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Internal Operational Challenges Around Rural and Agricultural Finance

Reflections on Opportunity International's AgFinance Operations in Africa

This "FIELD Brief" is the seventeenth in a series produced by the Financial Integration, Economic Leveraging and Broad-Based Dissemination (FIELD)-Support LWA Program. This brief, written by ***John Magnay, Douglas Pond, Ian Townsend,*** *and* ***Genzo Yamamoto*** *of* ***Opportunity International****, discusses the internal operational challenges posed when implementing rural and agricultural finance.*

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Introduction

The provision of financial services in rural and agricultural areas of sub-Saharan Africa poses many challenges. The lack of physical infrastructure and low population densities, the common vulnerabilities of the rural population such as HIV/AIDS, disease, and food insecurity, all hinder profitability and increase the likelihood of loan default. In agricultural finance, these risks are compounded by the challenges of poor quality inputs and seeds, crop sensitivity to drought, flooding, financial illiteracy, lack of a mature value chain, and other problems. And for these reasons, the provision of financial services in rural areas has been difficult.

In this context, microfinance institutions (MFIs) using a value chain approach can help by identifying how smallholder farmer production and returns can be increased, and by facilitating partnerships with financial and capacity building services toward that end. Such an approach can serve the poor, strengthen the value chain, and stimulate the economy for further development.

The decision to enter into rural and agricultural finance (RAF), however, poses challenges impacting MFI operations. They are at once both common and unique: If one goes up the ladder of abstraction, the categories are no different from those of any company making a new product launch. Yet, the challenges posed by the particularities of rural sub-Saharan Africa are also unique and worth highlighting.

With generous funding from The MasterCard Foundation and the Bill & Melinda Gates Foundation, Opportunity International expanded its Malawi rural and agricultural finance pilot project to five countries in sub-Saharan Africa–Ghana, Malawi, Mozambique, Rwanda and Uganda in 2009. This involved the provision of full financial services including a savings component to help build smallholder farmer assets, working with extension service providers to provide good agricultural practices training, the use of innovative technologies, and full facilitation along the agricultural value chain. This report reviews internal decision-making challenges raised by the project in the hope that they will prove useful to others entering the RAF field.[1]

[1] Still useful for this topic from Opportunity International's experience is Beth Houle, et al., "Banking Rollout Approaches to Rural Markets," Opportunity International White Paper, No. 8 (February 2008). For more information, see opportunity.org/knowledge-exchange.

Methodology

In one sense, the questions, issues, and processes involving rural and agricultural finance are nothing new. For preliminary questions prior to entering RAF, and for internal organizational changes following the decision, standard business categories for research prior to market entry (e.g., preliminary market research involving a review of market needs, market size, market risks, capacity to engage, costs of servicing the market, profit forecasts and sense of time to profitability), and processes preparing for product launch (e.g. product development, human resource preparation, systems and workflow preparation, marketing and infrastructure planning) are relevant respectively. These categories are commonly understood and require no special discussion. In this sense, the shifts required are no different from operational adjustments required of any company developing a new product.

And yet, even as these categories remain relevant, it is useful to pinpoint common challenges that are unique to the particularities of rural and agricultural finance (RAF). Agricultural finance is not "just" an addition to pre-existing loan operations already in place. The characteristics of rural and agricultural finance present challenges very different from previous business:

- Lack of MFI infrastructure close to the rural groups;
- Lack of power and connectivity in the field;
- Challenges in supervising staff activity a long way from the Head office;
- The need to spend extended periods in remote locations as clients are recruited and trained;
- The need to register large number of clients in a short period of time;
- Lack of financial literacy among the target population;
- Beginning from a non-existent base;
- Variation in farmer commitment to agricultural education;
- The nonpayment culture common in some communities;
- Inexperience with agricultural loans among bank loan officers; and,
- Generally, the need for flexibility that flies in the face of banking cultures that tend to look for control and rigidity.

Agricultural finance does not lead to one-size-fits-all products that can be developed and then rolled out. Opportunities need to be analyzed and their nuances identified. Even if two farmers worked in maize, one needs to understand their unique family contexts and financial needs, their specific crop profiles, the amount of land being planted, the nature of the soil, the type of fertilizer, the type of seed, the rainfall patterns, the yields from the previous year, and where the farmer intends to market it—a process requiring high attention to detail, and hence, cost, in every situation. As such, agricultural finance invites a shift in the way that banking operations are perceived and implemented. The points below present specific points within the common, broad categories that merit special attention.

A RURAL GROUP OF FARMERS AND SAVERS FROM GHANA.

Preliminary Questions

1. *Country Assessment*

a. **The economic and political environment created by governments.** The concern here extends beyond a general study of the country environment. Agricultural finance is impacted deeply by the economic environment created by governments. While this impact can be positive, it can also be negative if governments have provided deeply subsidized aid along the agricultural value chain. Smallholder farmers and others along the value chain accustomed to such aid will rely on these subsidies and choose not to take initiatives that would strengthen the value chain. The risk of value chain implosion due to aid makes MFI engagement difficult. Likewise, risks can increase at the time of elections.

BANK AGRICULTURAL FINANCE OFFICER WITH THE PRESIDENT OF A COOPERATIVE IN RWANDA.

b. **The economic and political environment created by donors.** The above issue is no less true for international donor intervention. While there are important ways in which donors can nurture a context for economic and agricultural growth, well-intended but misguided subsidies in food and cash crops and in financial markets could destabilize markets and undermine value chains. At the conclusion of a donor program, the financial incentives will no longer be there for value chain players to play their part. Such a context makes it difficult for MFIs to function but does suggest a different model – one with an MFI, a continuing organization, at the center of the intervention.

c. **Societal attitudes that impact financial behavior.** Historical developments in a country's history – such as communism, or recent civil conflict – may have impacted popular attitudes and practices regarding financial management (e.g. people do not want to work in groups, or existence of a general distrust of NGOs or government). But even more tangibly, farmers may believe that money is not a sufficient store of value and prefer to invest in physical assets. All of these can substantively impact bank operations not least the ability of a bank to raise deposits to fund the rural lending.

d. **Rural infrastructure.** Sufficient infrastructure is necessary in order for rural and agricultural finance to work: Roads, water, irrigation infrastructure, power, and communications must be sufficient to support farmer productions and access to markets, and MFI operations. Something ostensibly as basic as the physical infrastructure necessary to make quality seeds and inputs available in a timely manner has shown itself to be a significant issue. Likewise, the quality of the roads that farmers use to access the market can make a large difference on how competitive they can be. No simple principle exists on this issue, but all macro infrastructure issues must be evaluated when considering delivering rural and agricultural financial services.

2. *Value Chain Assessment*

a. **The number and type of existing players in the value chain.** We might consider two different categories of smallholder farmers. The first consists of subsistence farmers who are isolated from the broader market and for whom the value chain consists mostly of local relationships. The second consists of economically and commercially active farmers who can produce surplus yields if connected to modern inputs, fertilizers, agricultural practices, and offtakers. The line between these two categories is permeable. The only difference between the two groups may be the lack of knowledge of, or adherence to, good agricultural practices (GAP), willingness or capacity to pay for potentially higher yielding inputs, or lack of sufficient yield. There must be a sufficient number of farmers that are capable of joining this second group to make it work.

A Rwandan farmer enjoying her harvest

b. **The state of agriculture in the country.** The MFI must determine whether the state of agriculture has potential for growth. What are current yields and in what conditions are they produced? This is key. Farmers will often seek first to increase the acreage farmed rather than seek to increase yield. What is the level of subsistence farming being done? What is the value and range of export crops and what capacity is there for expansion? What is the value and range of import crops and products? Is there a growing domestic market for local cash crops? Is there a potential for substituting imported food with locally produced crops and meat products? What are the trends in import/export parity prices across all crops? All this should be looked at in the context of competitive advantage and sustainability.

c. **The level of organization, training and skills amongst the smallholder farmers.** Achieving the scale and agricultural output necessary to make agricultural finance sustainable requires the aggregation of farmers into groups (e.g. farmers groups, producer organizations and cooperatives) and an ability and willingness to attend sessions that present good agricultural practices (GAP) training and financial literacy training. Some understanding of where the smallholder farmers are at on this issue is necessary.

3. *Operational capacity*

a. **Sufficiency of MFI size (balance sheet capacity).** Given the current risks involved with RAF, it is important that agricultural loans not comprise an excessive proportion of the overall MFI loan portfolio. During the implementation phase, Opportunity International's model uses a rule limiting agricultural loan portfolio to less than 25% of the bank's total loan portfolio to spread risk. Portfolio diversity is also sought within this 25% to further reduce risk. Achieving scale in RAF then naturally requires a bank with a total loan portfolio of 4-5 times the agriculture portfolio to limit overall exposure. While this raises questions regarding expansion for MFIs working in a largely agricultural

economy, it is hoped that future risk mitigation innovations would further decrease risk and allow these percentages to increase.

b. **Sufficiency of MFI reach (service delivery capacity).** Sustainable rural finance involves the provision of a full range of services: Savings, loans, money transfers, and so on. It has become clear that ready access to these services are of high importance to clients; and, personal contact with bank officers and services has proven important in order to establish and maintain the trust and relationship necessary. Such contact requires sufficient reach of the bank's branch network into the rural areas from which agricultural bank officers can then travel further out. Mobile banks and especially motorbikes have been critical to achieve this.

c. **Understand risk mitigation mechanisms available** and establish criteria for processes that would further minimize risk (risk assessment/management capacity + capacity to deliver risk mitigation products). One set of questions can be asked and answered *at the head office*:

- Are there credit guarantees available?
- Is weather-indexed, or other, crop insurance available for the area?
- What criteria will be used for credit applications, approvals, and monitoring?
- What facilities can be put in place that will reduce the temptation of the farmer to side-sell his crop immediately prior to harvest, thereby putting the MFI at risk and greatly disadvantaging him in terms of the sale price achieved?
- What products can be produced to reduce the risk of farmer side-selling?

But another set of questions require assessments *in the field*:

- What is the character of the borrower?
- What are his/her financing needs?
- What is the anticipated yield and, hence, cash flow to repay the loan?

In the end, it may be that the organizational capacity to make these in-the-field assessments that are the most important skills for minimizing risk.

4. *Cost-Benefit Analysis*

A complete cost-benefit analysis prior to market entry is understandably difficult, but categories can be integrated with MIS in preparation for later data outputs.[2] A combined product and delivery channel assessment will assist greatly in developing products for specific market sectors and at individual outlets.

First, developing an effective program necessitates being able to have detailed allocation of income:

- Interest on each product at individual outlets
- Fee income on each product at individual outlets
- Other earned income at individual outlets.

Second, costs must be allocated to each outlet and if possible to several key business areas within the outlet:

[2] For a discussion of preliminary principles for the creation of a cost-benefit analysis tool from Opportunity's experience, see Nick Walden and Estelle Berger, "Developing a Cost-Benefit Analysis Tool: Experiences and Lessons from Malawi and Mozambique," USAID Financial Services IGP Learning Network Case Study facilitated by the SEEP Network (SEEP Network and Opportunity International, 2009). For more information, see opportunity.org/knowledge-exchange.

- Credit/ lending
- Savings / Term deposits

Third, Head Office costs must be allocated and Fund Transfer Pricing (FTP) must be calculated. Both of these calculations are difficult, but essential to show the whole picture in a transparent way. Head Office costs include the following:

- Finance
- Credit
- Audit/Risk
- H.R. & training
- Sales (Savings and Loans)
- Allocation of General Management costs

Fund Transfer Pricing (FTP) seeks to adjust the calculations for outlets to express more properly their respective costs and benefits. An outlet that has client savings/term deposits in excess of its loan base (after allowing for liquidity) will lend this to another outlet and receive interest on these surplus funds at an agreed rate. The reverse is then seen in an outlet that has a far higher lending portfolio, which will increase the cost of funds at this office. This shows a more realistic financial position.

Changes to Internal Organization

Once the decision has been made to enter the RAF field, an MFI faces another set of decisions and issues impacting internal operations. The degree to which RAF implementation requires changes in the whole of the bank's operations can be insufficiently appreciated. The paragraphs below focus on particular decisions that are especially salient when implementing RAF. In the following pages, points that could fit under multiple categories have been grouped by convenient categories to simplify organization.

1. *Human Resources*

a. **Recruitment and training of agricultural loan officers.** We have found that loan officers require significant additional training for agricultural savings and loans. They must understand both the bank financial products *and* agriculture. Activities differ from standard loans as monitoring involves visiting farmers, reviewing crop development, ascertaining whether the right inputs and fertilizers are being provided, and so on. Different personnel configurations are possible. Some of our implementing partners have taken financial staff and trained them in agriculture; others have taken agricultural experts and trained them in finance; yet another has placed an agronomist in a managerial position overseeing the work of loan officers. All approaches work. The essential point is that at least one person with strong agricultural experience and expertise—someone who understands crop cycles, costs and yield, and field activities—is necessary on the team.

b. **Training and incentivization of loan officers for rural and agricultural savings.** Where the MFI has the capability, the encouragement of savings is especially important when implementing agricultural finance for income smoothing of seasonal income for weekly expenditures as well as to meet the MFIs funding needs. In addition, if officers in the past have worked primarily with loans, they need to be retrained and incentivized to build their savings portfolio. A new incentive structure must be developed and then integrated into the MIS to implement, manage, and reward collection of

savings. Care must be taken to have a spread of funding sources, however, as farmers will tend to withdraw their savings for planting just as the funds are needed to make planting loans.

c. **Retention and career development of agricultural loan officers.** Creating a career development path is especially important for agricultural loan officers who are often recognized for their training and can be poached by other MFIs—impacting clients and exacerbating the need for training new staff. A comparison survey of salaries for comparable skill sets among indirect competitors (agriculture NGOs and extension service providers) is important.

2. *Agriculture Team*

a. **Identification of market information sources.** A significant hindrance to financial sustainability of agricultural finance is the macro-economic shifts in the local, regional, and international markets which can shift quite drastically from year to year. Identifying sources for information on, and understanding, these shifts is essential for pricing. Paying attention to import/export parity pricing shifts for each crop is key.

b. **Research of country market and crop profiles.** Given the high risks of agricultural finance, the identification of key crops/ livestock enterprises that have both an impact on household income or rural cash flow *and* are the key crops/livestock enterprises for the country is essential. Such analyses help prioritize and focus on financing crops that are uniquely fitting in the different countries. Moreover, crop profiles must be prepared in order to understand the different stakeholders along value chains for each crop, and costings and yields ascertained in order to see whether the loan can be viable from both a client and MFI perspective.

A "Success" Story: Uganda Maize Prices

The 2007-08 political riots in Kenya completely destabilized the maize market for two years. Despite low market prices in Uganda in 2007, the 2008-09 years were fabulous years for Ugandan maize because of the huge shortage in Kenya. Anything grown in Uganda would find a market in Kenya. However, in 2011, the Ugandan maize market collapsed because Kenya recovered. Had Opportunity International not monitored the regional market and financed clients based on 2009-10 level prices, credit scoring parameters would have been looser resulting in serious losses in 2011. Market information is essential for making accurate pricing decisions.

c. **Research of client needs and their specific crop profiles.** As important as deep knowledge of key crops and enterprises at the macro level (point b above) is, such understandings are by themselves insufficient. The crops must also be understood in the context of the individual clients: What the unique needs of clients are, their unique crop profiles, and how the components of their crop portfolios provide for their families:

- Family sizes and spending needs;
- The precise amount of land being planted;
- The nature of the soil;
- The type of fertilizer;
- The type of seed;
- The rainfall patterns;
- The yields from the previous year; and
- Where the farmer intends to market it.

Such gathered data should be verified with other stakeholders to reflect actual conditions applicable to rural clients.

d. **Develop loan cycle monitoring systems, such as CRM.** As noted already above, monitoring agricultural finance requires checking field preparation, planting, and fertilizing, and feeding the often quite detailed status findings into a customer relationship management (CRM) system. CRM makes it easier to manage this complex data where the loan specifications will depend on the crop or, quite often, mix of crops. In agricultural finance, sales, audit, credit, processes are very different from traditional urban microfinance.

e. **Establish working relationships with strategic partners.** While this includes value chain actors, it also includes other value chain supporters with whom the relationship may not be directly financial, such as extension service providers (ESPs)—a working partnership involving management and monitoring.

f. **Register interest in agricultural finance with governments and donors.** No less important is communication with value chain influencers—donors and governments—given their interests in impacting the same clients and potential to deeply impact the financial context for good or ill. While they can play positive roles, they can also undermine the value chain by providing free inputs or free credit (see textbox).

A "Failure" Story: Financing Rice

Opportunity notified the government of its intention to provide financing for rice production in a region of the country in 2010. Work had led to an agreement with 2,300 farmers to provide them with finance for inputs; and, in early 2011, they were due to come into the bank to sign the loan agreement. One day before they were to come in, the government suddenly announced that it would provide free fertilizer and seed on free credit, undermining overnight the financing for the fertilizer and seed that had been prepared. The reasons for the government decision were unclear. The example underlines both the need for government cooperation and how, without it, the best–laid plans can collapse overnight.

3. *Operations*

a. **Establish robust systems for registering rural clients, loan processing and monitoring.** As noted above in relation to loan officers, agricultural finance work processes differ from traditional group loans where payments are frequent and begin soon after the loan allowing a review of client account activity to be sufficient for monitoring. In contrast, monitoring production loans where there is little, if any, activity in the client account before harvest requires officers to go out and be in close touch with clients, their crops, and all actors in the value chain in order to monitor and, where the needs arises, control risk.

b. **Product integration with accounting, core financial, and CRM systems.** Agricultural finance product specifications need to be coded into the bank's MIS system and integrated with its core financial and CRM systems. Given the different characteristics of agricultural loans, clients, and their repayment schedules, this is not "just" another loan product. Thorough staff training on the uses of CRM is crucial.

c. **Tight bank operations.** Losses can occur not just in the work with smallholder farmers, their crops, and the value chain, but in bank operations. While tight bank operations is a characteristic of any good business, their implementation is especially difficult when dealing with large client numbers to be enrolled and monitored in short periods of time and across large distances: Bank accounting practices must be tightened; loan documentation must be clear and binding and accurately reflect the responsibilities of the MFI and the borrower; similarly, the relationships with all the partners in the value chain should be understood and the responsibilities of each clearly captured in contractual

agreements; monitoring, control and collection practices need to be carefully planned; a careful rubric for decision-making processes need to be established; the use of CRM must be standardized and operationalized for all staff; and gathering and analyzing better market intelligence must become a common part of core bank operations as it pertains to crop prices.

RICE HARVESTED AND LAND READY FOR NEXT SEASON

4. *Risk*

a. **Develop agriculture-specific credit policies, procedures, and systems to measure, manage, and mitigate agricultural risk (especially covariant risk).** Given the complexity of agricultural finance and the high level of covariant risk, every point in the loan and crop production process where risk exists must be considered. While very important, the mitigation of portfolio concentration risk alone is insufficient. After parsing the risk by type of financing (input suppliers vs. crop production vs. bulking/warehousing loans vs. processing vs. poultry/cattle/dairy loans etc.), geography, ESP, and so on, procedures must be developed to monitor every component to minimize overall risk. Risks also vary based on the type of crop being financed, local climatic conditions including, critically, the historic probability of the right amount of rain at the right time or better still, the lack of reliance of a crop on rain and, of course, the nature/strength of the borrower.

b. **Develop policies and procedures to manage impacts of crop seasonality on the bank's balance sheet.** Managing the seasonal cycles, more specifically, managing the variability in the actual and projected timing of and amount of funding needs, is one of the most difficult aspects of agricultural finance posing significant risks. Asset Liability Management (ALM) tools can be used to manage the risks that come with crop seasonality. Additionally, procedures should be established to provide for sufficient cash during key times in the cycle.

5. *Marketing/Outreach*

a. **Commitment to an extensive marketing and financial literacy campaign.** Bringing changes to traditional agricultural and financial habits of rural, smallholder farmers requires intensive capacity building efforts. The financial literacy program that is developed must specifically address the huge cash flow swings of rural clients which are very different from those of urban clients. And it must be effectively delivered in the rural environment.

Elements of Evidence-Based Program Design

These constitute some qualitative, operational lessons that have been learned through Opportunity International's operations in agricultural finance over the last two years. While grateful for what has been successful in the project so far, continuing challenges have suggested further research would be useful. In particular, a couple areas have been flagged as areas for future research:

1. Differentiating between credit and operational losses and then identifying the precise areas where they are taking place, has been difficult. This has been noted as an important research topic going forward.
2. Farmer loan repayment patterns have remained difficult to predict suggesting that we need to understand our clients even more. This has also been flagged as a topic for future research.

PADDY RICE COLLECTED IN BAGS IN RWANDA

Other data is in the process of being gathered. Given the project's focus on the value chain approach and the success of the smallholder farmers it seeks to serve, we are looking forward to measuring the effectiveness of different components of current operations for both modeling and impact effectiveness. The project seeks a better understanding of the client's needs, product development, delivery channels, project output/impact, value chain facilitation, and challenges to bank internal operations.

Conclusion

Special challenges await banks that intend to provide the financial and facilitation services involved in rural agricultural finance. RAF does not fit with prior processes for urban or peri-urban finance. From loan officer recruitment and training, implementing different loan monitoring activities, designing products that match the seasonality of crops, to establishing different back-office processes, RAF imposes challenges to MFIs that are very different from urban finance. These processes—which require the concerted and coordinated effort of all portions of the bank—suggests the need for the whole core management team to be committed to institutionalize these new capabilities into bank staff and systems.