**Assessing Micro-Finance Services in Agricultural Sector Development: A Case Study of Semi-Formal Financial Institutions in Tanzania**

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**Policy Brief**

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### Background

In Tanzania, as in other parts of Africa, lack of credit severely constrains sustainable agricultural development. Deficient or inappropriate collateral, credit rationing, lender preferences for high-income customers borrowing large amounts, and bureaucratic procedures in the formal financial sector are often identified as key factors contributing to low access to credit among most rural dwellers. Without credit, the millions of cash-starved smallholders who dominate the rural landscape are unable to adopt most productivity-enhancing technologies. Low-return, diversified, subsistence-oriented production practices therefore continue to underpin most rural livelihood strategies.

With liberalization of the financial sector in the 1990s, credit facilities for input supply and marketing collapsed as interest rates rose and shut out the subsidized sources of credit on which such schemes depended. Most co-operative unions—which were already struggling financially—could no longer access loans and were, in turn, unable to service small and medium-scale farmers. Private banks sprung up, but under the more competitive liberalized financial system, they could not profitably fill the gaps left by co-operatives. The sharper focus on profitability and actual financial risks therefore worked against traditional lending to the rural sector, and to agriculture in particular.

These barriers to rural lending in the formal and informal financial sectors have become a major concern for policy makers in Tanzania. One outcome of that concern is increased interest in semi-formal micro-finance institutions, which are responsible for increasingly large shares of credit in both urban and rural areas. Most of these micro-finance institutions are not profit-seeking banks but rather are run as not-for-profit nongovernmental organizations. These features of micro-finance organizations raise a number of issues regarding their viability, and, more importantly, about their ability to meet the borrowing needs of rural dwellers, including farmers.

### Objectives and Methodology

The objective of this study was therefore to evaluate the performance of, and constraints facing, semi-formal micro-finance institutions currently providing credit in two rural regions of Tanzania—i.e., the Agricultural Development Programme in Mbozi, Mbeya and the Mwanza Women Development Association in Ukerewe, Mwanza. Specifically, the study investigated the lending mechanisms of these institutions, examined the socio-economic characteristics that influence loan demand, assessed the transaction costs to lenders and borrowers, and the influence of such costs on credit repayment. The study aimed to highlight specific constraints facing institutions delivering credit to smallholder farmers, as well as problems encountered by the farmers in the procurement and use of such credit.

To achieve these objectives, data were collected through a formal survey of 222 farmers participating in the two lending programs. These primary data were supplemented by secondary data from the lending institutions, the Ministry of Agriculture and other regional and district authorities. Descriptive analysis of the data provided summary statistics that were complemented by regression analysis on credit demand and repayment. Demand for credit was hypothesized as being determined by household size, years of schooling of household head, household income, input expenditure, farmer's experience in farming, disbursement lag and borrowing transaction costs.

## Findings

Descriptive analysis revealed that more than 80 percent of borrowers were aged between 18 and 45 years, with a bias toward older farmers. The average farming experience was 13 years in Mbozi and 21 years in Ukerewe. About half of the borrowers in Mbozi and three-quarters of those in Ukerewe had attained primary education, indicating a level of literacy enabling understanding of rules and procedures for acquiring and using credit. But still only about 15 percent of borrowers in both regions were able to explain procedures for credit procurement and repayment.

The average household family size was about 7 people in Mbozi and 9 people in Ukerewe, and area cultivated averaged 0.9 hectares (ha) in the former and 1.6 ha in the latter. About 90 percent of farmers in both regions cultivated less than 1.6 ha, indicating the predominance of smallholder agriculture. One-third of the borrowers were males in Mbozi; all the respondents in Ukerewe were female because the lending program there targeted women. Major constraints to agricultural production were identified as lack of credit, lack of markets and shortage of farm inputs. Other key constraints included low producer prices, high input costs, shortage of extension services, damage caused by crop pests and high transportation costs.

High interest rates were significant barriers to borrowing decisions. Borrowers also cited problems with lengthy credit procurement procedures and the amount disbursed being inadequate. Both credit programs experienced poor repayment rates, especially in the early years of operation, with farmers citing poor yields, low producer prices and untimely acquisition of loans as reasons for non-payment. High and increasing transaction costs in credit procurement and disbursement hindered effectiveness of the credit programs. Since most borrowers lived in rural areas and far from credit offices, high transportation costs further constrained credit access. In addition, a savings-first arrangement before potential borrowers could gain access to credit, and linking the credit amount to the savings combined to shut out most poor, smallholder farmers, who need credit the most.

Regression analysis of the Mbozi credit system indicated that credit demand is negatively affected by transaction costs and disbursement lag period but positively influenced by input expenditure, average household income and the borrowers' farming experience. Similarly, in Ukerewe, the regressions identify a negative relationship between credit demand and both transaction costs and disbursement lag, but a positive relationship with average household income and borrowers' farming experience. Unlike in Mbozi, input expenditure in Ukerewe is not a significant factor in credit demand.

The results show that transaction costs are significant determinants of the demand for credit and cause farmers to borrow less. Long disbursement lag periods are also a disincentive to borrowing. Farmers with high input expenditures tend to borrow more. The same applies to farmers with greater farming experience and those with high incomes. Experienced farmers tend to be well-established, well-known to lenders, and thus more favored in the credit schemes. High household income signals high ability to repay loans. Education and household size have positive but insignificant effects on the demand for credit.

Regression on repayment performance indicates that slow credit disbursement and high transaction costs significantly deter repayment. In addition, in Mbozi, the education level of the borrowers is positively linked to better repayment rates, but those with access to other sources of funding have poor repayment rates. In Ukerewe, farmers with large cultivated areas achieve better repayment rates.

## Implications

Despite the fact that rural micro-finance institutions in Tanzania are rather new and operate in a difficult environment, they are playing a very important role in the agriculture sector development. It is evident that designing, experimenting with, and building micro-finance institutions, for smallholders, requires new thinking and access to new resources. Public policy will need to support and evaluate this experimentation process and nurture those designs or institutions that hold promise for future success. The government, donors, practitioners and research institutions must work together closely to identify costs, benefits and future potential of emerging micro-finance institutions in rural areas. Appropriate incentive structures must be established so that all actors have a stake in a well functioning micro-finance system. Greater clarity of distinct responsibilities for developing rural financial systems between the state, on one hand, and micro-finance institutions, on the other, would promote such an outcome.

Analysis shows that micro-finance services are inadequate and do not solve all the agricultural sector problems. It is certainly an illusion to think that micro-finance alone will lead to the sectors development. Agricultural sector development requires complementary services (e.g. infrastructure, marketing services, extension). If a clear orientation is taken towards agricultural development, the public sector must invest in these operations, since even sustainable micro-finance institutions will not be able to fulfil their role in the absence of essential complementary services.