

FARM Conference

WHAT MICROFINANCE FOR AGRICULTURE IN DEVELOPING COUNTRIES?

**Contribution to Plenary 1:
How can microfinance respond to the needs of farmers?**

Recent advances in agricultural finance: supply and strategies

A review of literature and experience

Coordinated by Cécile Lapenu (CERISE/RFM¹)

Version 1 – 20 November 2007

Draft

**Document prepared by the French Microfinance Network
Rural Finance Commission**

¹CERISE: Comité d'Echanges, de Réflexion, et d'Information sur les Systèmes d'Epargne-crédit; RFM: Réseau Français de Microfinance

Recent advances in agricultural finance: supply and strategies

A review of literature and experience

Introduction: our approach

Context and methodology

This paper combines a literature review with an examination of the rural finance experiences of the members of the Rural Finance Commission of the French Microfinance Network. For the occasion of the FARM conference, our focus is on agricultural finance. Our approach draws on a wide variety of sources (workshop conclusions and summaries, case studies, and experiences of French stakeholders in particular) and the institutional affiliations of its authors (donors, banks, NGOs, action-researchers).

The French Microfinance Network

Within the framework of the Institutional Support Program for Microfinance and its Environment (PRIME), the French Ministry of Foreign Affairs (MAE) set up an informal forum for French microfinance actors to exchange and consult with one another in view of capitalizing on their experiences. This forum is known as the French Microfinance Network (FMN).

The FMN is comprised of:

- Donors: MAE, AFD and French banks involved in the sector;
- Practitioners: NGOs and consulting firms;
- Universities and research units involved in the sector;
- Diverse resource persons;

Epargne Sans Frontière is the executing agency for PRIME and serves as secretariat, program manager and technical supervisor. Various French organizations have participated to the present report including CERISE and its members, BNP Paribas, Crédit Agricole Consultant, COFIDES, AFD and PlaNet Finance.

Our object of study suffers from a lack of systematic information. There is no up-to-date database detailing volumes of finance allotted to rural and agricultural sectors per financial institution. Existing studies focus primarily on financial data², and few cross-country studies have been carried out recently on the topic. Present-day data on rural and agricultural finance is weak, dispersed and practically incomparable from one country or one institution to another.

Moreover, rural and agricultural finance is relevant in such widely diverse national and regional contexts (for instance West African cotton regions where supply chains are currently destructured vs. peri-urban vegetable farming zones, producing for urban demand), that it necessarily calls for differentiated approaches.

The information constraints and complexity of the farming world have influenced the organization of this text and the way it may be used. The objective is to identify trends and discussion points rather than offer quantitative, definitive conclusions on interventions in the agricultural sector.

² Some data that was available in the late 1990's, such as the Central Bank of West African States' database (BCEAO, 2005) that collected data per sector, nowadays focuses on financial statements and no longer permits sector by sector analysis.

I – State of the practice

Specificities of agricultural finance

The agricultural sector is characterized by a number of specificities that make it difficult, costly and risky to finance (Chalmers, 2005; Wampfler and Lapenu, 2002; Zeller, 2003).

- The high systemic, economic, social and co-variant risks associated with agriculture combined with its seasonality, low profitability and relatively “specialized” nature often lead to small incomes. The low profitability of the sector makes it particularly difficult to borrow at interest rates practiced by microfinance, while widespread poverty in most countries makes households particularly vulnerable to risks.
- Rural constraints related to highly dispersed, heterogeneous populations and poor infrastructure (transportation, communication) make accessing financial services and developing rural networks costly, especially in especially isolated zones where population density is low.
- Lack of human resources (poor education, absence of incentives for the educated to work in rural areas) makes it even more difficult to develop local financial services.
- Lack of appropriate guarantees and favorable regulatory, legal and policy frameworks weaken financial transactions, particularly in absence of reliable justice systems or the existence of land titles.
- A credit culture wherein loans are sometimes confused with donations has eroded repayment behaviors. This is due in part to the history of failed state development banks, but such mentalities are still reinforced today at election time, or under certain populist government initiatives.

In sum, agricultural finance markets are wrought with high transaction costs and risks that hinder the development of financial services.

And yet, the international context in recent years has become more favorable: increased prices of raw materials, reduced production subsidies to rich countries and wealth creation among the middle classes of emerging countries (Brazil, Russia, India, China), which are also the sources of new business opportunities, like biofuels.

Renewed interest in rural and agricultural finance

Lack of significant advances in financial services for agriculture has led to a renewed interest in the issue in recent years.

The most recent World Development Report 2008 (World Bank, 2007) focuses on agriculture indicates that agricultural development is coming back to center-stage after years of neglect. The introductory session by Alain de Janvry at the FAO rural finance conference in Rome in March 2007³, drew on this report to offer an overview of how agriculture and rural development have evolved in southern countries. There has been genuine development and

³ International Conference on Rural Finance Research: Moving Results into Policies and Practice, FAO, Rome, 19-21 March, 2007.

growing perspectives especially in “dynamic markets”, but development is occurring at two-speeds, with growing disparities in regions like Sub-Saharan Africa. Moreover, a major challenge remains: rapid development of the non-farm rural economy. These evolutions predicate the future demand and supply for agricultural finance.

In the 1960-70’s, rural and agricultural finance was based on heavy-handed government intervention via of state development banks and subsidized credit, considered an “input” to production. By the 1980’s, the failure of subsidized credit and bankruptcy was sufficiently widespread to justify the closure of public banks, liberalization of the financial sector and the development of microfinance.

Today, there are efforts to draw lessons from past errors and failures, and recognition of the need for both functioning markets and efficient government intervention. There are attempts to develop alternatives with diversified public and private actors. A less monolithic conception of the division between public and private sectors is making it possible to define the parameters for action and the roles of government, private sector and civil society (Bouquet, 2008). These possibilities are based on new synergies between actors, particularly microfinance and professional agricultural organizations, as well as the emerging role of banks, value chain actors and, more broadly, donors and public policy makers.

In the USAID conference “Paving the way to Rural Finance,” Zeller (2003) identified three motives for the increased interest of donors in agricultural and rural finance. First, the agricultural sector remains the most important economic sector, especially for poor people, in many development countries. Secondly, improved financial markets accelerate rural and agricultural growth and lead to increased economic growth and reduced poverty. Finally, there is a great deal of optimism surrounding the idea that donors can learn from past failures and current successes to launch a new wave of rural and agricultural finance.

Supply is still insufficient

In 2002, during the Dakar conference⁴, an analysis of supply confirmed that the liberalization of the agricultural and financial sectors had lead to a diminishing and more costly supply of agricultural finance. Government supply had been drastically reduced, and the bank sector had only barely picked up the slack. While the microfinance sector was developing in rural areas, as a whole, it was still quite fragile. In 1999, only around 20% of rural households in the West African Economic and Monetary Union had access to microfinance.

It was noted that microfinance was nonetheless contributing to agricultural finance: in West Africa, one-third of microfinance’s annual portfolio was financing agriculture (i.e. 25 billion Francs CFA in 1997) (UEMOA study, 1999). Although significant, this contribution has its limitations. The credit amounts are small, considering demands. And while some large, primarily mutualist institutions (FECECAM in Benin, Kafo Jiginew in Mali) have developed in “secure” agricultural regions (areas where cash crops are cultivated, supply chains are well-integrated, irrigation systems in place), microfinance is barely present in areas where subsistence agriculture dominates, areas which represent a potential demand of 50 million people throughout West Africa.

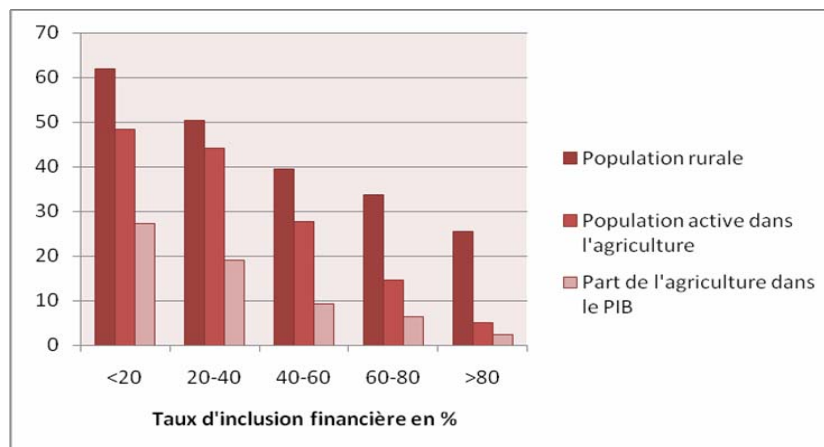
⁴ Financing family agriculture in the context of liberalization: How can microfinance contribute? Dakar, Senegal, CIRAD, CERISE, CTA, FIDA, MAE, ENDA, January 2002

It was also noted that the emphasis on financial sustainability was at risk of dissuading MFIs from implementing in marginalized regions. Other than institutions that have emerged directly from an agricultural context, few of the large microfinance networks invest in agriculture. Credit supply is limited to short-term loans, and does not satisfy the diversified demand. Savings services are also poorly adapted and are unable to compete with traditional forms of savings (like livestock and grain stocks). Moreover, experiences with agricultural insurance (crop, livestock) are few and far between, and rather unsuccessful.

Today, based on data that is often too general or refers to specific geographic zones, the supply continues to be limited.

Servet and Morvant (2007) sought to establish the link between the contribution of rural and agricultural sectors to the economy and financial inclusion. Drawing on data from the FAO in its 2006 Report, the authors crossed financial inclusion data for each country (Honohan 2006) with other variables such as the percentage of rural population, the contribution of agriculture to the GDP and the portion of the population working in agriculture. The result is a negative correlation between access to financial services and other variables. The higher the proportion of the rural and agricultural population and the greater the contribution of agriculture in the GDP, the lower the rates of financial inclusion.

Proportion of the agricultural sector in the economy and financial inclusion



Source: Servet, Morvant (2007) based on Honohan (2006) and FAO (2006)

This data indicates that financial inclusion is lower in countries where the economically active population working in agricultural is higher, and where agriculture represents a higher proportion of the GDP.

To better understand the level of financial service access, not just households but also small, primarily informal enterprises, Honohan (2006, in Servet, Morvant, 2007) analyzes the data collected by World Bank surveys on enterprises located in selected African countries. This analysis reveals that 41% among them are credit constrained—they either requested credit and did not obtain it or did not request credit because they lacked the necessary guarantees. The author highlights that agricultural enterprises are nonetheless under-represented in the sample; and yet it is proven that this sector is much more constrained in their access to sources of finance (Honohan, 2006). In this context, we can legitimately estimate that more than four out of ten small enterprises in the agricultural sector in these African countries face credit constraints.

On the basis of relatively recent data from Latin America, Trivelli and Vénéro (2007) conduct a country by country analysis to determine the part agricultural credit in the total credit accorded between 2004-2005. The authors observe that of the total amount of credit disbursed, only a small amount is used to finance agricultural activities (8% of the total credit averaged over the 18 countries). In nearly every case, the percentage of agricultural credit (compared to total credit) is lower than the contribution of the agricultural sector to the national economy (10% of GDP, on average).

In some countries, like Chile, the percentage of credit for agriculture is low (4.6%). Nonetheless, considering the degree of financial penetration, this represents a portfolio of more than 3.2 billion dollars for this sector (which employs less than 20% of the economically active population, *i.e.*: 1.24 million people). Conversely, in the case of Paraguay, 28% of all credit is dedicated to agriculture, but since the overall volume of credit is small, this represents only 431.2 million dollars (while the sector employs nearly 40% of the economically active populations, *i.e.*: 910,000 people). Agricultural credit per inhabitant is highest in Chile (1,479 USD), Argentina (458 USD) and Panama (424 USD). The countries where this ratio is lowest are Dominican Republic (49.30 USD) and Guatemala (44.50 USD)

Generally speaking, there is consensus that supply is still insufficient, despite innovations in terms in agricultural finance. However, as we will see, these innovations have yet to be widely disseminated.

II –Rural finance actors and financial institutions

Two entry points: the financial sector and value chains

One approach to rural and agricultural finance uses the financial sector as an entry point and emphasizes the important role of financial institutions for facilitating access to a wide range of services. There are a number of unresolved issues surrounding this approach, particularly in terms of governance, which itself implies issues of institutional type and methodological approaches, size and geographic expansion, and linkages with urban finance. Finding answers to these issues will help determine the success factors for rural finance.

This approach involves building long-term capacity and finding incentives for institutions to offer financial services to the rural and agricultural sector. In comparison to the value chain approach, the comparative advantages include:

- The capacity, in theory, to offer a wide variety of services including term finance, savings, insurance and money transfers. In reality, this range is rather limited.
- Access to external resources and hence capacity to serve new clients and adapt products to resources available.
- Transparent credit histories that enable clients to move from one institution to another.
- Credit that is not linked to specific crops or production, which permits a regular supply, even when market conditions change.
- The market structure tends to develop less monopolistic and predatory relationships
- Sustainability of supply, regardless of the situation affecting a particular sector.

The limitations include:

- A certain degree of ignorance regarding risk management relationships and models that can be applied to agricultural chains. (The particularly difficult relationship between agricultural producer organizations and MFIs is a case in point.)
- Negative past experiences that contribute to high risk perception, making financial institutions wary of promoting agricultural investments;
- Weak systems regulating property titles, absence of laws on guarantees and poor legal systems are a major constraint to lending. Policy reforms and innovations to lending methods often involve long processes.

A second approach to rural finance is focused on value chains. It takes the production chain as an entry point, and examines the financial services that could be proposed all along the value chain (from input suppliers, processors, intermediaries to buyers). This approach is commonly combined with commercialization activities and even technical assistance.

Value chain finance has a long history in integrated chains like the cotton sector in West Africa or coffee chain in Latin America and is considered a good way to reduce risk of non-repayment. This type of financing has been the principle vector for financing certain agricultural export chains.

The comparative advantages include:

- Mechanisms are based on existing relationships.
- It is possible to overcome information constraints thanks to familiarity and trust among actors, and to accept non-traditional guarantees such as standing crops or inventory.
- Repayment is integrated into the system.
- It is possible to facilitate technical assistance for producers.
- Often, buyers, sellers and input suppliers are the only actors providing credit.
- Professional organizations can play an active role, defending the interest of the chain, and offering assistance to small producers to access financial services.

Limitations include:

- Actors are not specialized in financial services and usually only offer short-term credit focused on production and rather than household needs.
- Lack of access to capital from financial institutions and liquidity constraints.
- Credit is often tied to a specific crop, risking dependency and problems if the markets change.
- Value chain actors often have a geographic monopoly.
- There is risk of not serving small producers due to high transaction costs.
- Regulatory frameworks that are not well adapted to this form of credit which can hinder use of non-traditional guarantees.

The following section will look at how these two approaches can contribute to financing the rural and agricultural sector.

The financial sector approach

Which models and institutional types for rural areas?

Each model has its strengths and weaknesses for offering adapted financial services for agricultural and rural needs.

Solidarity group models with salaried employees

The Grameen Bank-style solidarity group model⁵ relies on social cohesiveness to ensure repayment. Groups are small, comprising 5-10 borrowers. Financial transactions are conducted by loan officers.

The model, as it is applied by Grameen Bank (small solidarity groups and salaried staff), is not well-adapted to Africa's rural areas due to low population density, high transaction costs for the groups, co-variant risks that tend to create tension within groups (thus diminishing the effectiveness of joint liability) and migration from rural areas, incompatible with the regular group meetings.

Rather, participatory models—cooperatives, village associations, etc.—where members are in charge of some of the transactions (rather than loan officers) should be prioritized in rural areas.

Participatory models: cooperatives and self-managed banks

Savings and credit cooperatives are an essential component of rural finance. They are managed by their members, and each member is owner of the entity, equal rights (one person, one vote). Salaried staff is responsible for technical management.

In African microfinance, mutualist networks are the dominant contributors to agricultural finance. Cooperative and mutualist networks associated with the *Centre d'Innovation Financière* (CIF) such as Kafo Jiginew in Mali have managed to successfully adapt their services to the demand for agricultural finance (see box below on equipment loans), especially when agricultural producer associations are involved in the institution's governance.

As noted by Fraslin (2007), “the mutualist model, predominant in Madagascar, has shown to be effective in dense rural areas linked to markets and where populations have a relatively good level of education. It also has its limitations in less densely populated, isolated areas that are marginalized in terms of access to basic services, especially education. In this context, mutualist models face problems with operational costs and governance.”

Faced with the difficulty of mobilizing savings in rural areas, the basic principles of preliminary savings, and the cooperative model in general, have undergone adaptation.

The *Caisses Villageoises d'Epargne Crédit Autogérées* (CVECA) model of autonomous village banks was developed to provide profitable savings and credit services in rural areas with low population density, and in particular, Sahelian regions. The CVECA model is based on the possibility of mobilizing local savings (depending on household capacity, culture) with support from external financing and the willingness/capacity of community members to manage the banks themselves.

Village banks supported by NGOs such as Freedom From Hunger and FINCA are also based on principles of autonomous management and building member capacity.

⁵ Première génération (groupes solidaires de 5 personnes)

These autonomous models are well-adapted to rural areas, as transaction costs are easier to control, however they do not generally finance agriculture (financial resource constraints, high vulnerability to covariant risks).

Public banks

Development banks are making a comeback. As noted in the 2008 World Development Report (World Bank, 2007), MFIs alone cannot provide the totality of rural microfinance services. There is a call to “rehabilitate” agricultural development banks that can, if reformed and privatized, respond to rural and agricultural finance needs in the form of public-private institutions.

The example of Banrural in Guatemala is often cited as a failed development bank that underwent successful reform and functions today with an innovative governance model (majority control in the hands of diverse private shareholders—producer organizations, NGOs, SMEs, government, employees—while the government sector controls only 30%).

A less recent example of the restructured BRI in Indonesia (Robinson, 2001; Lapenu, 1998) also shows it is possible for a state bank to operate efficient local branches. Today, BRI’s village units are in a position of excess liquidity (savings volumes far outstrip loans disbursed) and it is likely rural savings will finance urban development.

Commercial banks

Commercial banks operate in rural areas either by investing in local financial institutions, opening branches or offering credit lines for rural MFIs. Experiences from members of the French Microfinance Network indicate that banks can refinance and support MFIs in rural areas by networking with other actors to create synergies that will offer insurance—and reassurance—of the solidity of these MFIs. These synergies are based on long-term partnerships (MFI, commercial banks, donors, TA providers, etc.) and geographic proximity, *i.e.*: multinational banks will refinance the MFIs in country where they have branches.

Size and distance: small or big? local or national?

Regarding the issue of size and distance, we will draw from a summary proposed by Claudio Gonzalez-Vega in July 2007 on the discussion forum DevFinance.

Wenner et al. (2007) identified the importance of scale and argue for rapid expansion of loan portfolios in rural areas. The authors recognize nonetheless the existence of a few small rural institutions that are serving the rural sector efficiently.

Meyer and Gonzalez-Vega have underlined the advantages of small rural institutions in terms of information and incentives. There are also modestly sized MFIs with limited outreach that have achieved sustainability and genuine autonomy in very difficult contexts, such as the Sanduk d’Anjouan in the Comoro Islands (Poursat, Pierret, 2007). The strength of these types of institutions often stem from the strong ties they have to the local context, and the willingness and desire of the employees and members to make them work.

Gonzalez-Véga concludes that the development of rural financial systems will demand systemic innovation: finding a way to combine the strength of local institutions in terms of borrower information and transactions with diversified portfolios and the economies of scale of national organizations.

Constraints to good management

Recent studies have shown that profitability of rural networks depends largely on volume (PAMIGA, 2007). The size of a network, the size of each branch and the size of each loan are determining factors of profitability. Achieving a critical mass is not only necessary for networks, but for each branch so that it can manage its cash flow, diversify its products, reassure savers, attract large borrowers and absorb eventual non-repayment of larger loans.

Strengthening management and technical skills usually makes it easier to improve financial earnings. It is possible to achieve rapid gains in productivity thanks to improved asset allocation (local branches often do not allocate their financial resources adequately), optimizing investments and benefiting from more favorable terms in negotiations with banks for refinancing.

Studies that analyze product diversification have different conclusions. The lack of varied products can hurt profitability while the introduction of new products that meet a specific demand can revitalize a branch (PAMIGA, 2007). However, decentralized rural institutions face high costs when introducing new products, due to the need to train staff, standardize procedures and modify audit and control systems (Paquette, 2003).

Ties with urban finance

There is often a continuum between rural and urban finance, and exact definitions vary across countries in terms of what is rural, urban or peri-urban.

As AFD notes⁶, there is a trend towards rural MFIs wanting to develop operations in urban areas, considered more profitable, making it easier to achieve sustainability. In these cases, an equalization or mutual guarantee system is set up, to ensure overall profitability of organizations via more profitable urban activities.

Nonetheless, this drift away from the original mission of financing the rural sector calls for a system of checks and balances, set up by elected representatives of the agricultural sector, the board of administration, and partners and/or donors, to safeguard the rural strategy. AFD also emphasizes the need to adapt procedures to the new areas. While individual loans are relevant in urban areas, adding such a service to an institution that works primarily with joint liability groups involves a significant change in terms of risk assessment (guarantees, less stability of clients who are not tied to their land, new markets, etc.). Still, setting up urban operations not only increases opportunities to offer larger loan amounts, it also lowers the cost of funds for the MFI by collecting savings.

There is also a trend for urban and peri-urban MFIs facing increasing competition in cities, to develop operations in rural areas. This is the case in Benin, Marocco, Bolivia and the Philippines. For these MFIs, the question of adapting services and training loan officers in new procedures is crucial for ensuring the viability of these new services.

⁶ Workshop 1, FARM conference.

The value chain finance approach

Financing the value chain

Value chain finance has a long history in some large agricultural chains like cotton in West Africa and coffee in Latin America. This form of finance is based secure guarantees and an integrated approach.

The value chain approach as it is applied to cash crops (cotton, cacao, peanuts, etc.) in West and Central francophone Africa consists of a variety of integrated interventions at nearly all levels of the production, processing and commercialization chain. It involves, among other things, a credit system to facilitate use of chemical inputs and animal-draft power. These systems often depend on government intervention which can have a buyer's monopoly on production (Lapenu *et al.*, 2003). Because of these monopolies, this approach has seen a number of failures. Still, value chain finance, especially around commercialization activities, is the object of renewed interest among Anglo-Saxons.

Certain produce (milk, vegetables in Madagascar, quinoa in Bolivia, for instance) can be well-suited to contract farming (outgrower schemes) which enables access to finance and even services (TA, training, markets).

Gonzalez-Vega *et al.* (2007) describe how the rapidly growing supermarket chain Hortifruti did not want to offer cash advances or credit to small producers that supplied the chain with fruits and vegetables. However, these producers saw their access to credit improve, thanks to the credibility that came with the implicit or explicit association with Hortifruti in the eyes of potential lenders.

Kula and Farmer (2004) draw attention to the liquidity constraints of actors who could be potential lenders. They illustrate this in the case of Mozambique and note that constraints are even more severe as the chain grows rapidly. The value chain needs to attract external funds and not just simply redistribute resources among value chain actors (Gonzalez-Vega, Devfinance 2007).

The value chain approach has its advantages, but there is a need to draw lessons from past experiences and adapt solutions to existing operations. Moreover, the role of professional agricultural organizations should be examined as a way to render value chain finance viable, as should opportunities to work within fair trade relationships, which seek to secure prices and markets.

The role of producer organizations

In the increasingly complex, instable and competitive economic and institutional environment faced by family farmers, professional agricultural organizations (PAOs)—in whatever shape or form (committees, associations, federations, unions)—generally rally around two issues. They defend the interests of agriculture and offer support services to the small farmers who make up their membership base. These PAOs are confronted daily with financial constraints. Access to rural finance institutions, be they commercial banks or MFIs, is sporadic and difficult. PAOs are generally at a loss when it comes to improving their access to finance: they lack information on strategies for accessing services and contacting existing institutions, they lack the capacity to formalize their financial needs or apply for financing, and are often confronted with an absence of guarantee funds.

Financial institutions in general, and MFIs in particular, are careful when it comes to financing agriculture and peasant organizations. They hesitate when faced with the risks involved, and are limited by the lack of stable, long-term resources to finance the medium-term lending which agriculture needs so badly. Their geographical coverage is limited and the tendency is to focus on urban and peri-urban areas. Moreover, the insufficient professionalism of MFIs and financial sector's lack of supervision has led to instances of dysfunction (misappropriation of funds, default, loss of savings, overindebtedness of households) that have further undermined trust between POs and MFIs.

In absence of adequate financial services, PAOs have tested different strategies to improve their access: 1) internalizing credit operations in more "generalist" PAOs, 2) externalizing credit operations via institutions created specifically to this end and 3) building partnerships with the financial sector (bank and microfinance).

The first strategy has a number of advantages: it makes up for the absence of proximate credit supply and costs are limited if access to a credit line is free. But it also has some major limitations that have resulted in failures: PAOs often lack the professional capacity and tools needed for good credit management and they usually do not develop savings, thus are dependent on outside injections to develop credit operations. Moreover, crises commonly reveal the conflict of interest which underlies this strategy: because they are supposed to represent the interest of their members, PAOs often find it difficult to exert the necessary pressure to ensure repayment.

Therefore, although this strategy continues to develop, perspectives for success are limited: credit lines often disappear, attitudes towards credit and repayment deteriorate and there is a risk of disrupting local financial markets.

The second strategy also has its advantages: the newly-created MFI is a professional institution that can acquire a legal status and access specialized skills and tools, while at the same time remain dedicated to agriculture; it can finance PAO members and the PAO itself. But this approach also has its limits:

- The PAO will face all the difficulties common to creating an MFI: a long, difficult and costly process;
- Difficulties exacerbated by a high level of risk due to a credit portfolio dominated by agriculture;
- The MFI (the "sister PO") may be tempted to assert its independence and prioritize a more financial, rather than agricultural rationale ("move towards more profitable sectors...") and risks drifting from its initial mission rather quickly;
- This strategy nonetheless presumes acceptance of a financial approach, required to build a sustainable financial service, i.e., apply cost-covering interest rates.

Reinforcing partnerships between PAOs and financial institutions (and MFIs in particular) is therefore critical. Studies underway (Wampfler *et al.*, forthcoming) are looking into how to build these new alliances.

Some initial guidelines include:

- Show PAOs and financial institutions how to analyze the financial needs of organizations and their producers, and to identify the obstacles to accessing finance;
- Coach PAOs on how to choose a form of service delivery that is efficient and viable;

- Give PAOs and financial institutions the tools for building partnerships and improving PAO access to financial services.

The case of fair trade

Fair trade has developed out of the desire to respond to difficulties small farmers have to subsist on what they produce. By ensuring stable and “fair” prices, fair trade aims to help these farmers increase their incomes. Fair trade merchants offer producer organization temporary financial assistance in the form of pre-financing. Currently, the pre-financing that is advocated by fair trade standards does not fully meet the needs of the producer organizations: volume of credit is still low and producer organizations only have partial access to credit due to lack of information or late disbursement. Moreover, importers do not necessarily encourage the development of this form of finance, due to liquidity issues, risks, insufficient guarantees and poor management of PAOs.

Improving linkages between microfinance and fair trade offers an opportunity to increase financial access for producer organizations and their members.

Among other things, linkages with fair trade merchants can:

- Reduce production risks by offering guaranteed prices, stability (and growth) of market channels thanks to increasing demand in northern countries, and higher quality production.
- Reduce uncertainty concerning the credibility of certain producer organizations thanks to the transparency required by fair trade standards and fair trade bonuses that can be invested in capacity building. This can indirectly reinforce competitiveness and organization of export-driven value chains.
- Offer a more secure and stable source of finance via a guarantee fund.

In addition, microfinance offers the advantages of a sector that has innovated over the last thirty years to secure finance for individuals and enterprises. In particular, relationships established over the years in various countries between MFIs and PAOs represents a genuine source of expertise. Working with the microfinance sector makes it possible to ensure fair trade importers that the funds they earmark for pre-financing will be well-managed. Moreover, it enables producer organizations and their members to diversify their sources of financing. MFIs are likely to be interested in investing in fair trade value chains, provided guarantees and well-adapted financial resources are available.

III- Products and services

Certain innovations in the microfinance sector are considered promising, particularly those linked to the value chain approach or non-traditional forms of guarantees. Often these innovations have proved their effectiveness, but are poorly disseminated.

Analysis of rural finance needs

Family farmers need to intensify, modernize and finance technical and organizational innovation. Their limited capacity to self-finance is not enough to finance this modernization. Their needs for finance are considerable, diversified and complex.

Typology of rural and agricultural finance needs

Family farmers

A review of the needs of family farmers was presented at the Dakar conference in 2002. We draw from this presentation here.

Financial needs of family farmers:

- Short-term: input financing at the beginning of the crop year (seeds, fertilizers, pesticides), additional labor, feed, storage facilities, processing, etc.
- Medium and long term: equipment for intensification, commercialization (transportation), storage (buildings), perennial crops (investment, renewal, maintenance), (re)constitution of herds, land purchase.
- Family needs: personal, durable goods, housing.
- Savings (to cope with seasonality, to protect against unforeseeable events, to prepare for life cycle events), insurance (crop, health).
- Non-financial services: monitoring demand, technical assistance and extension.

New needs: professional organizations and agricultural enterprises

With modernization, new needs have emerged as a response to gaps (left by structural adjustment policies, the withdrawal of the public sector), as well as to revitalize agriculture by supporting microentrepreneurs. These needs include:

- For professional agricultural organizations: prefinancing input stocks, working capital for commercialization activities, equipment and infrastructure needs, monitoring member demand.
- For agricultural enterprises: considerable cash flow (to finance the crop year, commercialization activities, etc.), investment (acquisition and development of land, buildings, transportation), innovations. In addition, family expenses related to schooling, which often emerges as a key issue for these households, can be high.

These entrepreneurial households often manage to self-finance. But access to tailored financial services is a key element for increasing the rate, quality and intensity of their development. They are particularly important in the present-day rural context: a source of rural employment and a segment of a financial market in a sector that still needs development, “rural mesofinance.” (BIM, 9 October 2007).

New products

One of the major challenges facing rural finance institutions is to find ways to reduce transaction costs and mitigate loan portfolio risk. Meeting this challenge has led numerous institutions to find innovative solutions for conducting operations.

New information technologies

New technologies offer a way to develop new products, improve management (by improving existing systems and internal controls), and thus help lower costs, which enables MFIs to reach out to rural areas that have been neglected, or link up with local initiatives (such as self-help groups which are too isolated to be viable on their own).

Branchless and mobile banking involve the supply of financial services outside of a conventional branch network, using information and communication technologies and non-bank distribution agents. Because of their potential to drastically reduce costs and improve client service, these approaches can reach new segments that have been thus far neglected. Technology can help many actors—not just banks but MFIs, mobile phone operators and technology firms—push the frontiers of financial access,.

Niesigiso and mobile managers in Mali

The Nyèsigiso Network is a group of financial cooperatives made up of a central credit union and 11 ‘mother coops’, with 25 associated outlets. DID, together with its local partner, the Nyèsigiso Network, developed the teller software – a mobile application for information on operations (AMIO) – for use on PDAs.

The Nyèsigiso Network introduced this technology as part of a scheme to modernize and consolidate operations of its members that was launched in 2002. By December 2006, 12 credit unions operating in both urban and rural areas had been computerized. The members’ outlets in rural areas generally have limited funds, making it difficult – or even unaffordable – for them to computerize their systems. However, by using PDAs loaded with the AMIO software, they have been able to do so at a fraction of the normal cost.

The software comes in two versions. The ‘teller’ version is designed for transactions on members’ deposit accounts, while the ‘credit’ version provides data on the loans in a loan officer’s portfolio. The credit unions send tellers and loan officers out to the villages with their PDAs and a cash drawer once or twice a week, usually on market days. These ‘mobile’ loan officers now have the credit history of each of their borrowers at hand when they visit them in the field.

For the credit unions, in many places there is no longer any need for physical branches, thus reducing their costs and eliminating the need for permanent staff. For their members, the services are also far more convenient – they no longer have to visit the credit union office in person, since it now comes to them. Thanks to this technology, the risk of fraud and loss has been significantly reduced. For the staff, the technology saves them a lot of time as they no longer need to spend an hour or two at the end of each day manually making a tally of the transactions that have been made. They have only to withdraw the PDA’s memory card and hand it to a clerk, who takes it to the processing centre where the transaction data are entered on conventional desktop computers. Financial institutions in Mauritania and Mexico have also adopted the approach. In Mexico, member institutions have even integrated a portable printer into the system so that loan officers can now issue receipts to clients in the field.

Source: Lehoux, Karina, 2007.

Term loans for rural and agricultural enterprises

Dealing with medium and long terms loan demands a guarantee system that takes into account the specific nature of rural assets which may be untitled lands, herds, productive assets or durable household goods. This requires the ability to analyze budget capacity and profitability of activities conducted by the household. Financial resource must also be adapted to terms of these types of loans

Equipment loans at Kafo Jiginew (Mali): investing in family farms (*Zoom Microfinance*, no. 23, October 2007)

Kafo Jiginew is a mutualist network of savings and credit branches in southern Mali. With 223,000 members, it is the largest decentralized financial network in the country.

Equipment loans are, on average, 250,000 CFA (380 €), and carry an interest rate of 1-1.5%, depending on the nature of the loan, and offer terms of up to five year (for tractors). The lack of long term resources for this type of product led KJ to associate with partners and donors such as SOS Faim and the European Investment Bank, to finance these loans. In most cases, equipment loans are used to buy cattle for traction. A study of the institution reveals that the variety of services offered by KJ is necessary to meet the survival and investment

needs of peasants.

Employees of the rural branches have a strategic role in their cooperative, and it is this relationship that permits KJ to offer products adapted to small producers. Loan products are formulated by the peasants themselves, and thus made to meet their needs. KJ is an example of how an MFI that listens to the peasant organizations it serves can genuinely contribute to their sustainable development.

Leasing or hire-purchase

Leasing is a traditional medium-term alternative for machinery acquisition, as it reduces the constraint of guarantees. After successful experiences with leasing in projects promoting animal-traction, leasing was appropriated and perfected by MFIs. It allows clients to access finance to acquire equipment that itself serves as guarantee. More precisely, leasing consists of separating the ownership of an asset from usufruct. The institution remains the legal owner until the client has reimbursed in full.

Leasing at the mutualist network CECAM in Madagascar

The leasing product offered by mutualist network CECAM in Madagascar offers an example of this form of financing (Wampfler *et al.*, 2007). The CECAM network acquires the good requested by the member. The asset is transferred to the member, the lessee, who rents it on the basis of

- a down payment of 10% of the asset value if agricultural machinery, 20-30% if transportation
- a guarantee of 50%-150% of the asset value
- a regular rent payment, at a rate of 2.5%-3.5% per month

The network owns the asset until the lessee pays the entire value plus interest and fees. The leasing contract can be from 6 to 36 months. The lessee must be approved by CECAM and is monitored over the lease period. In the event of default, CECAM can repossess the asset without any specific litigation procedure.

CECAM has adopted two unique procedures to develop access to this form of financing:

- the guarantee can be any of a number of common rural items, such as cattle herds, commonly refused by financial institutions
- the repayment calendar is established together with the lessee, in accordance with his/her economic activities.

Inventory credit/warrantage

Inventory credit or warrantage aims to guarantee credit for farmers by using warehouse receipts from storing agricultural produce. It allows farmers to pledge their production to access loans for commercialization or processing activities, or simply wait for prices to go up. The CECAM network has also developed a credit product along these lines, its “village granary” loan, for producers to make the most of their rice production by waiting for the lean period to sell.

Introduction and development of warrantage in Niger

Warrantage, known more commonly as warehouse receipts, offers farmers the possibility to pledge their harvest in exchange for a loan to finance the beginning of the next crop cycle or some other agricultural activity (such as livestock purchase). Because financial institutions do not always have the means to store the object of guarantee (the warrant) within its walls, the pledge is put in escrow: merchandise is stored in warehouse in exchange for a receipt or deposit certificate, which serves as both a debt obligation and receipt for the merchandise. This document can be endorsed as both a debt obligation and receipt of goods received.

In absence of certified warehouses in Niger, a warrantage system was developed based on “community storage”:

- producers grouped together in cooperatives (known as producer organizations, or POs) to store part of their production in an appropriate facility that belongs to them. The individual producer does not have direct access

to the warranted credit. Rather, the PO borrows from a rural finance institution (RFI) and redistributes it among its members.

- Next, the RFI verifies the quantity, quality and form of storage undertaken by the PO and its members, as well as the norms of the warehouse (capacity, security, conditions), then consults the market prices and disburses a loan equivalent to 80% of the value stored.

- The PO divvies up the loan among its members on a pro rata basis. Each peasant receives cash for his harvest as if he had sold it—but it has not been sold.

- With this cash, peasants can finance an income generating activities (IGA) or cover pending social expenses.

- Several months later, the producer reimburses his loan and the RFI releases the stored produce which, in the meantime, has increased in value. The loan is reimbursed with the earnings from the IGA and not the product that served as guarantee. The pledged production is used only if repayment cannot be made with the IGA earnings.

Source: FAO presentation, FARM conference, Workshop 2

This form of financing can run into problems if storing production incurs high management, transportation or packaging costs, or if products are perishable (onions, for example). It is also difficult for isolated producers to implement this sort of system.

Insurance

Roberts (2005) notes that in traditional crop insurance, evidence of damage on the actual crop on the farm or in the area of the farm is needed before paying indemnities. But verifying that such damage has occurred is expensive, and making an accurate measurement of the loss on each individual insured farm is even more costly.

An index (also known as “coupon”) policy operates differently. With an index policy, a meteorological instrument is used as the trigger for indemnity payments (temperature, rainfall, wind speed, etc.). The classic insurance policy is replaced with a simple coupon which becomes payable on certification that the named weather event of specific severity has occurred. Since there is no direct connection between a farming operation and coupon, even those without crops at risk could theoretically purchase this type of risk coverage. This is not a disadvantage, since there are many persons besides farmers who suffer to stand losses from adverse weather events: fishermen, tourist operations, outdoor vendors, shopkeepers, etc.

However, indexed insurances also have their limitations. They do not always protect effectively the farmers who purchase them because there is no direct linkage between the loss and indemnities. Moreover, it can be difficult to find reliable indexes

There is trend to draw lessons from the success and failures of traditional crop insurance and indexed insurance in order to better protect farmers in developing countries.

Conditions for adopting innovations

Despite the promising innovations in agricultural finance, the widespread implementation of these new techniques remains difficult. Take for example the case of leasing at ANED in Bolivia. This form of financing represented 7% of ANED’s portfolio in 2001, and only 1.5% in 2007. Experiences with inventory credit are much the same. Despite the history of these techniques, they have only started to spread in recent years. There is nonetheless a positive shift underway.

Communicating and sharing information on new products was undoubtedly rare in the past, but is currently improving thanks to wider dissemination of their application (conferences, communications, and briefs like *Zone Microfinance* of SOS Faim, etc.).

Just as agricultural finance was not central to donors' agendas twenty years ago, the techniques that could have improved agricultural finance were not yet well-defined. Today, with renewed interest in the agricultural sector, there are new initiatives to disseminate innovations like the warrantage extension program of FAO's *Projet Intransit*.

Some technical constraints still limit widespread implementation of these innovations. Financial resources are poorly adapted to the specific needs of each different product. Regulatory frameworks are often limiting, as in the case of seizing guarantees in leasing contracts. Appropriate legal systems are needed to avoid litigation and achieve conflict resolution. There is a need to address the problem of accurately assessing the value and depreciation of an asset, to facilitate maintenance. Capacity is still too low among some stakeholders to develop new products, and sometimes even project developers are not skilled in certain areas (storage capacities, price and risk analysis, analysis of medium-term repayment capacity, etc.). Finally, many times these innovations are still too expensive for beneficiaries.

There is a growing willingness of stakeholders like MFIs, donors and PAOs to meet these challenges by creating synergies and setting up programs to disseminate information and technical assistance. In Bolivia, for example, actors have set up mutualist mechanisms like FINRURAL and PROFIN to systematize and disseminate sector experiences. These bodies have also lobbied for a specific law governing leasing activities that clarifies issues of ownership and simplifies cession procedures.

Non-financial services

Agricultural finance will only be effective if it is integrated into an active rural economy, supported by functional and functioning services such as input provision, commercialization alternatives, technical assistance, extension services and market information systems. Effectiveness is also tied to the supply of additional services that help optimize the use of services and improve results. One of the success factors for reaching rural populations is the establishment of alliances (NGOs, peasant organizations, local government, etc.) to provide these additional services.

Management advisory services

The budget and management practices of most agricultural households represent a "black box" for many financial institutions, into which credit is injected in order to produce "repayment." These institutions could benefit greatly from a better understanding of the production and income cycle of farmers. This would enable them to trace periods of high credit demand and periods of surplus liquidity, thus making it easier to track down repayment and propose savings services.

By asking farmers to analyze their own financial management, it is possible to identify the forms of storage, treasury, savings and credit management that are most adapted to their needs, and determine how best to mix and match them. It is then possible to take stock of the monetary and non-monetary resources of the farmer.

Management advisory services permit farmers to conduct this analysis themselves and receive advice on how to make good management decisions (when to save, when to invest, when to ask for a loan, how to make the most of an investment, when to make repayments, etc.).

Source: Dakar, 2002.

As COFIDES points out, it is important for beneficiaries (women, villagers, peasants, young people, etc.) to be able to control their demand for services. Groups like PAOs can help these segments express their needs, and help identify technical and financial solutions. In this respect, training in management and financial concepts is essential, but still poorly developed.

Sources of finance for the rural sector

Savings mobilization

As AFD indicates⁷, “With the exception of particularly wealthy and densely populated rural areas, rural savings represent small amounts. Savings is generally mobilized via demand deposits, which are subject to cycles not necessarily in phase with the institution’s need for credit funds. For example, cash savings tends to be at its highest at harvest time, when there is less demand for credit. In rural areas, collecting savings is costly. It involves many small operations that require a branch structure to be in place. In order to maximize returns of this service, MFIs will remunerate deposits only slightly, or not at all. The tendency is for potential savers to invest in opportunities considered more financially or socially beneficial (such purchase of livestock, consumer durables). There is nonetheless a recent trend in developing cash savings in areas confronted with insecurity, but MFIs are still underdeveloped in these contexts.”

Moreover, it is often difficult for MFIs to use cash savings as a source of loan funds for regulatory reasons. The challenge for MFIs is to mobilize term deposits, or work with apex structures that can ensure equalization of funds.

Migrant remittances

Migrant remittances drew the attention of multilateral institutions when they realized the dimension of this phenomenon. These transfers offer a source of funds for MFIs. However, in rural areas where migration is intense, such as the mountainous regions of southern Mexico, the considerable flux of funds and savings that result can lead to liquidity surpluses in the institutions that receive them. Indeed, while migrant remittances contribute to local development, they cannot resolve the structural economic problems that plague rural regions.

Bank refinancing and guarantees

AFD (2007) has observed the expansion of refinancing opportunities from banks. Banks often have credit lines for specific products with longer terms (leasing, granary credit) and can provide refinancing and authorize overdrafts, to help MFIs palliate treasury holes. Considering the needs of MFIs and possibilities of Malagasy banks, a risk-sharing tool like AFD’s ARIZ is particularly relevant for mature networks.

In order to be effective, these credit lines must respect the calendar of the agricultural operations they finance. The evaluation team noted burdensome procedures for these forms of financing sometimes slow down the process of responding to requests, which can lead to disbursing funds too late in the crop year. When this happens, the network may not be able to recycle the all the financing into loans, making for a very costly transaction.

Investment funds and guarantees

Investment funds and guarantees are gaining popularity. However, very few are adapted to agricultural and rural finance.

⁷ Presentation FARM conference, workshop 1

Public policies for rural development⁸

The role of government has changed considerably since the paradigm of financial liberalization has emerged, accompanied by the growth of microfinance. Governments have gradually been reinstated in their role as overseer of currency and financial institutions: legal and regulatory frameworks, control and supervision.

But to what extent must regulation be specific to rural and agricultural finance, to improve the supply of financial services. Should measures be adopted regarding guarantees and administrative procedures so as to favor dissemination of leasing? Can supervision practices be adapted to rural and agricultural finance (by reducing constraints on reserves, qualification standards and agricultural portfolio evaluation), without putting the overall financial system at risk? Can financial systems make space for diverse financial institutions dedicated to rural and agricultural finance?

Public authorities are increasingly implementing programs designed to compensate for market failures in the name of “financial inclusion”, by encourage private players—namely microfinance institutions—to broaden outreach (rural areas, family farming, etc.). In some countries, redistribution policies are emerging to reduce inequality, appearing side by side with renewed priorities for selected sectors, such as agriculture. Subsidies used to establish new, specialized financial intermediaries that may reduce costs of providing financial access in the most isolated of rural areas, are justifiable in the name of more equitable sustainable development. Discounts and rebates for agricultural investment and management of such investments by microfinance institutions are reappearing among the agricultural policy tools, and in some developing countries, actors are calling for the mobilization of international development aid funds (debt conversion, etc.).

Sometimes, governments would like to go even further, establishing direct or indirect public intermediaries. But will this new generation of solidarity and agricultural development banks learn the lessons from the agricultural bank failures of the 1970-80s? BRI in Indonesia (Robinson, 2001), Banrual in Guatemala (Trivelli, Véréno, 2007) are examples of successful reforms of public development banks. Are these examples generalizable? Are public institutions capable of reforming their governance?

These new forms of public sector intervention have consequences on the private non-profit and cooperative sector that has gradually developed to meet the need for rural and agricultural finance. Will new public-private synergies and partnerships emerge, improving the effectiveness of public interventions?

Conclusion

The FARM conference will provide a forum to exchange on these issues. The experiences and analyses of the actors coming together over these three days will offer a panorama of the recent advances in the field. This will help identify areas where further innovation can help move agriculture finance forward, and the bottlenecks that must be resolved in order to create a more dynamic agricultural sector and to build the capacity of small farmers.

⁸ This section draws on the briefing document on public policies, drafted for the FARM conference (Doligez, Wampfler, 2007).

Bibliography

Chalmers, Geoffrey , 2005, A Fresh Look at Rural and Agricultural Finance , RAFI Note #1, An AMAP/BASIS Publication, USAID's Rural and Agricultural Finance Initiative, Chemonics, ACDI/VOCA, Ohio State University and DAI.

Charitonenko, Stephanie; Heron, Lena; Chalmers, Geoffrey; Lennon, Barry; Miller, Mary , 2005, Value Chain Finance , RAFI Note #2, An AMAP/BASIS Publication, USAID's Rural and Agricultural Finance Initiative, Chemonics, ACDI/VOCA, Ohio State University and DAI.

Fraslin Jean-Hervé, 2007, Construire un modèle institutionnel inclusif pour la finance rurale dans une région enclavée, Thème 3: Améliorer la gestion opérationnelle des institutions financières, International Conference on Rural Finance Research: Moving Results into Policies and Practice, FAO, Rome, 19-21 March, 2007, FAO, FIDA, Ford Foundation.

Gonzalez-Vega, Claudio; Chalmers, Geoffrey; Quiros, Rodolfo; Rodriguez-Mega, Jorge; , 2006, Hortifrutti in Central America: A Case Study About the Influence of Supermarkets on the Development and Evolution of Creditworthiness Among Small and Medium Agricultural Producers , AMAP Publication: microREPORT # 57; Development Alternatives, Inc. and The Ohio State University .

Kula, O., Farmer, 2004, Mozambique rural financial service study, USAID, AMAP Publication: microCASE STUDY #1.

Lapenu, C., 1998, Le système financier rural indonésien: Rôle de l'Etat et des institutions privées, Sustainable Banking with the Poor, The World Bank, USA.

Lapenu, C., Fournier, Y., Ichanjou, P. (2003). Potentialités et limites de la caution solidaire. in Exclusion et Liens financiers, rapport du Centre Walras, Economica, Paris.

Lehoux, Karina, 2007, Un modèle qui dépasse l'Afrique de l'Ouest, L'informatisation des caisses de crédit mutuel maliennes, Numéro 36: Services bancaires, ICT Update, Avril 2007, CTA.

Mees, M. , 2006, La microfinance et le financement rural , Zoom Microfinance N°18, SOS Faim Belgique.

PAMIGA, 2007. Efficacité financière et rentabilité des réseaux CVECAS du Mali, Working document PAMIGA.

Paquette, Christophe, 2003, Sistematización de los Aportes de la Sociedad Civil al Desarrollo Local - Microbancos rurales, Mexico, Asociación Mexicana de Uniones de Crédito del Sector Social, Mexico.

Périlleux, A., 2007, Vers une structuration du secteur de la microfinance au Sénégal - Dynamiques de mise en réseau: l'expérience de la FONGS, Zoom Microfinance N°22, SOS Faim Belgique.

Polet Fanny, 2007, Les crédits d'équipement de Kafo Jiginew (Mali): investir au sein des exploitations familiales , Zoom Microfinance, N°23, SOS Faim, October 2007.

Poursat C., Pierret, D., 2007, « Tout d'une grande »: le réseau Sanduk, institution de microfinance de l'île d'Anjouan - Comores, Revue Traverses (forthcoming).

Roberts, R.A.J., 2005, Assurance des récoltes dans les pays en développement, ASB N°159, FAO, Rome.

Robinson, M., 2001. The Microfinance Revolution: Sustainable Banking for the Poor. World Bank.

Servet, Jean-Michel, Morvant-Roux, Solène, 2007, De l'exclusion financière à l'inclusion par la microfinance, Horizons Bancaires (forthcoming, December 2007).

Trivelli, Carolina, Venero, Hildegardi, 2007, Banca de desarrollo para el agro: experiencias en curso en América Latina, Instituto de Estudios Peruanos, Lima, Peru.

Wampfler B, Bouquet E, et Ralison E, 2007, Microfinance et investissement rural: l'expérience de crédit-bail du réseau CECAM de Madagascar, International Conference on Rural Finance Research: Moving Results into Policies and Practice, FAO, Rome, 19-21 March, 2007.

Wampfler B, Doligez, F, Lapenu, C, Vandembrouck, J-P, (2007, forthcoming). Organisations paysannes et microfinance: construire une nouvelle alliance au service de l'agriculture familiale, Un guide opérationnel, IRC, CERISE, Farm.

Wampfler B., Lapenu C., 2002, La microfinance au service de l'agriculture familiale. Résumé exécutif du séminaire international, 21-24 janvier 2001 Dakar Sénégal. Afraca Cirad Cta Mae Enda Graf Fida Cerise. Français / Anglais. Ministère Français des Affaires Etrangères Série « Partenariats ».

World Bank, 2007, World Development Report 2008: Agriculture for Development, World Development 2008, Washington DC.

Wenner Mark, Navajas Sergio, Carolina Trivelli, Alvaro Tarazona, 2007, Managing Credit Risk in Rural Financial Institutions in Latin America, Inter American Development Bank.

Zeller Manfred, 2003, Models of rural financial institutions, Presentation at: Paving the way forward for rural finance. USAID.