



Emerging lessons in agricultural microfinance

Selected case studies



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This publication is the result of a research conducted by CGAP with funding from IFAD on emerging lessons in agricultural microfinance. Based on desk reviews, consultant site visits and stakeholder consultation, CGAP identified a shortlist of institutions actively engaged in agricultural finance that showed the potential to achieve scale and sustainability. Several case studies were selected from this shortlist and are presented in the present publication. They are intended to offer insights, lessons learned and analyses that are relevant and useful to donors, investors, financial institutions and others engaged in promoting financial services to the many millions of poor people dependant on agriculture.

The following case studies were used by CGAP to finalize their Occasional Paper 11, dated August 2005, on “Managing Risks and Designing Products for Agricultural Microfinance: Features of an Emerging Model.”

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Contents

THE CHALLENGE OF AGRICULTURAL LENDING	6
Selection of case studies	7
Overview of case studies	7
Case study summaries	10
CONFIANZA IN PERU OVERCOMES ADVERSITY BY DIVERSIFYING LOAN PORTFOLIO	14
Summary	14
Background	14
Challenges	15
Responses	16
Changes lead to sustainability	18
Donors and investors	19
Lessons learned	20
Conclusion	21
Bibliography	22
BAI TUSHUM FINANCIAL FOUNDATION, KYRGYZSTAN	24
Summary	24
Background	24
Challenges	25
Responses	26
On the road to sustainability	28
Donors and investors	29
Lessons learned	30
Conclusion	31
Bibliography	31
CAJA LOS ANDES (BOLIVIA) DIVERSIFIES INTO RURAL LENDING	34
Summary	34
Background	34
Challenges of rural lending	35
Seven years of rural lending	37
Donors and investors	39
Lessons learned	40
Conclusion	41
Bibliography	41
EQUITY BUILDING SOCIETY OF KENYA REACHES RURAL MARKETS	44
Summary	44
Background	44
Meeting the challenges of rural services	45

Taking stock	47
Donors and investors	48
Lessons learned	49
Conclusion	50
Bibliography	51
SMALL FARMERS IN MOZAMBIQUE ACCESS CREDIT AND MARKETS BY FORMING ASSOCIATIONS WITH ASSISTANCE FROM CLUSA	54
Summary	54
Background	54
Challenges and responses	56
Donors and partners	59
Lessons learned	59
Conclusion	60
Bibliography	61
TABLES	
Confianza	
1 Confianza financial indicators, June 1999-December 2003	18
2 Evolution of Confianza agricultural portfolio, 2000-03	19
Financial indicators definitions table	22-23
Bai Tushum	
1 Bai Tushum portfolio breakdown by loan type, December 2003	29
2 Bai Tushum performance and outreach indicators, 2000-03	30
Financial indicators definitions table	32-33
Caja Los Andes	
1 Financial indicators of Caja Los Andes, 2000-03	38
2 Evolution of CLA rural loan portfolio, 1996-2002	39
3 Agricultural loan portfolio 2000-03	40
Financial indicators definitions table	42-43
EBS	
1 Equity Building Society performance and outreach indicators, 1999-2003	49
Financial indicators definitions table	52-53
CLUSA	
Financial indicators definitions table	62-63



Abbreviations and acronyms

CGAP	Consultative Group to Assist the Poor
CLA	<i>Caja Los Andes</i> (Bolivia)
CLUSA	Cooperative League of the USA (US, Mozambique)
EDPYME	<i>Entidad de Desarrollo de la Pequeña y Micro Empresa</i> (Small Business and Microenterprise Development Institution, Peru)
GAPI	<i>Sociedade de Gestão e Financiamento para a Promoção da Pequena e Média Empresas</i> (Management and Finance Company for the Promotion of Small and Medium Enterprises, Mozambique)
GNI	gross national income
MFI	microfinance institution
PAR	portfolio at risk
SEPAR	<i>Servicios Educativos Promoción y Apoyo Rural</i> (Promotion of Educational Services and Rural Support, Peru)

The challenge of agricultural lending

Despite the disproportionate concentration of poverty in rural areas around the globe, microfinance – the provision of financial services to poor and low-income people – has tended to gravitate away from rural borrowers.¹ As the industry matures, however, practitioners are increasingly turning to the vast and largely underserved rural frontier and to the thorny challenges of financing small-scale agriculture. Delivering small-scale loans and savings mechanisms can be particularly challenging in areas of low population density, where the distance between clients is great, transportation networks are often poor and low income levels tend to translate into impracticably small financial transactions. Given that most rural citizens depend at least in part on agriculture for their livelihoods, these conditions make the prospect of operating a self-sustaining, rural microfinance institution (rural MFI) even more daunting.

Agricultural finance is notoriously risky. Many farmers need credit to purchase seeds and other inputs, as well as to harvest, process, market and transport their crops. While borrowing on the basis of anticipated crop production might seem logical where collateral assets are few, such loans expose the lender to production and price risk. Natural disaster, a decline in market prices, unexpectedly low yields, the lack of a buyer, or loss due to poor storage conditions are only some of the factors that can result in lower-than-expected revenues. Such a fall in revenues can often lead to high default rates on agricultural loans. The overwhelming failure of state development banks that provided billions of dollars in subsidized agricultural finance to farmers in the 1970s and 1980s, combined with scant rural penetration by risk-averse commercial financial institutions, has led to a widespread dearth of agricultural credit. Yet, new approaches are increasingly being developed to fill this gap in a sustainable and efficient manner.

The identification of *agricultural* microfinance as a significant remaining challenge to financial sectors that serve the majority of the poor spurred the Consultative Group to Assist the Poor (CGAP) to undertake an analysis of current practices. With financial support from IFAD, CGAP, in 2002, began desk research, consultant site visits and stakeholder consultations to identify promising agricultural lending operations. An initial list of 80 candidates was

1. The important exceptions are Bangladesh and Indonesia, both of which have rural population densities significantly higher than most countries of sub-Saharan Africa or Latin America.

slowly whittled down to a handful of representative examples. While many on the long list proved to be fundamentally unsustainable or lacked the potential to achieve scale, about 30 were sufficiently promising to merit further research. Of that resulting short list, the case studies outlined here were selected as representative examples that merit dissemination.

Selection of case studies

These case studies present promising approaches to the sustainable provision of financial services to poor rural households reliant on agriculture. The five institutions or projects highlighted in the studies are:

- Confianza, Peru;
- Bai Tushum Financial Foundation (Bai Tushum), Kyrgyzstan;
- Caja Los Andes (CLA), Bolivia;
- Equity Bank, Limited (Equity), Kenya; and
- Cooperative League of the USA (CLUSA), Mozambique.

CGAP selected these cases on the basis of the following criteria:

- the importance of agricultural lending to the overall portfolio and mission of the microfinance provider;
- the medium-term sustainability of the agricultural lending activities (and institutional ability to survive difficult years caused by weather, price movements, or government policies);
- potential for replication or scale;
- ability to serve as an illustration of a particular institutional or methodological approach to agricultural microfinance; and
- geographic distribution.

Although CGAP considers the models represented by these five cases as promising, none can yet be declared an unmitigated success. Many methodological, financial, practical and political challenges remain. In several cases, the agricultural portfolio has yet to achieve significant scale. The case studies are thus intended to offer insights, lessons learned and analyses that will be directly relevant and useful to donors, investors, financial institutions and others engaged in promoting financial services to the many millions of poor people dependent on agriculture.

Overview of case studies

The case studies span three continents and a variety of institutional characteristics. The organizations highlighted differ in portfolio size (ranging

from about USD 2 million to USD 22 million), ownership (village-owned and membership-based networks, non-profit-making entities and a commercial bank) and age (from four to almost 20 years). Their lending styles also run the gamut from individual to solidarity group and village banking loans. Some institutions finance loans through savings mobilization, and others via interest-bearing lines of credit from international donors. Finally, some institutions are devoted primarily to rural or agricultural lending, while others maintain a modest rural lending programme as a mechanism to diversify their portfolio or enhance outreach.

While the institutions portrayed in the series are thus quite diverse, they face many of the same agricultural lending challenges:

- reaching rural clients efficiently and cost effectively (CLA, Confianza, Equity);
- maintaining liquidity in agriculture-dependent areas amid seasonal income cycles, economic crisis and regulatory constraints (Bai Tushum, CLA);
- mitigating covariant agricultural risk (BaiTushum, CLA, Confianza);
- adapting loan products to meet the specialized needs of rural borrowers (CLA, Equity);
- overcoming poor lending precedents and improving repayment culture (CLA, Confianza); and
- developing technical capacity at the local level (Bai Tushum, CLUSA).

The institutions featured in the case studies have adopted varying approaches to their respective challenges. Equity Bank, Ltd., is “taking banking services to the people” via high-tech mobile banking units. CLA bases its loan analysis and repayment schedules on revenue flows from all farm, labour and business activities that make up a family’s unique, multifaceted rural enterprise. And CLUSA is establishing linkages among farmer associations, agribusiness companies and financial institutions to provide small farmers with greater access to input credit, crop advances and commodity buyers.

Each case study begins with basic information about the institution’s history and goes on to present a set of key challenges and responses related to agricultural or rural finance operations. A brief institutional assessment of the financial provider is then followed by information on donor and investor support, plus a section on lessons learned. The principal lessons identified in the cases are:

for microfinance providers:

- A diversified portfolio that complements agricultural loans with other loan products, such as business and mortgage loans, can better serve the needs of borrowers, while simultaneously reducing institutional risk and improving operating margins. A rural portfolio provides an

opportunity for market expansion and can help offset losses in an urban portfolio during an economic recession.

- Adapting practices that have proven effective in traditional agricultural finance, such as incorporating crop-income-cycle models into loan analysis and tailoring repayment schedules to household income flows, can assist MFIs to expand into agricultural lending. Flexible, high-quality technical assistance can help financial institutions successfully adapt their product offerings to rural client needs and market opportunities.
- Lenders should not assume that a loan product intended for agriculture will necessarily be used for agriculture and should take into account all household income sources and expenditures in loan analysis, not only those related to agriculture.
- There is substantial demand for savings by rural households, provided that savers are offered the right combination of security, convenience liquidity and positive return. Access to deposit and transfer payment services (for remittances) is important for agriculture-dependent poor people, as these services help smooth seasonal agricultural cycles and meet large or unexpected expenditures.
- The high cost of reaching rural clients and operating in remote areas remains an obstacle. Strategies to overcome this obstacle include the use of technology, lending groups or associations, and flexible delivery mechanisms. It is frequently necessary to invest in product design and an underlying management information system, which underpin the performance and utility of technology, before developing more sophisticated technological solutions (such as personal digital assistants, mobile-phone banking, or automated teller machines).
- Farmer groups and associations can reduce client analysis and selection costs for lenders, as well as enhance the access of farmer clients to agricultural inputs and markets. Bringing small farmers together in well-organized farmer associations or locally run village banks can make them more attractive and cost-effective borrowers, leading to the greater availability of rural credit from financial institutions and agribusinesses.
- Financial institutions can be profitable even when half of their loan portfolios are in agricultural activities.
- Interest rates to end-clients should not be subsidized, nor should donors try to force institutions to focus exclusively on agricultural lending.

for donors:

- Long-term donor commitment (greater than five years) in the form of technical assistance and financial investment has been a crucial ingredient of success for many of these institutions.
- Flexible, high-quality technical assistance can help financial institutions successfully adapt their loan and savings products to rural client needs and market opportunities.
- Donors need to avoid taking actions that would distort the market, particularly when working to improve supply chains. Instead, they should focus on building the capacity of local players to work with and influence change within the system.
- An independent technical service unit can provide ongoing fee-based financial monitoring and assistance to community finance models and should be created early to avoid dependence on an expensive external NGO or technical partner.
- A decentralized structure with largely autonomous, locally managed operations can provide sustainable financial services in rural areas. However, the cost and effort to establish such a structure can be significant, and rigorous preliminary cost-benefit analysis is advisable to ensure that the resulting outreach justifies the required investment.

Case study summaries

The following executive summaries provide an overview of the central themes of each case study.

Confianza, Peru: Confianza is a small regulated financial institution in central Peru that provides a mixture of rural, urban, small business, agricultural, housing and consumer loans to low-income clients. From its beginnings as an Inter-American Development Bank-funded NGO programme in 1993 until it became a regulated microfinance provider in 1999, Confianza's loan portfolio was almost exclusively devoted to solidarity group loans for agricultural purposes. When a combination of factors, including plunging commodity prices, caused over half the portfolio to suffer from late payments in 1999, Confianza was forced to make a set of swift, substantial changes in order to survive.

Confianza altered its lending methodology, adding urban and individual loans to diversify its portfolio. Confianza successfully matched the agricultural finance approach of designing loan products to fit agricultural production, with the microfinance principles of sustainability and close client monitoring, backed up by a well-functioning management information system. The MFI's agricultural lending continued to grow, almost quadrupling in volume over the following few years, although its non-agricultural portfolio grew even

more quickly. By the end of 2002, the organization was financially sustainable, lending more than USD 4 million annually, with a respectable PAR >30 days of less than 4% and a 19% adjusted return on equity that topped the performance of its peers. About a quarter of its portfolio remains in agricultural loans; the portfolio delinquency rate on these loans has been notably lower than that of the portfolio as a whole.

Bai Tushum Financial Foundation, Kyrgyzstan: Bai Tushum began agricultural credit operations in Kyrgyzstan in 2000 after it assumed the foundering, 3-year-old portfolios of several small agricultural credit associations. A number of international donors, including CGAP, have collaborated effectively to support Bai Tushum's development in the face of a difficult macroeconomic environment, legislation unfavourable to the provision of microfinance, and lack of a credit culture. Through dedicated attention to building a sustainable institution and creative solutions to cultural and legislative barriers, Bai Tushum has quickly evolved into a strong local institution serving a range of rural and urban borrowers' needs.

Bai Tushum has half of its loan portfolio in agriculture, offering crop production and livestock loans, as well as a mixture of agro-processing, trade and mortgage loan products. Yet, it is profitable, achieving 230% operational self-sufficiency in its first year of operation. By early 2004, its active portfolio had grown to 1 543 loans worth USD 2.5 million, with a portfolio at risk (PAR >30 days) of 4%. Difficult conditions for agricultural lending have resulted in lower returns on Bai Tushum's crop and livestock loan portfolio. The institution's commitment to agricultural lending appears to have superseded profit maximization, however, with trade and other loans sometimes cross-subsidizing the agricultural portfolio.

Caja Los Andes, Bolivia: CLA has distinguished itself as a profitable, diversified provider of individual loans in the highly competitive Bolivian microfinance market. After inheriting a 3-year-old urban lending portfolio from its parent organization (Procrédito) in 1995, CLA immediately began expanding its operations to rural areas and adding agricultural loans to its portfolio. CLA's rural lending technology combines a loan analysis that incorporates all of a rural borrower's cash flows and expenditures (agricultural and non-agricultural) and a range of disbursement and repayment schedule options to fit agricultural income and expenditure cycles.

CLA has performed well despite a difficult recession that began in 1999. The organization's approach demonstrates that agricultural lending can be viable when combined with other rural and urban financial services, making small farmer clients attractive when competition is strong in urban areas. The experience of CLA illustrates both the potential and the limits of expanding microfinance operations into rural contexts and agricultural activities. The

agricultural portfolio represents less than 10% of CLA's overall portfolio (partly due to socio-political problems in rural Bolivia in recent years), and poorer clients in remoter areas have not been served in the initial stages of expansion into agricultural lending. The case focuses on CLA's expansion into rural areas, the adaptation of its urban lending methodology, its risk management techniques for agricultural finance and the socio-political constraints on portfolio growth.

Equity Bank, Limited, Kenya: Equity Bank, Limited, (previously Equity Building Society until it received a bank license on 31 December 2004) provides microfinance services to more than 250 000 low- and moderate-income citizens in Nairobi and in Kenya's Central Province via a network of branch offices and mobile banking units. After a decade of extending long-term mortgage loans to an untargeted clientele with meagre results, Equity altered its approach. In 1994, it began tailoring its loan and savings products to a microfinance market, eventually adding two loan products for tea and dairy farmers that are secured by agribusiness contracts. By the end of 2003, the deposit base of Equity had grown to USD 44 million, and its outstanding loan portfolio topped USD 22 million.

Equity initiated a mobile banking programme in 2000 with the goal of efficiently reaching more clients in remote rural areas. Mobile banking operations have been introduced successfully, and by the end of 2003 accounted for more than USD 1.3 million in deposits, serving over 12 000 clients in 30 rural communities. This case study outlines the strategy – including mobile banking – employed by Equity to expand its rural outreach.

Cooperative League of the USA, Mozambique: CLUSA has helped link small farmers in a number of developing countries with sources of credit from agribusiness and financial institutions. CLUSA launched its Rural Group Enterprise Development Programme in Mozambique in the mid-1990s, when the country was still overcoming a long period of armed conflict and settling into a market economy. As a supporter of market-oriented business associations, CLUSA focused its efforts on organizing impoverished, isolated farmers in the northern provinces, where the commercialization of cash crops (e.g., maize, cotton and cashews) was gaining momentum. CLUSA worked with local producers to form and strengthen farmer associations, then trained the associations to pool and market their crops to commodity traders, leading to higher farmgate prices and an 85% (inflation-adjusted) increase in average annual farm revenues.

CLUSA also assisted the associations to establish better relationships with local agribusinesses that provide input credit and short-term crop advances to smallholder farms prior to purchasing their harvests. In addition, CLUSA brokered a partnership with financial services provider, *Sociedade de*

Gestão e Financiamento para a Promoção de Pequena e Média Empresas (Management and Finance Company for the Promotion of Small and Medium Enterprises, GAPI), to offer loans to farmer associations for agricultural purposes. In 2003, 10 000 farmers in CLUSA-supported farmer associations accessed more than USD 300 000 in agribusiness company credits and nearly USD 100 000 in loans from GAPI, with average repayment rates of close to 100%. While the cost of CLUSA's support over a number of years may be high compared to the short-term benefits in terms of access to credit and increased sales for small farmers, the longer term benefits should be more significant if the enhanced production performance and creditworthiness of the small farmers is maintained.

Confianza in Peru overcomes adversity by diversifying loan portfolio

This case study was researched and written by Douglas Pearce and Myka Reinsch, with research support from João Pedro Azevedo and Amitabh Brar and financial support from IFAD. Dieter Wittkowski of the Inter-American Development Bank and Frank Rubio also provided valuable comments as reviewers of this case.

Summary

Confianza is a small regulated MFI in central Peru that, today, provides agricultural loans, alongside a range of rural, urban, small business, housing and consumer loans to low-income clients. From its beginnings as an Inter-American Development Bank-funded NGO programme in 1993 until becoming a regulated microfinance provider in 1999, Confianza's loan portfolio was almost exclusively devoted to solidarity group loans for agricultural purposes. When a combination of factors, including plunging commodity prices, led to an arrears rate of over 50% in 1999, Confianza was forced to make a set of swift, substantial changes in order to survive.

The MFI altered its lending methodology, instituted stricter lending requirements and monitoring and added urban and individual loans to diversify its portfolio. Its non-agricultural portfolio flourished, and Confianza also maintained a focus on agricultural lending (about a quarter of its total portfolio), with lending to agriculture almost quadrupling in volume over the next few years. By year-end 2002, Confianza had become financially sustainable, lending more than USD 4 million annually, with a respectable arrears rate (PAR >30 days) of less than 4% and a 19% adjusted return on equity. Notably, its agricultural arrears rate has remained consistently lower than that of the portfolio as a whole.

Background

Confianza was established in 1998 when *Servicios Educativos Promoción y Apoyo Rural* (Promotion of Educational Services and Rural Support, SEPAR), an NGO, transformed its 5-year-old agricultural lending programme into an *Entidad de Desarrollo de la Pequeña y Micro Empresa* (Small Business and

Microenterprise Development Institution, EDPYME), a class of regulated MFI in Peru. SEPAR began lending to impoverished rural women in 1993 with a USD 500 000 grant from the Inter-American Development Bank. The portfolio that Confianza inherited in 1998 was comprised primarily of unsecured solidarity loans to groups of women, 95% of whom depended on agriculture – largely potato farming – for their livelihoods. Despite SEPAR’s geographically dispersed borrowers, rudimentary loan appraisal process and minimal monitoring, the portfolio was considered healthy in 1998.¹

Scarcely a year later, more than 50% of Confianza’s USD 391 000 loan portfolio was at risk of default.² Several factors had contributed to the dramatic decline by the end of 1999. The transition from NGO to regulated MFI had proved difficult for staff members, many of whom either disagreed with the new emphasis on sustainability over poverty reduction, or were unhappy with the newly introduced culture of productivity and efficiency. An almost complete staff turnover ensued.

At the same time, potato prices reached their lowest level in over 20 years, drastically eroding the repayment capacity of many clients. In reaction, some borrowers formed lobbying groups to protest the repayment of their loans, contending that their obligations were with SEPAR and not Confianza.

Challenges

With potato prices bottomed out, dissatisfied staff departing and SEPAR borrowers boycotting the new institution, Confianza faced a host of challenges at the end of 1999. Although the acute delinquency crisis of late 1999 was triggered partly by factors out of Confianza’s control, the root cause of the problem was an unsustainable lending methodology. The MFI’s institutional viability was threatened by three main challenges, detailed below.

Portfolio concentration and restricted clientele

The poverty and gender focus of SEPAR’s initial portfolio resulted in a narrow clientele based on demographics rather than business or repayment potential. Loans were restricted to poor women in central Peru, which meant that many clients lived in rural zones far from branch offices. Most borrowers were farmers who depended on a single subsistence crop. The narrow client-focus produced a dangerously homogenous loan portfolio, with risk concentrated in agriculture, especially potatoes.

Insufficient borrower information

SEPAR and, in its early days, Confianza followed a lending model of solidarity loans to groups of three to seven women. Loan proceeds were not tied to crop

1. This was according to CGAP consultant interviews with Confianza; only anecdotal evidence was available for this time period.

2. According to MicroRate (2001), the gross portfolio of Confianza was USD 391 000 as of June 1999.

or production cycles, but used at the discretion of borrowers. Each group nominated a coordinator to assume responsibility for monitoring group performance and collecting repayments. Confianza had little presence in the field and thus gathered insufficient information to predict or stem defaults. Moreover, since solidarity loans were collateralized only by mutual borrower guarantees, Confianza had no recourse when loans went into default.

High cost of rural operations

Although certain staff recognized the need for better loan appraisal and monitoring, the expense of instituting such processes was prohibitive in remote rural regions. Reaching distant clients on a regular basis was impractical. Instituting an effective appraisal and monitoring system would require a different operational approach, new technical skills, rigorous staff training and a more advanced information system. Confianza lacked the funds to undertake such improvements and, at the end of 1999, was in a poor position to secure additional financing.

Responses

With the support of the Inter-American Development Bank, Confianza improved the quality of its portfolio in 2000-01 through write-offs and the introduction of a new lending methodology that responded to the foregoing challenges.

Portfolio diversification

Confianza began by revising its target clientele. Recognizing the inherent risks in agricultural lending and the potential balance that small business, housing and consumer loans could provide, the target proportion of agricultural loans was reduced to 30% of the portfolio. Loans to both urban and non-farming rural borrowers were added. While Confianza's focus remained on rural lending, its target clientele shifted from poor women to low-income households.

Stricter lending requirements

Confianza began insisting on risk diversification at the borrower level, too, making multiple income sources a requirement for agricultural loans. Households dependent on a single crop or lacking irrigation were excluded. The institution also moved away from solidarity lending in favour of partially secured individual loans. By the end of 2002, solidarity loans made up only 25% of the portfolio.

To mitigate the risk of borrower defaults further, Confianza began requiring more formal collateral depending on loan size and borrower credit

history. For smaller loans (less than USD 2 500), informally registered land was accepted. Larger loans required machinery, cars, trucks, or official mortgage titles as collateral.

Rigorous loan monitoring

More loan officers were hired, and regular visits to the field were instituted. With more detailed information on hand from the beginning and a more consistent presence in the field, loan officers were better able to monitor borrowers' businesses, identify potential trouble spots during the repayment period and help address crises before they ballooned out of control.

Production-based agricultural lending

Confianza also changed its agricultural lending policies. While accepting that loans could be paid back from diverse income sources, Confianza designed its agricultural loans to fit the income and expenditure cycles of agricultural production more closely. Agricultural loans, ranging from USD 150 to USD 10 000, were extended for specific crop production, usually to individual households owning an average of 2 ha of land. Loan terms were flexible, with an average maturity of eight months, and disbursements and payments were tied to income flows. Borrowers could receive a loan in up to three disbursements, and repayments could be partially or fully amortized over the term of the loan. Interest rates ranged between 4.2 and 4.7% per month in local currency (between 2 and 3% in US dollars).³ Emergency lines of credit were also made available to clients with good repayment histories.

Loan officers used new data collection techniques to develop realistic business plans for specific crops and to analyse potential income sources for repayment. Strategic partnerships were also formed with local public and private sector institutions that monitored weather patterns and agricultural commodity prices, allowing Confianza more accurately to predict repayment rates. The MFI also occasionally called on these organizations to help provide training to small farmers.⁴ Finally, agricultural clients were required to contribute, in cash or in kind, a portion of the total financing requirements for an agricultural production cycle.

Geographic footprint reduced

To offset the expense of its more labour-intensive lending model, Confianza trimmed its service area, limiting its services to clients located within an hour and a half of a branch office. It also upgraded its branches to handle multipurpose transactions and adopted a strategy of adding branches gradually, lending first to clients closest to the branch before venturing farther away. An effort was also made to establish branches in ecologically varied zones to diversify climatic risk.⁵

3. MicroRate (2002a), (2002b).

4. CGAP consultant report, based on interviews with Confianza staff, 2002.

5. The topography in Peru is diverse, and Confianza intentionally situates its branches in different zones in order to mitigate risk. In the state of Junin, for example, one branch is located in a jungle area, one in the city of Huancayo, and a third in a high-altitude plateau.

Changes lead to sustainability

By December 2002, Confianza's three branches held a combined portfolio of USD 4 million in loans to over 5 000 clients, and its PAR >30 days had dropped to 4.2%. It had reduced its agricultural exposure to 29% of the total portfolio by adding loans for urban and rural small enterprises (55%), housing (8%) and consumers (4%). The MFI offers no savings products.

Table 1
Confianza financial indicators, June 1999-December 2003

	30 Jun 99	31 Dec 00	31 Dec 01	31 Dec 02	31 Dec 03 ^a
Outreach					
Number of loans outstanding	686	2 473	3 650	5 290	10 411
Outstanding gross portfolio (USD)	391 000	1 495 083	2 699 332	4 407 154	7 967 678
Average outstanding loan size (USD)	570	608	695	833	765
Average loan size as % of GDP/per capita	28%	29%	34%	35%	37%
Sustainability/Profitability					
Adjusted return on assets (%) ^b	-6.8%	5.1%	5.1%	3.5%	2.8%
Adjusted return on equity (%) ^b	-13.4%	18.5%	22.5%	18.7%	15.4%
Operational self-sufficiency (%)	NA	1.55	1.73	1.75	1.84
Financial self-sufficiency (%)	NA	1.22	1.35	1.22	1.24
Operational efficiency					
Operating expenses as % of portfolio	102.6%	19.7%	16.4%	15.9%	14.3%
Number of clients per loan officer	172	328	383	378	416
Number of borrowers per staff	NA	94	134	147	174
Portfolio quality					
PAR >30 days as % of portfolio	NA	0.2%	4.5%	4.2%	3.4%
Write-offs as % of average gross portfolio	NA	1.1%	1.5%	0.9%	1.52%
Exchange rate					
Nuevos soles (PEN)/USD	3.33	3.52	3.44	3.51	3.46

Sources: Confianza staff, MicroRate reports, Confianza Annual Reports and CGAP consultant reports.

a. Unaudited financials.

b. Reflects end-of-period assets or equity, rather than average figures.

Three years after its default crisis, Confianza’s operational self-sufficiency ratio reached 1.75, and the financial self-sufficiency ratio reached 1.22. Most impressive, the MFI’s adjusted return on equity reached 19%, compared to an industry average of slightly more than 6%, making it the most profitable of the 13 EDPYMEs in Peru.

A new branch office in Lima, greater rural outreach and the creation of a new microenterprise loan product fuelled further growth in 2003, when the loan portfolio grew 81% in dollar terms and the arrears rate fell to 3.4%. Operational efficiency, as measured by the ratio of loan officers to clients, also improved, and operating expenses as a proportion of total portfolio value continued to fall (see Table 1).

Growth in the value of the agricultural portfolio has almost kept pace with that of the total portfolio, expanding by 40% in 2002 and 64% in 2003 (see Table 2) due to Confianza’s concerted effort to increase penetration in rural areas, including new agricultural zones. The growth in the value of agricultural loans has been accompanied by a decline in this value as a share of the overall portfolio (to 26% in 2003). Arrears on the agricultural portfolio also remained lower than the arrears on the overall portfolio from 2001 to 2003.

Donors and investors

Throughout its development, Confianza has benefited from donor and investor support in the following forms:

- grants for technical assistance, staff training, systems development, product revisions and branch expansion, principally from the Inter-

Table 2
Evolution of Confianza agricultural portfolio, 2000-03

Agricultural portfolio only	2000	2001	2002	2003
Number of active clients	682	631	671	2 148
Number of active loans	791	1 085	1 300	2 195
Active portfolio (USD)	559 394	913 713	1 280 407	2 094 578
Average loan size (USD)	707	842	985	954
PAR >30 days	NA	1.0%	3.3%	3.3%
Agriculture as % of total portfolio	37%	34%	29%	26%

Sources: CGAP consultant report and Confianza staff. Preliminary financial data are as of early 2004. Note that Confianza reported an increase in agricultural clientele of more than 200% during 2003, while the number of loans increased by only 69%. The growth in clientele was due to increased rural penetration, while the relatively low growth in the number of active loans resulted from a policy change. Prior to 2003, clients could receive two or three parallel, simultaneous loans. Beginning in 2003, borrowers had to demonstrate creditworthiness by making timely repayments over the course of 12 months before becoming eligible for a maximum of one parallel loan.

American Development Bank, with small grants from the Netherlands Organization for International Development Cooperation;

- Subsidized loans for on-lending from social investors such as the Netherlands Organization for International Development Cooperation, Oikocredit and Appui au Développement Autonome (Support for Independent Development); and
- Commercial loans from the Latin American Challenge Investment Fund and other international investors.

The Inter-American Development Bank has maintained a long-term relationship with Confianza since Confianza's inception as a lending programme of SEPAR. Recognizing the commitment of the MFI's management team to build a healthy institution, the Inter-American Development Bank supported the transition of SEPAR to a regulated EDPYME and helped facilitate a complementary package of funding from other donors and investors.

The Inter-American Development Bank also later assisted Confianza in overcoming the 1999 repayments crisis by providing funding to help Confianza modify its loan products and procedures, train staff and strengthen its reporting and information systems.

Confianza's transparent reporting and the availability of rating and assessment reports by MicroRate have recently helped attract social investors, who (as of year-end 2002) provided 82% of the institution's financing. Along with other Peruvian EDPYMEs, Confianza has shown that commercial financing can be a sustainable and profitable source of funds for microlenders.

Lessons learned

Confianza's experience with turning around a poorly performing agricultural loan portfolio offers the following principal lessons:

- A viable and growing agricultural loan portfolio can be achieved by combining the agricultural finance approach of designing loan products to fit agricultural production with the key microfinance tenets of sustainability, close client monitoring that is backed up by a well-functioning management information system, and portfolio diversification.
- A high degree of portfolio concentration in one crop makes financial institutions highly vulnerable to default, whereas a diversified loan portfolio, incorporating urban and non-agricultural rural loans, reduces vulnerability because of agricultural risk.

- Agricultural lending can be profitable. Confianza's agricultural portfolio achieved an unadjusted return on equity of 11% in 2003 and, for three years, has maintained arrears that are lower than the arrears of Confianza's overall loan portfolio.
- The risk of delinquency and default on agricultural loans can be lowered by only lending to households with other additional sources of income and by matching disbursement and repayment to agricultural expenditure and income cycles.
- Given the higher cost of operating in rural areas, an effective rural finance strategy is gradual expansion via full-service branch offices with mobile loan officers.
- Strong organizational management, including financial transparency and open communication with donors, attract well-targeted, coordinated investments and helps ensure that funds are put to good use.

Conclusion

This case study illustrates that it is feasible to conduct agricultural lending sustainably, even when starting with a disastrous agricultural loan portfolio. Despite promising results and a recent surge in lending, though, Confianza is still refining its lending methodology, and it is still too early to say that its long-term sustainability has been proved. Its ability to compete is likely to be tested over coming years, as MFIs in Peru proliferate and attempt to reach more rural areas and as commercial banks scale down (particularly to the urban small enterprise and housing markets that helped rebalance Confianza's portfolio).

Confianza also continues to struggle with maintaining its poverty outreach. More loans are going to men (54% in 2001, 57% in 2002), more collateral is required to secure a loan and the institution has now curtailed services to clients in more isolated rural areas. The larger average loan size of recent years also reflects a slight up-market drift. While this trend is partly the result of Confianza's prudent and successful responses to the challenges of 1999, Confianza's sustainability has nevertheless helped reduce the proportion of highly impoverished people among its clients.

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Agricultural microfinance case studies

Financial indicators definitions table

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Average loan balance per borrower: The outstanding gross portfolio, divided by the number of active borrowers.

Average loan balance as a percentage of gross national income (GNI) per capita: Average loan balance per borrower, divided by the country's World Bank-published GNI per capita.

Total savings deposits: The total value of funds placed in an account with the MFI that is payable on demand to the depositor. This item includes any current, checking, or savings accounts that are payable on demand. It also includes time deposits, which have a fixed maturity date.

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Return on assets	Net operating income, plus taxes Average assets	Measures how well the MFI uses its total assets to generate returns
Return on equity	Net operating income, less taxes Average equity	Calculates the rate of return on the average equity for the period
Operational self-sufficiency	Operating revenue Financial expense, plus loan loss provision expense, plus operating expense	Measures how well an MFI can cover its costs through operating revenues. In addition to operating expenses, it is recommended that financial expense and loan loss provision expenses be included in this calculation as they are a normal (and significant) cost of operating.
Financial self-sufficiency	Adjusted operating revenue Financial expense, plus loan loss provision expense, plus adjusted operating expense	By taking into account a number of adjustments to operating revenues and expenses, measures how well an MFI can cover its costs. The purpose of most of these adjustments is to model how well the MFI could cover its costs if its operations were unsubsidized and it were funding its expansion with commercial-cost liabilities
Operating expense ratio	Operating expense Average gross loan portfolio	Includes all administrative and personnel expenses and is the most commonly used efficiency indicator
Loan officer productivity	Number of active borrowers Number of loan officers	Measures the average caseload of each loan officer

Bai Tushum Financial Foundation, Kyrgyzstan

This case study was written by Douglas Pearce, Rachel Jacobs Allen and Myka Reinsch, with research support from João Pedro Azevedo and Amitabh Brar. Bai Tushum's long-term technical advisor, Muhammed Junaid, and general manager, Gulnara Shamshieva, supplied important background information. Naya Kenman and Elena Nelson of ACDI/VOCA offered valuable comments as reviewers.

Summary

Bai Tushum Financial Foundation began agricultural credit operations in Kyrgyzstan in 2000 after assuming the foundering, 3-year-old portfolios of several small agricultural credit associations. With the support of numerous international donors, Bai Tushum overcame a difficult macroeconomic environment, an unfavourable legal climate for microfinance and the lack of an indigenous credit culture to become a strong, local institution serving the needs of a range of rural and urban borrowers.

Today, Bai Tushum offers a mixture of crop, livestock, agro-processing, trade and mortgage loan products. The MFI achieved 230% operational self-sufficiency in its first year of operation. By February 2004, its active portfolio had grown to 1 543 loans valued at USD 2.5 million, with a reported PAR >30 days of 4%. Although agricultural loans result in returns for Bai Tushum that are lower than the returns from non-agricultural loans, Bai Tushum's commitment to agricultural lending appears to supersede profit maximization, with trade and other loans occasionally cross-subsidizing the agricultural portfolio.

Background

Bai Tushum Financial Foundation was created in 2002 when three rural credit associations were consolidated. Established by ACDI/VOCA (itself formed through a merger of Agricultural Cooperative Development International and Volunteers in Overseas Cooperative Assistance), in cooperation with Swiss Caritas, the German Agency for Technical Cooperation and Winrock International, the associations had collectively extended less than USD 500 000 in loans to around 400 clients after three years of operation.

All three were having difficulty collecting repayments. The decision of ACDI/VOCA and Caritas to consolidate the associations into a single, locally registered, non-commercial public foundation permitted donors to play a greater oversight role, a role that had been legally limited by the association structure.

Donors coordinated their efforts and focused on building a sustainable, Kyrgyz-run institution. With United States Agency for International Development and Swiss Development Cooperation support, ACDI/VOCA provided short-term technical assistance and an in-house advisor to Bai Tushum for a period of four years. The new MFI decided to forgo the tax privileges enjoyed by many other donor-funded organizations and register as a local company. This decision meant paying USD 50 000 in taxes during the first year of operations, forcing the organization to focus on financial sustainability. It also brought the organization clout with potential donors, proving that the organization could be profitable under local conditions.

Challenges

Portfolio concentration in agriculture

The credit associations had concentrated almost exclusively on agricultural lending. In addition to the unhedged risk of widespread defaults due to weather conditions and market fluctuations, administering loans to remote rural farmers was expensive. The combination of high administrative costs and unpredictable repayment rates contributed to net losses.

An activity-based costing exercise conducted in 2002 revealed that 76% of Bai Tushum's staff time and 57% of its portfolio risk were attributable to crop and livestock loans. Yet, these products accounted for only 35% of the clients and 28% of the net revenues.

Diversion of agricultural loan proceeds

Bai Tushum discovered that farmers were using loans for agricultural production to fund other business activities. The MFI was thus charging lower rates than it might otherwise charge on loans used to finance high-return trade activities. In one branch, the crop and livestock loan products resulted in losses that were being cross-subsidized with profits from small- and medium-enterprise loans.¹

Increasingly competitive lending environment

Bai Tushum faces competition in agricultural lending from the Kyrgyz Agricultural Finance Corporation, a quasi-governmental, donor-funded rural lender that offers low interest rates to first-time borrowers. Commercial banks moving downmarket also threaten Bai Tushum's share of the small-

1. Shamshieva (2003).

and medium-enterprise lending market. In southern Kyrgyzstan, Bai Tushum faces the additional challenge of cheap credit that is being promoted through some NGOs.

Inadequate loan appraisal and monitoring systems, poor staff training

Each credit association had its own policies, procedures and management information system to appraise and monitor loans. Yet, their systems and processes did not ensure sound financial management, resulting in high default rates. Fragmented internal systems were accompanied by a lack of indigenous expertise in credit. Loan officers had no training in risk analysis or delinquency management and were unaccustomed to making decisions on their own, preferring to execute the decisions of their managers.

Unfavourable legal constraints

The greatest challenges for rural lenders in Kyrgyzstan are constraints on collateral. Only financial institutions with a *licence* from the National Bank can accept land as collateral, and, according to a 1997 law, all loans require full collateralization. MFIs may only receive a *certificate* from the National Bank, a linguistic nuance that prevents them from collateralizing loans with immovable property. As a result, farmers cannot use their most valuable asset (land) to back microfinance loans, and this limited the size of loans that Bai Tushum could extend.

Kyrgyz law also requires that any property used as collateral be registered with the Central Mortgage Office, then reregistered *with each new loan disbursement*. This procedure not only added to the cost of Bai Tushum loans, it prohibited some poor farmers from seeking small loans.

Responses

Portfolio diversification

Bai Tushum's first step towards sustainability was to diversify its loan portfolio. It shifted from providing only agricultural loans, which carry high administrative costs, to a variety of loan products that responded to its clients needs: small and medium enterprises, agro-processing and trade loans. In 2003, the MFI also launched a mortgage product, as well as a solidarity loan designed for rural women to purchase milk cows. The activity-based costing exercise funded by CGAP was useful to Bai Tushum in refining its product line. By year-end 2003, agricultural loans had dropped to 50% of the portfolio from 95% in 2000.

Revised interest rate structure

In addition to increasing its lending for non-agricultural activities, such as services and trade that carry higher interest rates than do agricultural loans, Bai

Tushum was also able to lower its overall interest rates in order to enhance its competitiveness. By practising strict financial discipline and capitalizing on economies of scale, as well as an improved macroeconomic environment, Bai Tushum was able to lower the nominal interest rates for first-time borrowers from 36 to 26% for crop production, livestock and agro-processing loans and to 27% for trade loans (in early 2004). Bai Tushum also managed to compete by offering rapid loan processing, strong customer service and a broader range of products.

Improved control and management information system

Bai Tushum devoted a many resources to developing a new, proprietary information management system to track financial information and facilitate more stringent internal controls. The computerized system consists of two separate programmes for financial accounting and loan tracking, produces up-to-the-minute reports down to the branch level and consolidates all of Bai Tushum's financial activity at the end of each day. Regular internal auditing, a system requiring two signatures on all financial documents and a zero-tolerance policy for corruption supplemented the new computerized system.

Consistent staff training

Bai Tushum conducted extensive staff training when the three associations were consolidated and continues to allocate 2% of its annual budget to staff development and training. In addition, ACDI/VOCA has also provided training directly to Bai Tushum staff. New loan officers undergo a comprehensive orientation programme, with both formal and on-the-job training modules, followed by an in-house refresher programme every six months. All management is recruited from within the organization, which ensures continuity of skills and a performance incentive for employees.

Creative responses to collateral constraints

The institution's borrowers proposed a solution to the expensive legal requirement of registering collateral: repeat borrowers simply "leave" their collateral in the registry, and loan documents now indicate that it will be used for a three-year loan requiring annual repayments. Bai Tushum loans continue to have 12-month terms, but clients now only need to reregister their collateral every three years.

Bai Tushum also works closely with donors to build legislative support for sustainable MFIs, including reducing the tax burden on MFIs and lifting the value-added tax on equipment imports (to improve the environment for leasing).

On the road to sustainability

Bai Tushum's commitment to sustainability has been rewarded. The MFI achieved operational self-sufficiency of 230% in 2000 and 196% in 2003. By year-end 2003, Bai Tushum's three branches had a combined portfolio of USD 2.2 million and more than 1 400 clients. Average loan size was about USD 1 400 (approximately 53% of GDP per capita), and the overall PAR >30 days was only 4% (see Table 1 for a breakdown of the loan portfolio).

Between 2000 and 2003, operational productivity (measured by the ratio of loan officers to clients) doubled, portfolio volume grew from USD 646 000 to over USD 2 million, and PAR >30 days halved (see Table 2 for further details). The organization's progress was recognized in 2003, when the independent rating organization Microfinanza, Ltd., gave Bai Tushum a formal rating of A on a scale of D to AAA for its strong capacity to meet financial obligations and solid operations.

In keeping with its mission to develop both the rural and urban sectors of the country, Bai Tushum now offers six loan products to farmers and entrepreneurs:

- crop production loans (terms limited to 12 months; repayment of principal by a single balloon payment);
- livestock loans (terms of six to 18 months; typically repaid with a balloon payment);
- small- and medium-enterprise loans for agricultural processing (typical terms of two to four months);
- small- and medium-enterprise trade loans for financing trade and service businesses (the same terms as agricultural processing loans, but interest rates are 1% higher);
- mortgage financing (terms up to five years; repaid on an annuity basis); and
- solidarity group loans for low-income rural women engaged in dairy production (an interest rate of 20%; repayments due every two weeks).

All of Bai Tushum's individual loans are backed by collateral and may be repaid quarterly or monthly, depending on borrower needs. Solidarity group borrowers are required to have a 25% equity stake in the financed activity. (Equity can be in the form of cash, labour, or in-kind contributions.) Nominal interest rates in early 2004 ranged from 19 to 27%, charged on a declining balance, plus a 1% processing fee (resulting in effective interest rates between 23 and 33%). Despite their higher cost and risk, agricultural loans surprisingly carry a lower interest rate than do small- and medium-enterprise loans, with dairy loans carrying the lowest interest rate (20% for first-time borrowers).

Donors and investors

Bai Tushum attributes much of its success to the support it has received from a range of donor organizations. The MFI's closest relationship is with ACDI/VOCA, which provided the organization's long-term technical advisor, together with focused, short-term technical assistance. Other donor support has included:

- equity capitalization via grants from Swiss Caritas and ACDI/VOCA, funded by the United States Department of Agriculture and Swiss Development Cooperation;
- grant funding for an external rating (partial funding) and an activity-based cost analysis of loan operations (CGAP);
- a grant for the development of a solidarity group loan product (CGAP and IFAD);
- grant funding for the development of a mortgage lending product (European Union Technical Assistance for the Commonwealth of Independent States); and
- semi-commercial loans from Dexia BlueOrchard (USD 400 000) and Humanist Institute for Cooperation with Developing Countries and Triodos Bank Fund (EUR 300 000).

As of mid-2003, the majority of Bai Tushum's equity of USD 2.7 million had originated from donor funding (USD 2.15 million).

Table 1
Bai Tushum portfolio breakdown by loan type, December 2003

	Crop production	Livestock	Small and medium enterprise	Consumer*	Mortgage	Total
Active clients	282	517	555	21	33	1 408
Active portfolio (USD)	361 388	688 863	897 421	44 088	109 502	2 101 263
% of active portfolio	17%	33%	43%	2%	5%	100%
Average loan size (USD)	1 281	1 332	1 617	2 099	3 318	1 492
PAR >30 days	6%	4%	4%	0%	NA	4%
Repayment ratio	97.38%	97.71%	97.91%	100%	NA	97.72%
Weighted average interest rate	33%	34%	37%	12%	29%	34%

Sources: Reported by the Bai Tushum Financial Foundation.

* Consumer loans are a benefit offered to Bai Tushum employees. By charter, they may not exceed 2% of the total loan portfolio.

Lessons learned

Bai Tushum's experience in creating a sustainable financial institution with a significant agricultural portfolio offers the following lessons:

- Financial institutions can be profitable even with half of their loan portfolio (a relatively high figure for a diversified financial institution) tied up in agricultural activities.
- A diversified portfolio that complements agricultural loans with other products, such as agro-processing, trade and mortgage loans, better meets the needs of rural borrowers, while reducing institutional risk and operating costs.

Table 2
Bai Tushum performance and outreach indicators, 2000-03

	Dec 00	Dec 01	Dec 02	Dec 03 ^a
Outreach				
Number of loans outstanding	633	700	1 124	1 408
Outstanding gross portfolio (USD)	646 000	1 185 000	1 756 000	2 092 000
Average outstanding loan size (USD)	1 021	1 693	1 562	1 486
Average loan size as % of GDP per capita	64%	73%	65%	53%
Sustainability/Profitability				
Return on assets (%)	1.8%	8%	12%	18%
Return on equity (%)	4.38%	1.62%	38%	36%
Operational self-sufficiency (%)	230%	135%	156%	196% ^b
Financial self-sufficiency (%)	97%	106%	180%	157% ^b
Operational efficiency				
Operating expenses as % of portfolio	18%	19%	14%	13.5%
Number of clients per loan officer	50	58	88	100
Number of borrowers per staff	14	14	23	24
Portfolio quality				
PAR >30 days as % of total portfolio	15%	7.5%	7.9%	4%
Write-offs as % of average gross portfolio	0.0%	2.72%	5.6%	3.7%
Exchange rate (soms (KGS)/USD 1)	48	48	47	43

Sources: Microfinanza reports and audited and unaudited Bai Tushum Financial Foundation reports.

^a 2003 figures are unaudited.

^b Provided by ACDI/VOCA.

- Lenders should not assume that a loan product intended for agriculture will necessarily be used for agriculture.
- In countries with few indigenous good practice models for credit provision, MFIs should devote substantial resources to staff training and the development of sound policies and procedures.

Donors can successfully support microfinance providers by focusing on the creation of a sustainable, indigenous institution from the beginning, avoiding soft budget constraints (e.g., tax exemptions) and funding well-structured, consistent capacity-building.

Conclusion

In the four years since it began operations, Bai Tushum has established itself as one of the more successful MFIs in Central Asia. Portfolio diversification, competitive interest rates, a new information management system and better-trained employees have led to financial self-sufficiency. Although Bai Tushum is thriving, the next few years will be particularly critical for the organization. Its long-term technical advisor finished his contract in September 2004. The country's 2005 presidential election – the first since independence – will be one of the first tests of Bai Tushum's ability to withstand external events.

Bai Tushum's experience highlights the fact that agricultural loans may generate lower returns and higher risks than non-agricultural loans, especially in difficult environments (e.g., with low rural population density and a poor repayment culture, as in Kyrgyzstan). This requires more flexible delivery mechanisms that cost less and also a choice between cross-subsidization from other credit products or the pricing of agricultural loans at a higher level to reflect higher costs and greater risks. Bai Tushum chose to cross-subsidize, while at the same time improving its operating efficiency.

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Agricultural microfinance case studies

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Caja Los Andes (Bolivia) diversifies into rural lending

This case study was researched and written by Douglas Pearce, Myka Reinsch, João Pedro Azevedo and Amitabh Brar. The authors thank Juan Buchenau for his valuable contributions to this case study and Richard Rosenberg and Brigit Helms for their comments as CGAP reviewers.

Summary

Caja Los Andes (CLA) has distinguished itself as a profitable, diversified provider of individual loans in the highly competitive Bolivian microfinance market. (Caja Los Andes became Banco Los Andes ProCredit in January 2005.) After inheriting a 3-year-old urban lending portfolio from its parent organization (Procrédito) in 1995, CLA immediately began to expand its operations to rural areas and add agricultural loans to its portfolio. Despite a difficult recession that began in 1999, CLA has performed well and continues to hold close to 10% of its total portfolio in rural and agricultural loans. This case study examines the adaptation of CLA's urban lending methodology for rural and agricultural loans, its risk management techniques for agricultural finance, and the impact of the socio-political constraints in Bolivia that limit portfolio growth.

Background

Caja Los Andes opened in La Paz, Bolivia, in 1995. It was the offspring of Procrédito, a financial NGO founded in Bolivia in 1992 with support from the German consulting firm Internationale Projekt Consult. CLA was the first *fondo financiero privado* (private financial fund) licensed under the then new microfinance regulations. CLA was by no means the first institution on the Bolivian microcredit scene, but it distinguished itself from its competitors by pursuing individual lending as opposed to solidarity group loans.

Although Procrédito had focused on an urban clientele, CLA immediately began expanding its credit portfolio to include rural enterprises. The urban market for microfinance in Bolivia was becoming saturated, and the failure of state-owned agricultural banks in the 1980s had left enormous swathes of the

largely rural country with no access to banking services. CLA hoped that rural expansion would help diversify its portfolio and advance its mission of improving living standards by providing financial services to the poor.

Challenges of rural lending

With its expansion into rural Bolivia, Caja Los Andes faced a spectrum of challenges familiar to MFIs around the world that have attempted agricultural finance.

Higher cost of reaching rural clients

CLA took a number of steps to minimize the costs associated with the physical distance between rural clients. It strategically selected the locations of its rural offices, focusing on small town hubs in more densely populated rural regions, and favoured areas that had good irrigation systems and a sound base of crops with well-established markets.¹ These rural offices do not lend exclusively to rural clients; so, the lower cost of lending to clients in town, combined with the slightly higher interest rates charged for agricultural loans, helps cover the expense of lending to clients in more isolated areas. The cautious provision of some consumer credit to salaried employees also helps offset agricultural lending expenses.

In keeping with its individual lending methodology in urban areas, CLA makes larger first loans to agricultural clients if warranted. It bases loan sizes on repayment capacity rather than a stepped approach, whereby borrowers establish a credit history by starting with smaller loans and working their way up. CLA also moves up-market with its clients, making increasingly larger and longer term loans as the client enterprises grow. These practices boost efficiency and balance the agricultural portfolio, allowing CLA to continue reaching out to new, lower income borrowers.

Mitigation of general agricultural risk

Bolivia has a natural advantage for the diversification of agricultural risk: an array of altitudes and microclimates, even within small areas, helps protect against widespread crop losses. CLA institutionalizes and builds on this natural advantage by focusing its services on clients who diversify their own risk through the cultivation of multiple crops, planting in several locations, or combining dairy farming, livestock, or other income-generating activities with crop production.² Borrowers with more diversified enterprises may access loan amounts that are larger than those accessed by farmers relying on fewer income sources.

CLA worked with Internationale Projekt Consult to develop a lending technology that treats the various activities of a rural family as a single socio-

1. CLA established its first rural office in 1996 in Punata, a small town in the relatively well-populated agricultural department of Cochabamba. See Buchenau (1997).

2. Most rural families in Bolivia engage in two to five different income-generating activities, as compared to urban citizens, who typically have only one or two income sources. See Buchenau (1997).

economic unit and accounts for all cash flows of a multifaceted rural enterprise. This approach helps the institution maintain a high repayment rate on its agricultural portfolio.

Adaptation of loan products to meet rural needs

CLA and Procrédito adapted existing policies on collateral, appraisal, disbursement and repayments to meet rural conditions:

- **Collateral:** Many potential rural clients did not possess sufficient assets or even registered land titles. Bolivian law, moreover, prevented many small farmers from using their land as collateral.³ However, CLA already used a flexible approach to collateral that focused on the value of pledged assets to the borrower rather than the recovery value for the lender. Rural loans under USD 7 500 are collateralized with farm or household assets, and non-registered land titles may be deposited with CLA as collateral for up to 50% of the value of a loan.
- **Appraisal, disbursement and repayment:** Disbursements can be made in instalments corresponding to the crop cycle, and payments are set according to revenue flows. Several disbursement and repayment plans are offered, depending upon the needs and risk level of the borrower, including:
 1. single disbursement with a single lump sum payment of capital and interest at the end of the term;
 2. single disbursement, followed by periodic repayments with two variations (fully amortized with periodic payments in equal amounts or partially amortized with periodic interest payments and a balloon payment at the end of the term);
 3. two or three periodic disbursements with one final capital and interest payment at the end of the term; and
 4. different, irregular disbursements and repayments tailored to the cash flow schedule of the individual enterprise.

Managing borrower-specific risk in a more complex environment

All of CLA's rural loan officers have degrees in agriculture or backgrounds in agronomy, plus significant experience living in the local area. These qualifications ensure that staff has a thorough knowledge of agricultural inputs, risks and business models, as well as local culture and indigenous languages. Loan officer training in lending methodology and credit analysis is followed by approximately one year of on-the-job training under the close supervision of a branch manager.

CLA also takes a hard stance on repayment. One of the institution's abiding challenges is to change rural borrowers' perceptions and habits regarding financial services because the previous experience of many farmers with credit involved unsustainable rates and terms and ready loan forgiveness.

3. Bolivian land reform laws are intended to protect poor farmers from land seizure by predatory lenders.

CLA thus made a point of establishing a reputation for not tolerating delinquency. Loan officers visit clients immediately after the first missed payment, in part to help address any business problem before the damage multiplies. Penalty interest rates are charged to delinquent clients, while reduced interest rates are offered to repeat clients in good standing.

Quick turnaround times

CLA emphasizes a rapid application and disbursement process. Staff use sophisticated computer software to develop balance sheets and cash flow statements for efficient, systematic analysis. Approvals are decentralized; branch managers are responsible for loans of up to USD 5 000, and regional directors, up to USD 20 000. Staff remuneration is tied to the size, number and quality of officers' loans, providing an incentive to process loans quickly and accurately.⁴ The process takes an average of three to seven days; repeat borrowers enjoy more rapid service.

Seven years of rural lending

Between 1995 and 2002, CLA's loan portfolio grew at an average annual rate of more than 40%. By 2002, the organization had 477 employees operating through 27 branches in six (of nine) regions and offering a variety of both urban and rural financial products. The MFI's primary products were individual loans and savings deposits for micro-, small- and medium-sized enterprises. Loans typically carried interest rates of 1.3% to 2.5% per month for US dollar denominations (up to 3.5% per month for disbursements in bolivianos), with terms of up to five years. CLA also offered time deposits, credit lines to proven customers, letters of guarantee, urban housing renovation loans, consumer credit to salaried workers and gold-based pawn loans.

At the end of 2002, CLA had a total outstanding credit portfolio worth USD 64.2 million, comprised of 51 000 loans to 47 000 clients. Its portfolio alone represented 26% of the outstanding loan portfolio of the regulated microfinance sector in Bolivia in 2002. The institution's savings deposits were valued at USD 34.6 million and comprised about 30 000 accounts. Loans ranged in size from under USD 500 (21% of the loans) to USD 200 000, with an average loan size of USD 1 250. Around 20% of the agricultural loans were for longer term investments (up to USD 30 000 per loan), such as tractors (up to USD 30 000), trucks (up to USD 25 000), cowsheds (up to USD 3 000) and milking equipment (up to USD 4 000).

Loans to rural clients, which included agricultural credit, as well as rural enterprises, accounted for 9% of the overall portfolio volume and 15.3% in terms of the number of loans. Agricultural credit alone comprised 6% of CLA's overall portfolio in 2002 and approximately 12% in terms of the number of

4. FAO (2003).

loans and carried an elevated PAR >30 days of 8.26%, compared to 7% for the portfolio as a whole. In 2003, agricultural lending declined 4% in portfolio volume and about 10% in number of loans, with an improved PAR >30 days of 3.4%. The institution was finally self-sufficient, and its return on equity in 2002 and 2003 was over 20% (see Table 1 for additional information).

In spite of regional financial instability starting in the mid-1990s and a Bolivian recession that began in 1999, Caja Los Andes and the regulated Bolivian microfinance industry as a whole continued to flourish through 2003. Those institutions with a substantial rural portfolio fared noticeably better than did their exclusively urban counterparts.⁵ While political

Table 1
Financial indicators of Caja Los Andes, 2000-03

Item	2000	2001	2002	2003 ^a
Outreach				
Outstanding gross portfolio (USD)	46 759 853	52 633 750	64 219 989	82 179 376
Number of outstanding loans	44 180	46 605	51 073	53 213
Average outstanding loan size (USD)	1 058	1 129	1 257	1 544
Average loan size as % of GDP/per capita	105%	121%	143%	164%
Total savings deposits (USD)	13 920 534	21 719 87	34 550 321	49 100 000
Number of saving accounts	18 589	23 308	29 701	NA
Average deposit balance (USD)	749	932	1 163	NA
Sustainability/Profitability				
Return on assets (%)	1.4%	1.5%	1.6%	2.1%
Return on equity (%)	13.6%	11.5%	20.1%	25.5%
Operational self-sufficiency (%)	1.55%	1.49%	1.40%	NA
Financial self-sufficiency (%)	1.07%	1.07%	1.08%	NA
Operational efficiency				
Operating expense ratio (expenses/average portfolio)	12.15%	13.02%	12.46%	NA
Loan officer productivity (clients per loan officer)	379	366	326	NA
Portfolio quality				
PAR >30 days	5.1%	6.3%	4.8%	3.1%
Exchange rate (bolivianos(BOB)/USD)		6.81^b	7.48^c	

Sources: *Caja Los Andes (2003)*, *CGAP consultant visit (2003)* and *Caja Los Andes internal reports*.

^a Unaudited financials.

^b Caja Los Andes (2003).

^c Unaudited financials (December 2003).

5. Based on Bolivia statistics for 2001 from the MIX Market (www.mixmarket.org) and Buchenau (2001).

uncertainty and borrower protests in urban areas contributed to a significant decline in the country's formal banking sector, the *fondos financieros privados* managed to nearly double their portfolios, lower their arrears rates and – although modest compared to previous years – maintain profitability.⁶

During this volatile economic period, CLA gradually increased its rural lending (averaging between 15 and 17.5% of the overall portfolio between 1999 and 2002), which served to balance CLA's portfolio and allowed it to continue growing, despite widespread defaults in the microfinance industry in 2000. The value of the rural portfolio during the downturn reinforced CLA's commitment to maintaining a well-diversified, urban-rural portfolio. Rural lending volume peaked in mid-2001 and then declined as loan sizes began to decrease (see Table 3). Over the course of 2003, agricultural PAR >30 days was restored to the approximate level of the portfolio as a whole, 3.4% (compared to 3.1% overall), but the agricultural portfolio declined to 4% of total loan activity (see Table 4).

Donors and investors

Over the course of its development, CLA and Procrédito have received technical assistance from Internationale Projekt Consult (funded by the German Agency for Technical Cooperation), the multilateral financial institution Corporación Andina de Fomento and the Multilateral Investment Fund of the Inter-American Development Bank, plus financing from an array of international and Bolivian investors.

Internationale Projekt Consult played an integral role in helping CLA adapt Procrédito's urban lending methodology to serve an agricultural market and become a self-sustaining institution. Its technical assistance included help

6. von Stauffenberg (2001) and Caja Los Andes (2003).

Table 2
Evolution of CLA rural loan portfolio, 1996-2002

	1996	1997	1998	1999	2000*	2001*	2002*
Total loans	23 905	29 545	34 838	39 335	44 180	46 605	51 073
Number of rural loans	906	1 285	3 312	5 817	7 770	7 136	7 833
% rural	3.8%	4.3%	9.5%	14.8%	17.6%	15.3%	15.3%
Gross portfolio (USD)	11 899 908	20 459 135	28 613 915	35 852 453	46 897 140	54 912 371	66 386 519
Rural portfolio (USD)	386 586	740 027	2 547 420	5 073 053	7 103 379	6 337 044	6 132 715
% rural	3.2%	3.6%	8.9%	14.1%	15.2%	12.0%	9.5%
Average rural loan (USD)	427	576	769	872	914	888	783

Sources: FAO (2003).

* Gross portfolio figures for 2000-02 are from the Mix Market (www.mixmarket.org).

in establishing financing relationships, conducting feasibility studies, arranging extended learning visits to Calpiá in El Salvador and conducting staff training. The long-term perspective of Internationale Projekt Consult and other donors, plus the combination of technical and financial support extended to CLA, contributed to its success. Finally, the commitment of CLA board members and managers to the rural portfolio helped the institution weather difficult times.

Lessons learned

The following lessons can also be drawn from the Caja Los Andes experience in agricultural microfinance.

- Agricultural loans can be sustainable – even profitable – if they are combined with other types of rural and urban financing.
- When first expanding into rural areas, an MFI may find that an effective approach would be to initiate operations in more populous, lower risk and high-opportunity regions before expanding to more challenging areas.
- Agricultural portfolio risk can be mitigated by targeting borrowers engaged in diversified economic activities.
- Loans to rural enterprises should be awarded on the basis of all agricultural and non-agricultural income streams.
- Loan structure and repayment schedules should be tailored to fit the inherent seasonality of many rural enterprises.

Table 3
Agricultural loan portfolio 2000-03

	2000	2001	2002	2003 (unaudited financials)
Outreach				
Active portfolio (USD)	4 333 280	4 258 519	3 884 503	3 432 856
Share of total active portfolio	9%	8%	6%	4%
Growth from prior year	NA	-2%	-9%	-12%
Number of loans outstanding	NA	5 755	5 815	5 006
Average loan size (USD)	NA	740	668	686
Portfolio quality				
PAR >30 days as % of portfolio	6.29%	10.15%	8.26%	3.40%

Sources: Caja Los Andes unaudited data (2003), Caja Los Andes (2003) and CGAP consultant visit (2003).

- Diversification through agricultural lending can help preserve an MFI's profitability during economic recession.
- Political instability poses a grave threat to agricultural and urban microfinance, particularly if appeals to the masses by political candidates create incentives to default. When lending in an area contaminated by past agricultural debt forgiveness, a particularly strict approach towards late and non-payment is required, but may not be sufficient to ensure high portfolio quality.

Conclusion

The experience of Caja Los Andes illustrates both the potential and the limits of expanding microfinance operations into rural contexts and agricultural activities. While the CLA portfolio in agriculture is well managed, sustainable and significant in terms of volume and clientele, it now represents less than 10% of CLA's overall portfolio. The weight of agricultural lending in the portfolio is similar in other applications of the Internationale Projekt Consult model (15% of the gross portfolio at Calpiá in El Salvador, for example). Poorer clients in remoter areas are also not served in the initial stages of expansion into agricultural lending, at least in the case of branches opened in rural population centres for clients with diverse income sources.

CLA's diminished agricultural portfolio over the past few years can be traced to high delinquency rates in two rural offices and to a broader undercurrent of political instability in Bolivia. Civil unrest, increased protectionist policies and ongoing pressure from interest groups seeking government-mandated loan forgiveness for farmers have necessitated a scaling back of rural and agricultural lending in recent years. CLA's overall institutional performance has remained strong and continues to progress, making up for diminished loan values and the higher delinquencies of the agricultural portfolio. Nevertheless, political instability is putting at risk the long-term sustainability of CLA's agricultural portfolio.

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Agricultural microfinance case studies

Financial indicators definitions table

Outstanding gross portfolio: The outstanding principal balance of all of the MFI's outstanding loans, including current, delinquent and restructured loans, but not loans that have been written off.

Number of active borrowers: The number of individuals who currently have an outstanding loan balance with the MFI or are responsible for repaying any portion of the gross loan portfolio.

Average loan balance per borrower: The outstanding gross portfolio, divided by the number of active borrowers.

Average loan balance as a percentage of gross national income (GNI) per capita: Average loan balance per borrower, divided by the country's World Bank-published GNI per capita.

Total savings deposits: The total value of funds placed in an account with the MFI that is payable on demand to the depositor. This item includes any current, checking, or savings accounts that are payable on demand. It also includes time deposits, which have a fixed maturity date.

Number of savings accounts: The total number of deposit accounts at the MFI, as a proxy for the number of depositing individuals that the MFI is liable to repay. This number applies only to deposits that are held by the MFI, not to those deposits held in other institutions by the MFI's clients. The number is based on individuals rather than the number of groups. It is possible that a single deposit account may represent multiple depositors.

Average deposit balance: Total savings deposits, divided by the number of savings accounts, as a proxy for average client savings.

PAR (PAR >30 days): The value of all loans outstanding that have one or more instalments of principal past due more than 30 days. This item encompasses the entire unpaid principal balance, including both the past due and future instalments, but not accrued interest. It also does not include loans that have been restructured or rescheduled.

Return on assets	Net operating income, plus taxes Average assets	Measures how well the MFI uses its total assets to generate returns
Return on equity	Net operating income, less taxes Average equity	Calculates the rate of return on the average equity for the period
Operational self-sufficiency	Operating revenue Financial expense, plus loan loss provision expense, plus operating expense	Measures how well an MFI can cover its costs through operating revenues. In addition to operating expenses, it is recommended that financial expense and loan loss provision expenses be included in this calculation as they are a normal (and significant) cost of operating.
Financial self-sufficiency	Adjusted operating revenue Financial expense, plus loan loss provision expense, plus adjusted operating expense	By taking into account a number of adjustments to operating revenues and expenses, measures how well an MFI can cover its costs. The purpose of most of these adjustments is to model how well the MFI could cover its costs if its operations were unsubsidized and it were funding its expansion with commercial-cost liabilities
Operating expense ratio	Operating expense Average gross loan portfolio	Includes all administrative and personnel expenses and is the most commonly used efficiency indicator
Loan officer productivity	Number of active borrowers Number of loan officers	Measures the average caseload of each loan officer

Equity Building Society of Kenya reaches rural markets

This case study was written by Douglas Pearce and Myka Reinsch, with research support from João Pedro Azevedo and Amitabh Brar. Tamara Cook and Graham Wright provided valuable comments as reviewers.

Summary

Equity Building Society provides microfinance services to more than 250 000 low- and moderate-income citizens in Nairobi and Kenya's Central Province via a network of branch offices and mobile banking units. After a decade of extending long-term mortgage loans to an untargeted clientele with meagre results, Equity altered its approach. In 1994, the bank began tailoring its loan and savings products to a microfinance market, eventually adding two loan products for tea and dairy farmers. The products are secured by agribusiness contracts.

By the end of 2003, Equity's deposit base had grown to USD 44 million, and loans topped USD 21 million. Thanks in part to strong donor support, Equity instituted a mobile banking programme in 2000 with the purpose of efficiently reaching more clients in remote rural areas. Mobile operations have been successful, covering costs and accounting for more than USD 1.3 million in deposits in 2003. Mobile banking has also decreased branch congestion and improved the brand image and visibility of Equity.¹ This case study outlines the strategy employed by Equity to expand its rural outreach.

Background

Equity Building Society began business as a mortgage financing organization in Nairobi in 1984. It initially focused on providing term loans and deposit services, opening several branches in the nearby Central Province. Less than a decade after its inception, however, stagnant deposits, undercapitalization, poor management, a constrained macroeconomic environment and the high risk of term loans led to the bank's near collapse. In 1993, the Central Bank of Kenya declared Equity insolvent; more than 50% of the loan portfolio was at risk of default, and customer deposits were being used to meet operating expenses.²

1. Author correspondence with Graham Wright, MicroSave-Africa, during 2003.

2. Coetzee, Kabbucho and Mnjama (2002).

The chairman of Equity responded to the crisis by bringing on new management and shifting the institution's focus to microfinance. The subsequent decade of Equity history was dramatically different, marked by consistent growth and competitive performance. Although registered as a mortgage lender under the Building Societies Act, regulatory amendments made in 2000 permitted Equity and other similar institutions to offer a full range of commercial banking services except for checking accounts and foreign exchange operations.

Meeting the challenges of rural services

In order to expand its client outreach sustainably in rural areas, Equity developed demand-driven products for farmers, improved operational efficiency and introduced mobile banking operations. The groundwork was laid for this through a much-improved management information system.

Developing products that responded to rural customer needs

One of the first actions of Equity in 1994 was to revise its mission to reflect its actual clientele: low- and moderate-income borrowers. The bank then expanded its offerings beyond a single credit and single deposit product to include business, household, education, emergency and group loans, as well as special savings accounts for businesses, children, groups and the elderly. Loan terms were revised to include shorter loans of up to 12 months, and average loan sizes were reduced to meet the needs and repayment capacity of small farmers and microentrepreneurs. Equity also instituted an active marketing campaign that resulted in significant growth in both clients and deposits (despite low minimum deposit balances of between USD 6 and USD 13).

Two new products were specifically developed to meet the needs of agricultural customers: a crop advance loan and a farm input loan. These loans range in size from USD 21 to USD 820 and are made to tea, coffee and dairy farmers for terms of up to one year. The crop advance loan is based on expected farm production and is intended to smooth consumption or permit farmers to invest in another enterprise before crop sales have been realized. The farm input loan is intended for the purchase of fertilizer, pesticide, farm labour and other seasonal inputs. Farmers pay commercial interest rates of 21 to 24% annually on these loans, charged on the declining loan balance.

To mitigate risk, both types of loans must be secured by agribusiness contracts and are made only to farmers receiving regular payments by produce processing and marketing companies. Kenya Tea Development Agency, for example, processes, markets and sells tea on behalf of farmers, paying them a monthly advance over the course of the growing season, followed by an annual bonus based on the actual proceeds of the processed tea sales. In order

to be eligible for Equity loans, farmers open a savings account with Equity, to which Kenya Tea Development Agency transfers monthly and bonus payments. Upon approval, Equity loan proceeds and automatic loan repayments are posted to this account, backed by the contractual payments of Kenya Tea Development Agency.

Improved management information systems

In order successfully to introduce mobile banking operations and new loan and deposit products that better met farmer needs, Equity had to upgrade its management information system significantly. Moreover, its information systems had been unchanged despite rapid growth. From 1997 to 2000, the loan portfolio of Equity had more than doubled; deposits grew by a factor of four, and staff grew from 70 to 117. At the same time, the average loan size decreased by 77% (from about USD 3 400 in 1997 to about USD 800 in 2000), meaning that more administrative time was spent on each loan dollar disbursed.³

Account information was kept manually, which made for slow customer service, extensive staff paperwork, poor monitoring and greater opportunities for staff error and internal fraud. Moreover, commercial banks in the more populated areas were beginning to downscale to microfinance customers and Equity systems were no match for their swift, computerized service.

To address this critical challenge, the bank partnered with the United Nations Development Programme, which provided grant and technical aid to Equity to install a computerized information management system that would permit its branches to communicate via a local area network. Equity launched its *Bank 2000* system in June 2000. The first year after the system was established, customer turnaround time at Equity branches decreased from around 35 to about 5 minutes.⁴ Active loans and customer deposits grew by 71% and 65%, respectively, between 2000 and 2001, compared to 44% and 51% the year before. Current financial data are readily available to senior management for performance analysis and the monitoring of delinquent accounts. The system, which continues to be upgraded and refined, will also make it easier for Equity to develop products with more sophisticated interest and repayment plans in the future.

Reaching clients in remote areas

As Equity regained its footing in the late 1990s through the provision of more demand-driven products, it began to focus on building a larger clientele. Establishing permanent branches in remote rural areas was not financially tenable, so Equity struck on the idea of mobile banking units. The effort began with USD 262 000 of Equity's own capital in 2000. Two four-wheel drive vehicles were put into service in rural areas with population densities of over 400 people per k². As the viability of the mobile units became clear, a

3. See Coetzee, Kabbucho and Mnjama (2002).

4. Coetzee, Kabbucho and Mnjama (2002).

USD 411 000 grant from the Department for International Development (UK) permitted Equity to integrate more sophisticated technology and increase the scale of its mobile banking outreach.

The mobile units make weekly visits to each community that they serve and provide most services available at Equity branches, including processing and administering five different savings products and several loan products, as well as general financial services (such as the sale of cashier's checks and inter-branch cash transfers). Mobile customers pay a modest monthly fee for the service (lower than bus fare to the nearest branch) to help Equity cover related expenses.

As of early 2004, Equity's mobile units profitably served 29 rural villages and about 12 000 clients on a regular basis.⁵ A number of special features enable these units to operate successfully in the rural Kenyan environment:

- All-terrain, four-wheel drive vehicles ensure that the mobile banks can reach outlying areas, even during the rainy season.
- Mobile units are connected to the nearest branch via very high frequency radio to provide constant voice communication, security and monitoring.
- Laptop computers inside the vehicles are connected to a central Equity database via a wireless telephone (Global System for Mobile Communications) network, providing access to account information and permitting immediate updates through a reliable, secure system.
- Roof-mounted solar panels provide power for voice and data transmission equipment.
- Vehicles are bulletproof, and Equity hires government security guards to accompany each vehicle.

Taking stock

By the early 2000s, Equity had emerged as one of Kenya's leading MFIs in a market dominated by grass-roots savings and credit cooperatives.⁶ Deposits grew at an annual rate of more than 40% after 1995, reaching USD 44 million by 2003. The USD 21 million gross loan portfolio, with 65 000 borrowers, had a PAR >30 days of 8.5% in 2002. In addition to its Nairobi headquarters, Equity was successfully operating ten branches in the largely rural Central Province and reaching 21 isolated communities via mobile banking units, with an overall operational self-sufficiency ratio of 129%.

Mobile clients also accounted for about 10% of most branches' clientele,⁷ 4% of Equity's total deposit accounts, and 3% of over-all deposit volume, with the average mobile account (USD 123) about 30% smaller than typical Equity accounts. While not a perfect proxy for income level, these factors suggest that the mobile units serve a lower income clientele. Equity

5. Arora (2004).

6. Coetzee, Kabbucho and Mnjama (2002).

7. Malkamaki, Johnson and Wanjau (2003).

has, moreover, been able to cover the direct costs of its mobile banking services through associated fee and interest income.⁸ As of 2003, MicroSave estimated the overall self-sufficiency ratio of Equity's mobile units at 102%, despite a net loss for some units due to inadequate client volume⁹ (see Table 1 for Equity's overall performance and outreach indicators). Although Equity's agricultural portfolio reached USD 1.8 million and nearly 15 000 clients in 2002,¹⁰ the reliance on agribusiness payments as a form of security means that large numbers of independent farmers are ineligible for these loans. In terms of dollar volume, agricultural credit accounted for about 12% of the total loan portfolio in 2002,¹¹ and business loans, around 74%. Repayment rates on farmer loans are high: in 2002, the PAR >30 days on this portfolio segment was only 2.9%.¹²

Donors and investors

Equity Building Society is a privately held Kenyan company. The majority of its equity (84%) is held by Equity management, staff and clients. In 2003, the international equity investment fund AfriCap purchased 16% of the company. Equity proactively sought international assistance to accomplish its goals, and donors responded to the institution's focused requests. Since 1993, the bank has received donor and investment assistance in the following forms:

- technical and financial support, including the refinement of new financial products (the NGO Swisscontact);¹³
- a detailed market study conducted by MicroSave (Swisscontact);
- a grant to help launch the mobile banking programme (the Financial Deepening Challenge Fund of the Department for International Development);
- Intensive training and technical support leading to the development of new financial products, improved marketing and growth in market share (MicroSave, provided to Equity as a MicroSave Action Research Partner);
- a grant and technical assistance for the development of a computerized management information system (MicroStart programme of the United Nations Development Programme); and
- Capacity-building support (European Union Microenterprise Support Programme, the Department for International Development, the United Nations Development Programme and the grant-funded technical support facility of AfriCap).

One of the most important factors in donor funding has been a commitment to provide Equity leadership and staff with the skills and expertise necessary to make sound, strategic decisions on their own.¹⁴ Donors have focused on

8. EBS (1999), (2000), (2001) and (2002).

9. Malkamaki, Johnson, and Wanjau (2003).

10. Ayee (2003), which is based on Equity financial data and staff interviews.

11. Money is fungible, however, and a proportion of loans designated for specific uses, including agriculture, is diverted for other purposes.

12. CGAP data, 2003. Despite the relatively small agricultural portfolio, approximately half of Equity clients in 2001 depended on agricultural income, mostly medium- and small-scale tea and dairy farming. See Coetzee, Kabbucho and Mnjama (2002).

13. Craig and Goodwin-Groen (2003).

14. Craig and Goodwin-Groen (2003).

building institutional capacity, while standing back to allow Equity to develop its own products and implement necessary changes.

Lessons learned

The following lessons can be gleaned from Equity's experience in reorienting its services towards microfinance clients, including rural borrowers and savers.

- Developing a market-driven, customer-focused approach was a prime factor in turning around a poorly performing portfolio, increasing deposits and reaching rural customers.
- Mobile banking units can be a viable answer to the problem of reaching isolated clients in rural areas.

Table 1
Equity Building Society performance and outreach indicators, 1999-2003

	1999	2000	2001	2002	2003
Outreach					
Outstanding gross portfolio (USD)	4 487 742	6 453 374	11 014 992	15 108 453	22 060 988
Number of active borrowers	2 753	8 162	18 312	41 024	65 068
Average outstanding credit per borrower	1 630	791	602	368	339
Average credit per borrower (% of GNI per capita)	453%	226%	172%	102%	87%
Total savings deposits (USD)	8 335 038	12 545 253	20 675 014	27 869 571	44 465 375
Number of savings accounts	66 967	71 682	105 987	155 883	252 186
Average deposit balance (USD)	124	175	195	179	176
Sustainability/Profitability					
Return on assets (%)	2.35%	1.74%	1.36%	3.35%	3.01%
Return on equity (%)	24.91%	13.24%	10.16%	26.58%	24.11%
Operational self-sufficiency (%)	111%	109%	108%	133%	129%
Operational efficiency					
Operating expense ratio (Expenses/Average portfolio)	25.36%	26.75%	28.86%	23.05%	26.26%
Loan officer productivity ^a (number clients per loan officer)	172	480	509	NA	NA
Portfolio quality					
PAR >30 days	12.10% ^b	14.60% ^b	8.80% ^a	8.67%	8.56%
Exchange rate (shillings (KES)/USD)	72.89	77.94	77.82	76.86	75.76

Sources: The MIX Market, at www.mixmarket.org.

^a Negre and Mboya (2001).

^b Ayee (2003).

- Flexible rural delivery mechanisms such as mobile banking need not be restricted to credit and deposit services, but can be used to offer a number of different services, including inter-branch cash transfers.
- Loans secured by contractual agribusiness payments can be an effective method of extending credit to farmers without taking on extensive risk, although this practice can exclude many smaller farmers.
- A sound management information system provides the basis for any product or technological innovation. The combination of a reliable management information system and innovation can improve institutional efficiency, lower the cost of service delivery, increase customer satisfaction and perception and allow for greater product customization.
- The initial expense of new technology, such as a management information system and mobile banking units, may justify initial donor grant support.
- Emphasizing institutional capacity-building is a proven donor tactic for effectively supporting long-term MFI sustainability and growth.

Conclusion

The successful turnaround of Equity between 1993 and 2003 shows the tremendous institutional adaptability and commitment of the MFI. Its mobile banking operation provides rural Kenyan citizens with access to secure financial services at an affordable cost and on a consistent basis and has increased both the deposit base and the profitability of the bank. Many former branch customers are now opting to use mobile services, resulting in reduced congestion and improved efficiency at Equity branches, as well as better economies of scale among the mobile units.¹⁵ Although the mobile units are reaching an increasing number of rural borrowers, primarily farmers who save and borrow for consumption, agriculture and other business purposes, Equity currently offers no loan products designed for small independent farmers without agribusiness contracts. This represents a market opportunity, as over half of Equity's clients depend on agricultural income, mostly through medium- and small-scale tea and dairy farming.¹⁶

Equity is currently attempting to reach further down-market by tailoring new services to poorer clients and smaller entrepreneurs. Loan sizes currently range from just USD 6 to over USD 30 000, and effective annual interest rates vary from 21 to 53%. This trend towards poorer clients can be seen in increasingly smaller loan sizes and a new savings account with no minimum balance, introduced in 2004, for small farmers. The new account, offered in partnership with the NGO Pride Africa, will allow lower income farmers to access Equity services for the first time.

15. Arora (2004).

16. Coetzee, Kabbucho and Mnjama (2002); the 56% estimate is as of July 2001.

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Agricultural microfinance case studies

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Operating expense ratio	Operating expense Average gross loan portfolio	Includes all administrative and personnel expenses and is the most commonly used efficiency indicator
Loan officer productivity	Number of active borrowers Number of loan officers	Measures the average caseload of each loan officer

Small farmers in Mozambique access credit and markets by forming associations with assistance from CLUSA

This case study was written by Douglas Pearce and Myka Reinsch, with research support from João Pedro Azevedo and Amitabh Brar. Fion de Vletter contributed key field research. The authors thank Johnny Colon for his valuable suggestions as a reviewer of this case and Richard Rosenberg and Brigit Helms of CGAP for their helpful comments as CGAP reviewers.

Summary

The Cooperative League of the USA launched its Rural Group Enterprise Development Programme in Mozambique in the mid-1990s, when the country was still overcoming armed conflict and settling into a market economy. The programme organized 26 000 impoverished, isolated farmers in the northern provinces into associations that could market crops to commodities traders. These efforts led to higher farmgate prices and an 85% (inflation-adjusted) reported increase in average annual farm revenues.

The CLUSA programme assisted farmer associations in establishing better relationships with commodity traders and other agribusinesses. This enabled smallholder association members to access input credit and short-term crop advances from these agribusinesses in return for the guaranteed purchase of their output. CLUSA also brokered a partnership with a local financial provider, GAPI, to offer solidarity group loans to the associations. As a result, associations supported by CLUSA established credit relationships that resulted initially in USD 300 000 in agribusiness company credits and nearly USD 100 000 in loans from GAPI in 2003, with average repayment rates of close to 100%.

Background

Mozambique is a largely rural country with a territory almost twice the size of the state of California in the United States and a population half as

numerous. After gaining independence from Portugal in 1975, Mozambique adopted a socialist economic system and plunged into 16 years of civil war, gradually emerging as a free-market democracy in the early 1990s. A decade later, 70% of the population still lives below the poverty line (most surviving on less than one dollar a day), and a third of the population suffers from chronic hunger. Although less than 20% of the country's arable land is cultivated, more than 75% of all Mozambicans earn their livelihoods in agriculture.

When CLUSA launched its programme in Mozambique's northern province of Nampula in late 1995, limited credit and inadequate collaboration were among the factors that were constraining the local agricultural sector. Many small farmers could not afford the small cash outlays (often USD 20 to USD 60) required to produce and commercialize their crops, and lenders were unable to supply such small loans efficiently. The Government's attempts over two decades to provide rural finance at subsidized rates through the previously state-owned People's Development Bank persistently failed. And, though microfinance operations began appearing in the 1990s, they remain concentrated in urban centres. Nampula Province was characterized in 1995 by poor transportation networks and communication infrastructure, isolated farmers mostly engaged in subsistence agriculture, almost no economic activity apart from several agribusiness concessions, and a post-conflict culture of relief dependency.

CLUSA is an NGO based in the United States and run by the National Cooperative Business Association. Established in 1916 to create, support and advocate on behalf of United States cooperatives, CLUSA began operating internationally after World War II. Its programme in Mozambique, which ran from 1995 through 2004, aimed to improve the agricultural supply chain by focusing on the capacity of small-holders to produce, market and sell high-quality agricultural products profitably.

Challenges and responses

CLUSA overcame several challenges to organize farmers into self-managed associations and then assist these associations in connecting with new buyers, access short-term agribusiness credit and forge credit relationships with local financial institutions.

Individual farmers linked to buyers through associations

CLUSA began its work in the country by bringing together existing farmer associations, as well as unaffiliated farmers, to create a network of more than 800 associations in the provinces of Nampula, Niassa and Cabo Delgado. Each association consisted of about 30 smallholders; by year-end 2001, the

associations collectively involved about 26 000 individuals. CLUSA trained the farmers to work together as intermediary bodies to identify likely crop surpluses, control quality, collect and weigh harvests, arrange temporary storage, organize market days, coordinate the transportation of products to buyers and pay farmers. Under the guidance of CLUSA, these associations also negotiated contracts with new buyers and agribusiness companies.

CLUSA also formed groups of associations, or “forums”, to allow farmers to coordinate their agricultural marketing efforts on a broader scale, as well as to register with the government as legal rural enterprises. Simultaneously, CLUSA began to disseminate market information, such as regional and international price and trend data, via newsletters and community radio broadcasts.

By the end of the project’s first phase in October 2001, i.e., after six years of CLUSA support, the cumulative sales of the associations exceeded USD 3.6 million; more than 21 000 t of agricultural products had been successfully marketed, and average annual sales by farm households participating in an association grew from USD 40 in 1996 to USD 70 in 2001 (adjusted for inflation).¹ Farm revenues continued to grow in subsequent years, reaching an average of USD 74 in 2003.

In early 2004, an evaluation of CLUSA attempted to measure the effectiveness of the programme with regard to the investment of the United States Agency for International Development. The analysis showed that, for every dollar the US development agency spent during the 1996-98 period, USD 0.46 was generated in the household income of participants. During 2002-03, when the agency’s funding was about 20% lower, but the project benefited from the momentum of previous periods, this ratio jumped to USD 1.28. The analysis suggested that net returns (measured in the household income generated) became positive only in 2002.

Agribusiness as a source of short-term credit

The predominant source of agricultural credit for small farmers in rural Mozambique is agribusiness and trading companies.² Such credit is vital in an environment wherein many farmers lack the resources to invest in inputs like seeds, fertilizer and pesticide at the beginning of the season or to pay for transportation of their harvest for sale several months later. Agribusiness credit is almost always provided under a contract; in exchange for the inputs or an advance, the farmer agrees to sell his or her crop to the company (or individual trader), usually at a prearranged price. The company, in turn, promises to purchase the crop from the farmer.

One of the biggest risks to the buyer in contract farming is a practice called “side-selling”, which occurs when a farmer diverts part or all of the harvested crop and sells it to another buyer at a higher price.³ Due to the risk of side-selling, as well as the difficulty of enforcing contracts in Mozambique,

1. CLUSA (2002a) and Nadeau and Novoa (2004).

2. Ruotsi (2003).

3. It should be noted that the inverse of side-selling is also a grave risk to farmers. Agribusinesses in Mozambique have been known to decline to purchase contracted crops, leaving farmers with no buyer at the end of a growing season. The need for improved enforcement of contracts is thus as relevant for farmers as it is for agribusiness companies.

companies typically provide input credit (as opposed to shorter term credit for collection and other marketing costs) to farmers only on monopsonistic concessions, whereby the company is the only buyer for the crop in a given region.⁴

Leading agribusiness companies active in Mozambique are foreign-owned firms that purchase cotton, tobacco and maize from small farmers.⁵ These companies do not necessarily own the land on which the crops are produced, but usually benefit from government-allocated land “concessions” that grant them exclusive rights to buy the crops produced by farmers in a certain area.⁶

To increase the crop production and revenues of eligible farmers and thereby make them more attractive as recipients of input credit, CLUSA established or revived associations for cotton concessions and organized them into larger “forums” comprised of 5 to 15 associations. As with other associations, CLUSA trained the association members in organizational development, agricultural extension, crop management and contracting (with an emphasis on the importance of adhering to contract terms and resisting offers for side sales). CLUSA also encouraged the forums to register with the Government and assisted them in that process, where possible. One year after CLUSA’s first interventions in support of contract farming, the number of farmer associations receiving cotton contracts from agribusinesses had increased fourfold, from 18 in 1997 to 79 in 1998. By 2000, a total of 362 farmer associations (including those cultivating crops other than cotton) held such contracts and had collectively received more than USD 300 000 in related agribusiness credit.

An example showing how CLUSA facilitated access to credit outside of concessions is offered by the cooperation between CLUSA-supported farmer associations and the European agricultural trading company, V&M Grain Co. V&M provides short-term, interest-free crop advances to farmer associations at harvest time in order to help secure the supply of cotton. These loans are made without collateral, but under a contract that specifies the amount, quality, price per kg and total value of the crop to be delivered to V&M. The loan size is determined by crop value, with associations receiving 50% of the agreed value upfront, typically ranging from USD 2 500 to USD 10 000 per association. The maximum loan term is 20 days. Associations often use these proceeds to arrange transport to V&M.

V&M has provided such credit to around 30 farmer associations, which do not have to be legally registered with the Government in order to participate.⁷ The company reports low credit losses of around 2% and about 10% of crop value lost in side sales and is generally satisfied with the arrangement and the performance of the associations. But V&M cites side-selling as the main obstacle to expanding the provision of crop advances and finds that the yields per association are still too low to make contracting with

4. Ruotsi (2003).

5. Most are owned by Asian, Dutch, or South African companies.

6. Boughton et al. (2002) and Ruotsi (2003).

7. V&M does not have a concession, but does benefit from a similar monopsonistic arrangement involving exclusive control over a network of warehouses. Participating farmers may be located on or off concessions. (CLUSA information).

them truly efficient. The farmer associations, for their part, remain uncomfortable with being locked into a buyer and a price – commodity prices often rise in the weeks after harvest – and would also like to see wider availability of credits at the beginning of the season.⁸

Forging partnerships between farmer associations and financial institutions

In 1999, CLUSA turned its attention towards finding more flexible credit alternatives for small farmers. CLUSA identified a financial institution, GAPI, as a potential partner. GAPI became one of Mozambique's first regulated, non-bank financial institutions in 1990. Based in Maputo, it provides loans, venture capital and technical assistance to small- and medium-sized enterprises, cooperatives and individuals throughout Mozambique. As of early 2003, it had a total loan portfolio of USD 8 million, consisting of 304 loans (including loans to associations) averaging USD 26 000 in value.

Providing credit to farmer associations fit within GAPI's mission and existing portfolio, but the organization lacked the resources to administer small loans or undertake the significant training and capacity-building required. CLUSA therefore assumed the task of training farmer associations and organizing them into larger forums. It then facilitated solidarity group loan agreements between the forums and GAPI; the associations collectively guaranteed one another's repayment.

With the help of CLUSA, the associations created an umbrella union of forums and a credit committee structure at the union and forum levels. These bodies are responsible for soliciting and evaluating business plans from the associations, liaising with GAPI to apply for group loans, receiving loan proceeds from GAPI, distributing smaller credits to associations based on their plans, monitoring use of loan proceeds, collecting interest payments and ensuring full principal repayment to GAPI at the end of the term. By March 2002, forum loan applications valued at USD 168 000 had been approved under the CLUSA-GAPI agreement.

The GAPI loans are intended for the commercialization of lower input cash crops (maize, cashews and beans) during two growing seasons each year. They carry terms of three to four months and monthly interest rates (3% in 2002, 2% in 2003) charged on a declining balance.⁹ Whereas monthly interest payments are required, principal is paid according to each forum's agreed schedule. Forums are not obligated to draw down the full loan amount from GAPI even after the contract has been signed.

Although promising, the CLUSA-GAPI lending arrangement faces several hurdles. First, forums must be legally registered with the Government in order to qualify for GAPI loans, a requirement that currently excludes 60% of their number.¹⁰ CLUSA was assisting the forums with this onerous process, which in 2003 cost about USD 350 and took between six months and two years.

8. de Vletter (2003).

9. Commercial banks in Mozambique charge annual interest rates of 35-42% in an environment in which inflation rates are around 10%. See de Vletter (2003).

10. Nadeau and Novoa (2004).

Second, side-selling also continues to pose problems, despite the fact that forums engaging in side-selling become ineligible for future GAPI loans.¹¹ Third, loan monitoring by the forum credit committees needs to be greatly improved. An evaluation by CLUSA in early 2004 revealed that many forums had poor repayment records, engaged in little or no discussion of loans at credit committee meetings and had experienced some mismanagement, as well as one theft.

Donors and partners

The Rural Group Enterprise Programme in Mozambique has received support from an array of international and local organizations, including USD 8 million in grants from the United States Agency for International Development between September 1995 and September 2004. It has also received over USD 3 million from other donors, including CARE-European Union, Oxfam-Great Britain and the Government of Mozambique. A public-private partnership exists between CLUSA and the Government's Directorate for Rural Extension, which links CLUSA-supported farmers with government-promoted technologies to improve agricultural output.

The primary source of funds for CLUSA-GAPI loans has been a European Union food security grant. GAPI itself was established in 1984 by the Friedrich Ebert Foundation (Germany) and has subsequently received financial support from the KfW Entwicklungsbank (KfW Development Bank), the French Development Agency, the Danish International Development Agency and the formerly state-owned People's Development Bank of Mozambique.

Lessons learned

CLUSA and its numerous donor partners, including CARE and Oxfam, collaborated in northern Mozambique for almost a decade to develop active farmer associations and connect them with commodity markets and the sources of agricultural credit. Lessons from this experience include the following.

- Farmer associations can help small farmers become more attractive as borrowers from agribusinesses or financial institutions.
- The development of strong, self-managed producer organizations requires a substantial investment of money, time and expertise. The first six years of CLUSA's work in Mozambique were heavily focused on creating a viable network of farmer associations and forums.

11. CLUSA attempts to reduce side-selling by raising farmers' awareness about the issue and by threatening to exclude offending associations from future contracts.

- While a narrow cost-benefit ratio of initial increases in access to credit (over USD 400 000 in loans received by farmer associations over two years compared to USD 2.5 million in funding to CLUSA¹²) is unfavourable, the positive results of the CLUSA project include long-term benefits such as improved access to credit and markets for small farmers, enhanced skill levels and improved incomes.
- Narrow and often non-transparent credit products, such as agribusiness credit, play an important role in agriculture in developing countries, particularly in the absence of rural financial institutions willing to offer services to small farmers.
- Financial institutions lack the clients, markets and production knowledge of agribusinesses, but a broker such as CLUSA can compensate for these deficiencies and facilitate appropriate lending to small farmers.
- Rigorous and ongoing training in credit management and monitoring may be necessary to ensure that farmer associations can effectively manage group loans. Structures may need to be put in place to ensure that such training continues after an international implementer such as CLUSA departs.
- The broker role played by CLUSA will need to be covered by fees (e.g., from agribusinesses or the farmers) or a percentage of sales, in order to ensure the sustainability of links between small farmer associations and financial institutions and agribusiness companies.

Conclusion

Between 1996 and 2003, more than 700 farmer associations and 100 forums were established in northern Mozambique under the auspices of the CLUSA programme, which connected farmers with commodity buyers and agricultural credit. A greater number of northern Mozambican farmers contracted with agribusiness companies during this period than ever before, contributing to a growth in sales and an increase in their average annual revenues. Moreover, 28 forums – representing approximately 10 000 farmers – benefited from appropriate, flexible credit products provided by GAPI in 2003.

Although the total increase in credit that was extended to farmer associations (USD 400 000) was not very large over the nine-year programme, it should be noted that, as of 2003, the GAPI solidarity loans had only been in existence for two years. Less quantifiable results of the CLUSA programme included structural, long-term changes in farmers' access to finance, markets and negotiating position, as well as enhanced agricultural skills, market knowledge, organizational development, literacy and community lobbying power.

12. National Cooperative Business Association/CLUSA web site (www.ncba.coop/clusa.cfm). This figure includes United States Agency for International Development and non-governmental funding over the same period.

CLUSA has taken deliberate measures to build sustainability into the forums and associations at many levels, grooming at least one trainer (“animator”) in each association gradually to assume the facilitative role that CLUSA trainers play. Thousands of association and forum members have also received training to serve as marketing managers, fiscal committee and institutional board members, and forum managers. CLUSA also worked with CARE International to establish a local NGO, called OLIPA-ODES, to support the associations and forums in western Nampula province upon conclusion of the CLUSA programme.

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