# Innovations in Rural and Agriculture Finance

2020 VISION FOR FOOD, AGRICULTURE, AND THE ENVIRONMENT

## Overview

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Everywhere in the world, small agricultural producers are entrepreneurs, traders, investors, and consumers, all rolled into one. In all these roles, small agricultural households constantly seek to use available financial instruments to improve their productivity and secure the best possible consumption and investment choices for their families. But the package of financial services available to small farmers in developing countries is severely limited, especially for those living in remote areas with no access to basic market infrastructure.

When poor people have limited saving or borrowing options, their investment plans are stifled and it becomes harder for them to break out of poverty. If households have no access to insurance and are unable to accumulate small savings that enable them to pay for household and business expenses, especially during lean seasons, they are forced to limit their exposure to risk, even if high returns are expected, once again making the pathway out of poverty more arduous than necessary. Inadequate access to financial services is thus part of what is often called the "poverty trap."

### Microfinance and agriculture finance

In the 1980s and 1990s the deleterious impact of limited financial access caught the attention of many academics, policymakers, donor agencies, and development practitioners, who generated an outpouring of new thinking and new ideas. Innovative concepts such as group liability, village banking, microinsurance, and index-based insurance were tested in new and emerging microfinance institutions. But progress on expanding agricultural finance—as opposed to nonagricultural microenterprise finance—lagged. Donors and governments that had invested heavily in agricultural development banks and agricultural credit in the 1980s and early 1990s found that these efforts did not produce the expected results and withdrew their support. It was hoped that private commercial banks would step in, but for the most part they did not.

Financial institutions have demonstrated a lack of interest in agriculture finance for four reasons. First, many agricultural households were located in remote parts of the country and were often so widely dispersed that financial institutions found it challenging to provide cost-effective and affordable services. Second, big swaths of the agricultural population were subject to the same weather and climate risks, making it hard for providers of financial services to hedge risks or operate profitable insurance pools. Third, service providers, mainly urban-based, simply did not know enough about the business of agriculture to devise profitable financial products. Fourth, most small agricultural producers in developing countries had little education and little knowledge of how modern banking institutions work.

### Recent progress in rural finance

Since the early 2000s a number of organizations have developed innovative approaches to financing agriculture. They have sometimes adapted microfinance concepts to the provision of agricultural finance, used good banking practices, and above all drawn on knowledge of agriculture to enter and succeed in this market. Many of these new approaches show great promise, but no single approach works for all situations. Rather, organizations have the most success when they are nondogmatic, apply comprehensive risk-management strategies and tools, retain the ability to pick and choose their clients rather than having the government do so, and are innovative and pragmatic.

This set of briefs explores how rural and agricultural finance can be profitable, without high levels of government subsidies, by examining a selection of successful interventions—out of the many being implemented in the developing world—and highlighting the lessons learned.

The briefs fall into four thematic areas: addressing the business reality of small farmers in developing countries, using modern communication technology to overcome the tyranny of distance and information bottlenecks, managing risks at the farm and household level, and bundling financial services with nonfinancial services to address the multiple constraints faced by most small farmers.

### Addressing the business reality of small farmers

Most small farmers in developing countries have little education and limited exposure to modern financial instruments. Further, many of these small farmers have only recently transitioned from subsistence to commercial farming, and their contact with the cash economy and experience in cash management is limited. Hence, in Brief 2 Monique Cohen addresses the issue of financial literacy and explains why the poor may need some coaching on how modern financial instruments can better their lives.

Additionally, many small farmers in developing countries live in remote rural settings, where urban-based retail banking is unavailable. In Brief 3 Anne Ritchie describes two operational models used by community-based financial organizations and explains how community banking enables the unbanked rural poor to serve themselves, with or without links to the formal financial sector.

As rural banking takes hold in developing countries, it has also attracted the attention of institutions in developed countries that have traditionally served farmers. The Netherlands-based Rabobank, for example, has made investments in countries as varied as China, Paraguay, and Zambia. In Brief 4 Gerard van Empel describes Rabobank's use of a supply-chain approach to address key gaps in rural banking in many developing-country contexts.

Ghana's network of rural and community banks represents a unique approach to generating access to financial services across the rural areas of a whole country. In Brief 5 Ajai Nair and Azeb Fissha describe their business model, their services, and their financial performance. The brief discusses the challenges facing the network and its apex institution in becoming financially sustainable and competitive and draws lessons that are applicable elsewhere.

The financing of productive assets requires access to medium-term loans and usually significant collateral, neither of which are available in most rural circumstances. In Brief 6 Ajai Nair describes leasing as an alternative to credit, which can help ease the provision of credit for investments in movable assets in rural areas. The brief describes the benefits of leasing to the client and the provider and identifies lessons on how to manage and support financial leasing in rural areas.

Finally, a key issue in financial service delivery is how to effectively increase repayment rates. In Brief 7 Yanyan Liu and Klaus Deininger discuss this issue in the context of self-help groups (SHGs) in India. Their analysis of the factors affecting repayment performance among low-income SHGs shows that effective application of rules pertaining to loan terms is more important than group characteristics in improving repayment performance.

## Using modern communication technology

Recent advances in communication technology affect rural banking in two key ways. First, by facilitating electronic payment systems and branchless banking, this technology can significantly slash transaction costs for both service providers and consumers. Second, using portable smart technology to establish identification and monitor clients can significantly alleviate information asymmetries and help improve repayment rates.

In Brief 8 Susie Lonie describes how the cell phone–based payment service M-PESA now serves more than 9 million clients throughout Kenya, enabling them to remit money, make bill and loan payments, make cell phone–based payroll payments, and use banking services.

In Brief 9 Xavier Giné describes the results of an experiment to assess the impact of using biometric technology to monitor repayment performance of individuals in rural Malawi. This experiment showed that repayment rates increased by 40 percent for groups with a high default risk, and the benefits of improved repayment outweighed the cost of implementing the new technology.

## Managing risk at the household and farm level

The management of risk is the key issue for financial institutions that finance agriculture, as well as for rural populations in general. In Brief 10 Mark D. Wenner analyzes various approaches to managing risk in financing agriculture. Index-based insurance schemes are one approach that has been implemented on a pilot basis in several countries. Such schemes use an easily observable index that is not subject to tampering. The index is correlated with the underlying risk and used to make decisions on insurance payouts, thus eliminating the cost of verification as well as incentives to misrepresent losses. In Brief 11 Jerry Skees and Benjamin Collier describe an ongoing pilot project in Peru that insures firms (such as microfinance institutions or firms in the value chain) serving smallholder households. The insurance pays out based on extreme El Niño events that create catastrophic flooding resulting in significant consequential losses and extra costs for a wide range of stakeholders in northern Peru.

Microinsurance has been developed as a risk management tool only recently. In addition to being more expensive to administer than savings and loan services, microinsurance schemes are plagued by more severe levels of adverse selection and moral hazard, which makes them challenging to provide on a sustainable, full-cost-recovery basis. Brief 12 by Martina Wiedmaier-Pfister and Brigitte Klein surveys key experiences in providing insurance in rural areas, including important issues related to regulating microinsurance.

## Bundling financial and nonfinancial services

In addition to financial constraints, small farmers in developing countries also face market constraints in acquiring needed inputs (such as fertilizer, seeds, and extension services). Returns to financial services are thus highly conditional on access to other nonfinancial services. Brief 13 by Vijay Mahajan and K. Vasumathi describes how BASIX in India provides services such as soil testing and health monitoring of livestock, along with credit, to farmers in a way that maximizes returns to credit services.

Brief 14 by Jonathan Campaigne and Tom Rausch describes a similar approach used by the DrumNet project in Kenya. In contrast to BASIX, however, the DrumNet project uses information technology to link key actors along the supply chain to farmers.

## The way forward

This set of briefs seeks to initiate discussions among stakeholders by disseminating information on a selection of innovative, on-the-ground initiatives designed to improve financial access for poor small farmers. All of these initiatives hold promise, but they also face challenges, and in the end some may not be suitable for a massive scale-up or for use in all country settings. Yet such initiatives demonstrate that it may be possible to eventually provide financing for agriculture on a sustainable basis at a reasonable cost.

Many of these initiatives are based on the premise that there is a supportive policy environment that allows innovation to flourish. The gravest risks to sustainable financing for agriculture often come not from inherent business risks or the inability of financial institutions to design profitable financial products for the rural population, but rather from misguided government interventions such as subsidized interest rates and lack of or non-enforcement of appropriate rules and regulations. Conversely, an enabling environment and legal framework, enforcement of regulations, and a supportive rural infrastructure would eventually lead to lower but sustainable interest rates by reducing transaction costs and risks and increasing competition. All this would contribute immensely to making sustainable access to finance a reality. ■

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