offering Micro-agri Loans
	(1)	(2)	(3)	(4)	(5)	(5)
ARDCI	Luzon	Virac, Catanduanes <sub>HQ</sub>	NGO	1996	14	13
ASKI	Luzon	Ilagan, Isabela	NGO	2006	21	21
CB	Mindanao	Cantilan, Surigao del Sur <sub>HQ</sub>	Rural Bank	2005	12	7
ECLOF	Luzon	Quezon City (HQ); Palawan-Narra	NGO	2005	4	3
FVB	Mindanao	Maranding	Rural Bank	1990s	19	6
NWTF	Visayas	Bacolod City, Negros Occidental <sub>HQ</sub>	NGO	2005	34	7
PBC	Mindanao	San Francisco, Agusan del Sur <sub>HQ</sub>	Rural Bank	1972	10	9
VRB	Visayas	Iloilo City, Iloilo <sub>HQ</sub>	Rural Bank	2005	3	2

### *Limitations of the study*

This paper also discusses areas of innovation that could potentially help MFIs successfully expand their outreach among farming households. However, it will not provide definitive solutions to the challenges facing agricultural microfinance. Trial and error must be complemented with further research to understand *why* certain product designs and practices work or don't work.

## 1. Challenges facing agricultural microfinance

Microfinance institutions (MFIs) providing credit to small farmers in the Philippines face a multitude of challenges. Many of these are associated with microfinance in general, such as lack of collateral and insufficient information about creditworthiness. However, three hurdles were repeatedly mentioned by interviewed institutions that are unique to agricultural lending: crop failure resulting from bad weather or pests, low yield and poor quality produce due to underinvestment in inputs, and reduced harvest income caused by market failures in the sale of produce. Family illness and poor health is also one of the most frequently cited problems, which is not unique to agricultural lending but may affect farming clients disproportionately due to greater reliance on family members' physical labor. (At the end of this chapter, Tables 3 and 4 show the major risks to farmers and reasons for defaulting on loans, as reported by each interviewed MFI.)

Although the information in this report was gathered through discussions with the suppliers of agricultural microcredit, it is not surprising that the challenges they report are the same as those faced by their clients. Table 2 shows the typical client profile of interviewed institutions – although there is some variation, we can see that borrowers are generally rice farmers working on very small plots. High risk and thin profit margins are passed on from clients to MFIs as low borrowing capacity and greater likelihood of default. The limited range of agricultural lending – even in a country like the Philippines, with a highly developed microfinance sector – is likely related to these unique challenges and risks in agriculture. Expanding the reach of agricultural microfinance will require a deeper understanding of the current barriers and the development of new products and procedures tailored to address them.

**Table 2. Basic Profile of Target Clients**

	Main Crop grown by target clients	Average Land Size (hct)	Land Ownership Status	Non-farm income
	(1)	(2)	(3)	(4)
ARDCI	Abaca	2.50	Tenants (60-80%); owners (ARB <sup>1</sup> )	Required
ASKI	Rice	1.00	ARB (100%)	Required
CB	Rice	1.00	Tenants (60%); owners (ARB)	Required
ECLOF	Rice	2.00	ARB (95%)	Not required
FVB	Rice	2.00	Tenants (80%); owners (20%)	Not required
NWTF	Sugarcane	1.25	ARB (100%)	Not required
PBC	Rice	3.00	ARB (50%); tenants (50%)	Required
VRB	Rice	2.00	Tenants (20%); owners (80%)	Required

<sup>1</sup>Agrarian Reform Beneficiary



## Bad weather and pests

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Many institutions interviewed for this study reported that crop failures due to bad weather and pests are the biggest cause of default. The northern and central parts of the Philippines are hit by many typhoons every year, while southern provinces also suffer from heavy rains. Because of the country's vulnerability to severe storms, farmers in the Philippines bear a particularly high risk of natural calamities. Similarly, pest infestation poses an inherent challenge to farming. In the Philippines, a common pest called stem borer often leads to partial or total crop failure, and affects rice, corn, sugarcane, and other crops<sup>1</sup>. Although it can be controlled by pesticides, it is difficult to detect, and often causes significant damage before pesticides can be applied.

In order to reduce the risk of default due to crop failure, financial institutions may want to offer insurance to complement their loan products. In this study, we found that few MFIs offer crop insurance to protect their loan portfolio. This is partly because the insurance market for poor households is underdeveloped in the Philippines and there is a lack of insurance products designed specifically for small farmers. Philippine Crop Insurance Corporation (PCIC) offers a variety of crop insurance products; however, its basic crop insurance reimburses input costs up to a certain ceiling plus an optional 20% in the event of crop failure. The payout only covers a small portion of the loss from pests and natural calamities.

Another problem is that traditional crop insurance products that provide payouts based on cropping outcome have a moral hazard problem: the insurer cannot observe the farmer's behavior, so the farmer faces a strong incentive to under invest in measures to protect his crop, knowing that he can collect insurance if it fails. This makes insurance more costly and operationally difficult for the insurer to provide. To deal with this moral hazard problem, some insurance providers have begun to develop weather-based policies, which pay out benefits based on objectively measured weather conditions, such as the amount of rainfall at a given time of year. Such policies have potential to help farmers cope with unpredictable weather risk, but are not yet in general use in the Philippines. The details and potential problems with weather-based insurance are discussed in Chapter 3.

Pests present even greater challenges for insurance product design. Because farmers' behavior can greatly influence the likelihood of pest infestation, insurance coverage could easily incentivize under-investment in preventive measures. For instance, late planting and leaving stubble in the field create favorable conditions for infestation, while application of pesticides or use of resistant seeds can control it to a limited extent.<sup>2</sup> Unlike the weather, it is extremely difficult to create objective measures of pest problems that are beyond farmers' control.

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<sup>1</sup> International Rice Research Institute estimates that yellow stem borer causes 5-10% of yield loss in the Philippines ([http://www.knowledgebank.irri.org/ricedoctor/Fact\\_Sheets/Pests/Stem\\_Borers.htm](http://www.knowledgebank.irri.org/ricedoctor/Fact_Sheets/Pests/Stem_Borers.htm)).

<sup>2</sup> Philippines Department of Agriculture (1999). Rice Stem Borers in the Philippines. *Philippine Rice Research Institute, Rice Technology Bulletin* 1999 no.20.

## Under investment in inputs

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Another challenge identified by many MFIs is under investment in the quantity or quality of farming inputs, such as seeds and fertilizers. The causes of this common problem include high and volatile input prices, farmers' lack of technical knowledge, and credit constraints or mismanagement of funds.

Rising and volatile input prices were concerns identified by several interviewees. When the price of inputs is high, farm expenses increase but income does not increase at the same rate as the price of palay is relatively stable due to government intervention. This means that clients face uncertainty about their cost of production and profits from season to season, and if they are unable to save, they may have difficulty repaying loans when input prices are high. Furthermore, the prices of certain inputs are rising consistently, and farmers appear to be extremely price sensitive.

For instance, the Negros Women for Tomorrow Foundation (NWTF) reported that the prices of sugarcane fertilizers have increased by 100% in the last few years, reducing the fertilizer usage among sugarcane farmers by 40-50% and reducing their yields. The People's Bank of Caraga (PBC) reported that when input prices increase, farmers tend to compensate by reducing hired labor and working on their own farms. In some cases, farmers ask for labor assistance from other cluster members.

Another reason for under investment may be a lack of relevant knowledge or skill among small farmers. Farmers may be unaware of new seed varieties, fertilizers, and chemicals. Or, farmers may be unsure of which inputs are most appropriate to local conditions or how to utilize them effectively. For instance, farmers' home-saved seeds are widely used because they are adapted to local environments, cost less, require less technical skill, and have lower maintenance requirements. Yield and quality, however, are lower than that of imported hybrid seeds or for certified seeds, with which farmers are less familiar. To get successful output from hybrid or certified seeds, farmers may require technical assistance and more inputs, such as fertilizer, pesticides, and hired labor.

Finally, even given stable prices and the knowledge and desire to use sufficient inputs, farmers may lack the capital to make the upfront investment, either due to financial constraints or inability to manage funds across the growing season. Most of the MFIs interviewed for this report do not provide loans big enough to cover farmers' full cost of production, and expect clients to make up the difference out of savings or other income sources. For families without significant non-agricultural income, it may be difficult to accumulate sufficient savings. Some farmers may have difficulty managing their seasonal cash flow to purchase inputs at the right time. The study of fertilizer usage in Kenya by Duflo and Kremer showed that the timing of fertilizer purchase relative to the growing season had a big impact on total fertilizer use of maize farmers (Box 1, page 21). In this study, farmers who were offered fertilizers and asked to pay for them right after the previous harvest – when they had significant cash on hand – were much more likely to make the investment than those who were asked to pay later in the season, when money is tighter.

## Inefficiencies in the output market

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MFIs described a wide range of prices for agricultural produce (particularly rice), with the low end of the market typically populated by traders and millers and the high end by the National Food Authority (NFA). Many farmers sell their palay for well below the high rates offered by the NFA. In some cases the difference in sale price reflects true product differentiation; in others it appears to follow from pre-harvest uncertainty or problems in the timing or location of the market for outputs.

Traditionally, rice farmers in the Philippines borrow from local traders and millers who provide them with credit and inputs and guarantee to purchase the farm outputs. The provision of credit and purchase guarantee is often a packaged deal. Loans are typically offered as a combination of cash and inputs, and farmers repay with harvested palay at 30% interest per cropping season. Anecdotal evidence from MFIs suggests that in some cases risk-averse farmers may prefer the guarantee of output purchase even though the prices offered by the traders/millers are lower than the market price, or that offered by the NFA. In a comprehensive review of agricultural microfinance, Christen and Pearce point out that this arrangement can be preferable from the perspectives of both lenders and farmers—farmers can avoid uncertainty in output markets, and lenders can control the quality of outputs to some extent by providing the inputs themselves (2006).

The combination of high interest rates and low sale prices would seem to make traders/millers an undesirable option for farmers who have access to other sources of credit and higher prices in the output market. Lenders offered a number of other explanations for why their clients end up selling their palay to traders and millers anyway.

First, the NFA has strict criteria for the condition of palay. If palay is not properly dried and cleaned, the NFA will not accept it. Some farmers do not have access to mechanical dryers and blowers, and others feel that the expense of drying essentially negates the additional income received by selling to the NFA. Second, even if the palay is in a good condition, NFA's process is time-consuming and farmers typically have to wait 10-15 days to receive payment for their palay, which deters some. Third, the accessibility of NFA buying stations is limited in some areas, and many farmers are unable to transport their produce. Finally, the farmer must be an accredited NFA member in order to sell. Acquiring this accreditation can be time-consuming and difficult, since the NFA limits membership in response to the budget it has available to buy palay and is reported to provide preferential access to farmers with personal connections.

Thus, farmers may choose not to sell their produce for the highest available prices as a way to avoid risk, but also possibly in response to the need to get cash quickly to repay a loan or a lack of access to machinery or transportation. These problems may be exacerbated by a lack of information on market prices; some interviewees even reported that their clients are regularly cheated by middlemen who offer slightly higher prices than the millers but use weighted scales. Larry Millan of the Ecumenical Church Foundation points to problems in the market for outputs as a major determinant of small farmers' wellbeing: "In essence, whether the farmers gain from their produce will boil down to whether they can sell the produce at the right (market) price.

Selling decisions are determined by timing, cash flow needs, supply and demand, margins created, distance to market, and volume of harvest.”

## Other challenges

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### **Poor health:**

Almost every interviewee cited family illness as one of the biggest risks to small farmers, and consequently, to the institutions who lend to them. Illness affects loan repayment through three causal paths. First, since many small farmers rely heavily on family members to produce their crops, it reduces the labor supply available to them and may decrease or delay their harvest or raise their cost of production if they hire workers from outside the family. Second, medical bills may strain the budgets of poor families, potentially leading to loan default or depleting emergency savings that might have been drawn on to repay loans in the case of crop failure. Finally, families may take out additional loans to cover medical or living expenses, often from money lenders at high interest rates, increasing their total debt burden.

### **Limited property rights:**

The vast majority of clients at the eight MFIs interviewed are either tenants on their land or agrarian reform beneficiaries (ARBs). Few own their land outright. ARBs hold their land as a result of a national land reform program instituted in the Philippines; most MFI clients received their land during the Comprehensive Agrarian Reform Program (CARP) implemented in the late 1980's. Under CARP, most farmers are unable to sell or lease their land, or to offer it as collateral against a loan, or to use it for non-agricultural purposes (with limited exceptions).<sup>3</sup>

Although more information is needed on this subject, it seems likely that even if agrarian reform is positive on net, the restrictions placed on land use may lead to sub-optimal investments in many cases. For instance, these restrictions may inhibit investments in physical capital (e.g. improvements in irrigation or long-run soil quality) because farmers believe they will not be able to recoup their investment through sale. Further, the land sizes mandated by reform policy may not be optimal for the growth of particular crops. If small farmers are limited by the size, quality, or allowed usage of their land, organizations seeking to improve their wellbeing may need to help them to diversify their income in addition to improving access to credit. Diversification could mean changing crops, or diversifying out of agricultural activities; we return to this subject in the third chapter of the report.

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<sup>3</sup> Ballesteros, Marife (2003). Property Rights in Land Reform Areas. *Philippine Institute for Development Studies Policy Notes*, No. 2003-14, p.3.

**Table 3. Risks to the Micro-Agri Loan Product, by MFI**

Ranked in the order of importance

	<u>ARDCI</u>	<u>ASKI</u>	<u>CB</u>	<u>ECLOF</u>	<u>FVB</u>	<u>NWTF</u>	<u>PBC</u>	<u>VRB</u>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural calamity	✓	✓		✓	✓	✓	✓	✓
Poor Health	✓	✓	✓	✓	✓		✓	✓
Pests				✓	✓			✓
High Prices of Inputs				✓		✓		

**Table 4. Main Reasons for Default**  
Ranked in the order of importance

	ARDCI (1)	ASKI (2)	CB (3)	ECLOF (4)	FVB (5)	NWTF (6)	PBC (7)	VRB (8)
Natural Calamity	✓	✓		✓	✓		✓	✓
Family Emergency (Illness/Death)	✓		✓	✓		✓	✓	✓
Crop Failure (Caused by Non-Calamities) <sup>1</sup>				✓	✓			✓
Clients use loans for unproductive activities <sup>2</sup>	✓	✓				✓	✓	✓
Clients don't have repayment capacity (loan size too large) <sup>3</sup>	✓		✓				✓	✓

<sup>1</sup> Reasons include: failure harvesting due to irrigation timing (ECLOF) and pests (ECLOF, FVB & VRB).

<sup>2</sup> Clients divert when: family members leave (ARDCI & PBC), for non-agro purposes (ASKI & VRB), and believe program is a hand-out (NWTF).

<sup>3</sup> Reasons for not repaying have to do with approved loan amount being too large due to faulty cash flow analysis and lack of diligence in CI/BI.

## 2. Current approaches to product design

In extensive interviews with management and field staff, we documented the design and implementation of agricultural micro-loan products offered by four rural banks and four non-profit institutions in the Philippines. This section summarizes various approaches of the eight MFIs to product designs. The lending programs may be segmented into two main groups: *cash flow*-based lending and *production cost*-based lending (See Table 5). Below, we describe these two broad approaches as well as many smaller variations on product design intended to cope with the unique risks and challenges inherent in agricultural microfinance. Tables 6 and 7 at the end of the chapter show additional information about product design at each MFI.

**Table 5. Product Features**

	Liability Type	Lending Base	Average Loan Size	Loan Term	Interest (% per month)	Service Charges
	(1)	(2)	(3)	(4)	# (5)	# (6)
ARDCI	Group	Cash flow	5,000	13, 24, or 50 weeks <sup>1</sup>	1.80 or 2.70 <sup>3</sup>	2%
ASKI	Group	Cash flow	15,000	4.5 or 5 months <sup>2</sup>	2.00 or 3.00 <sup>4</sup>	3%
CB	Individual	Cash flow	5,500	12 months	3.00	200 PhP
ECLOF	Individual	Production cost	20,000	5 months	3.00	3%
FVB	Individual	Production cost	36,000	180 days	1.70	3%
NWTF	Group	Production cost	25,000	12 months	4.00	8%
PBC	Group	Production cost	25,000	6 months	2.30	2.5%
VRB	Individual	Cash flow	15,000	6 months	2.75	3%

<sup>1</sup> Depends on cash flow analysis.

<sup>2</sup> Farmers choose their loan term; the longer loan term has the higher interest rate.

<sup>3</sup> Depends on location: 22% per annum for Catanduanes and 32% per annum for mainland Bicol.

<sup>4</sup> A 4.5-month loan term has an interest rate of 2% per month, a 5-month loan term 3%.

### Cash flow-based lending

Cash flow-based lending is a method commonly employed in non-agricultural microfinance, in which the appropriate debt burden for a family is calculated based on regular household cash flow from non-farm income. Repayments are usually collected on a frequent short-term basis, often weekly or bi-weekly. In a comprehensive review of agricultural microfinance Christen and Pearce identify this strategy as one of the common features of successful agricultural microfinance programs (2006). Half of the MFIs interviewed for this report use a cash flow system.

One advantage of cash flow-based lending is that it is easy to administer for an MFI that is already engaged in regular microfinance operation. The loan processing and collection procedures are not much different from those of a typical program for micro-entrepreneurs, so the additional operational cost may be relatively low, as credit officers generally do not monitor loan usage or farming activities to ensure successful harvest. It may also be less risky for the

lender, since it requires the farmer to have diverse income generating activities and is therefore partially protected from the risks described in the first chapter.

On the other hand, this type of program excludes those without non-farm income, and is not closely tailored to the cash-flow needs of farmers. Loan usage and the repayment schedule are misaligned, with payments due well before harvest income arrives once or twice a year. Typically the loan amounts are smaller since they are not designed to cover production costs, and may not be large enough to help farmers overcome credit constraints for optimal input use.

### Production cost-based lending

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The other half of the MFIs interviewed calculates loan amount based on an assessment of the costs of farm production. These lenders approve loans based largely on a farm production plan submitted by applicants, tempered by credit officers' judgment and a standard per hectare production budget. In general, all or much of the principal and interest payment is collected after the harvest.

Production cost-based lending has the advantage that loan terms are usually matched to the cash-flow needs of farmers, by providing credit when costs are incurred and requiring repayment when income is made. Some lenders make sure that loan proceeds are used according to the farm plan by disbursing a portion of the loan in-kind. Many also engage in more intensive monitoring of loan utilization and farming activities.

The risk of lending in this style is high: even though some lenders prefer farmers who are also engaged in non-farm income-generating activities, the repayment largely depends on the crop harvest. In order to manage the risk of lending to farmers in this manner, lenders may conduct intense monitoring and provide technical and post-harvest assistance; however, these activities require staff with specialized knowledge in agriculture and organization's capacity to extend non-financial services. This more hands-on approach incurs costs to the lenders.

### Target clients

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All of the MFIs interviewed serve very small, marginal farmers through their micro agricultural loan programs. Average farm size ranged from one to three hectares, with farmers primarily engaged in growing rice, and a minority producing sugarcane or abaca (a banana plant grown for its fiber).

It is noteworthy that the two lending models described above target different groups of farmers. Cash flow-based lending is certainly less risky for the lenders; however, these programs may not necessarily *expand* access to credit to agricultural households that did not previously borrow from formal financial institutions. Because the target clients are those who have sufficient cash flow to repay on regular basis, a majority of clients also qualify for other microfinance loans. In effect, these programs provide *additional* credit for farming activities to households that already have access to credit.



For one interviewee, the targeting of households that already have access to credit is intentional and explicit. The People's Bank of Caraga (PBC) reports that they began offering agricultural microloans as a response to the frequent diversion of funds from their microenterprise loans to agricultural activities. Although they use a production cost method, PBC explicitly targets the spouses of existing clients, and the loans are meant to complement a regular microenterprise loan.

In general, production cost-based lending may be more likely to improve access to credit by providing financial assistance to farmers without multiple income-generating sources or with only a small regular household cash flow.

### Insurance provision

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Insurance provision among the MFIs interviewed is minimal. Six of the eight require clients to purchase credit-life insurance, either in-house or through a private provider contracted with the bank. The other two offer life insurance on a voluntary basis. Some of these policies include loan forgiveness in the event of a client's death, while others pay out cash benefits to surviving family members. Cantilan Bank and the Negros Women for Tomorrow Foundation offer combined health and life insurance products which provides assistance for medical and hospitalization costs in the event of a client's death.

Only one MFI offered a crop insurance product. First Valley Bank (FVB) requires clients to purchase crop damage insurance through the Philippine Crop Insurance Corporation (PCIC) which costs 5.5 – 6.5% of the loan principal amount, and reimburses input costs up to a certain ceiling plus an optional 20% in the event of crop failure. As mentioned in the first section of the report, this payout typically only covers a small portion of the loss from pests and natural calamities.

### Technical assistance

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Technical assistance and monitoring of farming activities is limited, although production cost-based lenders generally seem to be more hands-on with advice and supervision. Much of the assistance that is provided appears to be relatively informal, with credit officers providing advice during their occasional farm visits or loans center meetings. Half of the MFIs require their credit officers to have an agricultural background, ranging from family farming experience to a degree in agricultural sciences.

Some MFIs did report more formal technical assistance activities, with mixed results. Valiant Rural Bank (VRB) hosted a one-time agricultural seminar in cooperation with the Department of Agriculture, but only 20 out of 2000 clients attended and the bank has not organized such activities since then. ECLOF previously offered more extensive technical assistance, but there were clients who blamed the bank for farming problems and used this as an excuse for not paying back the loan.

In contrast, Alalay Sa Kaunlaran (ASKI) partnered with the Department of Agriculture for a training session on soil analysis in 2008, and believes that it was highly successful, as credit officers witnessed farmers choosing more appropriate seed varieties in the following cropping season. NWTF holds annual training sessions on new seed varieties and fertilizers conducted by the Sugar Regulatory Administration for center officials, who are then tasked with sharing their knowledge with other clients. PBC hosts a monthly continuing education meeting which covers both farming practices and entrepreneurship training, in the hope that clients will diversify their income-generating activities.

### Input and output markets

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Most MFIs do not assist their clients in input or output markets. In general, loans are disbursed in cash, and farmers shop for inputs themselves. On the other end, loan repayment is accepted in cash, requiring farmers to prepare, transport, and sell their own product.

Two of the MFIs with a group lending structure informally encourage their clients to work together to navigate the market. NWTF encourages center members to consolidate their purchases of inputs so that they can buy from wholesalers, rather than having individual clients purchase from retailers at higher prices. ASKI reported that clients exchange useful information on prices and suppliers during center meetings. Although NWTF and ASKI do not have the institutional capacity to directly facilitate input purchases, clients use the structure of group-lending to obtain better deals on inputs.

Only two lenders reported direct involvement in input or output markets. Both FVB and ECLOF employ a product cost method and disburse a significant portion of the loan amount in-kind. ECLOF hands out purchase orders for seeds and fertilizers, and is able to offer clients a 10% discount because of the volume and regularity of business they direct to a supplier partner. FVB goes one step further and gives clients vouchers to receive inputs directly from its farming supplies subsidiary company. Through this same subsidiary, FVB is also able to accept payment in-kind, and provides competitive prices for palay, combined with the transportation service from farm gate to the warehouse.

### Management information system (MIS)

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All MFIs interviewed reported that they do not have different features or reporting requirements to monitor the agricultural loan programs. Some MFIs recognize the need of improving the MIS. For example, ECLOF is currently developing MIS for easier monitoring. ARDCI cannot monitor the performance of agricultural loans separately from other microfinance loans—given a unique set of risks that farmers are faced with, establishing a separate monitoring system for the agricultural loans may help management of the program. PBC also reported the difficulty of maintaining the in-house MIS due to the dependence on the in-house programmer.

**Table 6. More Product Features**

	Collateral/Serialized Asset Requirements	Average Loan Amount in Proportion to Production Costs	Loan Releases		Repayment	
			Cash or In-kind	Lump-sum or Staggered	Cash or In-kind	Frequency
	(1)	(2)	(3)	(4)	(5)	(6)
ARDCI	Land titles	na	Cash	Lump-sum	Cash	Installment
ASKI	None	75 - 100%	Cash	Lump-sum	Cash	Lump-sum <sup>1</sup>
CB	Household appliances	17-25%	Cash	Lump-sum	Cash	Installment
ECLOF	Land titles, appliances	70-100%	Cash and in-kind	Lump-sum	Cash	Lump-sum
FVB	None	80%	Cash and in-kind	Staggered	Either	Lump-sum
NWTF	None	na <sup>2</sup>	Cash	Staggered	Cash	Lump-sum
PBC	Household, business assets	70%	Cash	Lump-sum	Cash	Installment <sup>3</sup>
VRB	None	40%	Cash	Lump-sum	Cash	Installment

<sup>1</sup> While principal payments are collected in lump-sum upon harvest, interest payments are amortized on monthly basis

<sup>2</sup> 25,000 Php for 1.25 has, which is less than total production cost for chemical-based farming; organic-based farming is encouraged due to lower costs

<sup>3</sup> Repayment schedule of 50%-25%-25% for 4th, 5th, and 6th month.

**Table 7. Non-financial Product Features**

	Technical Assistance		Insurance		
	Regular technical assistance	Agriculture Background Required for Credit Officers	Types of insurance offered	Insurance requirements	Management Information System
	(1)	(2)	(3)	(4)	(5)
ARDCI	None	Yes	Life	Compulsory	ABS
ASKI	Through credit officers	No	Life	Voluntary	Microsoft Visual Fox Pro
CB	None	No	Life	Compulsory	Microbanker & RB2000
ECLOF	Farming technicians are invited in the brgy orientation; monthly farm visits and coaching by credit officers	No	Life	Compulsory	---
FVB	Farming activities supervised by credit officers Training from SRA once a year; Informal consultations during center meetings	Yes	Crop, Life	Compulsory	MBX Gorb/ EnCash Savant
NWTF	Monthly training for best farm practices	Yes	Health, Life	Voluntary	M2
PBC	None	Yes	Life	Compulsory	Micro System Software
VRB	None	No	Credit-Life	Compulsory	Webloan, GLNET and Save Plus

### 3. Product innovations

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Agricultural microfinance can provide farmers with resources that allow them to make better decisions on investment and risk mitigation, whether it is for purchasing insurance or inputs, or diversifying their economic activities. However, many of the MFIs we interviewed provide loans that may fail to optimize farm productivity – and consequently both client welfare and lender profits. While small cash flow-based loans may be cost-effective for risk-averse lenders in the short run, they may not encourage farmers to make optimal decisions on farm investment. How can financial institutions help?

Lenders should consider tailoring their financial products more closely to the needs of farmers, as well as extending non-financial assistance to clients. The following chapter offers some examples of product improvements or supplements that were suggested by discussions with MFIs. It is important to note that the product innovations suggested below are intended to offer directions for further study, rather than definitive advice for immediate implementation. Trial and error must be complemented with further research to understand *why* certain product designs and practices work or don't work.

#### Repayment flexibility

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The first issue that we consider is the relationship, or lack thereof, between loan repayment schedules and farmers' cash flow. If the MFI sets a frequent repayment schedule – as most using a cash flow system do – then clients are naturally limited to those who have sufficient regular income and therefore are probably already qualified to borrow from other micro-loan programs. Christen and Pearce emphasize in their review of successful agricultural microfinance program features that a repayment schedule that matches with cash flow of the agricultural activities could make loan programs more accessible for farmers (Christen and Pearce, 2005).

Several options are available to lenders who wish to tailor repayment schedules to better meet farmers' needs. Lenders can schedule longer loan terms and allow lump-sum payment, or can simply build in more flexibility for unavoidable delays by restructuring loans. Several interviewed MFIs currently offer these options:

1. FVB does not charge penalties to farmers who experience a delay in harvest due to farm conditions; loans are simply re-structured and paid in full at a later time.
2. ECLOF does not schedule the lump-sum payment of loans until 1-2 months after the harvest – this allows farmers to take the time needed to dry the palay and sell it to the NFA at a higher price, rather than to traders.
3. PBC also builds repayment flexibility in their loan contract by setting a three-installment schedule within two months of harvest; farmers who have capacity to repay in full immediately upon harvest will not be charged for the interest for the last two months.

Setting loan terms that take into account the timing of harvest and sales could attract more credit-worthy borrowers. Reasonable repayment flexibility could also encourage farmers fearful of default to take up the loan and make better farm investments. It may even increase the impact of the loan in not forcing clients to take actions that might reduce the returns on their investment or that might get them over-indebted just to meet the rigid repayment schedule (Karlán and Mullainathan, 2007). For example, if PBC collected 100% of the repayment right after harvest, clients might decide to sell their undried palay to traders at a lower price, instead of waiting for the rain to stop and drying palay fully to get better prices. Given the unpredictable nature of agricultural activities, repayment flexibility built into the product designs and loan contracts could greatly benefit both the lender and clients.

ECLOF also restructures loans without penalties when farmers cannot repay due to crop failure caused by natural calamities. Larry Millan, the executive director of ECLOF shared his perspective on the RFL program: *“There is a big difference in delinquency management between urban microfinance and agricultural microfinance. If an urban client becomes past due because of loss of business, the loan has to be written-off because the source of the income is gone. In agricultural loans, even if a client becomes past due because of natural calamity, they can still repay in the following cropping season because the source of income is the land. As long as the client owns a piece of land, and the land continues to be productive, he/she should be able to eventually pay back the loan.”*

### Easing credit constraints

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Lenders report that even farmers who receive loans do not invest in the optimal amount of inputs or adopt new technology, due partially to credit constraints. Loans aid in the purchase of inputs and hired labor, but they often do not cover the entire production cost. Low quality, low quantity inputs result in a low quality, low quantity harvest. Since the reason that farmers borrow in the first place is to ease their seasonal credit constraints, there may be steps that lenders could take to solve the problem more completely. Here we suggest two simple steps: helping farmers smooth consumption through commitment savings, or increasing loan amount to cover production costs more completely.

#### **Commitment savings:**

Commitment savings products allow clients to set a savings goal – such as a particular amount or date – and lock in the deposited money until the goal is reached. This type of commitment device helps those who have difficulty managing money plan better for the future. For agricultural lending clients who have difficulty saving after a harvest to ensure sufficient ability to invest in inputs before the next planting season, commitment savings products may help them manage their seasonal cash flow.

Savings products could take several forms. Most cash-flow lending programs require clients to make small deposits at the regular center meetings (See Table 3). This weekly or monthly savings requirement is usually manageable for clients with regular income. However, households relying mainly on agricultural income will have a higher capacity to save after a harvest. Savings products that serve the needs of farming households with large, infrequent cash flows could be a useful complement for a credit program.

A slight twist on commitment savings helps farmers invest by asking them to purchase vouchers for inputs directly after a harvest, which can then be redeemed in-kind when needed. This effectively commits them to purchasing inputs when cash is available, even if they won't use them until later. A study in Kenya, conducted by Duflo and Kremer (2008) tested an intervention of this type, and found it to be effective in increasing fertilizer use (See Box 1). The program offered fertilizer vouchers to maize farmers immediately after a harvest. When farmers have to make purchasing decisions during the cropping season, there is no in-flow of

***Box 1: Why don't farmers use fertilizers? A study in Kenya***

Adoption of new technology, such as fertilizers, could significantly increase the yields and profits for farmers. In developing countries outside of Africa, use of fertilizers in maize farming is said to have increased the crop yields by 50-70% from the mid 1960s. And yet, the authors observed that the fertilizer use in maize farming in Western Kenya is limited.

In order to understand why farmers do not use fertilizers, the authors set up a field experiment to test, among other things, how financial constraints of farmers affect the decision on fertilizer usage. In the pilot study, they observed that the timing of purchasing fertilizers is critical—farmers who are offered fertilizers and asked to pay immediately after harvest are much more likely to purchase fertilizers than those who were offered fertilizers immediately after harvest, but are visited again in 2-14 days or during planting/top dressing in the next season for actual fertilizer sales even though farmers in both groups showed similar level of interest in purchasing fertilizers during the first visit right after harvest. Based on this observation, 1) offered fertilizers right after harvest, 2) given choice on when to purchase, 3) offered fertilizers during planting/top dressing, and 4) offered fertilizers during planting/top dressing at 50% discount (subsidy). The study finds that offering fertilizers right after harvest—thus, getting timing of fertilizer purchase right—has as large impact on fertilizer usage as providing 50% discount does. Furthermore, 48% of those who were given choice on the timing of fertilizer purchase chose to buy fertilizers right after harvest, suggesting that farmers know the importance of timing as well.

Given the timing of financial needs and cash flow cycle of farmers, there is a large potential for microfinance institutions to improve financial services that will help farmers make better investment decisions.

*Duflo, Esther, and Michael Kremer (2006). Understanding Technology Adoption: Fertilizer in Western Kenya Evidence from Field Experiments. Working Paper.*

cash, and income from the previous harvest may have been exhausted. By offering the voucher immediately after a harvest, the intervention encouraged farmers to make a decision on fertilizer usage when they have fewer financial constraints. The study found that fertilizer usage increased significantly.

**Increased loan amount:**

Increasing the standard amount of loans to fully cover expected production costs is another way that lenders could ease the credit constraint faced by farmers during the growing season. For cash flow lenders, this could mean shifting partially or entirely to a production cost system, which may bring increased risk of default and incur short run costs in switching loan processes

within the MFI. Whether these costs are worth the potential to increase farmers' profit margins and charge higher interest rates will have to be determined on an individual basis by each MFI.

For lenders already using the production cost method to calculate loan amount, however, such a shift could be easier. The production cost lenders interviewed all report an average loan amount between 70-100% of total expected cost. Moving closer to 100% of cost or tying expected cost calculations more closely to varying input prices from season to season could help farmers invest more sensibly in expensive inputs.

### Insurance coverage

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As discussed in the first chapter of this report, marginal farmers with little or no savings can be hit very hard by unpredictable crises such as bad weather, pests, or family health emergencies. Insurance is the most obvious way to cope with these prevalent risks. However, the insurance market in the Philippines is under-developed, and it can be difficult to construct insurance products that are accessible to poor clients and don't fall prey to moral hazard problems. In this section we discuss several promising types of insurance that may help farmers protect themselves and consequently reduce the need for MFIs to restructure loans.

#### **Weather-based crop insurance:**

In recent years, some groups including Micro-insurance Agency (MIA) have developed weather index-based insurance to work around the moral hazard problem. The insurance policy pays out benefits based on objectively measured weather conditions, such as the amount of rainfall at a given time of year. Because the insurance is based on weather conditions, which are observable to everyone and uncorrelated with the farmers' riskiness and other individual characteristics, it avoids moral hazard. MIA has rolled out weather insurance in several countries, and the first pilot in the Philippines is scheduled for January 2009<sup>4</sup>.

While the innovative approach of such insurance has significant potential, offering weather insurance alone may not be sufficient. Studies on rainfall insurance products for farmers in Malawi and India show unexpectedly low take-up. A study in Malawi conducted by Giné and Young (2007) tested the impact of offering rainfall insurance packaged with a credit program on loan take-up among maize and groundnut farmers. The study found that loan take-up is actually lower for those who were offered credit plus insurance than those who were offered credit alone. More importantly, they report that the take-up of credit with insurance is highly correlated with the cognitive ability of the clients. The concept of weather triggered insurance may be difficult for farmers to understand. Another study on rainfall insurance in India also reports that the most common reason for not purchasing the insurance was that clients did not understand the product (Gine, Townsend and Vickery, 2008) (See Box 2). These study findings indicate that careful testing of marketing strategies will be necessary before insurance can successfully combat crop failure problems.

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<sup>4</sup> [www.microinsurnaceagency.com/crop\\_insurance.html](http://www.microinsurnaceagency.com/crop_insurance.html)

### **Health insurance:**

Family illness was one of the most common reasons for default or delinquency cited by MFIs, yet few offer any sort of health insurance products alongside their loan products. Most offer loan or life insurance, but these only pay out benefits in the severest sort of emergency: the death of the client, or sometimes, a family member of the client. Situations that fall short of death, such as illness or temporary disability in the family, can still seriously impact production. Providing in-house insurance or partnering with an outside organization such as PhilHealth could mitigate the health risks that the poor households face.

Providing useful health insurance for poor rural clients is far from straightforward, however. Health insurance often falls prey to the twin problems of adverse selection and moral hazard, even in wealthy countries. Adverse selection suggests that clients who know they will need health care are more likely to purchase insurance. Moral hazard may cause clients to engage in riskier behavior or to collect for minor conditions for which they would not normally seek treatment. Both of these problems will drive up the cost of insurance, and may make it unsustainable for MFIs or clients.

High deductible insurance combined with some marketing and client education may help address the health risks facing agricultural lending clients. A high deductible will help lower costs and avoid moral hazard, while still providing a life line to households dealing with serious illness or injury. Client education may help borrowers make good decisions for their families and increase take-up.

#### ***Box 2: Determinants of Rainfall Insurance Take-up, Studies in Malawi & India***

To study how the insurance against weather affects the farmers' decision to adopt a new technology, Gine and Young conducted a randomized controlled trial with 800 maize and groundnut farmers in Malawi (2007). In this study, half of the farmers in the sample were randomly assigned to receive an offer for credit to purchase improved/high-yielding seeds, while the rest were offered the credit plus mandatory weather insurance. The authors report a surprising result—the take-up of the credit plus rainfall insurance package was 13% lower than the take-up of the credit offer only. They show that the take-up of the credit plus rainfall insurance is correlated with cognitive ability (i.e., education level), indicating that the concept of insurance is complex, and less-educated individuals—often the ones that are more vulnerable to risks—may have had a difficulty understanding how the insurance works.

In another study, Gine, Townsend and Vickery analyze the pattern of rainfall insurance take-up among castor and groundnut farmers in rural India (2008). Among other things, the authors find that wealthy farmers with better knowledge of insurance are more likely to purchase the insurance, while those who experience credit constraint are less likely to take up the product.

These results suggest that the weather insurance did not reach farmers who are poor, less educated, less familiar with insurance, and who do not have steady cash flow.

Giné, Xavier & Yang, Dean (2007). "Insurance, credit, and technology adoption: Field experimental evidence from Malawi," *Policy Research Working Paper Series 4425*, The World Bank.

Giné, Xavier; Townsend, Robert; and Vickery, James (2008). Patterns of Rainfall Insurance Participation in Rural India. *The World Bank Economic Review 2008 22(3):539-566*.



## Technical assistance and market support

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Non-financial assistance, such as technical advice and training, post-harvest assistance, and support in input and output markets, may also increase agricultural productivity. Such support can be costly and may require more staff time or expertise than is available; as such, it may not be an appropriate strategy for all MFIs. However, partnerships with government organizations or NGOs could help farmers without placing an undue burden on lenders.

Several MFIs suggested that even occasional training sessions to introduce new seed varieties and other technologies were successful in helping clients choose more appropriate inputs and farming techniques. Those that reported unsuccessful training sessions mostly cited a lack of participation or interest on the part of clients – more intensive marketing or outreach to clients may help solve this problem.

Only half of the MFIs interviewed require their credit officers to have an agricultural background. For more effective technical assistance or monitoring of farming activities, MFIs may consider hiring staff with agricultural knowledge, or providing specialized training on certain crops. Better staff training may also help counter difficulties in calculating an appropriate loan amount and identifying credit worthy clients.

Although it requires high organizational capacity and close involvement with both farmers and local suppliers, some MFIs may find it useful to support their farmers in purchasing inputs or selling their produce. Support in the market for inputs could range from deals with suppliers that provide clients with bulk discounts and protection from dishonest traders, to direct provision of inputs or vouchers for inputs. In the output market, MFIs could provide access to dryers, blowers, or transportation, to enable clients to receive higher prices for their produce.

## Diversification

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Even given financial products and other assistance tailored to their needs, agricultural households' income will still be limited by the size or quality of their land, and the prices of inputs and outputs on local and international markets. Given these constraints, MFIs, NGOs, and government actors interested in improving the welfare of rural households may need to focus on other strategies in addition to improving agricultural lending. In general, helping households that rely primarily on agricultural activities to diversify their income-generating activities is likely to be critical.

Diversification could include transitioning to more profitable crops, either those that are more suited to the land or which command a better price on export markets. Another possibility is to provide large one-time loans for capital investments that will increase farm productivity, and can potentially be rented to other farmers (e.g. mechanical dryers) to supplement income from crop sales. Finally, some organizations may wish to help households transition away from agricultural activities entirely, through entrepreneurship training, start-up loans for microenterprises, or savings programs.

## 4. Case studies

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In this section, we describe the details of agricultural loan product offered by each MFI interviewed and its performance.

### I. Agriculture and Rural Development for Catanduanes

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Established in 1998, ARDCI is an NGO that provides microfinance, research, training, consulting, and other support services to communities. ARDCI's micro-business (MB) loan program targets households with multiple sources of income that are engaged in micro-enterprises or agricultural activities. Currently, only a small portion of its MB loans are used for agricultural activities, and ARDCI does not monitor the performance of agricultural loans separately from loans provided for other business activities. Among farming households receiving MB loans, 60-80% are tenants engaged in abaca farming.

The MB loan is a Grameen-style group-liability lending program, in which five members form a group and are held liable for each other's loans. Loan amount is calculated using the cash flow method, based on analysis of regular income. The average loan amount is 5,000 PhP, and the term varies from 13 to 50 weeks. Loans are disbursed in a lump-sum, cash value at the beginning of the term, and payments are collected on weekly basis. The interest rate is 1.8% or 2.7% per month, depending on the branch location. The design of the loan product is not different for clients who need capital for their microenterprises and those who need farm capital.

ARDCI does not offer crop, weather, or health insurance, but does offer compulsory life insurance provided by Country Bankers Life Insurance Corporation, with a payout of 100,000 PhP or 200,000 PhP per member in the event of a natural or accident-related death. Aside from insurance, members are required to save 30 PhP for capital buildup. The CBU may be withdrawn upon exit from the program. Members may also avail of the voluntary savings program.

ARDCI has 10,813 clients and 275 credit development officers involved in the MB loan program, with a client to officer ratio of 40:1. The MB portfolio has a current PAR of 1.9%. The bank attributes its successful program performance to the strict implementation of the group-liability structure. The major challenges to the MB program's success that were cited by ARDCI include illness in members' families, crop failure due to natural disasters, poor cashflow analysis based on inaccurate income reporting in applications, a lack of business knowledge among members, and the cost and safety risks associated with credit officers travelling to monitor and collect payments in remote areas.

In order to expand the MB loan program for farmers, it would be useful for ARDCI to monitor the loans provided for farming activities separately from other micro-enterprises loans so that it can identify challenges and financial needs that are specific to the farming households.

## II. Alalay Sa Kaunlaran

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Alalay Sa Kaunlaran, Inc. (ASKI) is an NGO that was established in March 1987 to serve and empower the poor through micro-enterprise development. ASKI offers a micro-agricultural loan product called Credit Assistance for Sustainable Agriculture (CAFSA) which aims to increase the income levels and improve quality of life for farmers while also promoting sustainable, natural methods of farming by reducing dependence on chemical fertilizers and pesticides. In this program, ASKI targets farmers who are owners or tenants of farm land and are engaged in rice or corn farming.

CAFSA uses a group-liability lending scheme. Initially, the program was open to any small landholder or tenant, but most branches are now offering the product only as a bonus loan for well-performing clients of other ASKI programs in order to allow for close supervision. To be eligible for the bonus loan, the applicant must be one of the following:

- a. Agrarian Reform beneficiaries (ARB)
- b. Household member of ARB
- c. Non-ARB:
  - Small farmers with the land size of 5 hectares or less
  - Tenant farmers without land ownership

Loan size is based on cash flow and projected farm income, and clients often rely on sources of income outside of farming activities. The average loan size is 15,000 PhP per hectare, covering 75%-100% of the average rice farmer's production cost. Farmers usually use non-farm income to cover the remaining cost. The method of loan disbursement depends on a farm proposal submitted by the client, but in general loans are disbursed in lump-sum at the beginning of the 4.5 or 5 month term. Interest is 2% per month for a 4.5 month loan term, or 3% per month for a 5 month term—most clients choose a shorter loan term. Interest payment is due on monthly basis, while repayment of the principal is due after the harvest.

ASKI does not offer crop insurance, but provides compulsory life insurance with a benefit of 120,000 PhP. Technical assistance and monitoring is provided by credit officers who are farmers themselves. They provide informal advice during the monthly farm visits and facilitate discussions on farm problems during the center meetings.

Principal payment is collected at the center meeting after the harvest and sale of palay. If there is a client who cannot make the payment, members are first asked to contribute for the payment of the delinquent client. If other members do not have capacity or are unwilling to contribute, the center holds a discussion on how to manage the unpaid loan. This is a center-wide concern because the releases for next cropping season will be delayed when there is a delinquent client in the center.

If the delinquency is due to the delayed harvest or sale of palay, the center members generally ask the delinquent client to submit a promissory note to the bank, stating that s/he will make the full payment upon sale of his/her palay and requesting the next loans for other members to be released. Otherwise, the delinquent client's serialized collateral (usually household appliances) will be sold to cover all, or a portion, of the payment. Deductions from

CBU of the center members are the last resort. In the cases of crop failure or damage, caused by uncontrollable factors such as weather and natural calamities, ASKI restructures the loans; however, this is limited to the extreme cases in order to avoid moral hazard problems. In ASKI's micro-crop loan program, the group dynamics appears to work similarly to what one can find in a typical group-liability loan program for micro-entrepreneurs. Farmers have a strong social network, which makes the group-lending approach practical and effective.

ASKI has 8,304 clients and 20 credit officers in the program. The portfolio at risk as of December 2008 was 1.79%, an improvement over previous months. In order to ensure proper loan utilization, ASKI pays a special attention to the proper timing of loan disbursement and has increased the intensity of monitoring. The major challenges to the program cited by ASKI are crop failure due to natural disasters, illness or other family emergencies, and clients' lack of understanding or seriousness about repayment and due dates.

### III. Cantilan Bank

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Cantilan Bank, Inc. (CB) is a rural bank established in 1980 and operating in the Surigao provinces. It began to offer microfinance services in 1999. CB's micro-agricultural loan program, called Programang Agrikultura alang sa UMA aron mo asenso<sup>5</sup> (PAG-UMA), started in September 2005 in an effort to expand their clientele to farming households. Loans are used for rice (70%), banana (5%), corn (5%), coconut (5%), and vegetables (5%), and clients are a mixture of tenants (60%) and land owners (40%) that are engaged in both farming and non-farm income generating activities.

The product design of PAG-UMA is the same as CB's regular microfinance program; the only difference is in the purpose, although the bank does not closely monitor the actual loan utilization. To be eligible for the PAG-UMA program, farmers must have farm activities that are at least two years in operation and multiple income generating activities/ multiple sources of income. The liability structure is individual, and decisions on loan approval and amount depend on household cash flow. The average loan size is 4,000 – 7,000 PhP, covering 17-25% of total rice production cost per hectare—the proportion of the production cost covered by this loan is small because lending is based on cash flow, and not on production costs. The loan term for the first-cycle is 3 to 6 months, and 3 to 12 months for repeat loans. Loans are disbursed in a lump-sum, cash value at the beginning of the loan term. They are repaid in cash on a weekly, monthly, or semi-monthly basis, depending on the cash flow. Interest is 3% per month.

Initially, cash flow analysis was conducted based on regular business income and projected income from farming, and repayment was amortized equally over the cropping season and collected frequently. Because the resulting loan amounts were often beyond clients' real repayment capacity, program performance struggled. The bank has decided to modify the computation of loan amount, and is currently conducting cash flow analysis on regular sources of income alone. In order to adapt the repayment schedule to the needs of agricultural households, one branch has been offering a new repayment scheme—60% of principal and interest payment is amortized over the loan cycle and the remaining 40% is due in a lump-sum at the end of the

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<sup>5</sup> Translates to “Program for Agriculture/Small Farmers to Uplift or Improve their Living”

loan cycle upon harvest. The branch reports that in this pilot, only 6 out of 150 clients chose the new repayment scheme because they were able to complete the repayment before harvest. While this 60-40% repayment scheme attempts to adjust the repayment schedule to the cash flow of the households, this adjustment may not be effective if the loan amount is calculated based on the regular source of income alone. Such repayment scheme would be most beneficial if the loan amount considers the projected farm income.

CB partners with Philam Insurance to offer compulsory life insurance, which covers medical expenses in the event of serious injury or burial expenses and family benefits in the event of a client's death. The bank also offers compulsory loan insurance, which pays for the clients' outstanding loan balance in the case of client's death. The bank does not offer technical assistance, and account officers do not necessarily have an agricultural background.

There are 846 clients and 11 credit officers in the PAG-UMA program, with a client to officer ratio of 76:1. Portfolio at risk is 9.4%. The bank cites family illness and poor health, mismanagement of non-agricultural microenterprises, and bad weather which reduces both agricultural and other income as the major causes of non-payment. Implementation problems included concerns about the accuracy of the cash flow analysis, credit officers' non-compliance with cash flow and credit check procedures, and the cost and risk of travel to remote areas. To deal with these issues, the bank has increased the supervision of credit officers to ensure compliance and has instituted incentives for clients who pay on time by lowering the interest up to 1%. CB plans to add 2 more officers in the second quarter of 2009 to expand the program.

#### IV. ECLOF Philippines Foundation

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Established in 1973, the Ecumenical Church Foundation, Inc. (ECLOF) is a non-profit corporation that provides credit for human development. It offers a Rice Farming Loan (RFL) in one of its four branches. ECLOF does not require clients to have other sources of income—the purpose of the RFLs is to extend financial assistance to farming households that do not have existing access to credit. Target clients are agrarian reform beneficiaries, and only 5% of clients are tenants. RFLs are primarily for rice farmers, as the name suggests, but ECLOF also allows strawberry, potato, and cut-flower growers to participate.

RFL is an individual liability program, but farmers meet regularly and repay together. Loan amount is based on production cost, and the average is 20,000 pesos per hectare, for up to two hectares in the first term, and can be increased if repayment is made on time. The loan term is usually 5 months. Loans are disbursed at the beginning of the term at 2,000-4,000 PhP per hectare in cash and the rest in purchase orders for farming inputs. The interest rate is 3% per month. With the 10% discount on inputs that ECLOF clients receive from suppliers, the loan generally covers the entire production cost. Repayment is in lump-sum at the end of the loan term. Though the basic product designs and features are the same across loan programs for different crops, the bank will adjust loan terms and provide flexibility appropriate for each crop.

At present, ECLOF does not offer crop, weather, or health insurance. It offers a compulsory in-house life insurance product, under which the outstanding loan balance is forgiven and the borrower's family receives 2,000-4000 PhP in assistance in the case of the borrower's death. For

monitoring purposes, credit officers visit each farm every month, providing informal assistance if necessary. ECLOF previously offered more extensive technical assistance, but there were clients who blamed the bank for farming problems and used this as an excuse for not paying back the loan. As a result of this experience, ECLOF does not provide advice on choices such as seed variety and fertilizer use.

Because of its focus on agricultural lending to those without other sources of income or credit, ECLOF has developed a number of ways to assist its clients. For instance, farmers with good standing can take out an additional loan to purchase agricultural equipment on installment over several years. Access to farm equipment reduces production costs and allows farmers to generate extra income by leasing it out.

ECLOF also helps its clients by providing them with the flexibility to dry and sell their palay at the right timing: the crop cycle is 4 months, but loan terms are usually 5 or 6 months, allowing farmers time to prepare their product and find the highest price. Even though farmers have time to sell their rice at better prices, many still choose to sell palay to traders, because they need the money immediately after the harvest to prepare the land for the next cropping season. In response, ECLOF is now providing additional capital for farmers to prepare for the next cropping season before they repay the previous loan.

When clients cannot repay because of crop failure or low prices in the output market, ECLOF restructures loans and provide farmers additional credit for the following cropping season. In several recent cases ECLOF restructured loans for a large number of farmers, and all of these restructured loans have been paid back in full without any write-off.

ECLOF currently has 2,905 clients and 8 credit officers in the RFL program, for a client to officer ratio of 363:1. The portfolio at risk is 8%. Credit officers reported that bad weather and pests, volatile input prices, and poor health were all major challenges to loan repayment. They also noted the lack of financial literacy among clients, leading to overreliance on moneylenders and traders who charge high rates. ECLOF is considering offering crop/weather insurance in the future to reduce default due to crop failure, although it has successfully collected over time by restructuring loans. ECLOF also plans to expand the loan program for crops other than rice. Even though the basic product designs and features are the same across loan programs for different crops, they adjust loan terms and provide flexibility appropriate for each crop—this is the key to the successful agricultural lending programs.

## V. First Valley Bank

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First Valley Bank (FVB) is a Mindanao-based rural bank that has been offering supervised micro agricultural loans since the 1990s, and views this program as part of its social mission and commitment to its home region. The program is targeted at rice farmers with no capital or other income sources, of whom about 80% are tenants and 20% own their land.

The product uses an individual liability scheme. Loan amount is calculated based on production costs, up to a maximum of 20,000 PhP per hectare, which usually covers about 80% of expected costs. FVB expects clients to cover the remaining cost, and speculates that most

clients use their savings or income from paid labor. The average loan term is 6 months, to match the rice growing season. Loans are disbursed in both cash (41.5%) and inputs (58.5%). Principal is placed in a savings account with a passbook, to be withdrawn by the client only with approval from an account specialist and granted only as needed. Cash is disbursed typically to meet labor needs while farmers can get a voucher to purchase fertilizers and pesticides directly from First Valley Bank's farming supplies subsidiary, Kapatagan Valley Bank Trading Company (KVBT). Interest is charged at 1.7% per month.

Both interest and principal are paid in a lump-sum at the time of harvest, and the bank accepts either cash or crops for repayment, offering a price for palay that is competitive with that offered by traders. Although the NFA offers the highest prices, about 20% of farmers are unable to meet its requirements, and so sell their palay to traders or KVBT. KVBT provides transportation to get the palay from the farm to the company's warehouse. Once KVBT picks up the farmer's palay, the farmer will be provided with a receipt to pay off the proceeds of the loan and have the remaining revenue either in cash or as a credit to the farmer's account. KVBT also reimburses the transportation of the farmer, if they themselves bring the palay to the warehouse.

FVB requires clients to purchase crop damage insurance through PCIC, but according to the bank the payout in the event of crop failure is rarely sufficient to cover the full damage or repayment of the loan. Clients are also required to purchase in-house life insurance, under which the loan is forgiven in the event of the client's death. No weather or health insurance is offered. Loan officers have an agricultural background and make frequent visits to clients to supervise and offer assistance, especially during the harvest. Technical assistance is often related to pest control or loaner crops.

As of November 2008, FVB's supervised agricultural loan program has 800 clients and 3 loan officers, for a ratio of 267:1. The bank typically restructures loans that are overdue because of a delay in harvest—generally caused by uncontrollable factors such as weather—and collects after the harvest so that the client will not be penalized. To reduce the PAR, FVB cross checks the accuracy of the computation of the production cost, rather than approving what the farmer requested. The bank is looking into modifying its selection process possibly by revising its client qualification requirements. The major causes of trouble repaying loans, according to FVB are pests, bad weather (especially flooding), and family illness. FVB's unique lending approach relies on successful farm outcomes to enable clients to make lump-sum repayments at the end of the loan term. The portfolio-at-risk is currently at 3%, which is lower than similar programs at other MFIs.

FVB is interested in expanding its agricultural lending program, but faces constraints due to its highly supervised, resource-intensive approach. At present, FVB's 3 account specialists are trained as agriculturists so that they can both provide advice on farming techniques and also monitor the progress of the crops closely. These account specialists often need to travel long distances to visit clients' farms, which can be very time-consuming. In its home province, FVB's trading subsidiary sells inputs and buys back palay at market prices to ensure clients are not cheated and will earn enough to pay back their loans. In other provinces, FVB is in the process of negotiating relationships with outside sellers and traders who can provide the same services to its clients and who will also be trustworthy enough to help FVB collect loan payments.

## VI. Negros Women for Tomorrow Foundation

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Founded in 1984, the Negros Women for Tomorrow Foundation, Inc. (NWTF) began as an NGO that aims to help women achieve self-sufficiency, particularly in Negros Occidental's low-income communities. NWTF's micro-crop loan program began in December 2005. Target clients are land reform beneficiaries who grow sugarcane and rice; the majority of clients are sugarcane farmers. Most clients have other sources of income; however, these non-farm activities do not affect the decision on loan size.

NWTF's micro-crop loan program uses a group-liability lending scheme. Loan amount is determined by a production cost analysis, and farmers submit a detailed costing plan which is then checked by a credit officer and adjusted. The average amount is 25,000 PhP for 1.25 hectares, which is less than what the farmer would need for the traditional chemical-based production, because NWTF encourages its farmers to employ an organic farming methodology and reduce costs from chemical inputs. Loans are disbursed in cash in a staggered fashion over 3 months, based on farming activities completed. The interest rate is 4% per month.

NWTF does not offer crop, weather, or loan insurance. However, it does offer voluntary life/health insurance which includes assistance in the cases of hospitalization, medical expenses, and death. The bank also offers emergency loans, which must be approved by the client's group members and then repaid along with the existing loan. NWTF does not directly extend technical assistance, but encourages lending centers to coordinate among members, and holds annual training sessions for center officials. Credit officers have an agricultural background, and during bi-monthly meetings share their knowledge about farming and answer questions.

NWTF currently has 651 clients with 8 loan officers and 3 supervisors in the micro-crop loan program for a loan officer-client ratio of 81:1. Portfolio at risk is 30%. Given the low repayment rate, the bank has stopped expanding the program to new clients while assessing the product design. NWTF feels that some farmers do not take the repayment seriously, because of past government credit programs that failed to collect repayments. Furthermore, in spite of the group-liability scheme, center members' responsibilities in the case of default are not strictly enforced: if center members refuse to pay for the delinquent client, credit officers conduct house visit to assess the repayment capacity of each member. In the future, NWTF plans to limit loan size to 25,000 PhP, and to add a compulsory savings requirement of 100 PhP per month in an attempt to deal with the low repayment rate.

The bank cites many challenges that contribute to the product's poor performance. The lack of lending capital is a major constraint in modifying and expanding the program. Bad weather and high and volatile input prices hurt farmers<sup>6</sup>. Although clients are encouraged to reduce costs by using organic techniques, few have actually switched away from chemical-based methods. High costs associated with hiring skilled staff and providing transportation to remote areas are a concern as well. NWTF also reports that it is cheated by farmers who sell their product and then refuse to repay. It plans to form partnerships with millers so that it will be able to trace whether

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<sup>6</sup> Staff reported that the clients experienced 100% increase in the price of chemical fertilizers over the past three years.



farmers were paid for their sugar.

Staff noted that NWTF does not have the capacity to compensate for technical services that were promised but never delivered by the government, such as helping farmers till their land, and providing access to seeds and post-harvest facilities. Furthermore, because many NGOs and government projects have lasted only for a short time, staff suspect that clients do not have confidence in NWTF. They mentioned that they plan to continue providing loans and other services, even if farmers don't repay, to build client confidence and send the message that NWTF will continue to serve the area.

## VII. People's Bank of Caraga

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The People's Bank of Caraga, Inc. (PBC) is a rural bank established in 1972 and operating in Mindanao. PBC offers a loan program called Isa-Isang, Sama-Samang Pag-Unlad, Pangsakahan at Palaisdaan Project ("Together Toward Success, for Farmers and Fisherfolk"), or ISAPA-PPP, for a wide variety of agricultural activities including farming (rice, corn, banana, etc.), livestock, and aquaculture. Loans can be used for regular production, or to purchase fixed assets, farm equipment, or livestock. The program's target clients are the spouses of regular microfinance clients who are engaged in farming or fishing, but it is open to others as long as they have off-farm, regular income generating activities. An estimated 85% of ISAPA clients are rice farmers.

ISAPA is a group lending program. Loan amount is computed based on production costs; however, due to a lack of reliable information on farm activity, ISAPA loans start small and gradually increase as the client develops a credit history. The average loan amount is 25,000 PhP, for an average 3 hectare farm. The maximum loan amount is 15,000 PhP per hectare, up to a maximum of five hectares, covering only a portion of total production costs for rice farmers. Loans are released fully in cash at the beginning of the term, rather than in kind or in stages conditional on farm status. Loan terms depend on the cropping cycle, up to a maximum of 12 months. The typical installment repayment schedule for a 6-month loan is 50% of the principal plus interest on the 4th month (upon harvest); 25% in the 5th month; and the last 25% in the 6th month. Interest is 2.3% per month. This payment schedule gives some flexibility to farmers who may encounter unforeseeable delays in harvest or sale of their produce.

PBC does not offer any crop insurance, but it offers accident/life insurance to its clients, which is compulsory at some branches. Benefits include assistance in the case of the death or hospitalization of a family member. Clients are also required to pay for loan protection which repays the loan in the case of the client's death. Nine out of 10 ISAPA credit officers have an agricultural background, and they host a monthly continuing education meeting for the farmers on appropriate technology, collection of savings, and partial repayments, as well as best practices in farming, organic farming, and entrepreneurship. One of the branches also offers post-harvest assistance, providing access to a mechanical dryer owned by the bank.

Under the ISAPA program, PBC no longer becomes directly involved in farming activities. Credit officers discuss farm conditions and any problems arising during periodical farm visits and cluster meetings, but monitoring of regular activities has been cut back, as it is costly for loan officers to conduct frequent farm visits. Credit officers report that the group-liability is

generally enforced—if the cluster officials are unable to collect the payment from the delinquent farmer, members are asked to contribute to make up the difference. If the contribution from the members is not sufficient, cluster savings funds are used to pay for the delinquent farmer's loan. PBC does not monitor whether or not cluster members eventually get repaid by the delinquent farmer. If the cluster does not repay on behalf of the delinquent farmer, loan renewals for all cluster members are delayed. PBC believes that this strict enforcement of group-liability has helped maintain low PAR. However, the bank recognizes that risks among farmers producing the same crop in the same region are correlated – when one farmer experiences crop damage due to pests or weather, it is likely that other farmers also suffer from crop damages. In extreme cases of natural calamity, the bank considers restructuring loans rather than holding the cluster accountable.

As of November 2008, PBC has 1,437 active clients and 10 credit officers in the ISAPA program, for a client to officer ratio of 144:1. Portfolio at risk is 10%. The main challenges faced by the bank's clients are weather, pests, and the volatility of input prices. PBC is considering offering crop insurance in the future. Implementation challenges include staff corruption and lack of diligence in implementing policies, as well as the cost and risk of staff travel. PBC is planning to increase oversight of field staff to reduce corruption, and is also considering more training seminars and better incentives to increase compliance.

### VIII. Valiant Rural Bank

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Valiant Rural Bank (VRB), a rural bank based in Iloilo City, was established in 1997. VRB's micro-agricultural loan program, Bugana sa Valiant, is an individual-liability loan product for small farmers with multiple sources of income, and began in October 2005. The program aims to extend financial assistance to small farmers and is intended for crop production, raising livestock, and purchasing farm equipment. A majority of the clients in the Bugana program are engaged in rice farming (50%), hog-raising (30%) and sugarcane farming (10%). The Bugana program also requires a secondary, non-farm source of income to encourage farmers to diversify their income generating activities.

VRB uses cash-flow analysis to determine the loan amount, and the average is 15,000 PhP. The loan term is determined by the length of the cropping season and can be up to 6 months (or 12 months if the client offers serialized assets). Loans are released in cashier's check at the beginning of the loan term. Loan repayments are amortized on monthly basis, collected by account officers from clients' homes or businesses. The interest rate is 2.75% per month. Even though the Bugana program is a cash flow-based lending that only considers regular sources of income, credit officers conduct regular farm visits. Credit officers generally do not have agricultural background, so they do not intervene in farming activities; they only conduct the loan utilization check to make sure that the loans are used for farming activities.

VRB mandates credit-life insurance provided by the Country Bankers Life Insurance Corporation for every loan. Upon death, the insurance company will pay off the loan; however there is no additional benefit for the family. Bugana does not include technical assistance.

As of December 2008, VRB's Bugana program has 1,946 borrowers and 18 loan officers with client-loan officer ratio of 108:1. Portfolio at risk is 10%. The main challenges to clients are negative income shocks in the household resulting from family illness or natural disasters. To reduce PAR, VRB is implementing strict assessment of applicant's cash flow and persistent follow-up with delinquent clients. Product design and implementation procedures are under re-evaluation and may be modified in the near future. By delinking the assessment of loan repayment capacity and loan usage, Valiant Bank extends financial assistance for farming activities; however, the product design is not much different from that of the traditional micro-enterprise loans—the program adopts cash flow analysis based solely on the regular sources of income and frequent and small repayment schedule. As a result, the program only includes households that have regular income sources.

**Table 8. Program Status & Performance**

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	Portfolio at Risk	Number of Clients	Number of Micro-Agri Loans	Average Default (% of pastdue accounts)	Portfolio (million PhP)	Number of Loan Officers
	(1)	(2)	(3)	(4)	(5)	(6)
ARDCI	1.90%	10,813	10, 813	na	118.00	275
ASKI	1.79%	8,304	8,304	2.6	122.00	20
CB	9.39%	846	846	9.84	5.15	11
ECLOF	8%	2,905	2,905	na	11.64	8
FVB	3%	800	865	30	12.00	3
NWTF	30%	651	1364	25	41.37	8
PBC	10%	1,437	1437	15	250.00	10
VRB	10.11%	1,946	1946	10	18.80	18

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The data is collected from each institution between October and December 2008. Note that ARDCI does not have performance data on agricultural loans--the numbers in the table is the aggregate performance data for micro-business loans

**Table 9. Challenges to Program Implementation**

	ARDCI	ASKI	CB	ECLOF	FVB	NWTF	PBC	VRB
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Client Selection</b>								
- Lack of variety in sources of income		✓	✓					
- Poor analysis of loan application (loan size over repayment capacity)	✓		✓					
- Poor client character	✓	✓			✓	✓		✓
- Lack of confidence in the MFI				✓		✓		
- Other loans from informal lenders				✓	✓		✓	
- No collateral, credit history, or business record						✓	✓	✓
<b>Monitoring</b>								
- Limited agricultural background of staff						✓		
- Diversion of loan proceeds	✓	✓						✓
- Migration of clients	✓					✓		
<b>Other Operational Challenges</b>								
- Staff fraud	✓	✓					✓	
- Limited number of staff to serve a large number of clients					✓	✓		
- Safety and security risks / hard-to-reach areas impose high service costs	✓		✓			✓	✓	
- Insufficient lending capital		✓				✓		
<b>Product Innovation &amp; Competition</b>								
- Severe competition (need of product innovation)							✓	✓
- Lack of weather insurance		✓						

## Conclusions

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Practitioners and the national government in the Philippines are growingly interested in expanding agricultural microfinance. However, due to the unique and uncontrollable risks that farmers face, it is inherently risky for financial institutions to provide financial services to agricultural households.

This study documented a selected number of micro-loan products designed for farmers in the Philippines. We find a large variety of product designs and add-in services that attempt to serve the needs of the farmers while managing the risks of lending to farmers. While a cash flow-based lending that uses regular household cash flow analysis and collects payments frequently provides a valuable line of credit for households engaged in farming activities, there is a limitation in deepening the outreach among marginal farmers who do not have other sources of income. Production cost-based lending provides more promise to increase profits and help farmers without other sources of income to mitigate the uncontrollable risks to agriculture.

Operationally, many MFIs mentioned that limited resources and capacity prevent them from improving the product designs and expanding the micro-agricultural loan programs. Monitoring of farming activities is labor and time-intensive and requires credit officers who have specialized knowledge in farming. This is particularly the case for the more promising, production cost-based lending method.

The main risks identified by the interviewed MFIs are 1) weather and natural calamity, 2) volatility of input prices, 3) uncertainty in output markets, and 4) family illnesses. In order to reduce these risks, lenders must think creatively and flexibly to design innovative products and services that address the specific constraints faced by farming households, and which are tailored closely to the cash flow and needs of agricultural production. Some MFIs design loan products with flexible loan repayment schedule in order to encourage farmers to sell their produce at higher prices. Some disburse loans in the combination of cash and in-kind to ensure the appropriate loan utilization. Many MFIs make effort to obtain better input prices for their clients. In part, this may also involve expanding partnerships with other entities, such as insurance companies and input suppliers, and offering services besides financial products. In particular, helping clients access proper crop and health insurance policies seems critical in mitigating many of the risks repeatedly mentioned by MFIs (natural calamity, health of clients' family members).

This report attempts to highlight some of the major risks and challenges that lenders face in providing financial assistance for farming households and suggest avenues for future study. In order to expand the outreach of agricultural microfinance and establish best practices, more careful research and pilot-testing of innovative microfinance products and services that aim at solving specific constraints of farming households are needed.

## Appendix 1 – Participating institutions and interviewees

Location	Website	Interviewee	Title
<b>Agriculture &amp; Rural Development for Catanduanes (ARDCI)</b>			
Virac, Catanduanes	http://ardci.com	Evelyn Teves	Finance & Administration Services Unit Head
		Alma Villanueva	Operations Head
<b>Alalay sa Kaunlaran, Inc. (ASKI)</b>			
Iligan, Isabela	http://www.aski.com.ph	Joel Respicio	Iligan Branch Mgr.
		Robino Albino	Iligan Branch Agri-loan Officer
		Jerry Fernandez	Iligan Branch Agri-loan Officer
<b>Cantilan Bank (CB)</b>			
Orozco St. Magosilom, Cantilan, Surigao del Sur		Amachel Plaza	Microfinance Head
		Remybert C. Trugillo	Loans Officer Main Branch
<b>Ecumenical Church Foundation, Inc. (ECLOF)</b>			
Ecumenical Centre 2nd floor, 879 EDSA, Quezon City 1162		Dan Santiago	Palawan Branch Manager
		Larry Milan	Executive Director
		Armando Bait	Palawan -Narra Satellite Office Loan Officer
<b>First Valley Bank (FVB)</b>			
Vamenta Blvd.Carmen Cagayan de Oro City	http://1stvalleybank.com/	Boy Lapuz	Maranding Branch Manager
		Rogelio Lapus	Maranding Branch Account Specialist
<b>Negros Women for Tomorrow Foundation (NWTf)</b>			
102 San Sebastian Corner Verbena St., Bacolod City 6100	http://nwtf.ph	Raymund Serios	Micro Crop Supervisor
<b>People's Bank of Caraga (PBC)</b>			
National Highway, Brgy. 5, San Francisco, Agusan del Sur 8501		Epifania Bulaon	Microfinance Project Director
<b>Valiant Rural Bank (VRB)</b>			
Valiant Bldg., 41 Mabini St. Iloilo City 5000		Roger Escaro	Loan Support Officer
		Silverio Estocado, Jr.	Account Officer
		Paul Michael Cebritas	Account Officer
		Jonathan Ordaniel	Account Officer

## Appendix 2 – List of participating MFI’s branches offering agricultural loans

<b>Agriculture &amp; Rural Development for Catanduanes (ARDCI)</b>	
Baras Branch	Poblacion, Baras, Catanduanes
Viga Branch	Asuncion, Viga, Catanduanes
Caramoan Branch	LGU Compound, Caramoran, Catanduanes
San Andres Branch	San Andres, Catanduanes
Goa Branch	Brgy. Matacla, Goa, Camarines Sur
Naga Branch	Dr. Fernando's Compound, Haring, Canaman, Camarines Sur
Iriga Branch	Aquiller Building, Block 2, Rizal St., San Nicolas, Iriga City
Sorsoagon Branch	Garcia St., Sulucan, Sorsogon City
Irosin Branch	Valderrama Bldg., San Julian, Irosin, Sorsogon
Bulan Branch	Concepcion St., Zone 1, Bulan, Sorsogon
Tobacco Branch	Karangahan Blvd, Bombon, Tabaco City
Daraga Branch	299 Morada Apt., Los Banos Subd., Sagpon, Daraga, Albay
Ligao Branch	Tuburan, Ligao City, Albay
<b>Alalay Sa Kaunlaran Inc. (ASKI)</b>	
Gapan Branch	Del Rosario Bldg., Tinio St., San Vicente, Gapan City, Nueva Ecija
Guimba Branch	MC Leonardo Bldg., Sarmiento, Guimba, Nueva Ecija
Palayan Branch	Ground Floor, Smile Arcade Bldg., Aurora Road, Brgy. Atate, Palayan City, Nueva Ecija
San José Branch	# 3 Mokara Bldg., Brgy Rafael, Rueda St., San Jose City, Nueva Ecija
Talavera Branch	# 188 Maharlika Highway, Brgy Pulong San Miguel, Talavera, Nueva Ecija
Baler Branch	Recto St. Brgy. 3 Baler, Aurora, Nueva Vizcaya
Solano Branch	2nd Floor Farinas Bldg. Brgy. Roxas, Solano, Nueva Viscaya
San Rafael Branch	# 107 Cruz na Daan San Rafael, Bulacan
Plaridel Branch	# 4361 Gov. Padilla Road Brgy. Poblacion, Plaridel, Bulacan
Tuguegarao Branch	Metroplex Commercial Center Balzain Highway, Tuguegarao City, Cagayan
Cauayan Branch	National Highway Cabaruan Cauyan City
Ilagan Branch	# 64 G/F Lubo Bldg. Brgy. Guinatan, Ilagan, Isabela
Roxas Branch	Bantug National highway Roxas, Isabela
Santiago Branch	Gokioco Bldg. City Road centro West Santiago City, Isabela
Tayug Branch	Quezon Blvd. Tayug, Pangasinan
Urdaneta Branch	2nd Floor APN Bldg. Mac Arthur Highway San Vicente Urdaneta, Pangasinan
Angeles Branch	#382 Tri City Bldg. Salupungan Mc. Arthur Highway, Angeles City, Pampanga
Concepcion Branch	Arthur Go. Bldg. L. Cortez St. San Jose Concepcion, Tarlac
Paniqui Branch	2nd Floor Fernandez Bldg. M.H. Del Pilar St. Poblacion Norte Paniqui, Tarlac
Tarlac City Branch	Unit 3 Sun Yat Sen Bldg. Block 9 San Nicholas Mc. Arthur Highway, Tarlac City
Cabanatuan City Branch	#105 Maharlika Highway Cabanatuan City, Nueva Ecija



## Improving Agricultural Microfinance: Barriers to the supply of agricultural lending in the Philippines

<b>Cantilan Bank (CB)</b>	
Cantilan Branch-Main	Orozco St., Magosilom, Cantilan, Surigao del Sur
Madrid Branch	San Isidro St., Madrid, Surigao del Sur
Tandag Branch	Corner Rizal & Osmeña St., Bag-ong Lungsod , Tandag, Surigao del Sur
San Miguel Branch	Tina, San Miguel, Surigao del Sur
Surigao City Branch	Rizal St., Surigao City
Tubod Branch	National Highway, Tubod, Surigao del Norte
Butuan Branch	Rudy Tiu Building, Montilla Boulevard, Butuan City
<b>Ecumenical Church Loan Fund (ECLOF)</b>	
Palawan Branch	Puerto Princesa, Palawan
Benguet Branch	La Trinidad, Benguet
Antipolo Branch	Antipolo City
<b>First Valley Bank (FVB)</b>	
Maranding Branch	Maranding, Lala, Lanao del Norte
Kapatagan Branch	Kapatagan, Lanao del Norte
Pagadian Branch	Sta. Lucia St. Pagadian City
Buug Branch	National Highway, Buug Zamboanga Sibugay
Imelda Branch	Poblacion Imelda, Zamboang Sibugay
Aglayan Branch	Sayre Highway Aglayan Malaybalay, Bukidnon
<b>Negros Women for Tomorrow Foundation (NWTF)</b>	
Victorias Branch	Rainbow Mall, Victorias City
Silay Branch	Senator Locsin St., Brgy. 5, Silay City
Bago Branch	LE Complex Bldg., Pensionne, Marhil Subd., Bago City
Valladolid Branch	Door 5 & 6, NGG Bldg., Rizal St., Pontevedra
La Castellana Branch	Villa Angela Market, Villa Angela Subd., La Castellana
Hinigaran Branch	Rizal St., Hinigaran
Binalbagan Branch	2nd Flr Mt. Carmel Arcade, Brgy. Progreso, Binalbagan
<b>People's Bank of Caraga (PBC)</b>	
Principal Office	Barangay 5, San Francisco, Agusan del Sur
Tagacogon Branch	Del Monte, Talacogon, Agusan del Sur
Prosperidad Branch	Poblacion, Prosperidad, Agusan del Sur
Sibagat Branch	Highway Poblacion, Sibagat, Agusan del Sur
Sta. Josefa Branch	Poblacion, Sta. Josefa, Agusan del Sur
Oroquieta Branch	Bernad St. Oroquieta City, Misamis Occidental
Lupon Branch	Aguinaldo St., Lupon, Davao Oriental
Compostela Branch	Compostela, Comval, Province
Digos Outreach	2 <sup>nd</sup> Fl. Ladera Bldg. Rizal Ave. Digos City, Davao del Sur
<b>Valiant Rural Bank</b>	
Head Office	#41 Mabini St., Iloilo City
Dueñas Branch	Brgy. Capuling, Dueñas, Iloilo
Estancia Branch	E. Reyes Ave., Estancia, Iloilo
Antique Lending Center	Antique, San José, Antique

## Improving Agricultural Microfinance: Barriers to the supply of agricultural lending in the Philippines

Roxas Lending Center	Jovita Sts, Roxas City
Sara Lending Center	E. Salcedo St., Sara, Iloilo
Banate Lending Center	Melton Building, Real St., Banate, Iloilo

### Appendix 3. Summary of Client Selection Process

	ARDCI	ASKI	CB	ECLOF
Eligibility Criteria	<ul style="list-style-type: none"> <li>• The household's monthly income should fall below the poverty threshold (based on National Census)</li> <li>• The household must be engaged in microenterprise or agribusiness.</li> <li>• Permanent resident of a barangay in ARDCI's areas of operations.</li> <li>• The household must be engaged in, or is willing to engage in, agricultural activities.</li> </ul>	<ul style="list-style-type: none"> <li>• No past due loan for one year.</li> <li>• Be one of the following:               <ol style="list-style-type: none"> <li>a. Agrarian Reform beneficiary (ARB)</li> <li>b. Household member of ARB</li> </ol> </li> <li>• Non-ARBs must be:               <ol style="list-style-type: none"> <li>a. small farmer with the land size of 5 hectares or less</li> <li>b. tenant farmer without Emancipation Patent (EP) or Certificate of Land Ownership Award (CLOA)</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>• Farm activities that are at least two years in operation.</li> <li>• Multiple income generating activities/ multiple sources of income</li> <li>• A resident in the community for at least two years</li> <li>• 18 - 65 years of age</li> <li>• Clear from cases in the barangay</li> </ul>	<ul style="list-style-type: none"> <li>• Resident of the area for at least 2 years</li> <li>• Must not be a member of other MFIs</li> <li>• Must be engaged in rice farming</li> </ul>
Marketing	Credit officers conduct door-to-door marketing of the product.	<ul style="list-style-type: none"> <li>• Offered to well-performing clients and their family members</li> <li>• Pre-orientation during monthly meetings of other programs.</li> </ul>	Radio ads, field visits, and word of mouth at meetings.	Radio advertisement and barangay orientations.
Collecting Application Form	All applicants attend the Guarantee Group Compulsory Training (GGCT), in which applicants learn about responsibilities of being a member in the MB loan program.	Interested farmers are encouraged to visit the bank branch where they fill out application forms.	Interested farmers visit the bank branch to attend orientations. The application is filled out and signed afterwards.	Applicants fill out application forms at the ECLOF satellite office
Validation	Credit officers check the eligibility of applicants. Branch manager interviews applicant	Credit officers visit the client's house and conduct cash flow analysis	CIBI is conducted which includes character analysis is conducted.	Credit officers conduct CIBI at applicants' homes and verify the information (1-2 days).
Loan Decision	Based on cash flow analysis	Based on farmer's income and expenses. Loan approvals for renewals are announced at the branch-wide meeting.	Based on cash flow analysis. An account officer goes to field to inform applicant of loan decision.	Approved if 1) the farm produces well, 2) farm is irrigated and not in flood area, 3) has no other credit obligation, and 4) barangay or police record is good.

### Appendix 3 (Continued)

	<b>FVB</b>	<b>NWTF</b>	<b>PBC</b>	<b>VRB</b>
Eligibility Criteria	<ul style="list-style-type: none"> <li>• The client must work the farm directly either as an owner or a tenant (cannot be mortgaged);</li> <li>• The farm must be three hectares or smaller;</li> <li>• The farm should be irrigated;</li> <li>• The applicant should be in the farming industry for at least 2 years;</li> </ul>	<ul style="list-style-type: none"> <li>• Between the age of 18 and 60</li> <li>• Must own a farm land</li> <li>• Must own a land suitable for sugarcane farming</li> <li>• Must own a land near sugarcane millers</li> </ul>	<ul style="list-style-type: none"> <li>• Must be land tillers. The applicant must show legal documents proving that they are owners or tenants of cultivated land.</li> <li>• Must not own more than five hectares of land.</li> <li>• Must be a resident in the community for at least two years and working regularly on a farm.</li> <li>• Must be married, or else the main income earner of the household</li> <li>• May not have any outstanding loans from other lending institutions or individuals.</li> <li>• Must have non-agricultural income generating activities.</li> </ul>	<ul style="list-style-type: none"> <li>• The applicant must be engaged in farming/agricultural activities for at least 2 years;</li> <li>• A resident in the community for at least two years;</li> <li>• No past due accounts with the Valiant bank, or any other banks/creditors/suppliers;</li> <li>• Clear from Barangay or Court cases;</li> <li>• Must have present and regular sources of income other than the farm;</li> </ul>
Marketing	Word of mouth, flyers and radio advertising. Account specialists also market their products when talking to clients	Word of mouth from Project Dungannon (regular MF program)	Community orientations for barangay residents	Client orientations are conducted regularly or as requested by residents of the barangay.
Collecting Application Form	Application forms are submitted directly to the branch office.	Staff helps farmers fill out application in the field	Loan officers conduct house-to-house visits to interested applicants	After client orientation, interested applicants receive the application forms.
Validation	Visit to client, interviews with co-makers, a background check with the barangay captain, and a check on clients' borrowing history at FVB.	House visits and interviews are conducted with family, center members, neighbors, barangay officials, etc.	Administer a means test and poverty score card survey (PSCS) as well as a credit investigation. A thorough survey of the area to be cultivated is conducted as well.	CIBI is conducted, which takes an average of 5 days.
Loan Decision		Farm plan is assessed during center meeting. Center members approve the loan and submit to Credit Committee, which makes the final loan decision. Loans are released within 3 days of the loan decision.	S/he must attend a 3-day workshop and pass tests on understanding of program policies. A farm plan and costing is also prepared by the applicant. The final decision on loan approval is made by center members.	The applicant is assessed based on stability, entrepreneurship, repayment capacity and reputation tests.

## **Appendix 4 – Agricultural Loan Product Survey Instrument**

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<b>Target Market</b>				
Produce type		Rice		
		Sugarcane		
		Abaca		
		Other (specify: _____)		
Average land size				
Land ownership				
Average income/exp				
Previous means of financing		millers/suppliers		
		money lenders		
		friends/family		
		formal institutions		
<b>Product Features</b>				
Loan term				
Average loan size	_____ pesos ( ____ % of total production cost)			
Interest rate				
Service charges/fees				
Collateral requirements				
Co-maker requirements				
Compulsory savings		Yes (please describe: _____)		
		No		
Loans disbursed in		Cash	Repayment type	Cash
		Inputs		in-kind
Disbursement frequency		Lump-sum	Repayment frequency	Weekly
		Staggered		Lump-sum
<b>Other Services</b>				
Technical assistance (please describe)				
Post-harvest assistance (please describe)				
Insurance		premium	Benefits	Provider
		Crop		
		Weather		
		Health		
		Death		

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<i>Client Selection</i>				
Eligibility for applying for loans				
Step1: Marketing				
Step2: Collecting application forms				
Step3: Validating the info on application forms				
Step4: Making the loan decision				
Step5: Informing the loan decision				
Step6: Disbursing the loan				
<i>Activities Over Cropping Season</i> (Produce type: _____)				
	<i>Farmer's activities</i>		<i>MFI's activities</i>	
	<i>Activities</i>	<i>Cost</i>	<i>Scheduled loan releases</i>	<i>Other services provided</i>
<b>Month 1</b>				
<b>Month 2</b>				
<b>Month 3</b>				
<b>Month 4</b>				
<b>Month 5</b>				
<b>Month 6</b>				
<i>Program Status</i>				
Number of farmers served		Years of operation		
Average default				
Main reasons for default (in the order of importance)				
How do credit officers monitor farmers' activities?				
What are the challenges of implementing the program?				
What do you think are the potential solutions to these problems?				

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<p>Please describe background of staff members administering your agricultural loans.</p>	
<p>What kind of management information system (MIS) is used at the MFIs to administer their agricultural loans?</p>	



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