

Using a Subsector Development Methodology to Improve the Effectiveness of Agricultural Lending



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INTRODUCTION

Over the course of the past 15 years, significant advances have been made in microfinance technology. These improvements have allowed for millions of micro and small enterprises to access credit on a sustainable basis. Similarly, as microfinance institutions mature and face increasing competition, interest rates are coming down and services for SMEs are improving. Unfortunately, in spite of many of the advances in microcredit technology, agricultural credit still seems to lack viable solutions to assure that both the MFI and the small producer benefit consistently and improve their profitability.

The most obvious explanation for this void is that this is due almost exclusively to the inherently risky nature of agriculture. Many professionals, implicitly or explicitly, seem to have arrived at the conclusion that agriculture, especially among small producers, is too risky for microcredit to be viable.

While it is true that agriculture has inherent risks, and perhaps more so than other industries, it would seem logical that a corresponding increase in the interest rate or other adjustments to the conditions of the loan to the individual client would resolve this problem, though it would appear that in many cases it hasn't. Furthermore, there are cases in the developing world of agricultural portfolios performing quite well. In some cases, two institutions can be competing in the same areas, under the same conditions, but achieve very different results. In 2001,

ANED in Santa Cruz, Bolivia, began lending in Bracha Casarabe, a lowland community that had been declared a “red zone” by various other rural MFIs, due to the high arrears rates of many clients. ANED has worked closely with clients to change their “credit culture, but also to improve the productivity and the marketing systems of their clients. The portfolio in that community is currently at \$150,000, with an arrears rate of 0%. ANED’s total portfolio in Santa Cruz, Bolivia is approximately \$1.5 million, with an arrears rate of 3%, and generating net surpluses (profits) of 8%. When properly managed, agricultural lending can be profitable for the MFI and the client.

Perhaps one of the major differences between urban and rural lending is that rural lending, particularly for agriculture, tends to be heavily dependent on a very narrow range of subsectors. Whereas urban financial institutions lend to a highly diversified group of business sectors (commercial retailers, restaurants, traders, furniture manufacturers, bakeries, clothing manufacturers, bicycle repair shops, auto repair shops, etc.), agricultural lending institutions tend to have the bulk of their portfolios across 2-3 agricultural products in any given branch. These products are all susceptible to adverse weather patterns, but the more concentrated the portfolio is among fewer agricultural products, the more susceptible the entire portfolio is to market risk and changes in the industry. Furthermore, in agriculture, the price of the final product is generally more susceptible to macroeconomic factors in the rest of the world than the market for the goods and services of urban enterprises, which tend to have local markets that are less volatile, even if they are weak.

In order for agricultural lending to be successful, MFIs must find ways to mitigate at least some of the risk. To this end, many professionals are rightly looking at tools such as crop insurance to help deal with agricultural portfolio risk^{1, 2, 3}. While these kinds of tools are important, and the need for continued improvements in the methodology for individual lending in agriculture cannot be underestimated, for many MFIs with rural portfolios, the means of reducing risks may be even more basic. Part of what rural MFIs need is to be able to target more successful agriculture. There is a need, particularly in agricultural lending, for MFI managers to understand the risks, constraints and opportunities for each commodity (subsector) in its portfolio. When, as often occurs, a large portion of the agricultural portfolio is concentrated in a small group of commodities, even though it is spread among a large number of producers, the MFI must become more savvy in understanding the “Business Plans” for those products, almost as if it were two or three large loans, rather than hundreds of smaller ones. This is necessary because the impact of a

¹ Skees, Jerry. “Risk Management Challenges in Rural Financial Markets: Blending Risk Management Innovations with Rural Finance”. Paper presented at “Paving the Way Forward for Rural Finance- An International Conference on Best Practices”. USAID Washington DC. June 2, 2003.

² Dana, Julie; Ulrich Hess and Panos Varangis. “The Use of Price and Weather Risk Management Instruments”. Paper presented at “Paving the Way Forward for Rural Finance- An International Conference on Best Practices”. USAID Washington DC. June 2, 2003.

³ Wenner, Mark & Diego Arias. “Agricultural Insurance in Latin America: Where Are We?”. Paper presented at “Paving the Way Forward for Rural Finance- An International Conference on Best Practices”. USAID Washington DC. June 2, 2003.

change in the market of a single commodity can be potentially devastating to the agricultural portfolio, but this could be mitigated by a better analysis. The plan should help the MFI to understand the vulnerabilities in accessing inputs, producing, processing and marketing. It should also help to identify mitigation strategies, means to reduce costs, increase yields and improve quality. The MFI must continually improve its understanding of what the market is looking for, what are the major factors that affect/determine price, and where the potential opportunities are.

The history of agricultural lending in Tarapoto, Peru is an excellent example of this. During the rice boom (approximately from 1994- 1998), almost all local financial institutions had 80-90% of their agricultural portfolio in rice. As rice production was highly profitable, the portfolios did extremely well. However, in 1999 the price of rice began to drop because of increased production in other parts of Peru, and many producers began to lose money. Financial institutions in the area saw their arrears rates for the agricultural portfolios begin to soar. In retrospect, there had been warning signs of the coming decline in prices, but financial institutions did not have the systems in place to respond appropriately.

Because traditional urban microfinance has had a very a diverse representation of subsectors among its client base, it has not been as susceptible to shocks in any one subsector, and therefore has been able to focus more on improving *efficiency* (for this discussion this would include: managing costs, improving profitability, improving the loan conditions for the individual client, etc.). It would not be practical or cost-effective for urban MFIs to try to intimately study all the factors affecting each of the subsectors in their portfolio. However, for agricultural lending to be successful, lending institutions must continue to improve both *efficiency* (managing costs and lending practices for clients) as well as *effectiveness*. For the current argument, the term *effectiveness* in agricultural lending would include *analyzing the viability of credit of the sector and the opportunities to affect positive changes in the sector through strategic targeting of credit at specific links along the productive chain*. Microfinance institutions should not be expected to try to single-handedly change the production patterns of a region, but must have a strong enough understanding of the factors of production and marketing to be able to identify strategies for mitigating risks, and taking advantage of opportunities.

THE DEVELOPMENT OF BDS

Parallel to the developments of the microcredit industry recent strides in the technology around non-financial services, or “Business Development Services” (or “BDS”), have been tremendous. Whereas at one point BDS was generally conceived of as a series of highly subsidized, generic training courses that were quite often disassociated with the needs of small producers, the emerging vision for BDS is much broader and more dynamic. It envisions the development of sustainable services offered by local enterprises, and goes far beyond the generic

“business training” courses of the past. Furthermore, and of more interest to the current discussion, great strides have been made in the technology of offering “Sector Specific Services”.

Developing “Sector Specific Business Development Services” begins by analyzing the relationships between all the actors along the Productive Chain of a product or commodity, from inputs suppliers, producers, processors, marketers, and final buyers. From this analysis, a vision begins to emerge of where the opportunities and risks are in the market and along the productive process, and how certain strategic interventions at different points along the process can have a very dynamic impact on the whole chain.

In some contexts of agricultural lending, this kind of analysis would appear to have great value for the MFI. As Frank Hollinger notes, in his article, “Financing Term Investments in Agriculture: A Review of International Experiences”, “Investments with significant impact on reducing risks and enhancing profitability related to production and marketing might also be attractive from the lender’s point of view. Irrigation allows farmers to switch to high value crops or to intensify existing production by increasing the number of cropping seasons and protects against drought. Storage systems can enhance product quality, reduce losses, and may allow farmers to sell their produce outside the peak season. These investments may enhance the scope for subsequent deepening or broadening of rural financial markets.⁴ “In this sense, *by seeking ways to mitigate its own risks, the MFI can play a role in helping small producers to better integrate in an increasingly competitive market.*”

(It is important to note here that common sense is required in applying this concept. For rural MFIs with a very small agricultural portfolio, or for institutions with a well-diversified agricultural portfolio, the potential benefit would probably not justify the resources required. The investment made in gathering information should have some relevance to the potential return on that investment.)

EXAMPLES

ANED leasing⁵: The Asociacion Nacional Ecumenico de Desarrollo (ANED) in Bolivia is a microfinance program with extensive experience in rural credit. In 1997, ANED began a program to help small farmers to finance the purchase of farming equipment to improve productivity through “leasing to own”. ANED leases equipment, using the equipment itself as part of the guarantee. Once paid off, the equipment becomes property of the client. The leasing of small pumps, \$500-\$1500, has become a very popular item in certain parts of Bolivia, as they have a tremendous impact on improving productivity and stabilizing income. Clients with

⁴ Hollinger, Frank. [Financing Term Investments in Agriculture: A Review of International Experiences](#). Case Study presented at “Paving the Way Forward for Rural Finance: An International Conference on Best Practices”. USAID. Washington DC. June, 2003.

⁵ <http://www.aned.org/leasin.htm> for more information on ANED’s leasing program

pumps become much less susceptible to drought, and therefore also reduce the risk to the institution. In other cases, milking machines, leased to an association of dairy producers, has a strong, positive impact on the association, but also on the individual producers that are also clients of ANED⁶.

The leasing model, as in the ANED example, is interesting in that it is a profitable product for the MFI, it improves the profitability of the producer, and helps to reduce some of the risks associated with agricultural lending. The experience of ANED and others, as documented in, "Financing Term Investments in Agriculture: A Review of International Experiences"⁷, points to the potentially positive impact that can be achieved through leasing, assuming certain barriers can be overcome. However, this type of investment can only be made effectively if the MFI understands the opportunities and constraints faced by its clients.

Broad Bean Seed Production in Potosi, Bolivia: From 1998- 2002, MEDA executed the Rural Marketing Project (PROCOR) with funding from the Bolivian government to support three associations of small producers to improve their marketing systems. For each of the three associations, MEDA carried out a market study and an analysis of the subsector for the five products that the associations were managing.

In the case of the broad bean producers association in Potosi (ASOHABA), one of the opportunities that was identified was the strong demand and high prices for large sized broad beans in the international markets. However, as no adequate seeds were available for broad beans, most of what was being produced was small size and of low value.

MEDA as an NGO took on the task of developing a variety of certified seed for broad beans, using a local eco-type that produced more, larger sized grains. It then transferred ownership of that variety to the producers association (ASOHABA). The local MFI financed the reproduction of the seed with local seed breeders contracted by ASOHABA. As seed breeding is more technically demanding than commercial production, seed breeders earn significantly more than commercial grain producers, making them good clients for the MFI. However, perhaps more importantly, the seeds were sold throughout the region, and the use of the certified seed was estimated to have increased farmers' incomes by as much as 20%. In this sense, by financing the production of certified seeds with strong market demand, the MFI also helped many of its other clients, as they benefited from the access to improved seeds.

BRAC: In a recent article by the ILO's Social Finance Programme and the Small Enterprise Development Department, entitled, "Synergies through Linkages: Who Benefits from Linking Finance and Business Development Services?" the authors, Marten Sievers and Paul Vandenberg review over 25 cases of ways in which

⁶ Phone interview with David Flores, Regional Manager of ANED. Santa Cruz, Bolivia. March 15, 2004.

⁷ Hollinger, Frank.

microfinance institutions have offered directly or have linked up with other organizations to offer non-financial services (BDS), and to distil the lessons learned.

Because in the past, linking MFIs with non-financial services has generally meant linking with business training, the majority of the cases in the paper focus on this kind of service linkage. However, some of the more successful linkage programs, such as the one offered by BRAC in Bangladesh, focus on linking MFI clients with “sector specific services”. BRAC offers training in specific income generating activities (poultry raising, agricultural trading, fresh vegetable production) as well as access to certain inputs if they are not readily available in the local markets (chicks). Though BRAC does not charge the full cost of the training, the financial analysis carried out shows that clients could easily pay the full cost of the training program through the increased profits, as the increase in income from the training is generally between 8-66 times the costs of offering the service. By deepening its knowledge and understanding of the needs of a few subsectors, the MFI has been able to develop better clients for itself, as the clients have higher, more stable incomes.

This is not to suggest that rural MFIs step outside their role as lenders, but rather to point out that by focusing on specific subsectors and by providing solutions to the constraints faced by those subsectors, benefits can be enjoyed by both the MFI and their clients.

The result of the study of these 25+ cases is a list of six suggestions for effective linkages that appear relevant to the current discussion:

1. **Assess your market:** Find out what clients can already obtain and what they need.
2. **Link up after developing a core competency:** “Have a Broad vision, but a narrow specialization”.
3. **Assess (and re-assess) the benefits of linkages:** Carefully assess the benefits of linking with BDS providers in view of the goals of the institution.
4. **Be client driven:** Make sure that the BDS provider responds to market signals from the clients in order to adapt services to make them more relevant and to assure sustainability.
5. **Use credit as a first service:** As BDS is generally a less tangible service, credit is a good entry point.
6. **Adapt to local subsectors: Concentrating on certain subsectors may be a good option for some providers.** Only by maintaining contact with clients and conducting occasional market surveys can providers understand the needs of clients.

For future possibilities, the authors note that “embedded services that could be coupled with credit might be an interesting option; for example, leasing schemes and the embedded service provided by machinery suppliers can be coupled.”⁸

STUDYING THE AGRICULTURAL COMMODITY SUBSECTOR: METHODOLOGY AND PARTNERS

For the MFI interested in studying the agricultural commodity subsectors, there is a plethora of material available. Some, such as the Action for Enterprise, “Subsector/ Business Service Approach to Program Design”⁹, are extremely detailed and intensive. While it provides perhaps some of the richest data, not all of it may be very useful for the MFI. Others, such as the “Agribusiness Subsector Assessments”¹⁰ tool, by Theresa Miles of DAI, or John S. Holtzman’s, “Rapid Appraisals of Commodity Subsectors”¹¹, may not provide all of the detailed information, but will likely capture most of what is relevant to the MFI. It should be noted that these systems have been developed for development practitioners with a broader, slightly different agenda, and perhaps less limitations on resources. *Developing or adapting a tool specifically for MFIs to cost-effectively identify the risks, constraints, opportunities and needs for investment for the different subsectors in their portfolio, may be an area for future study.*

Gathering this kind of information may not be cost-effective for one loan of \$1000, but as the example of rice production in Tarapoto has shown, when a large portfolio is highly susceptible to the same set of risks, it is important for the MFI to understand those risks and to seek ways to mitigate them. Part of the strategy to mitigate risk must be to assure an adequate diversification, so that the normal price fluctuations of any one product do not affect the entire portfolio. But choosing which products are most viable, and where credit is most needed is a somewhat complex operation. As most MFIs do not have this kind of expertise “in-house”, they will need to spend some time grappling with how to go about carrying out a study of this nature.

Choosing a methodology may be of less importance than deciding who actually carries out the study. Should external consultants be brought in, or should it be done internally? This will be a decision that the MFI will need to make, based on its own internal capacity to carry out a study like this, and its resources available for contracting external consultants. If resources are tight, as they generally are, the study may be carried out using entirely internal staff. The study may not be perfect,

⁸ Sievers, Merten and Paul Vandenberg. *Synergies through Linkages: Who Benefits from Linking Finance and Business Development Services?*. SEED Working Paper No. 64. InFocus Programme on Boosting Employment through Small Enterprise Development Job Creation and Enterprise Department and Social Finance Programme. International Labor Organization. Geneva, 2004.

⁹ Lusby, Frank; Henry Panlibuton (Action for Enterprise submitted for USAID MED dept.): *Subsector/ Business Service Approach to Program Design*. August 2002

¹⁰ Miles, Theresa (DAI): *Agribusiness Subsector Assessments*. World Bank Web Site: http://wbln0018.worldbank.org/essd/essd.nsf/Agroenterprise/agro_guide

¹¹ Holtzman, John S. (Abt Ass.): *Rapid Appraisal of Commodity Subsectors*. World Bank Web Site: http://wbln0018.worldbank.org/essd/essd.nsf/Agroenterprise/agro_guide

but the MFI should end up with a better understanding of the roles of the different actors, the risks, the opportunities and the factors that shape the demand for the product. However, even if resources are available to contract external support, a subsector assessment should be carried out with participation from the internal staff, as the study must be updated at least on an annual basis, as markets are dynamic, and factors of production can change over time.

SUMMARY

One of the greatest needs that MFIs have for successful agricultural lending is to find ways to mitigate risks. One strategy for risk mitigation is to keep the agricultural portfolio sufficiently diversified among a group of products. Diversification of production is also an important strategy for the long-term success of small producers. By financing a diverse range of products, the MFI is helping small producers in diversifying their risks in the global market.

The other strategy, though it may sound over-simplified, is to lend to successful agriculture. Rural MFIs should play a proactive role in keeping abreast of changes in the commodity markets, limiting the amount of financing they put into products with poor or highly volatile futures. They should help finance successful agricultural practices that improve yields, improve quality and mitigate risks. Finally, they must look at how their clients for agricultural production loans can benefit from financing other links in the productive chain, including providers of improved seeds, technological packages, irrigation packages, machinery and processing services, and marketing agents, among others. *Lending for solid agricultural practices that respond to market demand is one of the best ways for rural MFIs to mitigate risk, and help small farmers to integrate their production in an increasingly globalized world economy.*