KILIMO BOOSTER

Musoni Launches an Agricultural Loan for Kenya's Smallholder Farmers

Grameen Foundation / Kenya / January 2015

Agriculture is the main livelihood for three-quarters of the population in Kenya. Yet 75 percent of the country's agricultural outputs are still produced by smallholder farmers (those with little land, producing mainly for home-consumption, and using traditional technologies). [1]

Reliance on rainfall and traditional technologies leaves farmers exposed to climate risks such as drought and flooding. This challenge, combined with their distance from business hubs and inadequate collateral, means that few borrowing options exist. Yet good yields rely on significant up-front investment.

With limited funds available, farming competes with other family needs such as school fees, medical expenses and even daily meals. Tabitha Muthoni, a smallholder farmer in Nakuru county, struggled to distribute money between competing priorities in the household. "I always found myself in a situation where the children were winning the battle and the animals would suffer." [2]

The use of poor quality seeds, no fertilizer or pesticide, and substandard feed for livestock all add up to lower yields that perpetuate the poverty cycle.

THE PARTNERSHIP

Musoni Kenya is the first all-mobile microfinance institution (MFI). Because its clients are able to receive and repay their loans using Safaricom's M-Pesa[3] system, the institution is able to provide affordable financial services in hard-to-reach places. Its strategic vision is to expand into rural areas. This means offering products that address smallholder farmer needs directly.

With support from MasterCard Center for Inclusive Growth, Grameen Foundation partnered with Musoni to create a loan designed specifically for smallholder farmers. The goal was to make formal lending available to smallholder farmers who were previously unable to borrow (thus creating a new customer base to the MFI) and to offer more attractive terms to existing customers.

While many of Musoni's clients are farmers, the institution historically offered them traditional business loans and had little knowledge

1. African Development Bank, 2009
2. Kilimo Booster Success Stories, Musoni, 2014
3. M-Pesa is a mobile-phone based money transfer service launched in Kenya in 2007 by Vodafone and Safaricom. M-Pesa allows registered users with a national I.D or passport to deposit, withdraw and transfer money through a mobile device. In addition to money transfer, M-pesa now enables its subscribers to make payments for services as well as access various banking services directly from their M-Pesa wallets.

musoni

Musoni Kenya is a fast-growing microfinance institution (MFI) that has created a fully automated, mobile phone-based banking platform to service its clients. This enables its clients to repay their loans using Safaricom's M-Pesa[3] system.

Musoni provides loans of 5,000 to 250,000 Kenyan Shillings (about $53 to $2,544) through its group lending methodology, and loans of 100,000 to 500,000 Kenyan Shillings (about $1,176 to $5,882) through its individual lending product. Currently the MFI works with more than 15,000 borrowers and aims to reach 23,600 clients by December 2015 (target of 60% in rural areas).

GF GRAMEEN FOUNDATION
Connecting the World's Poor to Their Potential

In 2011, Grameen Foundation took an ownership stake in Musoni because of the strong synergy between the two organizations' strategic objectives. Grameen Foundation is committed to leveraging technology to expand access to financial services, especially in underserved communities.

In Sub-Saharan Africa, this most often means people who live in rural areas and pursue agricultural livelihoods. Musoni's cash-less, paper-less model offered an exciting opportunity for Grameen Foundation to help create gains in efficiency by providing financial services in hard-to-reach areas at lower costs. Follow us on Twitter @GrameenFdn.

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The MasterCard Center for Inclusive Growth was created to foster collaborative relationships between academia, governments, nonprofits, the social design community, and the private sector. Through the advancement of research and strategic philanthropic investments, we support and enable those historically excluded from financial services and serve as a catalyst for change. Follow us on Twitter @CNTR4growth.

about the unique seasonal financial needs of agricultural households. To create a successful and competitive product, understanding the financial behaviors of Kenyan farmers was key. The team selected two pilot branches, and set out for the surrounding villages to speak with the farmers. For those who were current clients, we wanted to understand their challenges with taking out and repaying loans. For those who were not current clients of Musoni or any other institution, we wanted to understand what was preventing them from borrowing. Our focus was on smallholder farmers – specifically those planting on under 5 acres and growing at least a portion of their food for sale, not household consumption.

DEFINING THE PROBLEM SPACE

After weeks of interviews with farmers and analysis of our data, the team gained a better understanding of the target clients, and the challenges that can be addressed with the new agricultural product.

EXISTING STRENGTHS

We learned that Musoni has two strengths that already make it well positioned to serve smallholder farmers in remote rural areas:

Credit without formal collateral

Musoni's group methodology makes credit accessible to those without formal collateral. As many farmers don't formally own the land they farm or are unwilling to put it up as collateral, the group approach makes credit available to a much broader population.

Loans serviced through mobile money

Musoni's loans are disbursed and repaid through M-Pesa, Kenya's mobile money network. Since there is a mobile money agent in almost every village, Musoni clients save significant cost and time of traveling to the city center to service their loan. This savings reduces the overall cost of borrowing.

CLIENT CHALLENGES

By learning about current practices and experiences with the existing Musoni loan portfolio, we uncovered key challenges farmers are facing with borrowing:

Repayment schedule does not fit the farming cycle

Smallholder farmers are stuck at the bottom of the agricultural value chain, where a lot of money and effort are invested up front and the return on that investment takes months to materialize. A typical crop might take six months to mature and brings no profit until harvest. Meanwhile, a business loan requires farmers to start repaying almost immediately. Some farmers take out bigger loans and use a portion of the loan to finance those repayments.

One big disbursement promotes risk and misspending

Farming costs are spread out throughout the season, yet the farmer gets all of his money at once. Storing the extra cash at home is a risk, yet most farmers do not have a bank account. Letting money sit idle while you're charged interest for it is also bad business, so many farmers invest it in other ventures. When such ventures fail, the farmer does not have enough money to harvest his crops and the full loan is at risk of default. Farmers would rather take only the money they need at the time, but are unwilling to take out multiple smaller loans because of the paperwork involved and the risk of not getting approved for the second and third loans.

JULIUS NDERITU

Used KSH 30,000 ($330) to purchase chickens

He started with 13 chickens and expanded his farm to 120 birds. His wife is occupied on the farm full time now, selling eggs worth KSH 10,000 and birds worth KSH 7,500, for a total of KSH 17,500 per month. This allows them to comfortably make their loan payments of KSH 8,325 per month.

"My wife had a phobia for loans because of repayment structure. The Kilimo structure (with its source of payment coming from the project) has changed her attitude. She is now positive about using loans and eager to take a bigger loan to construct a big poultry structure."

Shocks need to be addressed quickly; getting a loan takes time

When disease, pests, or frost hits, a farmer has just a few days to resolve the issue. Yet getting a loan often takes longer. Fear of running out of funds forces farmers to take out larger loans, just in case, which in turn promotes misspending and costs them extra interest.

Farmers want to 'pivot' their business (say from maize into livestock), yet loans require them to have experience

In many parts of Kenya, the climate is changing. Seasons are shifting and rainfall is becoming much less predictable. Traditional crops are highly susceptible to drought, flooding or even frostbite, so many farmers try to shift their focus to livestock rearing, which is a more stable enterprise. However, all available loans require them to have a few seasons of experience in the enterprise they are taking the loan out for.

Farming is a risky business, and farmers want insurance options

Farmers don't mind paying extra fees for insuring their loans in case of default. They are also very interested in being able to insure their loan against environmental factors.

Land size in not always an accurate indicator of income

Most existing agricultural loans have a land size minimum. However, in Kenya, land size is not always a determinant of the farmers' level of productivity. Many smallholder farmers use innovative irrigation techniques or greenhouses to produce high yields on very small plots.

Livestock is not just another asset

Livestock allows farmers to take on more risky investments because it insulates them against shocks. Cows and chicken provide a daily income from milk and eggs. This is a small salary that can be used to cover unplanned spending. Animals also function as savings that can be liquidated in emergencies.

Many farmers desire the 'growing together' benefits of informal financial tools

Musoni's main competitors are not other MFI's or Banks. Most Kenyans still rely on more informal financial instruments such as borrowing from friends and family, or being a part of a savings group. They value the advice they get as well as the less rigid repayment structure.

OPERATIONAL CHALLENGES

Understanding the farming activities and financial behaviors of farmers also helped the team appreciate the unique operational challenges of agricultural lending:

Loans require extra effort and their duration is longer

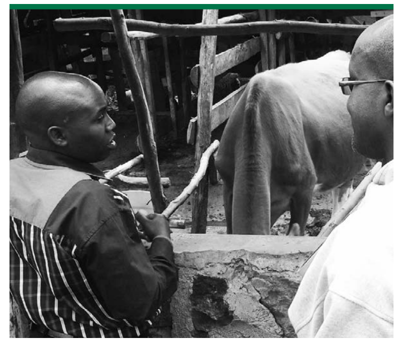
Many small, relatively long-term loans in remote villages drive up operational costs.

Environmental shocks hit everyone in the region

The environmental risk factors, such as drought or flooding, that affect many farmers in the same region put added risk on Musoni's portfolio.

Every region is different

Structuring effective agricultural loans requires a good understanding of the crops planted and the environmental factors in the area. Each region in Kenya has a different micro climate and cultural context. Average farming cycle, yield per acre, and projected income from that yield differ drastically per region. The loan design has to be flexible. A catch-all solution will not work.



JOSEPH KARIUKI NJUGUNA

Used KSH 80,000 ($880) to purchase a dairy cow

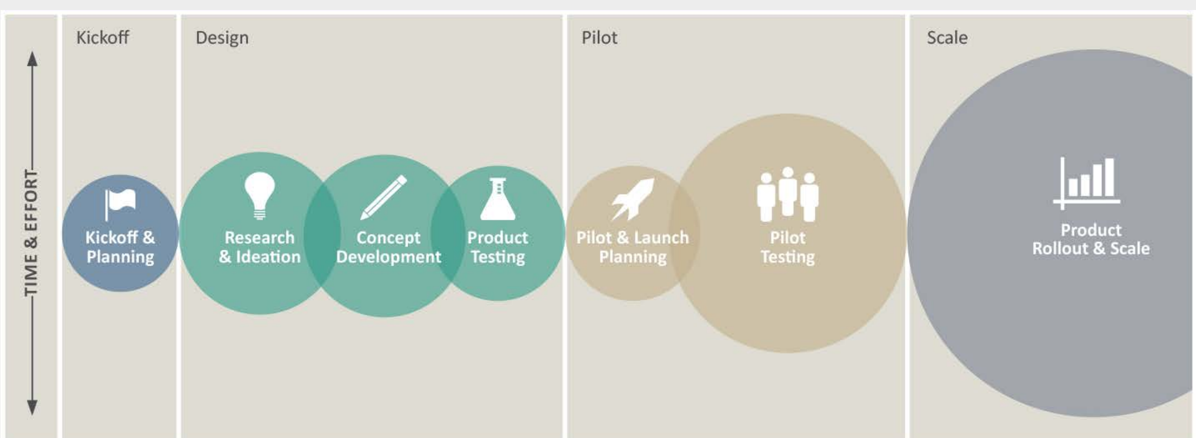
Used the loan to buy a dairy cow. His cow is now producing 10 liters per day, which brings him KSH 9,000 ($100) per month. He is able to use this money to repay the loan and fund other farming activities.

"A cow is an assurance of stable daily income for 9 months. I have desired to have a dairy cow for years. Kilimo Booster has made me realize my dream, now I am assured of KES 300 (US$3.5) from milk sales every day."

FIGURE 1: Why farmers borrow?

	EMERGENCY	STARTUP CAPITAL	DIVERSIFICATION	EXPANSION
Demand for credit	Life events and natural disasters deplete funds, leaving farmers without resources to take care of crops or animals.	Farming requires up front capital, and returns are slow. Farmers need to borrow early in the season and can repay later, after the harvest	Farmers want to diversify their endeavors or shift to a more profitable business and need resources to do so.	Farmers desire long-term loans to invest in business growth.
Farmer's requirements	Quick approvals are required; these loans are very time sensitive.	Quick turnaround is needed, as farming timelines are sensitive.	Support systems and partnerships are necessary to help launch the new venture.	These loans are not time sensitive, as there are many credit options available.
Bank's requirements	Bank should limit exposure to this segment.	Staggered disbursements help ensure money is spent correctly.	Staggered disbursements help ensure money is spent correctly.	A unique value added from the proposed credit product is needed to attract this audience.
Level of Risk	Very High	High	Moderate	Low

FIGURE 2: Methodology



http://www.grameenfoundation.org/what-we-do/financial-services/solutions-innovation-process

Grameen Foundation's **Solutions Innovation Process** combines its user-centered design approach to product development with deep expertise of helping financial institutions test and scale financial products for the poor. There are seven phases of the process (see graphic above): kickoff, research and ideation, concept development, product testing, pilot planning, pilot testing, product rollout and scale.

Grameen Foundation's methods employ several tools for in-depth qualitative market research to understand the target clients' financial needs, business structures, and comfort levels with risk. These qualitative methods allowed Grameen Foundation to segment Musoni's potential clients into three distinct groups, which had different levels of assets, access to markets, and tolerance for risk.

Using the deeper understanding of clients' financial and social situations produced in the segmentation analysis, Grameen Foundation helped Musoni identify the four primary reasons why Kenyan smallholder farmers seek credit.

UNDERSTANDING WHY FARMERS BORROW

In order to identify new opportunities, we needed to understand the different reasons why clients might want to borrow. Each reason has associated needs for clients and risks for the financial institutions. *(See Figure 1 on previous page).*

DESIGNING A BETTER LOAN

While smallholder farmers have a high risk profile, they represent a huge growth opportunity because they are currently under-served by financial institutions. The new loan, called Kilimo Booster (Agriculture Booster) helps to position Musoni as the farmers' bank. This loan aims to help smallholder farmers diversify their enterprises, expand existing farms, and venture into new farming activities.

The new product had to balance providing customized, flexible terms that will make it appropriate for farmers with cost-effective operations that will allow Musoni to scale.

To manage this, credit officer efforts have been re-allocated to the beginning of the loan cycle to determine terms that will make it most likely for farmers to repay on time, minimizing the need for collection trips later. The kinds of enterprises that can be funded have also been restricted in each area, to make the agricultural knowledge required manageable for credit officers.

THE LOAN DESIGN INCLUDES:

Flexible loan design to accommodate different crops and weather conditions

Unlike many existing loans, the terms of Kilimo Booster are determined on an individual basis. This includes a grace period of up to six months, which allows farmers to harvest before having to repay their loan and staggered disbursement of the loan amount which allows farmers to manage their money better.

72 hour loan turnaround time

To help farmers weather shocks and minimize damage to the crops and livestock, the loan can be disbursed very quickly. Funds are wired directly into the client's mobile money account.

Repayment based on a money-making enterprise, not necessarily the venture loan is taken out for.

The loan repayment is linked to one of the farmer's established, income-generating enterprises. This limits the need for experience in the new venture they are undertaking without introducing additional risk for Musoni.

Education and support provided to loan clients

This promotes the 'growing together' attitude and helps to maximize profits (which helps to increase the repayment rate).

Insurance

Credit-life insurance is a requirement for every loan. When it becomes available, crop insurance to protect farmers' investment will also be included.

TABITHA MUTHONI

Used KSH 200,000 ($2,200) for quality feed for her animals and a poultry house expansion

Before accessing the loan, she was not able to pay school fees and feed both her cows and birds well. As a result her margins were very low. Since getting the loan, her milk production has increased from 50 to 70 liters per day and she is able to sell chickens after 5 weeks instead of 10 weeks (leading to saving on feeding costs).

"Kilimo Booster is now a solution to my farming financial needs. I am assured of taking care of my family needs without compromising my farm."

FIGURE 3: Kilimo Booster Product Details

Product Name	Diversification Loan
Financing areas	• Working capital to support agricultural production and trade. • Asset financing for farm equipment to support production and value addition. • Startup ventures to support farmers seeking to expand, grow or diversify farming activities to grow income.
Enterprises funded	Livestock and crop undertaken on a commercial basis.
Crops and Livestock enterprises that qualify for funding	Livestock and crop undertaken on a commercial basis
Target	Smallholder Commercial Farmers, Agri-Business Traders & Input dealers
Amount	KES 5,000 – 350,000 (about USD $58 - $4,022)
Collateral Security	0% cash collateral for both individual and group borrowers. Group Borrowers • Group guarantee of at least 5 members • Livestock pledged to the group Individual Borrower • Valuable chattels (household assets, etc.), land certificates, logbooks and other formal collateral securities.
Loan Term	3 – 12 months
Grace Period	Up to a maximum of 6 months, depending on nature of enterprise.
Repayment frequency	• Monthly for Agri-Trade borrowers with regular income. • Payments shall be tagged to the cash flow for farmers with irregular income. • Interest portion of the loan shall be paid monthly during the period of the loan.
Interest Rate	Group (flat) - 22% per annum Individual (flat) - 18% per annum
Insurance	1% (Covering death of the borrower, permanent incapacitation, etc.) for loans greater than or equal KES 100,000 (about USD 1,600)
Other Fees	• 3% one-off payment for loan processing for the borrowed amount. • RTGS transfer of 500 for loans above 140,000. USD 5 for loans higher than USD 1,610
Other requirements	• Borrowers must have an MPESA account or bank account for amounts higher than KES 140,000 (about USD $1,610). • 10% contribution towards total cost of asset for asset loans. • Farmers without formal collateral security, MUST form groups to access funding.
Accessed at	Thika, Naivasha, Kisii, Kitengela, Zimmerman, and Donholm branches.
Penalties	Defaulter shall have to rest for 1 season before they can access any new funding.
Benefits	• No travel costs to branches as loans are disbursed and paid via MPESA in the convenience of borrowers' home. • Ability to access funding for new a venture that support income growth. • Only 72 hours turnaround time on loan processing. • Flexible repayment mechanism tagged to the timing of income. • Access to a wide range of support services through Musoni partners. • Free financial education training to all borrowers.

EARLY SUCCESS

The original pilot was scheduled for 12 months and was undertaken in two of Musoni's branches—Naivasha and Thika. The pilot was so successful that after the first six months Musoni's board voted to extend the pilot to all of its branches and to increase the Kilimo Booster portfolio ceiling from $120,000 to $350,000 in response to customer demand. With an average loan size of about $350, Musoni aims to reach 1,000 clients in the first 12 months.

One of the product's most popular features is its flexibility; it is customized to the farmer's cash flow. This flexibility extends to grace periods, disbursement, and repayment plans and allows the product to service a variety of value chains and different types of client-owned businesses. The clients' need and preference for significant flexibility in their credit products were identified through a user-centered approach. This model was used to provide a better understanding of the client, permitting the development of a more tailored and therefore more successful product.

CONCLUSIONS & RECOMMENDATIONS

Be ready to provide holistic support

Small microfinance institutions require not just product development assistance, but also technology, training, and other support. Establishing a product development committee, training the staff on their roles and deliverables, and involving MFI staff in the whole process from start to finish directly helped achieve internal buy-in and shorten the product development cycle.

Engage the MFI staff early

Set up a product development committee within the microfinance institution at the beginning of the partnership to gain buy-in and engage staff in the research, ideation, and concept development steps of the process. Musoni identified a point person for the product development process and created a product development committee that comprised the COO, two Branch Managers, and the Business Development Officer.

Create comprehensive training programs

Combining classroom training with practical field activities proved most effective in training loan officers on the new product so they could quickly and effectively assess whether farmers were good candidates for the loan.

Investment in understanding clients' needs pays off

The user-centered design approach requires a significant upfront investment of time and expertise to deeply understand the needs of the clients. However this investment pays off in the ability to define client needs and preferences, segment clients by attribute, and create tailored products for each segment that include the features most valued by clients.

Consider the whole system

Agricultural financial innovations involve delivery channels, risk management, and additional support services to help increase agricultural production and not just the modification of the features of traditional financial products.

Don't ignore technology

Start early to integrate product features into the Core Banking System (CBS) early in the process. Agricultural product features can be complicated for CBS systems to incorporate, so product features should be integrated early on. Understanding the constraints offered by the CBS can help shape the design of the product's features during the product development process.