CASE STUDY

Unlocking Credit for Haiti's Smallholder Mango Producers

November 2014

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Overview

In 2010, TechnoServe and its partners launched the Haiti Hope Project to double the incomes of 25,000 Haitian mango farmers within five years of joining. Achieving this goal will raise the standard of living for beneficiary farmers and contribute to the long-term development and revitalization of the country.

The Haiti Hope Project is a public-private partnership comprised of The Coca-Cola Company; the Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank Group (IDB); the U.S. Agency for International Development (USAID); and TechnoServe. The Clinton Bush Haiti Fund, the Soros Economic Development Fund, and other international and local organizations also support the project.

As part of Haiti Hope, TechnoServe is acting as an independent intermediary to build linkages between capital providers and rural producers seeking capital. Since April 2011, TechnoServe and Sogesol, a Haitian microfinance institution, have helped unlock $2.2 million in short-term, low-interest credit for more than 8,000 smallholder farmers, many of whom were previously excluded from the country's financial system.

As Haiti Hope enters its final year, it is an opportune time to reflect on lessons learned and share practical insights to support the replication of scalable approaches to direct-to-farmer finance. The following case study documents the evolution of Haiti Hope's farmer credit program, explores the critical ingredients for its success, and highlights ongoing challenges and constraints.

Contents

Mango as an Opportunity for Economic Growth

Haiti Today

Located in the Caribbean just 650 miles from the United States, Haiti was originally known as the Pearl of the Antilles. Today, Haiti is among the world's poorest and most unequal countries — with approximately 80 percent of its population living on less than $2 per day and the world's seventh highest disparity between rich and poor. The majority of Haitian adults do not have a formal education, and the national illiteracy rate hovers around 50 percent.

In rural areas, where 45 percent of all Haitians live, only half the population has access to clean water and only one in five individuals have access to improved sanitation.[1]

Over the past decade, massive deforestation and soil degradation, rapid population growth, and periods of political and social turmoil have only exacerbated these challenges, leading to further economic and ecological resource constraints. Then, in 2010, the country experienced a catastrophic earthquake that crippled its economy, destroyed its infrastructure and resulted in at least 100,000 deaths.

Agriculture plays an important role in Haiti's economy, representing 25 percent of GDP. The sector is also critical for the livelihoods of approximately 60 percent of the population. The majority of these individuals are smallholder farmers who practice low-input, low-output market-oriented agriculture and farm less than two hectares of land.

Inputs are scarcely available for purchase and agricultural extension services are rare,. Although farmers generally sell their production to local markets, credit is not widely available to them.

However, because of its significance to rural livelihoods, agriculture offers an especially promising opportunity for Haiti's long-term economic development. And few agricultural value chains offer as much promise as mangos.

Mangoes are produced in over 90 countries and are among the most traded tropical fruits in the world. In Haiti, mangos are the largest agricultural export crop by volume and represent more than $10 million in sales per year.

Like most mango producing countries, the majority of Haiti's production is consumed locally. Among the more than 40 named mango varieties that are grown in the country, Francique is the only variety that is exported. It enjoys strong demand worldwide and is known for its distinct flavor, earning a premium price. Francique mangos comprise an estimated 20 percent of total mango production in Haiti.

However, lack of tree maintenance, poor harvesting techniques, and improper handling result in a large percentage of mangos failing to meet export-quality standards. It is estimated that only one in four Francique mangos reaches overseas markets due to these issues as well as degraded or non-existent roads in rural areas.[2] As a result, year after year exporters are unable to provide the consistent volumes and quality demanded by U.S. retail chains, and the industry operates far below potential.

This was not always the case. Until the late 1990s, Haiti was the second largest supplier of mangos to the United States. At that point, lack of investment in Haiti's agricultural sector and increased productivity and competition from Peru, Ecuador, and Brazil led those countries to capture most of the growth in mango consumption in the U.S.

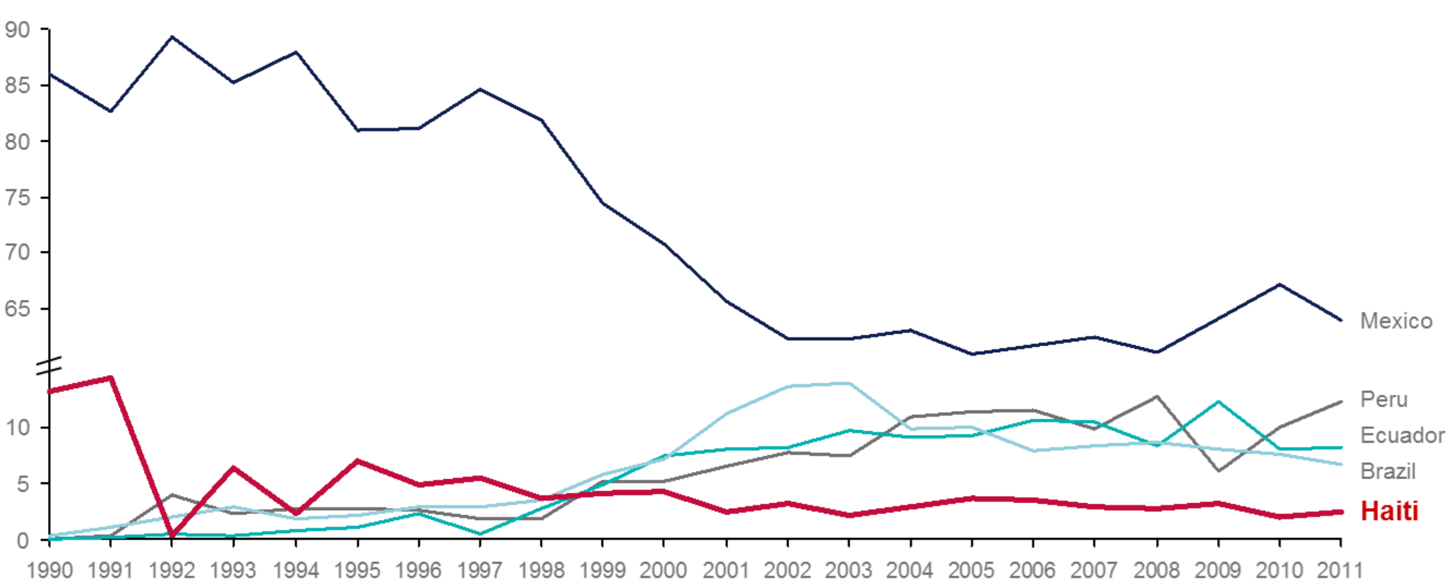
Today, Haiti is the sixth largest supplier to the U.S., with just 2.4 percent of the market (**See Figure 1**). Increasing overall production and growing the share of exportable quality mangos would not only benefit the country, but it would significantly enhance livelihoods for close to 30,000 producers active in the industry.

However, producers — and the enterprises they supply — are constrained by numerous barriers: poor infrastructure, a fragmented supply chain, lack of access to agricultural credit, poor market information, inadequate knowledge of new food safety standards, and low yields.

FIGURE 1

Share of U.S. Mango Imports by Exporting Country (1990—2011)

Percent Share of Total



The Haiti Hope Project

To support the country's mango industry and help Haitian farmers realize the full economic value of their mango trees, TechnoServe established the Haiti Hope Project along with several other partners.

Launched just months after the 2010 earthquake, Haiti Hope is five-year, $9.5 million public-private partnership among The Coca-Cola Company; the Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank Group (IDB); the U.S. Agency for International Development (USAID); and TechnoServe, which serves as the implementing organization. The project is also supported by the Clinton Bush Haiti Fund, the Soros Economic Development Fund, and other international and local organizations.

The project aims to double the mango income for 25,000 Haitian farmers within five years of joining. Achieving this goal will raise the standard of living for beneficiary farmers and contribute to the long-term development and revitalization of the country.

Haiti Hope has implemented activities in regions where Haiti's mango industry has the highest potential for success, and works to facilitate a supportive environment to strengthen the mango value chain. For example, the absence of direct links between farmers and packing houses prevents market signals, such as quality standards, from being clearly communicated to farmers. The project team therefore engages farmers to form producer business groups (or "cells") to connect them directly to exporters, while also providing training in business skills, productivity measures, and appropriate harvest techniques.

Haiti Hope also connects smallholder mango farmers to niche premium markets, such as organic and fair trade, through retailers including Whole Foods Market.

Finally, to address producers' lack of access to credit, Haiti Hope launched a pilot loan program in 2011 with a local microfinance institution (MFI). Drawing on lessons from the pilot, the team later expanded the loan program to new regions and reached additional farmer groups. Today, the credit component within Haiti Hope offers interesting insight into the ways in which partners can collaborate to deliver financial products and services directly to farmers who would otherwise be excluded from the country's financial system.

TABLE 1
Summary of Results

Farmer activities	• 19,838 unique farmers trained (51% women) • 216 producer business groups with mango sales (up from 10 in 2010)
Marketing	• $429,793 in producer business group sales for mango exports (716% increase) • 1027 metric tons sold for export (700% increase)
Access to credit	• 44 percent of participating farmers have access to credit (51% women) • 8,136 unique borrowers • $2.2 million in cumulative loan disbursements

Results as of September 1, 2014

Agripro: Expanding Financial Services to Rural Haiti

Understanding the Need for Credit

In Haiti, access to financial products and services is extremely limited, with only 8 percent of the population having received a loan from a formal financial institution, according to the World Bank.[3]

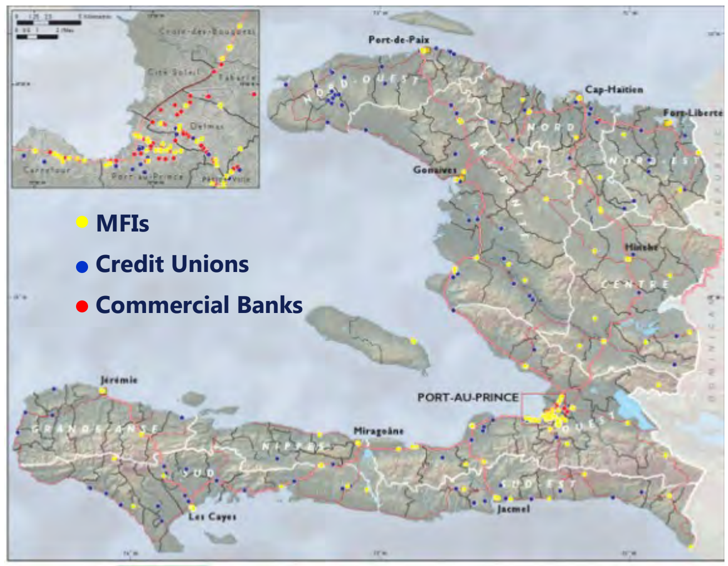
Historically, the country's banking system was directed toward serving the formal sector, despite the fact that the *informal* sector employs 80 percent of Haiti's workforce.[4] Similarly, the amount of credit provided by the banking system for agriculture is estimated to be less than two percent, despite the fact that agriculture accounts for 25 percent of Haiti's GDP.[5]

In 1995, the Haitian government transformed the country's banking sector by removing interest rate ceilings on loans and lowering the reserve requirements for banks. As a result — and because of the overall dynamism and scale of Haiti's informal economy — a vibrant network of informal and semi-formal capital providers has emerged over the past two decades. Today, financial service providers in Haiti are divided into three broad categories: commercial banks, credit unions (cooperatives) and non-cooperative microfinance institutions (MFIs).[6]

In order to maintain low transaction costs and realize revenue from high-turnover borrowers, MFIs target their lending to customers in urban environments of Port-au-Prince, Cap-Haïtien, Jacmel and Gonaives, which are relatively compact and accessible; the hardest-to-reach rural communities are often overlooked by all financial institutions.

FIGURE 2

Mapping Financial Institutions—Points of Service



Source: HIFIVE/USAID

In these cities, non-profit MFIs tend to focus on women engaged in small-scale and informal commerce, such as fruit and vegetable sales. Commercial MFIs and cooperatives tend to focus on individuals with relatively higher income who engage in high-turnover commerce with steady revenue, such as "*madan saras*" who trade wholesale fruit and vegetables, jewelry and low-quality imported consumer products. The experience and loan terms of MFIs are heavily influenced by this client profile.

Unable to qualify for credit from commercial banks and faced with high interest and onerous loan terms offered by many MFIs, most rural Haitians find themselves excluded from reasonably priced credit.[7] It is estimated that the amount of available credit for rural areas (including for agriculture) meets no more than 20 percent of the demand.[8]

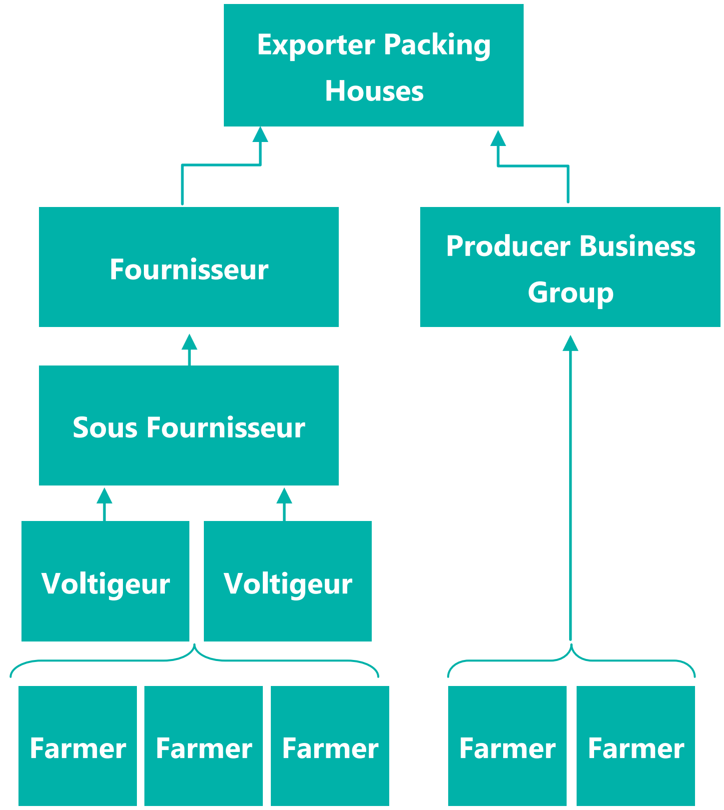
During the initial design phase of Haiti Hope, the team believed that credit, while important, was not an absolutely critical component to achieving the goal of increasing farmers' mango-related incomes. Rather, significant income gains could be achieved by improving market linkages and training producers to adopt relatively simple agronomic practices that would result in higher quality mangos.

Although farmers did not require credit for mango production activities, an analysis of their cash flows and of local value chain dynamics revealed that credit could potentially play an important role in boosting farmers' negotiating power and allowing them to realize higher prices by selling mango through more formal sales channels (**See Figure 3**).

During focus groups, one of the most common complaints of mango producers was the financial pressure they face immediately before the mango season. In the months leading up to the harvest (January – May), producers incur expenses such as children's school fees and inputs for staple food crop production. Because income from the previous season has since been depleted, these expenses result in significant household-level liquidity constraints. (On average, households in rural Haiti spend an estimated 60 percent of their income on food).[9]

To meet their household's financial needs, producers are then forced to harvest their mangos before they are ripe and sell at below-market prices to local traders, or "*voltigeurs*" as these middlemen are known locally. Relations between voltigeurs and farmers are strained and highly asymmetrical. Because few exporters and packing houses manage direct relationships with individual producers or with producer groups, voltigeurs are frequently the first buyer at the farm gate. They harvest mangos from the tree whether they are appropriately ripe or not.

FIGURE 3
The In-Country Mango Value Chain



Additionally, voltigeurs frequently offer year-round cash advances and are able to "pre-purchase" entire trees or gardens of trees at significant discounts, often 50 percent below market value. This transaction takes place months ahead of the harvest when actual yields are unclear to both buyer and seller. Yet because farmers' lack of understanding of quality issues that factor into prices paid and their poor bargaining ability, voltigeurs are able to consistently pay below-market prices and operate with opaque and inconsistent payment terms. For instance, prior to the launch of Haiti Hope, there were no uniform units of sale; a dozen could mean anywhere from fourteen to eighteen mangos.

Even if producers did not require immediate cash, weak marketing channels and poor trading relationships meant that they were still at the whim of voltigeurs. Farmers frequently cited the challenge of not knowing the next time voltigeurs would visit. They feared that there would be no buyers around when their mangos ripen. For that reason, they would often sell at any price and at any time.

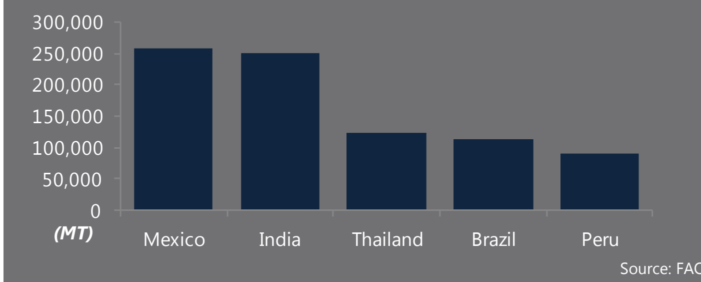
This supply scheme was especially common in regions where farmer associations are not involved in commercialization. Despite the high demand for Francique mangos among exporters, the lack of transparency within the domestic value chain results in poor communication, and producers are almost always price takers.

Given these dynamics, the project team concluded that for Haiti Hope to be most successful producers would need access to affordable, short-term credit to meet their immediate liquidity needs. With such financing in place, producers would likely feel less compelled to harvest their mangos early and sell to traders at below-market spot prices for immediate cash. Ideally, access to credit would allow them to sell their mangoes closer to maturity and through established producer business groups, which offer higher and more transparent prices.

BOX 1

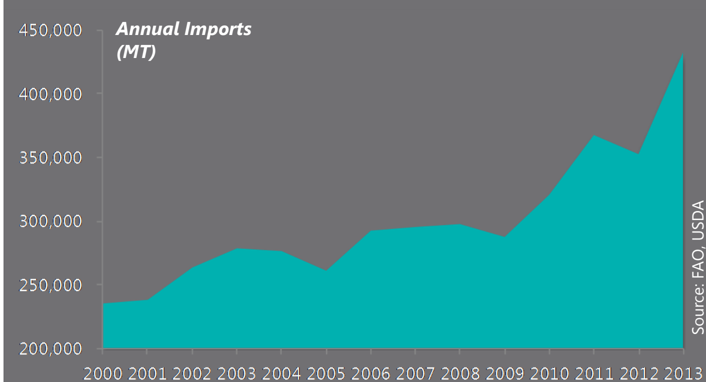
The Global Mango Market

Top Mango Exporters (2007—2011)



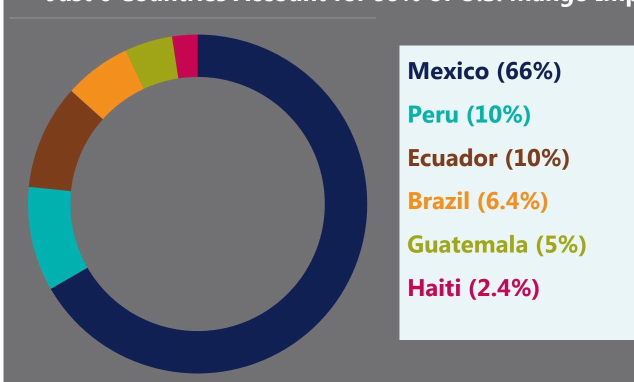
Top Mango Importers (2007—2011)

U.S. Mango Consumption Rapidly Rising



The United States is the world's leading importer of fresh mangos, accounting for a third of total world imports each year. In 2013, imports reached a record-setting 430,000 metric tons and consumption continues to grow.

Just 6 Countries Account for 99% of U.S. Mango Imports



Source: USDA, National Mango Board
Average from 2011 - 2013

Securing a Guarantee

Given their limited risk appetite and lack of experience, most financial institutions in Haiti require some form of external guarantee in order to expand into new sectors, client segments, or geographies. In this case, all three conditions applied. The availability of a loan guarantee was especially important given that potential borrowers had few, if any, fixed assets to offer as collateral.

In mid-2010, during the initial project design phase, the Clinton Bush Haiti Fund (CBHF) joined Haiti Hope as a partner alongside TechnoServe and the IDB. Guided by its mission to foster a diversified and competitive Haitian economy, CBHF desired to make a unique and targeted investment, rather than providing general budgetary support to the project.

Recognizing farmers' need for short-term credit, TechnoServe proposed that CBHF establish a loan guarantee fund to incentivize lending by local financial institutions. In late 2010, CBHF provided a partial guarantee of $250,000.*

* In 2012, CBHF formally ceased operations in Haiti and management of the guarantee fund was transferred to IDB/MIF. Based on the initial terms stipulated in 2010, the loan guarantee for newly originated loans expired in June 2014, while borrowers who entered the program before then would be covered for three loan cycles or one year.

Identifying a Partner Financial Institution

Given the underdeveloped market for agricultural lending in Haiti and the significant financing gap for smallholder agriculture worldwide, an implicit and long-term goal of Haiti Hope's credit program was to foster greater financial inclusion among rural producers. The assumption was that the program would demonstrate to MFIs and other financial institutions the commercial viability of rural lending.

Therefore, in exploring potential financial partners, TechnoServe intentionally focused on local Haitian institutions that would lend directly to individual farmers rather than to producer business groups. The project team also targeted MFIs that had widespread geographic coverage and a presence in rural areas.

Fonkoze, FINCA and MicroCredit National were among the institutions considered. During initial meetings with these and other institutions in September and October 2010, the concept of rural smallholder lending was initially met with enthusiasm. Yet, most of these MFIs quickly followed up with their concern that "now was just not the right time." Others were unwilling to adapt the terms and conditions of their existing financial products for rural, higher-risk borrowers who could not offer formal collateral.

Another institution under consideration was Société Générale Haitïenne de Solidarité (Sogesol). Established in 2000, Sogesol is the microfinance subsidiary of Sogebank, one of Haiti's largest commercial banks. Its mission is to promote Haitian entrepreneurship by adapting traditional banking services to nano, micro and small businesses needs (**See Box 2)**.

In order to diversify its client base, Sogesol, had been interested in rural lending for several years, beginning in 2008.

Increased competition drove the MFI to look for new clients further and further away from Port-au-Prince and other urban locations. Sogesol's executive leadership and its board of directors, led by Pierre-Marie Boisson, had wanted to move further down market and were therefore especially supportive of the idea.

In the end, it was the commitment from these champions within Sogesol that drove TechnoServe to select the institution for a pilot credit program. In early 2011, TechnoServe and Sogesol signed a formal operating agreement, supported by the CBHF guarantee.

For their part, Sogesol was drawn to TechnoServe's logistical expertise and relationships in rural communities, plus a captive network of potential borrowers and a loan guarantee already in place. All these elements galvanized the MFI to take part in Haiti Hope and expand further into rural areas. Indeed, recent interviews with Sogesol's management confirmed that Haiti Hope was a major initiative through which the MFI was able to grow its client base.

Additionally, given its decade of experience lending to microentrepreneurs, Sogesol already had knowledge of loan size, interest rates and terms that would be realistic for repayment. In April 2011, the first loans were disbursed under a pilot program.

BOX 2

A Commercial Bank Moves (Even Further) Down Market

In 1986, a group of Haitian investors purchased the Haiti-based operations of the Royal Bank of Canada and established the Société Général Haitienne de Banque (Sogebank). Nearly thirty years later, Sogebank is now Haiti's largest commercial bank, with over $800 million in deposits and a market share of over 25 percent.[10]

It currently operates over 30 branches located in the major cities throughout Haiti as well as several solely in Port-au-Prince. During its growth, Sogebank was instrumental in introducing significant banking innovations in Haiti, including credit cards and ATMs.

In 1999, with $300,000 in support from the Multilateral Investment Fund of the Inter-American Development Bank, Sogebank's chief economist Pierre-Marie Boisson began to explore opportunities to lend to microentrepreneurs to support Haitian's vast and dynamic informal economy. A feasibility study revealed that the market demand for microfinance services in Haiti at that time was large and generally unmet, with fewer than 50,000 active microloans in total.[11]

The following year, Sogebank established Sogesol as an independent microfinance service subsidiary. The newly formed MFI made its inaugural loan equivalent to $400 USD to Immacula Desjordins, a woman street vendor in Port-au-Prince.[12]

Under its "service company" model, Sogesol is responsible for marketing, originating, managing, and collecting loans using its own staff of nearly 400. Sogesol has also established a network of 23 branches. The loans themselves, however, are from Sogebank and appear on Sogebank's corporate balance sheet.

Thus, Sogesol is paid an amount by Sogebank equal to all interest and fees earned on the microloan portfolio, minus the funding and provisioning costs and minus the costs of utilizing Sogebank's infrastructure and support services. From this transfer payment, Sogesol's own operating costs (*e.g.,* personnel) are subtracted to arrive at net income for the MFI.[13]

Because of the vision and determination of Pierre-Marie Boisson, who remains chairman, Sogesol achieved profitability within its first two years. And its contribution to Sogebank's revenue, while relatively small, has continually grown as a percentage of overall Sogebank revenue.[14] Today, Sogesol has over 30,000 active borrowers and an outstanding portfolio of approximately $20 million, with an average loan size of roughly $700.

With Haiti Hope, the MFI has moved even further down market and is pioneering financial services for some of the most remote and hardest-to-reach customers.

Designing and Piloting Agripro

As previously noted, the financial needs of mango producers were seldom related to mango production. Instead, focus groups and feedback from farmer associations indicated that what was needed most was simple, short-term credit to smooth irregular cash flows and overcome household liquidity constraints that happened to occur at the beginning of the mango season and resulted in reduced benefits for producers.

Working with Sogesol over an eight-month period, the project team designed what both TechnoServe and Sogesol describe as a consumption loan, despite its externally branded name, "Agripro." (The nomenclature "Agripro" was only useful in its description of the intended borrowers: rural small-scale farmers with highly seasonal cash flows).

Intended to be a mass market product for producers living in remote rural regions of the country, Agripro loans begin at 2,000 Haitian Gourdes (HTG), or roughly $45. As clients repeatedly prove their repayment performance, they become eligible to apply for larger loans of 4,000 HTG ($100) and then 5,000 HTG ($115) as part of subsequent and independent loan cycles. For reference, $40 is enough to buy a small goat and $150 is enough to pay for one child's school fees for a year. In 2013, Haiti's annual per capital income was $810, with inflation hovering around 6 percent over the past two years.[15]

Agripro loans feature a fixed four-month duration and a fixed monthly interest rate of 2.5 percent, plus a 3 percent origination fee. A benchmark analysis of other credit products found that these terms were very competitive and far below other interest rates, which can reach 60 to 70 percent on an annualized basis. For example, a 2010 survey of 75 farmers in Leogane, Haiti revealed 4.1 percent monthly interest rates for MFI loans and 20 percent monthly interest rates for loans from informal moneylenders.[16]

TABLE 2

Comparison of Existing Microloan Products in Haiti, 2011

Lender	Number of Branches	Estimated Number of Borrowers	Gross Loan Portfolio (Million)	Average Loan Value (2012)	Loan Duration	Sample Loan Designed for Rural Producers
Sogesol	23	21,728	$17.1	$694	4-24 months	• Agripro ($50-115) • Credit Agricole ($500-$20,000)
Fonkoze (including Fonkoze Financial Services)	41	50,198	$14.5	$217	6-12 months	• Ti Kredi (~$22) • Solidarity Group Loans ($75-$1,300) • Business Development Loans ($1,300+)
AME	22	30,333	$19.8	$714	5-15 months	• Le Prêt Maraîchers ($115-$900)
Finca*	8	8,122	$1.2	$378	4-24 months	• Individual loans • Village banking/group lending loans • SME loans
Micro Credit Nationale (MCN)	27	13,544	$19.0	$1,212	3-18 months	• Kredi Agricole (average loan ~$550)

Source: Mix Market, USD
** 2010 data*

The CBHF guarantee fund covers 75 percent of the loan principal for first-time borrowers, 50 percent for second-time borrowers, and 25 percent for third-time borrowers. These terms were designed through discussions between a TechnoServe consultant with expertise in microfinance and Sogesol leadership, resulting in an agreement between the two organizations detailing the terms, communication channels, and claims process.

In addition to providing immediate credit directly to producers to reduce pressure to pre-sell mangos, the program team sought to foster greater financial inclusion longer term. To do this, the team believed that the tiered loan-sequencing model would allow borrowers to build a credit history with Sogesol over time and demonstrate the demand for rural finance.

With three four-month lending cycles, farmers are able to prove their creditworthiness and build a relationship with Sogesol by the end of the first year. This, it was assumed, would help to ensure long-term and sustainable borrowing opportunities in the future, including the chance to potentially graduate to other financial products or services, such as savings accounts or more substantial loans.

In designing Agripro and tailoring it to the needs of producers, TechnoServe and Sogesol consulted the leadership of producer business groups in two rural locations. These group leaders provided input on the terms of the loans and helped identify farmers to participate in a pilot program.

The objective of the pilot was to solicit farmer input, refine the terms of the loan based on farmer realities, and strategize on efficient methods of service delivery. The project team decided to conduct the pilot with KOPKOM, a 1,000-member producer group that expressed interest in short-term credit and is located in the northern town of Gros Morne.

KOPKOM had successfully sold mangos to a leading exporter over the past several years and had recently received organic certification.

TechnoServe specifically targeted KOPKOM members who were already participating in Haiti Hope, of which there were approximately 100. Loan terms during the pilot required that they owned at least three Francique mango trees and managed at least a half hectare, although no formal land rights were needed. Government-issued photo identification was (and still is) a prerequisite for receiving credit.

The credit pilot was launched in mid-2011 with the disbursement of approximately 125 loans of $50 each to mango farmers in two locations. The program team conducted a focus group evaluation and, when combined with repayment data, found that the majority of borrowers were able to manage the loan properly.

Immediately prior to launching the pilot, TechnoServe and Sogesol conducted an in-depth training for loan officers at Sogesol's branches. The purpose of the training was to provide loan officers with basic knowledge of the mango industry, production season, local value chain, and export market. Both TechnoServe and Sogesol led parts of the training.

TABLE 3
Agripro Snapshot

Loan size	2,000 HTG—5,000 HTG ($45- $115)
Duration	4 months
Rate	2.5% monthly (fixed)
Fee	3%
Repayment	Balloon repayment of principal and accrued interest
Collateral	None

Understanding Process Flows

1. TechnoServe provides credit management training and informs producers about the availability of Agripro loans
2. TechnoServe populates list of producers interested in receiving credit and sends to Sogesol
3. Sogesol headquarters batches producer business groups by location and sends the list of prospective borrowers to local Sogesol branch directors
4. Branch directors then schedule evaluation days, working in collaboration with TechnoServe Animators to inform producers when/where this will take place
5. On evaluation day, TechnoServe staff support Sogesol loan officers in meeting with applicants in person at a centralized location to conduct simple evaluation
6. If approved, applicants are told which day disbursements will be made at Sogesol office

1. Financial Literacy Training and Marketing

As part of Haiti Hope, producers benefit from monthly activity-based trainings delivered via producer business groups and led by TechnoServe Animators and Business Advisors who are hired locally and know their communities best. Trainings focus on the structure and purpose of a producer group, marketing and business skills, and credit management and small business, in additional to trainings on mango production and agronomics. Over 275 two-hour trainings on credit management and 900 two-hour trainings on small business have been delivered to date, covering the following topics:

- What is Agripro?
- What is TechnoServe's role in the program?
- How will producers be evaluated for a loan?
- How do they repay loans? Why is this important?
- What advantages does on-time repayments bring?
- How should the credit be used?
- How to evaluate a small business opportunity? Will it produce enough profit to repay the loan plus interest?

> "From our training, we know to invest the money in ways where it does not take more than four months to earn profit. A lot of people have planted peas since it takes about two months for peas."
>
> **AGRIPRO BORROWER**
> GROS MORNE, HAITI

2. Due Diligence

With reduced underwriting requirements, Sogesol and TechnoServe intentionally made the barriers to entry very low for prospective borrowers. Eligibility criteria is that individuals are participants in Haiti Hope, have a national identification card, and are between 18 and 65 years old.

Beginning in 2012, TechnoServe introduced the additional requirement of membership in a producer business group. After potential borrowers pass this stage of evaluation, TechnoServe Animators provide basic screening and selection to minimize moral hazard, and Sogesol loan officers conduct basic due diligence at the centralized evaluation meeting, though denials are extremely rare.

3. Disbursement

When it comes to loan disbursement, there are minimal operational differences between Agripro clients and other Sogesol and Sogebank customers. After visiting a Sogesol branch in-person and receiving a paper voucher, borrowers walk to a Sogebank branch, often immediately next door.

There, they wait in line with the other Sogebank customers and meet with tellers who disburse cash in exchange for the voucher. Involving Sogebank directly in the disbursement process provides cost-savings, but it has also resulted in unanticipated negative client experiences for Agripro borrowers; this is discussed in the Lessons Learned section later in this report.

To facilitate transactions for the most remote clients, Sogesol in 2011 invested in the Sogebank sub-agent network, SogeXpress, bringing additional points of service in rural locations for Agripro borrowers. With this network, Sogebank pays 30 to 40 HTG per transaction, which has added to the already high transactional costs.

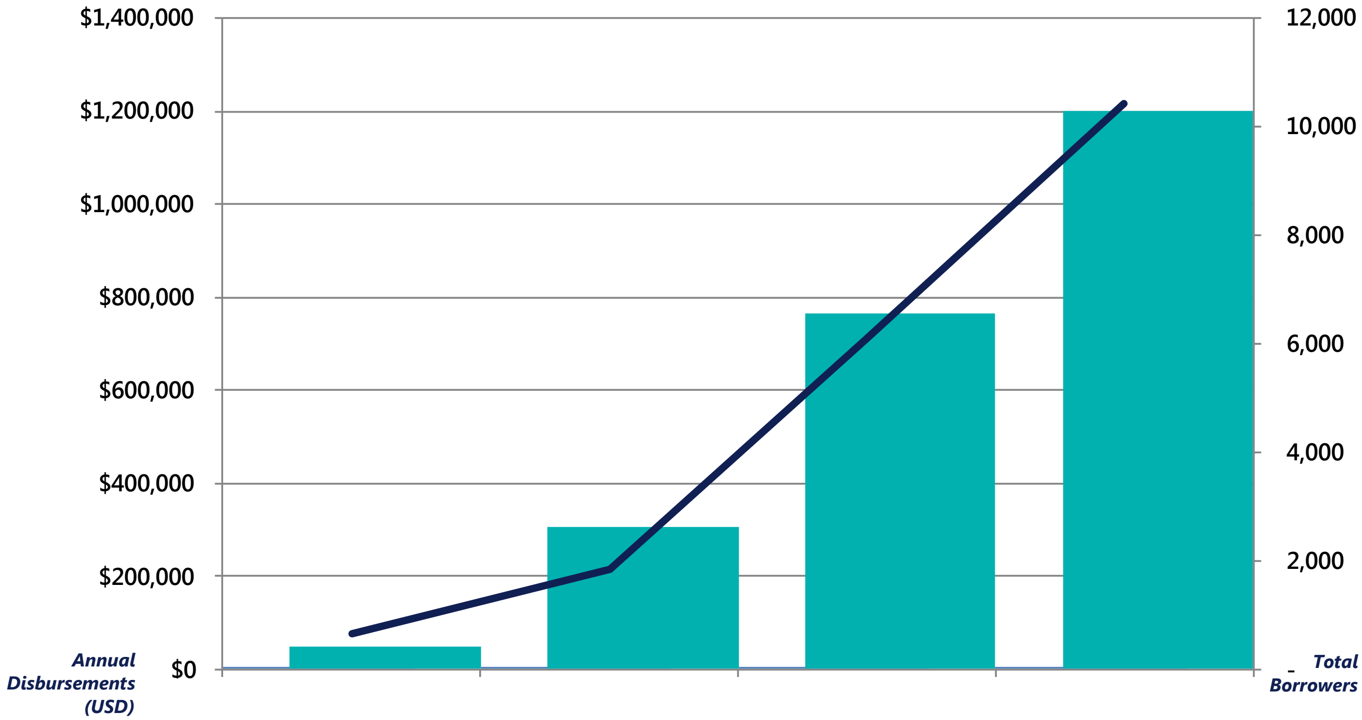
4. Repayment

Similar to the disbursement stage, borrowers are required to return to a Sogesol branch or a SogeXpress to repay the loan on a specific day. The repayment date is communicated to them when they receive the disbursement, but TechnoServe Animators and business group leaders often have to remind individuals ahead of time.

A critical aspect of the loan product design is the repayment schedule. Traditionally, almost all loans offered by Sogesol and other MFIs require monthly, biweekly, or weekly repayments. However, the cyclical and time-deferred nature of smallholder cash flows necessitates fixed-term loans with repayment moratoriums, followed by bullet or balloon repayments, rather than the regular repayment schedules and fully amortized loans required in traditional microfinance lending operations.

Assessing the Impact of Agripro

FIGURE 4
Scaling Agripro



	2011	2012	2013	2014*
Cumulative Borrowers	644	1,838	6,079	10,429
Annual Disbursements	$47,000	$306,000	$765,000	$1,200,000

* ***Projected***
Source: TechnoServe, Sogesol

Since the first Agripro loans were disbursed in April 2011, the program has already grown to provide over 8,000 borrowers with approximately $2.2 million in short-term credit, significantly exceeding TechnoServe's projected cumulative disbursement target of $250,000 by 2015.

"With the credit we can take our time with the mango before selling it. But when we didn't have the credit, we had to sell early in order to survive because we had nothing."

AGRIPRO BORROWER
GROS MORNE, HAITI

The project team worked from an assumption that while there were likely alternative sources of credit available in the areas where Haiti Hope was active, high interest rates and strict terms deterred producers from access.

In 2013, the project undertook a detailed survey of Haiti Hope participants to answer critical questions about project effectiveness, including the credit program. This study looked at overall credit access, uses of credit, and what benefits, if any, Agripro clients experienced compared to project participants who did not receive an Agripro loan.

The study results confirmed the assumptions about alternative sources of credit, as well as the presence of factors limiting access. A comparison between producer business group members, who have greater access to Agripro loans, and nonmembers, who have less, indicated that only 18 percent of nonmembers borrowed from an institution and half of those borrowed from Sogesol. Other important lenders for this group included credit unions, Fonkoze, and local associations (**See Figure 5**).

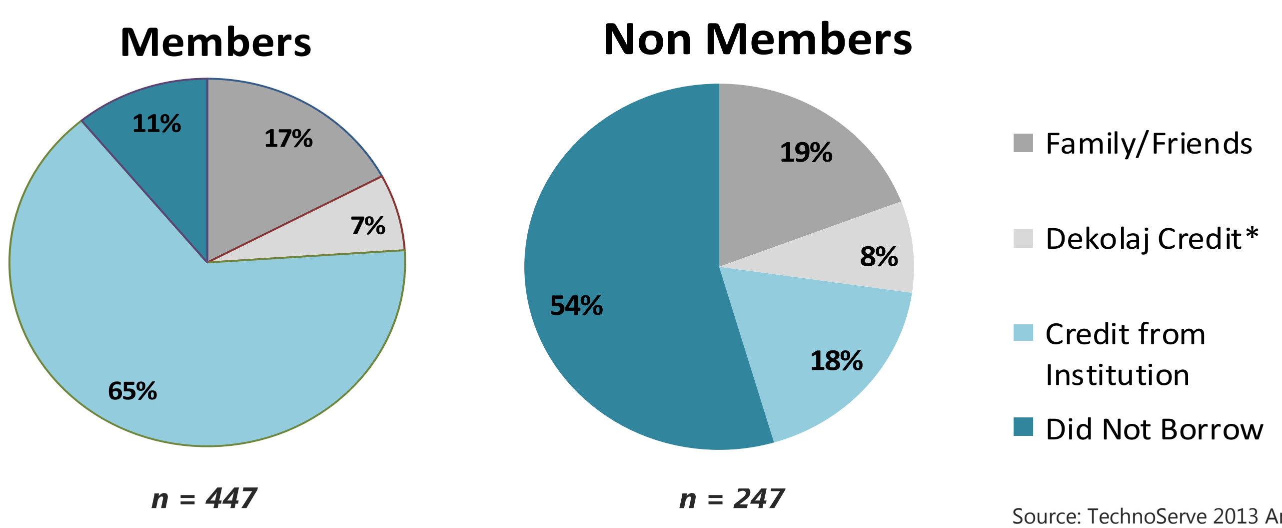
Meanwhile, among members of producer business groups surveyed—who have the greatest access to Agripro—65 percent access credit from an institution, of which 96 percent was from Sogesol.

Additionally, TechnoServe staff experience and secondary research indicate that informal lending is much more prevalent than the survey responses may suggest. For example, an unrelated focus group study from 2010 of 225 people in the town in Leogane, west of Port-au-Prince, found that 82 percent of respondents reported borrowing from "friends and family," 23 percent of respondents reported borrowing formally from an MFI, and 13 percent reported borrowing from moneylenders, referred to as a "*ponya*," who reportedly charged monthly interest rates of 20 percent.

This same study also noted a salient point that is of major relevance to Agripro: debt, even if rarely cited by producers, represents a significant financial burden that constrains economic well-being of households. Of 225 individuals surveyed in 2010, 94 percent reported that they were indebted, on average, 15,700 HTG ($350).

In TechnoServe's 2013 study, the majority of survey respondents cited that they borrow for the purpose

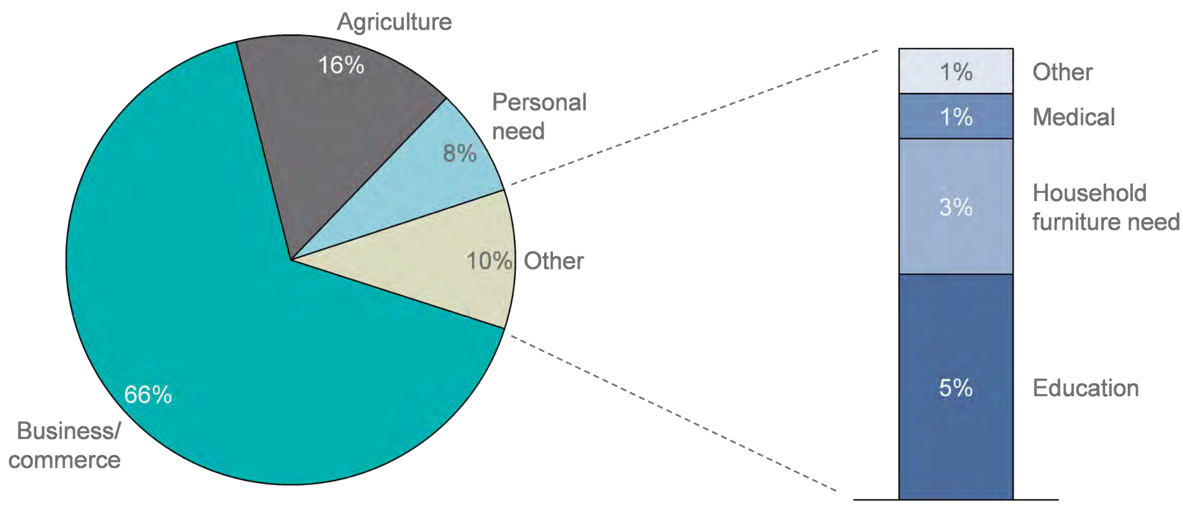
FIGURE 5
Sources of Credit: PBG Members and Nonmembers



Source: TechnoServe 2013 Annual Survey
**Dekolaj* means taking items on credit and then reselling

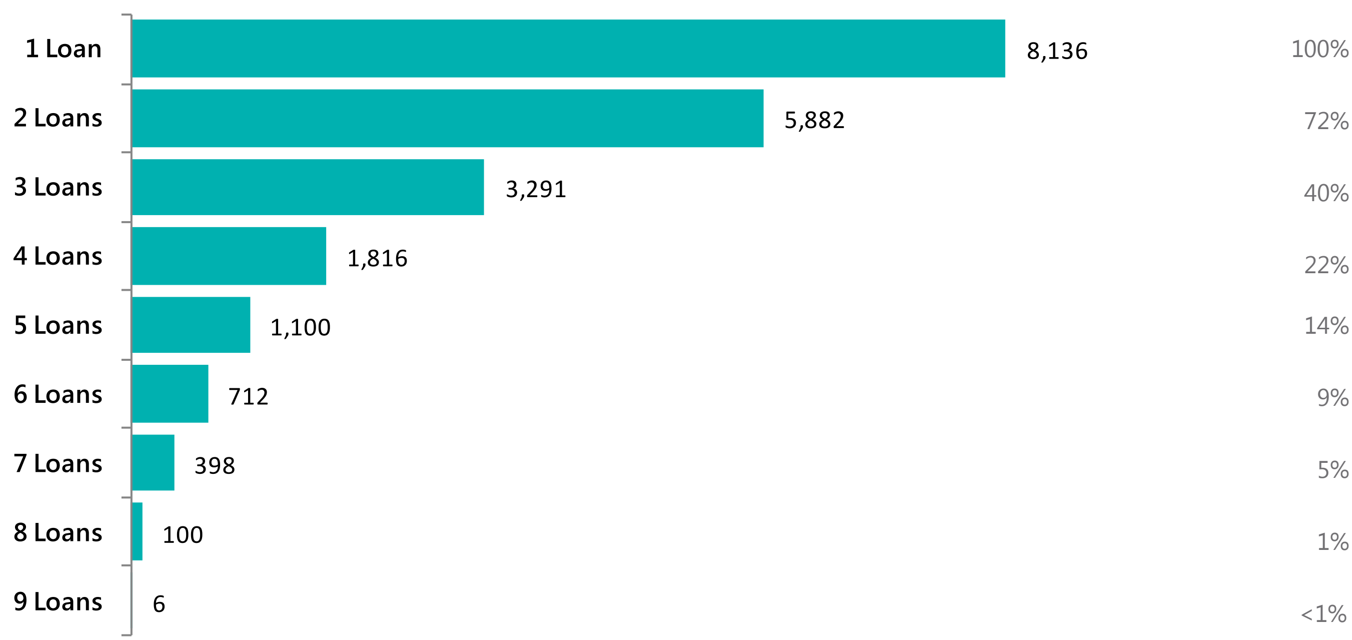
of business or commerce (66%), followed by agriculture (16%). This is supported by anecdotal evidence and farmer interviews, during which borrowers mentioned their involvement in a wide range of entrepreneurial activities. These findings are surprising given that the initial assessment indicated farmers had urgent liquidity needs—yet most of them report using the money for business or commerce, which yields future rather than immediate returns.

FIGURE 6
Reasons for Borrowing



If they have repaid their first 2,000 HTG loan in full and on time, Agripro borrowers are eligible to apply for a 4,000 HTG loan, although they are not automatically approved. This loan-sequencing model acts as a dynamic incentive, helps to mitigate credit risk for Sogesol and aims to ensure that borrowers can effectively manage the cost of credit as they become more familiar with it. Since 2011, 8,136 individuals have received an Agripro loan, and 72 percent continue to the next level (4,000 HTG loans), and average on-time repayment (within 30 days of scheduled reimbursement date) is 96 percent.

FIGURE 7
Borrowers by Cycles of Credit



Lessons Learned:
Successful Solutions & Ongoing Challenges

Three years after its implementation, the credit component of Haiti Hope has provided 8,136 unique borrowers with $2.2 million in short-term credit — over eight times the projected cumulative disbursement target of $250,000. As Haiti Hope enters its final year, it is an opportune time to reflect on lessons learned and share practical insights into ways of unlocking finance for smallholder farmers. In some cases, solutions to challenges were anticipated during the design phase or early in the program, while other issues continue to present barriers and require solutions. The following learnings emerged in conversations with the original project team and with individuals from TechnoServe and Sogesol, as well as Agripro borrowers themselves.

Successful Solutions:

1. Take time to understand smallholder cash flows and diversity of revenue sources.
2. Centralize the credit program with one "champion" lender.
3. Design financial products and services collaboratively.
4. Keep it simple and focus on the realities of rural livelihoods.
5. Allow time to iterate.
6. Disburse loans in incremental tranches based on successful repayment.
7. Do not underestimate the powerful role of social capital when it comes to borrower motivations for repayment.
8. Commitment and buy-in from the leadership is essential to success.
9. Leverage producer groups to achieve the dual mission of increasing access to credit while also increasing farmer bargaining power.

Ongoing Challenges:

10. Reduced underwriting requirements lower barriers to rural finance for both lenders and borrowers, but increase the need for continual subsidy and support.
11. Evaluate long-term commercial viability with robust and exhaustive cost accounting.
12. Leverage the expertise and infrastructure of parent banks but pay close attention to unanticipated and negative effects this may have on borrowers.
13. From branches to borrowers, poor delivery channels remain an Achilles heal for rural finance.
14. Trust with borrowers is difficult to build and easy to lose.
15. Structure clear pathways for borrowers to graduate to other financial products and services.
16. Unexpected results always occur: farmers can receive a loan and still pre-sell mangos.

Successful Solutions

1. Take time to understand smallholder cash flows and diversity of revenue sources.

MFIs in Haiti generally viewed rural farmers as a risky population with limited ability to repay loans. This was based on a perception of their reliance on harvest income, which can be volatile in Haiti's shaky economy. Mango farmers, who rely on a quality-sensitive export market, were viewed as especially risky.

Rather than assuming that they knew smallholder finances and challenges, the project team first took the time to fully understand the needs of smallholder farmers and the trading dynamics of the value chain. By having a clearer picture of both farm and off-farm household income and expenses, TechnoServe and Sogesol were able to provide a more client-centric product and service offering.

Given the seasonality and unpredictable nature of smallholder finances, it was not enough to simply model projected cash flows from one particular crop. Understanding the number of mango trees or last season's production is helpful to gain a rough estimate of smallholder wealth or level of commercialization, but does little to illuminate the day-to-day financial realities that producers face. This is especially true in Haiti, where the majority of smallholder families have diverse off-farm sources of income.

While it is difficult to understand and measure the complex financial lives of smallholder families, there are several proxy methods that can be used. One method that proved to be effective was creating a map of relative importance of various forms of income. Similarly, using crop calendars to uncover the timing of major costs or revenues was helpful.

After gathering farmer feedback, the product was designed as a fixed-term, fixed-rate loan with a balloon repayment after four months. This simple structure was adapted to rural cash flows, and provided ample time for farmers to earn back the principal and interest from their activities.

2. Centralize the credit program with one "champion" lender.

At the project design stage, TechnoServe anticipated engaging two or three different financial institutions. The initial plan involved dividing the $250,000 loan guarantee fund between these partner institutions based on the number of borrowers and the expected amount of outstanding principal.

However, within the first few months, it became clear that involving multiple lenders would not be feasible given the resources and staff bandwidth required to collaborate with just one financial institution. The absence of existing rural loan programs at Sogesol meant that new processes and systems needed to be created.

Having a large number of partner lenders would have only added to an already challenging set of administrative, logistical, and communication activities, and may have diluted the level of commitment of each financial institution. It was therefore important to find that one "champion" partner institution rather than flooding the project with multiple banks.

This approach also allowed TechnoServe and Sogesol teams to collectively adjust and improve the loan structure and processes as the program scaled and reached more farmers.

3. Design financial products and services collaboratively.

When working with Sogesol in late 2010 and early 2011, it was important to achieve an appropriate balance of tasks. TechnoServe's value-add included expertise of rural livelihoods and knowledge of local value chain dynamics. Sogesol, on the other hand, had greater expertise around lending operations as well as important insight into macro-level factors that would affect the overall performance of a rural credit program.

Had TechnoServe taken the lead in designing and then delivering a "pre-packaged" loan concept to Sogesol, it is quite possible that Agripro would have become an "orphan loan" — one that is disconnected from Sogesol's core business and for which they devote little resources (See Lesson Learned #10). More practically, TechnoServe would have run the risk of designing a product that conflicts with operational realities. For instance, while the issue was eventually resolved, Sogesol had never offered loans that featured lump-sum balloon repayments, so their IT system was initially unable to track these types of repayments.

Most importantly, it is impossible to build an inclusive financial market without actually being inclusive from day one. None of these efforts would have mattered if the loan failed to meet the needs of rural producers, if it was too costly, or if it did not reach the communities it was intended to benefit.

Therefore, TechnoServe and Sogesol adopted a collaborative model and engaged producer groups and individual producers during the design phase through meetings and workshops to gain a better understanding of local culture and context as well as needs and motivations.

> "What interests me about the program is that when they lend me the money, I don't have to give it back right away. And when I gave it back, it's with a low interest."
>
> **AGRIPRO BORROWER**
> SAUT d'EAU, HAITI

4. Keep it simple and focus on the realities of rural livelihoods.

Initial research to determine and characterize the financial needs of Haiti Hope participants pointed to the fact that short-term credit would likely help ease household liquidity constraints. And it was the simplicity of the loan and the reduced underwriting standards that was vital to its widespread adoption.

It was important to create an easily understood product. Key elements of the product design include a fixed term (four month) and a fixed rate (2.5% monthly). Producers also benefited from a full moratorium on repayment immediately following the disbursement date, until a balloon repayment was required at the end of the four months.

This made it easier for often illiterate farmers to assess the total cost of the loan as a single lump sum owed four months from when they received it. For instance, anecdotal evidence indicates that Agripro borrowers viewed the associated interest rate as a "fee," rather than calculating interest over time and understanding the time value of money. Similarly, when borrowers were asked during interviews "How much does the loan cost?" they also responded with the costs they incurred traveling to the Sogesol branch to receive the disbursement.

Sogesol eligibility requirements were also purposely reduced at the request of TechnoServe to encourage widespread adoption. As long as producers were participants in Haiti Hope, between the ages of 18 and 65, and had a national identification card, they were eligible to apply for credit (See Lessons Learned #10).

Additionally, though not necessarily intended, the local knowledge and relationships of Animators and producer business group leaders provided a form of "embedded" due diligence. While subjective and prone to bias, this method of screening potential borrowers based on their reputation to repay decreased the likelihood that those with known delinquencies and defaults would receive a loan from Sogesol.

5. Allow time to iterate.

During the first 18 months of the credit program, the project team continued to refine and adapt the loan terms and delivery mechanisms. This opportunity to iterate and test assumptions provided rigorous reality checks and resulted in three critical adjustments:

A.) No longer required collective group liability and instead relied on implicit group liability and social capital to reduce cases of non-repayment. The team initially organized lending based on "Borrowing Support Groups" of ten or more farmers. The purpose of these groups was 1.) so that borrowers at-risk could seek support for loan repayment from peers on their own terms, and 2.) to mitigate the overall risk of default by using social capital and collective group liability.

Specifically, if one borrower failed to repay on time, he or she would be charged a 50 HTG penalty for each day late. A default would make the borrower ineligible for future loans and all members of the Borrowing Support Group, while still eligible for future loans, would be subject to a higher interest rate.

The team found that this Grameen Bank-style approach was very unpopular with borrowers, who naturally did not want to be responsible for someone else's repayment. The model also resulted in confusion among borrowers and constrained the overall adoption of credit.

The project was later adjusted to eliminate collective group liability. Although, *implicit* social pressures remain a powerful tool to ensure prompt repayment. This trend has been seen in other credit programs in Haiti as well, with borrowers suggesting that non-repayment "tarnishes the image of our families" and "weakens our respect in community."[17]

Additionally, when a borrower fails to repay, other borrowers in the community quickly become concerned with protecting their own relationship with TechnoServe and Sogesol and their own eligibility to access loans in the future.

B.) Structured marketing and origination around producer business groups. In early 2013, the project began to invite producers to meet with Sogesol loan officers by their producer business group, and membership in a producer business group became a prerequisite to receive credit.

This had multiple advantages for the farmers, the producer business group, and Sogesol. In addition to reducing transportation and logistical burdens, the social structure of the producer business group helped to reduced the risk of non-repayment, and the activity of applying for loans built trust within the group and encouraged more active and engaged membership. However, each individual producer continued to be responsible for his or her own loan.

C.) Limited maximum loan ceiling to 5,000 HTG. After experimenting with higher loan amounts, the team observed that some borrowers had greater difficulty repaying. This allowed the team to narrow in on an upper threshold of 5,000 HTG as the maximum loan size to maintain product simplicity and ensure prompt repayment. However, questions remain as to whether this loan ceiling is effective, especially considering high transaction costs of administering credit.

6. Disburse loans in incremental tranches based on successful repayment.

In order to minimize risk of default for Sogesol and ensure that farmers are able to effectively manage the cost of credit, the Agripro credit program sequences loans in increasing amounts. Individual borrowers are able to graduate from 2,000 HTG ($45) loans to 4,000 HTG ($100) loans to 5,000 HTG ($115) loans only after repaying on time and in full.

This method of progressive lending acts as a dynamic incentive and helps familiarize borrowers with credit management.[18] However, it requires continuous administrative and operational support from both TechnoServe and Sogesol, as borrowers do not receive automatic renewals but instead must reapply for their next loan — a strategic decision mandated by TechnoServe to avoid over indebtedness.

7. Do not underestimate the powerful role of social capital when it comes to borrower motivations for repayment.

Since 2011, Sogesol has averaged a loan loss ratio of approximately 2 percent for its Agripro portfolio, compared to its average overall loan loss ratio of 9.4 percent during the same time period.[19]

Evidence from farmer interviews suggests that this relatively high repayment rate is largely due to the social pressures that producers face, making them hesitant to default on their loans. Again, while there is no longer contractual group liability, borrowers worry that the entire group will lose their relationship with TechnoServe and Sogesol in the case of any one individual case of non-repayment.

One borrower explained: “As long as we continue to pay and respect the timeline, we will continue to go forward. You must understand when someone is offering you such an opportunity, you need to know how to act and behave. We follow the rules and hope to continue moving forward so that we don’t get kicked out of the program.”

Additionally, a common theme that emerged from borrower focus groups and individual interviews was the notion that Agripro is the only source of credit available. While research suggests that people do indeed have access to other sources of credit, such as that from family and friends or from informal moneylenders, it is possible that borrowers view Agripro is the most affordable source, or that they do not consider other sources of loans as “credit” per se. More research is required to fully understand borrowers’ decision-making when evaluating options for credit.

“Agripro is one of the few programs available to the people needing to access to credit,” explained one TechnoServe Animator. “As a result, producers are motivated to make sure they have the money ready when it's due. They know that there is more opportunity ahead."

"People were so thirsty for credit," explained another member of TechnoServe's field team. "That is why they work hard to reimburse on time, so that they never lose it." These views were echoed by Sogesol representatives, who noted the dedication of borrowers and their strong willingness to repay.

These strong social dynamics manifested themselves in other aspects of the program as well. For example, borrowers reported that, in a few cases, TechnoServe Animators had repaid Sogesol on their behalf, effectively bailing out borrowers who were unable to repay on time through cash advances. It is suspected that this behavior is limited and due to Animator motivations to show results and to ensure the continued availability of credit in their communities.

8. Commitment and buy-in from the leadership is essential to success.

TechnoServe's Haiti Hope Project commenced in September 2010 and the Agripro credit component was launched only eight months later, a relatively quick turn around from initial market research and partner negotiations to loan design and disbursement.

As previously stated, the seemingly obvious notion of selecting a partner institution that *actually wanted* to expand their service offering to rural agricultural communities was critical. Gaining buy-in and building momentum from the board and senior leadership within Sogesol's headquarters was also essential to charting the course for the years ahead.

In fact, TechnoServe staff interviewed highlighted the motivation and commitment of Sogesol's leadership to rural agricultural lending as among the most important ingredients for success. For example, Daphne Louissaint, director of Sogesol,

personally attended loan officer trainings during the pilot in Gros Morne. This level of involvement sent an important message to branch directors and to local loan officers.

The MFI leadership also acted swiftly to clear operational roadblocks and address challenges within branch offices. For example, the team made investments to correct an unexpected technical glitch when Sogesol's IT system could not record lump-sum repayments (since the MFI had traditionally required borrowers to make ongoing payments to pay down principal). Moreover, in October 2013, Sogesol hired a director of agricultural credit to coordinate lending to the sector in conjunction with SYFAAH (See Lesson Learned #15). This role was also tasked with centralizing communication with TechnoServe and improving program efficiency.

9. Leverage producer groups to achieve the dual mission of increasing access to credit while also increasing farmer bargaining power.

In late 2012, TechnoServe made a strategic decision to support farmers in establishing new producer groups instead of continuing to work with larger pre-existing groups. This move was unrelated to the credit program and was driven by the poor governance and lack of professionalism among the existing groups, as well as their lack of progress from 2010 to 2012.

Within the first two years, the interest and motivations of existing group leaders had substantially diverged from those of member farmers. Eventually, these refused to apply Haiti Hope practices designed to benefit farmers. One example of this was the group leaders' demand that new Agripro loans flow through the groups to on-lend to their members, rather than being disbursed directly to producers. This, of course, would give leaders more control over their member's access to credit.

As a result of these and other challenges, TechnoServe decided to form new, ultra-local producer groups, based on existing community relationships within each village. These new groups were formed exclusively for aggregating and marketing members' mangos and are now run as businesses, without outside economic subsidies.

As part of this change, TechnoServe required all new Agripro borrowers to be members of a producer business group. This was a deliberate decision intended to drive participation in the new producer groups, which were initially met with great skepticism, by leveraging the highly popular credit program. It was anticipated that this would also reinforce confidence within the group, since members would see each other taking and reimbursing loans. Again, leveraging the power of *implicit* group liability.

While this policy change did in fact lead to the growth of new producer business groups, it is believed that some individuals joined simply to receive credit and may not actively produce mangos, or even own any mango trees. Reports of this happening are anecdotal and the scale of this issue is unknown.

"Theses farmers are very honest. They would see not paying back as a sin or a crime."

TECHNOSERVE BUSINESS ADVISOR

Ongoing Challenges

10. Reduced underwriting requirements lower barriers to rural finance for both lenders and borrowers, but increase the need for continual subsidy and support.

Because of the high cost of providing direct-to-farmer credit in rural areas, TechnoServe encouraged Sogesol to adopt reduced underwriting standards. This, in turn, resulted in the MFI relying more heavily on TechnoServe's field staff for operational support. Using participation in Haiti Hope as a firm condition, reduced eligibility requirements included:

- A 65-year age limit for borrowers, as opposed to the traditional Sogesol limit of 55 years;
- A centralized evaluation meeting with other potential borrowers, as opposed to individual visits to homes and businesses and interviews with neighbors and business partners; and
- A short in-person assessment that covers basic demographic information, as opposed to the full 7 to 8 page loan assessment, which requires credit scoring, a thorough review of financial statements, and calculation of ratios.

During the pilot phase, TechnoServe collaborated with Sogesol to design and deliver training workshops for loan officers — TechnoServe addressed dynamics within the mango value chain, while Sogesol educated its staff on the new loan product and the reduced requirements.

Following the pilot program and during subsequent introductory informational meetings, potential borrowers were made aware of the respective roles of the two organizations. Instructional materials distributed to producers explained that "After this presentation, the rest of the steps are between you and Sogesol."

However, given their relationships with and proximity to producer business groups, TechnoServe's Animators continued to provide significant operational support, especially as it relates to coordinating disbursements and repayments with borrowers. For instance, while all exchanges and documentation of money were (and still are) solely owned and managed by Sogesol, TechnoServe Animators ended up reminding borrowers of repayment dates and following-up with clients when they did not repay.

TechnoServe field staff also frequently provided Sogesol's loan officers with transportation to attend meetings with borrowers in rural regions.

"It would have been too costly for us to offer our services in those remote areas, which are completely deprived of infrastructure," explained a Sogesol representative. "And without the support of the group leaders and the Animators, we would not have been able to reach these clients to do a proper follow-up for the repayments."

Indeed, both TechnoServe and Sogesol staff reported that the likelihood of prompt repayment is higher when TechnoServe is involved. In their view, borrowers seemed to have a "moral obligation" to their producer business groups and to TechnoServe, though not necessarily to Sogesol.

The TechnoServe project design team did not plan on offering Sogesol's regional branches this level of ongoing logistical support. The 2011 operations plan between Sogesol and TechnoServe noted that the role of TechnoServe Animators was to provide "light support specifically in information gathering from farmers and grower groups for the pilot loan program." During a focus group, one TechnoServe Animator explained that he is "essentially a Sogesol loan agent" as well as an Animator.

More recently, Sogesol has taken on more responsibility thanks to investments in vehicles, particularly for its Gonaives branch. The hiring of a director of agricultural credit has also significantly streamlined logistics and improved operations.

Still, uncertain and imprecise definitions of roles and responsibilities in the early years of the program has led to an unsustainable reliance on TechnoServe field staff. During interviews, Sogesol staff frequently cited TechnoServe as "the most important factor for the continued functioning of the credit program." These viewpoints, even if anecdotal, raise concerns about the sustainability of Agripro without subsidy or support.

Looking ahead, Sogesol has agreed to a plan through which, by August 2015, TechnoServe logistical support will have been phased out entirely. A key element of this plan may involve Sogesol hiring a small sub-set of TechnoServe Animators to become full-time loan officers working for Sogesol, effectively acknowledging and embracing their current unintended role.

11. Evaluate long-term commercial viability with robust and exhaustive cost accounting.

The involvement of TechnoServe's field staff obscures the true economics of providing direct-to -farmer financing in rural communities. Is Agripro a commercially viable product? Or, does the operational and logistical support that TechnoServe provides make it a viable product?

Without knowing, let alone measuring, the frequency and level of support provided by TechnoServe's field staff it is impossible to accurately quantify the direct and indirect costs associated with this support.

Without knowing the true costs of the credit program, we are unable to determine if Sogesol can profitably serve the rural smallholder segment in the future without some form of subsidy.

According to interviews with Sogesol representatives, Agripro will never be profitable under the current conditions (*e.g.*, 5,000 HTG ceilings on loan amounts and interest rates of 2.5% monthly), even when considering the operational support carried out by TechnoServe in the field.

However, the MFI has, thus far, continued to fund the program through cross-subsidies from its other loan products and financial services. Again, it remains to be seen if this commitment will last.

BOX 3

Ydalma Placide

In early 2012, Ydalma Placide attended a credit management training held by TechnoServe near Saut d'Eau in Central Haiti. Ydalma had been taking part in Haiti Hope for the past year, managing 12 trees that each consistently yielded around 100 dozen mangos.

She joined the training to learn more about Agripro and see if it might provide her with credit to expand her passion and primary business: raising livestock.

In March of that year, Ydalma was approved for her first loan. She received 2,000 HTG and immediately put it to work. In August, after repaying, she became eligible for the second-cycle of Agripro and received a loan for 4,000 HTG. By her third loan, in late 2012, Ydalma had purchased and then sold a pig, profiting over $100 USD. With each successive loan and her superior financial accounting skills, Ydalma repeats this process: she buys a young pig and takes care of it for four months and then sells it, often for three or four times what she originally paid.

Ydalma has also continued to harvest and sell her mangos for additional income. She says that she now has enough money to wait for her mangos to ripen, and then she sells them to her producer business group, where she serves as the marketing agent.

Building a Credit History for the First Time

MARCH 20, 2012
First Loan (2,000 HTG | $45 USD)

AUGUST 7, 2012:
Second Loan (4,000 HTG | $90 USD)

DECEMBER 20, 2012:
Third Loan (5,000 HTG) | $115 USD)

MAY 17, 2013
Fourth Loan (5,000 HTG | $115 USD)

OCTOBER 1, 2013
Fifth Loan (5,000 HTG | $115 USD)

FEBRUARY 12, 2014:
Sixth Loan (5,000 HTG | $115 USD)

12. Leverage the expertise and infrastructure of parent banks but pay close attention to unanticipated and negative effects this may have on borrowers.

Many MFI subsidiaries use the infrastructure and payment systems of their parent companies. This practice of "leaning on the bank" is no different for Sogesol and is much in line with its arrangement as a service company within the Sogebank Group.

Practically, the model prevents Sogesol from needing to make significant capital expenditures and allows it to focus on the core mission of microenterprise financing. Similarly, it allows Sogebank to leverage its management and infrastructure advantages while also entering the microfinance market with minimal cost and risk.[20]

Directly involving Sogebank in the disbursement and repayment process is also strategic in supporting the longer-term goal of greater financial inclusion. The project team hypothesized that by having Agripro clients go into a Sogebank branch to receive and repay their loans, they would become more aware of and comfortable with formal banking services. Perhaps they would graduate to other loan products or eventually open a savings account.

However, this process also resulted in unanticipated and negative effects on borrowers' experience. Because the vast majority of Haiti Hope producers — indeed, the vast majority of *all* Sogesol clients — had never been inside a commercial bank, there was confusion and anxiety around the process. Sogebank branches are air-conditioned and have furnishings that reflect a commercial business. They are closed off from the street with one or more security guards.[21]

TechnoServe Animators often accompanied borrowers to the branch to receive their disbursement. "It is a long day when you have to accompany an individual to obtain their disbursement," explained a TechnoServe Animator. "Some don't know what to do, or they become afraid when they see police at the bank. Therefore, you have to be able to walk them through the entire process."

13. From branches to borrowers, poor delivery channels remain an Achilles heal for rural finance.

The credit program within Haiti Hope was not immune to the perennial challenge of costly financial service delivery in rural areas. While Sogesol could lean on TechnoServe's field staff to help coordinate logistics and on Sogebank's infrastructure of branches and tellers to provide payment services, it was the borrowers themselves who bore most of the financial and non-financial costs of accessing credit.

Exacerbated by low population density and inadequate infrastructure, the geographic distances between borrowers and branches caused the most persistent and formidable challenges.

Today, Agripro borrowers travel long distances to reach Sogesol's regional branches for cash disbursement and repayment. This has led to high transaction costs and reduced margins, especially for borrowers. "The only problem is when we leave here to go to Gonaives, we have to pay 60 Gourdes for transportation and food," explained two borrowers. "We are good clients and when we return the money, it doesn't leave us with much left."

In some instances, borrowers were unable to travel to the branch on the disbursement day and were therefore ineligible to receive credit until the next round, which could be several months later. Other farmers reportedly elected to forego credit altogether due to the hassle and cost of traveling to and from the branch, yet it is unclear how common this is. Sogesol's investment in the SogeXpress sub-agent network helped to alleviate some of these pressures and contributed to greater ease of service for Agripro borrowers.

With regard to repayment, some borrowers reported that TechnoServe Animators or the leaders of their business group would collect individual repayments and then deliver a batch repayment to the Sogesol branch on their own.

"The animator helped the most. Because he is the one who takes the money from us and takes it back. That way we won't have to pay for transportation," explained one borrower.

This practice was echoed in other interviews. "You are not able to have someone go and pick up the money for you, but you can have the recruiter [Animator] return the money for you," explained one borrower during a focus group. While this method eliminates the need for each individual borrower to travel to the branch, it introduces a new set of challenges and risks, and is not endorsed by either TechnoServe or Sogesol.

Three years into the credit program, there remains a large-scale need for innovative and alternative payment services and delivery channels, especially around mobile payment systems. (Although weak or non-existent mobile coverage is also a major challenge in some communities).

"When you are in the program, you just pray that you keep getting the opportunity to be a part of it."

AGRIPRO BORROWER
TERRE NEUVE, HAITI

14. Trust with borrowers is difficult to build and easy to lose.

As all practitioners know, trust is fundamental in microfinance. However, in Haiti, where several short-term donor projects have retreated from their long-term promises, rural communities are skeptical of almost all development interventions.

As one borrower explained: "There was a time when there was an agricultural credit program through BCA [Bureau de Crédit Agricole]. The rates were too high for people to handle and those who couldn't repay were thrown in prison. As a result, people are afraid of the concept in general. That program did not involve training either, making it hard for people."

Issues of trust are further complicated by the stark social divide between urban and rural Haiti. And, until Agripro, Sogesol had not lent to small-scale agricultural producers in remote areas of the provinces.

This underlines the importance of having highly reliable implementation teams when introducing a new product to a new client population in new regions.

For instance, in developing their mainstream agricultural credit product, Credit Agricole (See Page 34) Sogesol learned from this experience and chose to hire agronomists as loan officers, believing that their familiarity with farmers would lead to stronger client relationships. As the Credit Agricole product is only now scaling up, it will be important to monitor and learn from their experience.

15. Structure clear pathways for borrowers to graduate to other financial products and services.

The project design team generally operated under the assumption that, by building a history of prompt loan repayment, producers could improve their overall creditworthiness and send a positive signal to lenders in the absence of formal credit bureaus. In this way, loan repayment records could serve as a tool to help rural producers transition from informal to formal banking, if they chose to do so and if formal lending opportunities were available.

After successive on-time repayments, it was envisioned that borrowers would reach the 5,000 HTG ($115) Agripro ceiling and then, with an established credit history, be able to graduate to receive other financial products and services through Sogesol or other providers.

By 2012, one likely opportunity for larger-scale producers who needed additional credit was to apply for Credit Agricole, a new agricultural loan product developed by Sogesol under the System of Agricultural Financing and Insurance (SYFAAH) capacity building program. Funded by Canadian development institutions, SYFAAH began working with Sogesol in May 2012, about a year after the launch of Agripro. Since then, they have been successful in launching a fixed-term loan to farmers and agro-entrepreneurs operating near St. Marc, Gonaives, and Mirebalais. Credit Agricole loan sizes range from $500 to $20,000 and require significantly more due diligence and evaluation as compared to Agripro.

Sogesol's leadership states clearly that one of their objectives with Agripro is to develop a wider client base for their larger value credit products, especially Credit Agricole. However, despite TechnoServe's advocating and the fact that Sogesol's director of agricultural credit is involved in both programs, there appears to have been minimal linkages between the two programs within Sogesol since Credit Agricole was introduced.

Because of this, the path to greater financial inclusion after Agripro was not always clear for

borrowers. For instance, of the 8,136 individuals who have received an Agripro loan since 2011, 28 percent are in at least their *fifth* credit cycle, meaning that they have already reached the ceiling of Agripro, at 5,000 HTG ($115 USD) and have borrowed approximately $500 in total.

Indeed, it is likely that some farmers decided to approach Sogesol loan officers for larger loans through Credit Agricole to finance their commercial and production activities, but it was not a formalized graduation process, nor was it always offered in similar areas.

A few factors contributed to this disconnect between Credit Agricole and Agripro. For instance, TechnoServe was not informed of the new Credit Agricole product until it was already released, and SYFAAH has been reportedly reluctant to participate in tri-partite meetings with Sogesol and TechnoServe, according to TechnoServe.

In addition, Agripro and Credit Agricole had traditionally been managed by different loan officers, with Agripro relying on the officers who also manage urban credit. This is slated to change in late 2014, when Agripro clients will transition to new specialist agro-economist loan officers hired specifically for the Credit Agricole program.

While some collaboration has taken place more recently, advanced planning and systems-design around a formal loan graduation process could have allowed for a relatively easy cross-selling and transition from Agripro to Credit Agricole or to other financial products and services.

16. Unexpected results always occur: farmers can receive a loan and still pre-sell mangos.

Lack of access to affordable financing options for producers is commonly cited as one of the key challenges for the mango sector. As mentioned earlier, the overarching purpose of providing credit was ostensibly to help ease producer liquidity constraints that drove them to pre-sell mangos to traders at below-market prices. The assumption was that access to credit would allow farmers to meet immediate financial needs and then sell mangos closer to maturity — meaning that they would be less likely to pre-sell mangos at below-market prices for immediate cash.

However, despite the fact that over 8,000 farmers have received an Agripro loan, a relatively large share continue to pre-sell mangos before the harvest season. This, combined with data on loan use, suggests that the key reason for pre-selling may not be an immediate need for cash, but insecure market access.

Specifically, multiple interviews and focus groups revealed that, because farmers fear that they may not be able to sell mangos when they are ripe, they accept a loss of up to 50 percent for cash immediately. While the creation of producer business groups has helped to improve market access and lowered farmers' concern of not being able to find a buyer, pre-selling continues.

The reported need for pre-financing for farmers, cited in numerous studies on the mango sector over the past decade, is usually attributed to leaders of the big farmer associations which pre-date the Haiti Hope project. They report the need in the context of requesting financing for the association to buy mangos to offer an alternative to voltigeurs — a claim that is often repeated.

However, over the course of the Haiti Hope project, it was observed that when provided with the requested financing by various NGOs in the form of grants, or from exporters as trade credit, these leaders simply copied the behavior of the voltigeurs, purchasing most mangos ahead of the mango season, by tree and at a discount, and frequently harvesting under-ripe mangos.

They were motivated by the exact same incentives as voltigeurs — in an environment where demand far exceeds supply but price is more or less fixed by exporters, groups must find alternative methods to acquire sufficient volumes at a good price. The most obvious solution is offering farmers money earlier and earlier, a difficult proposition to refuse for an income– and asset-poor household.

This process naturally transfers the risks of irregular market access (*i.e.*, buyer is unable to acquire all the mangos he pre-purchased due to coordination challenges) and quality (*i.e.*, mangos are damaged by disease or bruised). The former risk is often mitigated by arriving early and harvesting all of the mangos at once, many of which may be under-ripe. Thus, operating fund grants and pre-harvest loans made to producer groups, a frequent component of development projects intended to alleviate market constraints and improve quality, will very likely only serve to exacerbate the problems they are intended to solve until the broader challenges are addressed.

Although Agripro has addressed one of the causes of pre-selling, namely the lack of rural credit for small commerce activities, two additional causes remain. Curbing pre-selling behavior will only be realized when farmers have secure access to a well -organized value chain and when buyers have access to adequate supply.

Although producer business groups have made significant progress in strengthening market access, the vacuum created by exporters' absence in the supply chain remains palpable. The value chain needs coordination from downstream actors to ensure consistent and timely market access for farmers, giving them the confidence that, on the day their mangos are ripe, they can be certain of selling them all. More fundamentally, the base of production needs to be increased drastically and with greater density and attention to overcoming logistical issues, such as limited road access.

BOX 4

Three Essential Questions to Evaluate Agripro[22]

Is It Needed?

- Yes, but mostly for unforeseen reasons. Producers frequently reported how seasonal liquidity constraints force them to harvest their mangos before ripe and pre sell their harvest to traders at below-market prices. However, more generally, rural communities in Haiti are excluded from financial services, and smallholder farmers are at a particular disadvantage due to the inherent risks of agricultural production.

Is It Being Used as Intended?

- The original intention of providing short-term credit was to meet producers' immediate liquidity needs so that they would no longer have to pre sell their mangos at below-market prices. However, Agripro is essentially a consumption loan, and many farmers are therefore matching it to a range of long-term and/or immediate expenses. More than 80 percent of borrowers used loans to fund other income-generating activities. This appears to be the biggest benefit of Agripro.

- Some borrowers are investing their loans more strategically over the four-month period, while others are simply using it for daily household or discretionary purchases. Anecdotal evidence also points to a small group of borrowers using the loan but also continuing to pre sell their mangos.

Does It Work?

- A mid-term evaluation of Haiti Hope showed that members of producer business groups who utilized institutional credit, though not necessarily Agripro, reported an average net return on borrowing. With an average loan size of $104, a farmer typically spends about 15 percent of the loan on interest, fees, and travel costs and earns about 30 percent of the value of the loan. Also, as a proxy indicator, more producers are now selling through producer business groups – leading to the assumption that fewer are at the whim of voltigeurs for quick cash infusions.

- However, it is important to note that the use of debt for both entrepreneurial activity and personal consumption is common among Haitians. In many ways, debt becomes a safety net. Without an in-depth, longitudinal evaluation of individual farmer incomes, it is difficult to evaluate the effectiveness of the loan; even then, specific attribution to Agripro may be difficult given the fungibility of household finances.

BOX 5

Partnership, Product, and Process: What Could Have Been Done Differently?

PARTNERSHIP

- **Adopt more rigorous approach to impact assessment.** As part of the mid-term evaluation of Haiti Hope, a sample of nearly 700 farmers were surveyed. Of these, 74 percent reported having borrowed money during the past year. About half of those who reported borrowing obtained a loan from an institution, and 86 percent of this sub-group reported borrowing from Sogesol. However, detailed evaluation *specifically* on Agripro borrowers over time was not conducted. It is therefore difficult to gain insights and attribute impact to Agripro, especially given the multitude of other informal credit sources available (*e.g.,* family and friends). In retrospect, the project team could have invested more resources in measuring the effect that improved access to credit had on rural producers, with precise baselines and endlines. Gaining a more specific understanding of how credit was used and the sources of funds used for repayment would have been especially useful. This measurement could have taken the form of household-level surveys or more in-depth methods, such as the use of financial dairies.
- **Adopt more rigorous cost accounting and cost allocation systems.** As mentioned earlier, the significant involvement of TechnoServe's field staff acted as a form of subsidy, and because this support was not necessarily quantified it obscured the true economics of providing direct-to-farmer financing in rural communities. Without measuring costs, it is difficult to manage them — making it impossible to answer the question: "*Is this model financially sustainable without TechnoServe?*" Indeed, few MFIs are costing their agricultural lending activities, and improved product costing could help inform adaptions to product design, lending operations, and risk management, while uncovering opportunities for innovation.[23] It is also worth mentioning the cost incurred by borrowers, which was assumed to be significant given the out-of-pocket transaction costs directly arising from having to travel to the Sogesol branch. Of course, costs of borrowers also include opportunity costs, for example the time spent for group meetings and traveling to the branch.

BOX 5 (Continued)

Partnership, Product and Process: What Could Have Been Done Differently?

- **Design and implement a Sogesol staffing plan from day one.** While branch directors had operational responsibility for approving and processing loans and managing repayments, it took over a year for Sogesol to hire someone to assist with coordinating Agripro at the headquarter level. Because of this, significant workloads were placed on the shoulders of TechnoServe staff, including its monitoring and evaluation manager. In retrospect, a more detailed memorandum of understanding and/or operating agreement could have clearly noted staffing responsibilities. As part of this, more frequent trainings for Sogesol staff (from loan officers to tellers) could have fostered a more client-centric experience. Related, the project could have benefited from Sogesol hiring full-time loan coordinators located not in the branches, but in the rural communities with clients — effectively adopting a lead farmer-style model.

PRODUCT

- **Loan amount [2,000 HTG—5,000 HTG ($45- $115)]:** Amounts proved to be adequate for most borrowers. And, progressive lending models, such as increasing loan sizes over time conditional on repayment, has been proven in several microfinance contexts over the past two decades. However, several Agripro clients demanded higher amounts — as of early September 2014, 40 percent of the 8,136 borrowers reached the third loan cycle and hit the loan ceiling of 5,000 HTG ($115). With more targeted service delivery and borrower segmentation, it is possible that *some* of these clients could manage more substantial Agripro loans. Alternatively, a formal graduation process for Agripro borrowers to access Credit Agricole, or other products, would have delivered additional benefits to more commercially oriented producers.

- **Duration [Four month fixed-term]:** The four month fixed-term duration proved adequate. Again, it is possible that, with borrower segmentation, differing loan tenors would have increased benefits and decreased costs to both producers and Sogesol. Subsequent pilots and test markets could have demonstrated this.

- **Interest [2.5% monthly]:** The current interest rate (2.5% monthly) is among the lowest available, especially to rural borrowers. Sogesol and TechnoServe staff agree that the affordability of credit was and still is a critical driver of high uptake. To account for higher risk with first-time borrowers, the project team could have considered a progressive or "tiered" interest rate structure that inversely correlates with loan amounts and borrower history (*e.g.*, first-time borrowers are subject to 3 percent monthly rate, while those in their third cycle benefit from a reduced rate of 2 percent monthly). However, there is also value in simplicity of the loan product (See Lesson Learned #4).

- **Eligibility.** As of 2012, borrowers are required to be members of a producer business group. Borrowers must also be between the ages of 18 and 65 and have a national identification card. Finally, as described, there was "embedded due diligence" from the local knowledge and relationships of Animators and producer business group leaders; however, this was not always done in a systematic way. If the intended goal of providing credit is to help producers overcome household-level liquidity constraints and allow them to sell mangos when they are ripe, additional eligibility requirements or incentivizes for producers to sell to their groups could have been considered.

Lastly, it is well-documented that rural producers use a variety of financial instruments to manage their complex financial lives. In retrospect, the project team could have also explored opportunities to bundle credit with insurance or voluntary savings products to help borrowers further manage risks, smooth consumption, and mitigate the impact of exogenous shocks.

BOX 5 (Continued)

Partnership, Product and Process: What Could Have Been Done Differently?

PROCESS

- **Better align credit management training and Agripro origination to harvest cycle.** Given its intended goal to reduce pre-selling of mangos, the credit program could have benefited from better alignment between when producer business groups receive credit management training (during which Agripro is marketed) and the start of the mango harvest. Today, Agripro is available year-round and is not always aligned with the mango crop cycle.
- **Rethink channels for credit disbursement and repayment.** While the amount of credit disbursed far surpassed the original program target and though repayment rates remain high, the logistical challenges of actually receiving and repaying cash proved incredibly challenging as noted in Lesson Learned #12.

  Today, cash must be disbursed from and delivered to the Sogesol branch or a SogeXpress agent. There are no options for mobile payment/repayment. As noted earlier, there is anecdotal evidence that TechnoServe Animators and business group leaders are assuming responsibility for collecting repayments and traveling to the nearest branch or agent themselves with all borrower repayments (since individuals borrowers do not need to be present at the time of repayment, only disbursement).

  In retrospect, more attention should have been devoted to designing solutions to overcome these logistical barriers. For example, hiring a full-time local loan coordinator, as mentioned previously, to formally aggregate repayments from neighboring farmers. Or, partnering with Fonkoze, which has a rural presence and a broader network of agents, to offer borrowers more widespread options for loan disbursement and repayment. Similarly, mobile payment solutions may now be more widely available than they were immediately following the earthquake, and mobile payments could now help to bridge the rural divide (recognizing the persistent challenges of signal strength, building an mobile-agent network, and educating borrowers).

  Even without a brick-and-mortar or agent presence in rural areas, some MFIs — such as Opportunity International in Ghana — have been able to overcome such challenges by using mobile vans that offer nearly all the capabilities of a bank branch, without requiring clients to travel long distance from their homes or businesses, thus saving them time and their hard-earned income for transportation.[24]

Photo: The Coca-Cola Company

Looking Ahead

Due to the slow and uneven expansion of formal financial institutions into rural areas, the vast majority of the world's estimated 450 million smallholder farmers are excluded from participating in formal markets. Despite significant demand, they are unable to benefit from credit, savings, and other basic financial products and services.[25]

Among the various pathways to unlocking credit for smallholder farmers and rural poor, direct-to-farmer finance is considered to be the most challenging — the so-called "last mile" of smallholder finance.[26]

However, it is also believed that — because of their experience financing individuals outside of formal banking systems — microfinance institutions, such as Sogesol, are well-positioned to lend to farmers directly.

Yet these institutions will need to continue adapting their urban and peri-urban models to reach deeper into rural areas. They will also need to restructure credit and other products to account for the uniquely cyclical and time-deferred cash flows of agricultural producers. Fortunately, there are several examples where this is already underway.

Looking ahead, the sustainability of Agripro will be largely dependent on Sogesol's level of commitment and the resources it chooses to allocate to rural lending. As the past three years have demonstrated, there is significant and unmet demand for credit among rural Haitians, and the vast majority of Agripro borrowers have repaid on time and in-full, with many demanding *more*.

Additionally, as demonstrated by the learnings shared in this document, there are still several knowledge gaps and questions related to the most effective and efficient delivery mechanisms and payment systems for rural credit.

As such, there is an opportunity for Sogesol, along with other MFIs and development partners, to further test and validate high-impact models of direct-to-farmer finance.

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