CGAP Agricultural Microfinance

CaseStudy

No. 2 August 2005

Bai Tushum Financial Foundation, Kyrgyzstan

This case study was written by Douglas Pearce, Rachel Jacobs Allen, and Myka Reinsch, with research support from Joao 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 (Bai Tushum) began agricultural credit operations in Kyrgyzstan in 2000, after assuming the foundering, three-year-old portfolios of several small agricultural credit associations. With the support of numerous international donors, Bai Tushum overcame a difficult macroeconomic environment, an unfavorable legal climate for microfinance, and 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 percent operational self-sufficiency in its first year of operation. By February 2004, its active portfolio had grown to 1,543 loans valued at US $2.5 million, with a reported portfolio-at-risk ratio (PAR > 30 days) of 4 percent. Although agricultural loans result in lower returns for Bai Tushum than its non-agricultural loans, Bai Tushum's commit-ment 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 in cooperation with Swiss Caritas, GTZ, and Winrock International, the asso-ciations had collectively extended less than US $500,000 in loans to around 400 clients after three years of operation. All 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 USAID and SDC 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 forego the tax privileges enjoyed by many other donor-funded organizations and register as a local company. This decision meant paying US $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 focused 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 administration costs and unpredictable repayment rates contributed to net losses.

An activity-based costing exercise conducted in 2002 revealed that 76 percent of Bai Tushum's staff time and 57 percent of its portfolio risk were

attributable to crop and livestock loans. Yet these products accounted for only 35 percent of clients and 28 percent of 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 (SME) loans.[1]

Increasingly Competitive Lending Environment

Bai Tushum faces competition in agricultural lending from the Kyrgyz Agricultural Finance Corporation (KAFC), a quasi-governmental, donor-funded, rural lender that offers low interest rates to first-time borrowers. Commercial banks moving downmarket also threaten its share of the SME lending market. In Southern Kyrgyzstan, Bai Tushum faces the additional challenge of cheap credit 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.

Unfavorable Legal Constraints

The greatest challenges for rural lenders in Kyrgyzstan are constraints on collateral. Only financial institutions with a *license* 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, which 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 re-registered *with each new loan disburse-ment*. This procedure not only added to the cost of Bai Tushum loans, it prohibited some poor farmers from seeking small loans.

[1] Shamshieva, 2003.

Responses

Portfolio Diversification

Bai Tushum's first step toward 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 percent of the portfolio from 95 percent in 2000.

Revised Interest Rate Structure

In addition to increasing its lending to non-agricultural activities, such as services and trade that carry higher interest rates that agricultural loans, Bai Tushum was also able to lower its overall interest rates in order to enhance its competitiveness. By practicing 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 percent for crop production, livestock, and agro-processing loans, and to 27 percent for trade loans (in early 2004). Bai Tushum has also managed to compete by offering rapid loan processing, strong customer service, and a broader range of products.

Improved Controls and Management Information System

Bai Tushum devoted a great deal of 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 programs 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 percent of its annual budget to staff development and training. In addition, ACDI/VOCA has also provided training directly to Bai Tushum's staff. New loan officers undergo a comprehensive orientation program, with both formal and on-the-job training modules, followed by an in-house refresher program 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 re-register their collateral every three years.

Bai Tushum also works closely with donors to build legislative support for sustainable microfinance institutions, 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 percent in 2000 and 196 percent in 2003. By year-end 2003, Bai Tushum's three branches had a combined portfolio of US $2.2 million and more than 1,400 clients. Average loan size was about $1,400, (approximately 53 percent of GDP per capita) and the overall portfolio-at-risk ratio (PAR > 30) was only 4 percent (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 US $646,000 to over $2 million, and portfolio at risk (30 days) halved (see table 2 for further details). The organization's progress was recognized in a formal rating in 2003, when the independent rating organization Microfinanza, Ltd., gave Bai Tushum a 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 6 to 18 months, typically repaid with a balloon payment)
- SME loans for agricultural processing (typical terms of 2 to 4 months)
- SME trade loans for financing trade and service businesses (same terms as agricultural processing loans, but interest rates are 1 percent higher)
- Mortgage financing (terms up to 5 years, repaid on an annuity basis)
- Solidarity group loans for low-income rural women engaged in dairy production (interest rate of 20 percent, 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 percent equity stake in the financed activity. (Equity can be in the form of cash, labor, or in-kind contributions.) Nominal interest rates in early 2004 ranged from 19 to 27 percent, in the financed activity. (Equity can be in the form of cash, labor, or in-kind contributions.) Nominal interest rates in early 2004 ranged from 19 to 27 percent, charged on a declining balance, plus a 1 percent processing fee (resulting in effective interest rates between 23 to 33 percent). Despite their higher cost and risk, agricultural loans surprisingly carry a lower interest rate than SME loans, with dairy loans carrying the lowest interest rate (20 percent 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 USDA and the SDC Swiss Development and Cooperation Agency;
- 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 (TACIS); and

Table 1. Bai Tushum Portfolio Breakdown by Loan Type, December 2003

	Crop Production	Livestock	SME	Consumer*	Mortgage	Total
Active clients	282	517	555	21	33	1,408
Active portfolio ($)	361,388	688,863	897,421	44,088	109,502	2,101,263
% of active portfolio	17%	33%	43%	2%	5%	100%
Average loan size ($)	1,281	1,332	1,617	2,099	3,318	1,492
Portfolio at risk >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%

* Consumer loans are a benefit offered to Bai Tushum employees. By charter, they may not exceed 2 percent of the total loan portfolio.
Source: Bai Tushum Financial Foundation, self-reported.

Table 2 Bai Tushum Performance and Outreach Indicators, 2000–2003

	Dec 00	Dec 01	Dec 02	Dec 03[a]
Outreach				
Number of loans outstanding	633	700	1,124	1,408
Outstanding gross portfolio (US$)	646,000	1,185,000	1,756,000	2,092,000
Average outstanding loan size (US$)	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				
Portfolio at risk > 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 to US$1)	48	48	47	43

[a] 2003 figures are unaudited. [b] Provided by ACDI/VOCA
Sources: Microfinanza reports; audited and unaudited Bai Tushum Financial Foundation reports.

- semi-commercial loans from Dexia BlueOrchard (US $400,000) and HIVOS/Triodos Bank Fund (€300,000).

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

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) 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.
- 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 microfinance institutions 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, and 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 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, in difficult environments (e.g., with low rural population density and a poor repayment culture, as in Kyrgyzstan). This requires more flexible and lower cost delivery mechanisms, and also a choice between cross-subsidization from other credit products, or pricing agricultural loans higher to reflect higher costs and risks. Bai Tushum chose to cross-subsidize, while at the same time improving its operating efficiency.

Bibliography

ACDI/VOCA. "Final Report to Swiss Development and Cooperation Agency" from ADCI/VOCA on MCA Bai Tushum Financial Fund (BTFF), Kyrgyzstan. Bishkek, Kyrgyzstan: ACDI/VOCA, January 2004.

Chemonics International, Inc. "An Assessment on the Development of Agricultural Initiatives for USAID/CAR: Kyrgyzstan. " Washington, DC: Chemonics, May 2003,.

Bai Tushum Financial Foundation. "Portfolio Report." 2001, 2002, 2003.

Fries, Robert. "Agrocapital and Bai Tushum: Lessons from 2 Rural Financial Service Foundations." Case study developed for "Paving the Way Forward for Rural Finance: An International Conference on Best Practices," organized by ACDI/VOCA, Washington, DC, May 2003.

International Land Coalition. Contextual information for Kyrgyz Republic, www.landcoalition.org/pdf/wbtcikyr.pdf (February 18). AccessedApril 2004.

Kyrgyz Republic. Law "On Pledge" of the Kyrgyz Republic. Legislative Assembly of Jogorku Kenesh of the Kyrgyz Republic, Bishkek, Kyrgyzstan, May 1997.

Microfinanza Ltda. "Assessment of Bai Tushum Financial Foundation." Milan: Microfinanza, December 2002.

Shamshieva, Gulnara. "Kyrgyzstan Bai Tushum Financial Foundation Product Costing Report: Based On Bai Tushum Experience Using Cost Allocation and ABC Methods." Report recommended by CGAP to Bai Tushum Financial Foundation, Bishkek, Kyrgyzstan, February 2003.

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 percent of GNI per capita—average loan balance per borrower divided by the country's World Bank-published gross national income 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 number of savings accounts, as a proxy for average client savings.

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

Return on assets (ROA)	Net operating income plus taxes Average assets	Measures how well the MFI uses its total assets to generate returns
Return on equity (ROE)	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	Measures how well an MFI can cover its costs taking into account a number of adjustments to operating revenues and expenses. 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 expense, 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