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**RURAL FINANCE: RECENT ADVANCES AND EMERGING LESSONS, DEBATES,
AND OPPORTUNITIES**

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Abstract: Twelve key themes covering institutions, products, services, processes and enabling environment are studied in this literature review of rural finance in developing countries. Advances made and emerging lessons are examined for these themes, and the challenges and remaining gaps in knowledge that limit the expansion of the rural finance frontier are identified.

Keywords: Rural finance; Agricultural Finance; Microfinance

JEL Classification: O16; G20; F30



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Key Acronyms

AgDB	agricultural development bank
ASCA	accumulating savings and credit association
ATM	automated teller machine
DFI	development finance institution
GSM	global system for mobile communications
LAB	local area bank
MFI	microfinance institution
MIS	management information system
NBFI	non-bank financial institution
PoS	point of sale
POSB	Post Office Savings Bank
RF	rural finance
RFI	rural finance institution
RTS	remote transaction system
ROSCA	rotating savings and credit associations
SACCO	savings and credit cooperative
SME	small and medium enterprise
SHG	self-help group
WOCCU	World Council of Credit Unions

Executive Summary

Rural Finance: Recent Advances and Emerging Lessons, Debates, and Opportunities

By Geetha Nagarajan and Richard L. Meyer

Rural finance remains very challenging and in developing countries it is generally weak, despite the efforts of donors, governments and private investors to improve it. However, important lessons are emerging from these experiences that provide useful guidelines on how to expand and make more effective the provision of rural financial services.

This report examines these lessons about rural finance. It identifies the recent advances, current debates, major gaps, challenges and opportunities that confront efforts to expand and strengthen it. This review, conducted between June and November 2004, was commissioned by the Ford Foundation's Affinity Group on Development Finance (AGDF)'s Rural Finance Committee. It is based on the latest literature available and on discussions with various donors, practitioners and researchers active in this field.

Throughout this review, the term 'rural finance' refers to the provision of financial services to a heterogeneous rural farm and non-farm population at all income levels. It includes a variety of formal, informal and semiformal institutional arrangements and diverse types of products and services including loans, deposits, insurance and remittances. Rural finance includes both agricultural finance and rural microfinance, and is a sub-sector of the larger financial sector.

We utilize a conceptual framework based on the new rural financial paradigm that considers rural populations as bankable through effective institutions. The desired goals for rural financial institutions include maximizing outreach and achieving sustainability in order to make the great-

est possible impact on the lives of rural people. These goals are achieved through advances made in different types of institutions, products, services, and processes in response to the information, incentives, and contract enforcement barriers that hinder financial transactions in rural areas. These advances are nurtured by a good enabling environment, consisting of sound policies and supportive institutions.

Twelve key themes in rural finance

The rural finance literature is voluminous and too broad to study thoroughly in a short period of time. Our conceptual framework, literature review, and discussions with knowledgeable persons guided us to examine 12 key themes that, in turn, helped identify important rural finance issues and important gaps that require further examination. The 12 themes are clustered below according to our framework:

Advances in Institutions

1. Reforming state-owned development banks
2. Member-owned institutions: SACCOs and credit unions; self-help groups
3. Expansion of microfinance institutions (MFIs) into rural areas
4. Informal finance provided through buyers and input dealers via value chains
5. Apex institutions

Advances in products

6. Savings: flexible savings products for smoothing incomes and asset creation
7. Term loan products: housing loans and leasing

Advances in services

8. Methods of risk reduction: crop, livestock, and health insurance for client protection; credit guarantee schemes for expanding outreach and institutional protection

9. Remittance and transfer services

Advances in processes

10. Technological advances to reduce transaction costs and improve information

Outreach and Sustainability

11. Reaching in a sustainable manner both economically active, very poor populations and remote areas with appropriate institutions, products, services, and technology

Enabling environment

12. Advances in regulation, supervision, and legal reforms

This report discusses these 12 themes in detail in order to identify recent advances, emerging lessons and remaining gaps in knowledge.

Several parallel efforts to advance rural finance are currently under way with support from major donors, practitioners, and private investors. Donors tend to support pilot projects that test new and innovative products, services other than credit, and cost-reducing processes to provide financial services to the so-called unbanked. Private investors are more likely to support initiatives that offer increased marketing opportunities, including non-financial products. In general, donors encourage knowledge generation and view widespread dissemination as the key to facilitating greater capacity building. Information technology is increasingly utilized to establish Internet-based platforms to generate and share knowledge. Since rural finance requires large investments, some partnering among donors, practitioners, and the private sector is occurring as a way to leverage scarce resources and make a larger impact in rural areas.

Key lessons learned

Institutions

- The “technology” of reforming agricultural development banks (AgDBs) is well under-

stood, but there is no clear road map for obtaining the political commitment required for success.

- When governments are blocked from using AgDBs as a means to allocate subsidies for economic and political interests, they may seek other channels such as cooperatives, provincial banks, and village or community funds. Therefore, political commitment to reform may need to extend beyond the specific AgDB being reformed.
- There is no assurance that a reformed or privatized AgDB will strive to expand its agricultural and rural outreach aggressively.
- Demand for microfinance exists in rural areas, and the current microfinance technology can be adapted to provide services to rural clients. However, rural operations are expensive and risky, so increasing scale and cross-subsidization with robust, urban operations is often required.
- Local cooperatives such as SACCOs appear to be suitable for remote rural areas if access to external funds is feasible and governed well.
- SHGs that are well connected to formal financial institutions may be used to provide services to the poor in rural areas. However, SHGs located in remote areas and farther from formal institutions have only a limited capacity to grow without receiving continuous support from external sources, especially additional funds and technical assistance.
- Important issues of governance, regulation, and supervision remain to be resolved for SACCOs and SHGs in many countries.
- Trader credit is still very important in rural areas. It is useful to foster greater linkages between traders and the financial and real markets, by developing value chains in rural areas to expand rural finance. Such developments require an enabling environment in which private-sector growth is not discouraged.

- Apex and second-tier institutions have contributed only modestly to rural finance, largely because of the limited retail capacity that exists in most countries.

Products

- A proper balance may be required between urban and rural operations to reduce costs so that good, efficient services can be offered to rural poor.
- Savings products intended for asset building must provide attractive returns in addition to flexibility and easy accessibility.
- Reducing transaction costs is very important for populations that are highly dispersed and that only save in small quantities. Mobile deposit collectors who collect deposits at the savers' doorstep, increased points of sale, and collecting savings during periodic group meetings are effective ways of reducing saver transaction costs. Mobile banks may also reduce transaction costs for financial institutions if they help increase the size of transactions. Also, electronic innovations may help drive down the costs of handling many small transactions in areas where high-tech alternatives are feasible.
- Rural housing finance is still very rare. The experiences of a few housing finance providers indicate that homelessness is not necessarily the biggest problem in rural areas, but there is a demand for expansion and improvements as a means to enhance their assets. A strict focus on the housing niche market might be too risky at this stage; linkages with input suppliers and housing developers must be developed for clients to utilize the loans effectively.
- Leasing may provide a viable financial option for the rural poor and those engaged in agriculture-based enterprises. Leasing may offer fewer options for remote areas, however, because of the high costs of transporting equipment and machinery, and the lack of servicing stations for the leased equipment. Also, the vulnerable poor may seldom require

assets that are suitable for leasing for their income generating activities.

- Leasing products are suitable for individual-based transactions but require a significant down payment or collateral for reducing risks for the lessor. Many legal and tax issues must also be resolved before leasing can become an attractive alternative for loan products.

Services

- Insurance services are important for rural areas, but it is very challenging to provide them to rural clients at an affordable cost without massive subsidization.
- Index-based weather insurance is ineffective and too costly in marginal farming areas and in areas where weather trends are changing.
- Credit guarantees function as a kind of insurance for financial institutions. However, designing sustainable credit-guarantee schemes for rural financial institutions is complicated. Even when they are sustainable and are used to guarantee loans, there is no clear evidence that they do much to bolster aggregate rural lending.
- Training and technical assistance may do more than guarantees to induce lenders to become more involved in serving some under-served segments of the rural market.
- Successful remittance services require listening to the clients to design appropriate products and choosing strategic partners to affect transfers at both sides of the remittance.
- Because remittance operations require a sufficient volume to reduce costs and make profits, using formal international remittance services with service points in both receiving and remitting countries can be safe, cost-efficient, and time-efficient.
- In many Asian and Latin American countries that receive remittances, the supplier market for remittances is generally much more competitive than the market for loan and deposit services.

Technology for reducing transaction and risk costs

- Banks tend to make greater use of information technology in countries where the technology industry is less regulated than the financial sector.
- Electronic banking is not appropriate for all financial institutions, especially in countries with abundant labor supplies. Also, electronic banking may not suit all clients, especially the vulnerable poor. It may provide convenience and security for slightly larger depositors and it may lower the costs for financial institutions, but it may not be relevant for many smaller depositors, especially in rural areas.
- Economies of scale and scope are needed to achieve greater cost-effectiveness in electronic banking.
- To reduce costs of using information technology, it is important to bundle financial services into the physical infrastructure and to widen the client base through strategic partnerships with service providers.
- Credit scoring can be efficient in reducing information costs for financial institutions only when credit bureaus are capable of providing reliable historical data on clients.

Reaching the vulnerable poor and remote areas sustainably

- Currently, rural finance is mostly inaccessible for the economically active vulnerable poor and for populations living in remote areas.
- Member-owned institutions such as autonomous cooperatives and SACCOs can be viable means to serve remote areas, provided they can access external sources for excess liquidity, keep costs low, and achieve good governance.
- The use of mobile banks to reach remote areas is context-specific and depends on the status of security; law and order in rural areas; the availability of good roads for transport; and regulatory issues regarding the collection of savings.

- Serving environmentally sensitive areas may become important, but there is little documentation of successful efforts to date.

Enabling environment

- Collateralized lending expands the scale and scope for rural finance beyond that offered by non-collateralized lending products. It also protects lenders.
- Recognition of movable property and land user rights as collateral will help with secured transactions in rural areas.
- Regulation and supervision of rural financial institutions by an apex body requires skilled staff and involves high costs.
- Self-regulation and peer supervision have not yet proven to be effective, due to inadequate legal backing to enforce compliance with given standards and the power to close insolvent institutions.

Remaining important debates and puzzles

- What is the role of value-chains in examining rural finance issues? Is it an effective analytical approach to identify leverage points for intervention in financial systems, a tool for designing projects for integrated rural development, or both?
- What should donors do to meet their poverty objectives if reformed public institutions do not or cannot sustainably serve many poor households and populations living in remote areas?
- What are the possibilities to expand rural finance, reduce costs, and ensure high loan recovery by creating more wholesaling and retailing partnerships between agricultural banks, farmer cooperatives, commodity associations, and MFIs?
- The push for cost-recovery using market interest rates has often been successful in urban

microfinance. However, will the goodwill and support that MFIs have received from donors and governments continue if they service agriculture and rural areas on a cost-recovery basis that requires even higher interest rates? Can MFIs that compete with existing rural finance institutions (RFIs) survive without subsidization?

- Few member-owned institutions are linked with an umbrella organization such as WOCCU. Why is this? Why are credit unions not the logical legal form for most to strive for, and why are there so few interactions among the member-owned organizations such as cooperatives, credit unions, and SHGs? What are the strengths and weaknesses of these member-owned institutions in serving rural areas, especially the very poor and remote areas?
- Can large countries that have recently become technologically advanced—like Brazil, China, India, and South Africa—leapfrog in rural finance by utilizing their technological edge to counterbalance some constraints due to their size?
- Under what circumstances are non-financial services critical for the rural poor and how can they be supplied efficiently?
- What changes are required in most countries' legal, regulatory, and supervisory frameworks to support financial institutions geared toward serving rural areas by using collateral to secure transactions?
- Can high-risk populations, such as those affected by HIV/AIDS, be insured without subsidization?
- What should actually be expected out impact studies? If impact studies are justified, how can the impact of rural financial services be measured at an affordable cost and in a reliable way? Is there a need for new tools and methods to measure impacts, especially for rural financial services geared toward vulnerable poor populations and remote areas?

Key gaps in recent advances that require further examination

- Under what conditions will technical arguments, technical assistance, and donor conditionality be sufficient to assure successful reform of development banks? Will they only work in countries where a substantial constituency for reform already exists? Would more in-depth, systematic studies of successful and failed reforms contribute to answering these questions?
- Are SHGs substituting or complementing formal finance institutions in rural areas? How can they viably serve remote areas and the vulnerable rural poor?
- How can rural finance institutions, including MFIs and rural banks, successfully serve rural clients subject to the systemic risks of floods, drought, and disease?
- What role should apex institutions play in rural areas? When and under what circumstances should they be introduced in the sequencing of assistance? How can they be designed more effectively to relax resource constraints while simultaneously building capacity?
- What challenges inhibit donors from engaging with traders effectively without creating market distortions?
- What types of institutions are best suited to serving vulnerable poor populations and remote areas? How can financial products be designed to serve remote areas if it is really a problem due to poor products? What are the innovative programs and delivery mechanisms that can viably serve remote areas?
- How can term deposits be offered in rural areas by a variety of institutions? What possible linkages among these institutions might increase and improve the quality of services?
- What roles do remittances and leasing play in asset accumulation in rural areas?
- What types of appropriate information technologies can be developed in rural areas to re-

duce transaction and risk costs?

- What is the feasibility for piggybacking rural finance services with non-financial providers to increase outreach at reduced costs, especially in remote areas?
- How are production and marketing contracts used in value chains being designed and enforced? How is finance handled in these contracts? What can be done to facilitate and ensure small farmer participation? What is the demand for and supply of domestic transfer and payment services especially for small players within value chains?

General suggestions for donors

Knowledge generation and dissemination

- Encourage and facilitate the documentation of emerging best practices in the provision of agricultural and rural finance, and disseminate them broadly to the stakeholder community.
- Encourage research and pilot testing of innovative types of collateral substitutes for the rural sector geared toward helping asset-poor, but economically active, low-income people qualify for loans.
- Encourage rigorous studies based on a sound conceptual base to examine the feasibility of institutions, products, and services for rural clients, especially for the very poor and clients in remote areas.

Operations

- Support experimental designs of financial services for rural areas, and especially to finance populations in remote areas and agricultural production. Options may include creative uses of local institutions including member-owned institutions, community-based organizations, post offices, retail stores and lottery outlets that provide products and ser-

vices other than loans.

- Fund innovative pilot projects that may generate breakthroughs for rural finance. These may include smart cards and credit cards for farmers; rural housing finance in South Africa; index-based crop and livestock insurance in Mongolia; financial extension workers in Uganda; and the Hewlett-Packard experiment with remote transaction systems in Uganda which allows MFIs to electronically capture data on individual clients and groups and creates an electronic identification system for MFI clients..
- Support curriculum development for client education programs.
- Support feasibility studies to assist RFIs in making informed decisions about the adoption of new information technologies.

Advocacy

- Encourage transparency of rural finance institutions by providing incentives to share information and follow industry standards.

In terms of financial services, most rural areas remain underserved, but financial and non-financial service providers are entering the field to expand service provision. In addition to donors, several rural finance practitioners and private investors are now employing advanced technologies to provide innovative products and services more efficiently. However, several challenges remain. One is to develop an enabling macro policy environment that can integrate rural finance into the broader financial sector such that donor funds finance those things that the private sector considers too risky and unprofitable. Others include bridging the digital and information divide for knowledge sharing and enhancement, and extending financial services to remote areas and the economically active very poor to ensure that relatively few economically active clients are left behind.

Several studies now inform our understanding of rural finance. However, many gaps remain. Part of the problem is due to donors' almost universal focus on producing brief, descriptive, state-of-the-art studies and toolkits at the expense of supporting rigorous studies to advance knowledge and develop new ideas for extending the financial frontier. Although these briefs and toolkits help summarize lessons for the donor staff's immediate consideration in the field, they often lack the theoretical and empirical rigor needed to address important issues regarding product and institutional design and to assess more carefully the impact of the ideas being tested. A more balanced approach is needed between supporting short-term summary documents and rigorous longer-term studies.

Rural Finance: Recent Advances and Emerging Lessons, Debates, and Opportunities

By Geetha Nagarajan and Richard L. Meyer

Frontier advances can help overcome the apparent conflict between financial sustainability and social outreach that fuels debate among many donors, practitioners, and academics. They must be undertaken in full cognizance of the physical, economic, social, political, and cultural environment — J.D. Von Pischke (1996)

Section I: Introduction

Rural finance, despite several efforts by donors, governments and private investors to improve it, still remains very challenging and is generally weak in developing countries.¹ Lessons are, nonetheless, emerging from past and continuing efforts to learn about how to effectively provide rural finance.

This report discusses recent advances, lessons, and current debates in rural finance in order to identify major gaps, challenges, and opportunities for donors to engage in the field. This review was commissioned by the Ford Foundation's Affinity Group on Development Finance (AGDF)'s Rural Finance Committee. It was conducted between June and November 2004 and draws on the latest literature available as well as on discussions with various donors, practitioners, and researchers active in rural finance.

We refer to rural finance as the provision of financial services to a heterogeneous, rural, farm and non-farm population at all income levels through a variety of formal, informal, and semiformal institutional arrangements and diverse types of products and services, such as loans, deposits, insurance, and remittances. Rural finance includes agriculture finance and microfinance and is a sub-sector of the larger financial sector.

¹ Rural finance (RF) is generally weak around the world but regional differences exist. Regional background papers prepared at the World Bank for a project titled "Reaching the Rural Poor" identified the following factors inhibiting the efficient provision of RF in specific regions (Steel and Charitonenko, 2003): inadequate physical and financial infrastructure to penetrate rural areas (especially in Africa); weak institutional capacity of RFIs due to poor governance and operating systems and low skills of managers and staff; low business and financial skills of potential clients (especially in Latin American and Caribbean countries); policy constraints on financial and agricultural markets that limit profitability of both RFIs and their clients (especially in Africa, South Asia, East Asia, and the Pacific); dominance of state-owned banks operating on non-commercial principles (especially in East Asia, the Pacific, the Middle East, and North Africa)

Gaps exist between supply and demand for rural finance in several developing countries. An inefficiency gap between the potential supply and current achievements, an insufficiency gap between legitimate demand and potential supply, and a feasibility gap between political expectations and legitimate demand are common (Gonzalez-Vega, 2003a). Several factors contribute to these gaps and challenge the efficient functioning of rural financial markets compared to urban finance. At the macro level, these factors include urban-biased policies manifested in restrictive agricultural price policies for inputs and outputs and financial policies such as interest rate controls and usury laws. As a result, the returns earned on rural investments are often low. Moreover, subsidized and directed credit policies

Box 1: Challenges to Rural Finance

- Dispersed demand
- High information and transaction costs
- Weak institutional capacity
- Crowding-out effect due to subsidized and directed credit
- Seasonality
- Farming risks
- Lack of usable collateral

Source: CGAP Donor Information Resource Center, 2004 (www.cgap.org)

implemented in many countries undermine and crowd out efficient rural financial institutions.

Supplying rural finance is often perceived as more difficult than supplying urban finance for several reasons. Miller (2004) classifies the constraints faced in rural finance as (i) vulnerability constraints, including systemic, market, and credit risks; (ii) operational constraints due to low investment returns, low investment, low asset levels, and geographical dispersion; (iii) capacity constraints including infrastructural capacity, technical capacity and training, social exclusion and institutional capacity; and (iv) political and regulatory constraints, such as political and social interference and regulatory framework. These constraints translate into the challenges listed in Box 1.

Clients for rural finance are more dispersed than urban clients due to lower population densities. They often demand relatively small loans and savings accounts, so per-unit transaction costs are high for financial institutions. Information costs for providers and users are higher because the rural transportation and communication infrastructure is usually less developed.

Furthermore, rural incomes are subject to seasonality, and involve a slow turnover of economic activities that are risky. Agricultural loans are usually perceived as being less sound because of the production and marketing risks involved. Moreover, in rural areas many non-farm and off-farm activities are invariably linked with farm activities.

Therefore, non-farm and off-farm households are also subject to many risks that affect the agriculture sector, and this creates covariance in incomes. Although rural households engage in a variety of enterprises, the concentration on similar, agriculturally related activities within restricted geographic locations results in high covariance of farm household incomes. Formal insurance mechanisms are generally absent to mitigate these risks, and informal insurance is inadequate to manage systemic risks arising from covariant incomes (Conning and Kevane, 2004). As a result, local financial institutions are vulnerable to localized disasters.

In general, many rural clients have little acceptable loan collateral, either due to lack of assets or unclear property rights for the assets they do possess. Underdeveloped legal systems in rural areas are incapable of recognizing marketable property rights resulting in weak collateral and inadequate contract enforcement mechanisms.

Inadequate regulation and supervision of financial intermediaries, limited lobbying power among the rural poor, weak governance, corruption, and other political factors also limit the provision of rural finance (Yaron, Benjamin, and Piprek, 1997). Opportunities still exist for expanding the frontier of finance in rural areas, however, because of the high demand for financial services, the high level of social capital and collateral substitutes that are proxies for marketable physical collateral, and the informal mechanisms used to enforce contracts (Von Pischke, 2003). These factors can be effectively utilized to manage many of the challenges posed by geography, economic activities, and risks inherent in rural areas.

Efforts to improve rural financial services have continued despite these challenges, and lessons are emerging on how to sustainably advance the rural finance frontier. Beginning in the 1990s, new approaches to rural finance were implemented and they have identified some of the essential requirements for establishing a well-functioning rural financial system. With assistance from donors, governments, and private investors, some rural financial institutions are now developing innovative ways to design and offer diverse types of products and services to rural clients. Rural financial institutions are also connecting with the real sector through strategic alliances and linkages and are becoming more integrated into the larger global real and financial sectors.

This report is organized as follows: In the next section, we first discuss the recent advances in rural finance paradigms and approaches as well as some major donor strategies. We then use the concepts to develop a framework called the Triangle of Rural Finance and identify the twelve key themes that emerged in this literature review, each of which demands attention in order to advance rural finance. In section three, we discuss each theme in order to

draw lessons and identify remaining gaps for further learning. In section four, we discuss selected efforts by major donors to advance rural finance research and projects and suggest areas for future donor support.

Section II: Evolving Paradigms and Analytical Approaches

This section first summarizes the developments that have occurred in rural finance paradigms and analytical approaches utilizing the results of our literature review. These developments, in turn, inform a conceptual framework that guides our subsequent analysis of recent advances, lessons, and debates in rural finance. The section concludes by identifying twelve key themes that, in our judgment, demand attention in order to advance rural finance.

Several paradigms and policies have been used in developing countries to address the especially difficult and costly problems of providing financial services in rural areas. The old rural finance (RF) paradigm dates back to 1960s and 1970s. The new RF paradigm, based on lessons from the old paradigm and new views linked to the financial systems approach, emerged in the late 1980s and gained a broader consensus in the 1990s. Microfinance activities, starting in the 1970s, contributed to the evolution of the RF paradigm. The microfinance approach that typically worked well in urban and densely populated rural areas among non-farm enterprises and households continues to evolve as attempts are made to extend it into rural and remote areas and to farm households. In doing so, it has contributed to the emergence of a new rural finance paradigm.²

A. The Old RF Paradigm

The 1960s and 1970s ushered in a plethora of rural credit projects around the world, especially in Asia and Latin America. These projects were premised on the recognition of the special costs and risks — assumed to be involved in RF — that made formal financial institutions reluctant to expand into rural areas. A rationale was developed, therefore, that urged governments and donors to intervene in rural financial markets. Five main types of interventions were advocated under the paradigm: lending requirements and quotas on banks and other financial institutions, refinance schemes, loans at preferential interest rates, credit guarantees, and targeted lending by development finance institutions (DFIs). Rather than rely on financial institutions to use market mechanisms to mobilize savings and allocate resources, interventions were used to target credit for specific purposes (Adams, Graham, and Von Pischke, 1984; Meyer and Nagarajan, 2000; Meyer and Larson, 2002).

These RF programs were expected to promote agricultural development. The interventions were intended to increase rural lending by reducing the costs and risks to lenders that made loans to preferred rural clients and sectors.

² For more discussion of these developments, see Meyer and Nagarajan (2000).

Subsidized interest rates, loan waivers and forgiveness programs were also used to reduce the debt burden of priority-sector borrowers, especially following floods, droughts, and periods of low farm prices. Credit was considered an important means to speed agricultural development, expand exports, promote small farmers, reduce poverty, and ensure cheap food supplies to urban areas. Multilateral and bilateral donors invariably supported the approach taken by many governments and funded many of the targeted supply-led projects.

This approach helped some developing countries, especially in Asia, to improve agricultural yields in the short-term. But it was costly and unsustainable over the long term, and it failed to reach the majority of rural households. The few positive benefits were unable to achieve the intended objectives of increasing rural incomes, stimulating

Box 2: Lessons from Following the Old Paradigm

- Systematically including all types of households, both farm and non-farm, in rural areas is essential.
- Rural finance should dovetail with other rural economic development activities, since finance often “follows” rather than “creates or leads” development.
- The enabling environment for RFIs can be enhanced through supportive policies and institutions, such as regulatory and supervision systems, judicial systems, collateral registries, and credit bureaus.
- Easing restrictions on interest rates is necessary but not sufficient to create efficient RFIs. All contract terms and conditions (such as term structure, interest rates, collateral, and contract enforcement mechanisms) should be evaluated to account for their interaction effects.
- Strong, new financial institutions should be built — and weak ones should be restructured or liquidated — in order to efficiently expand rural outreach and serve rural areas in a sustainable way.
- Savings mobilization, insurance, and remittance services are important for rural people and need to be developed.
- Commercialization and competition need to be encouraged to expand outreach, and
- Interest-rate subsidies provided directly to clients should be eliminated, while subsidies for developing institutional infrastructure and the capacity of financial institutions may be useful in developing financial systems.

asset formation, and reducing rural poverty. The focus on lending only for agricultural purposes ignored the potential benefits of supporting growth-intensive investments more appropriate for the rural poor or small, off-farm rural enterprises. In many cases, costly bailouts of state-owned agricultural credit institutions undermined the development of private, for-profit, rural financial institutions. Most governments invariably used RF for political objectives and underestimated the difficulties, costs, and risks of supplying sustainable rural financial services.

The majority of the RF programs that followed the old paradigm failed. Subsidized interest rates did not cover costs, so rural financial institutions (RFIs) were unviable and they lost the confidence of depositors. There was a huge build up of nonperforming loans since cheap credit encouraged unprofitable investments and led to a concentration of loan portfolios in the hands of the rich and powerful. Subsidized agricultural credit often resulted in production inefficiencies by targeting the wrong products and creating artificial preference for capital-intensive investments that “crowded out” abundant labor in rural areas. In some cases borrowers intentionally defaulted because they believed that governments would waive or forgive their loans or not take action against defaulters in priority sectors. Financial discipline was damaged and intermediaries weakened. Several development finance institutions

became insolvent and were closed or had to be recapitalized, in some cases, many times. Refinance schemes discouraged savings mobilization and financial intermediation. Since donors and governments provided most of the funds used by RFIs to channel subsidized services, deposit mobilization was largely ignored. The costly lessons learned from following the old rural finance paradigm are listed in Box 2.

B. The Microfinance Revolution

In the late 1970s, major criticisms of the old RF paradigm crystallized, and semi-formal microfinance providers such as NGOs and credit unions emerged. They targeted the unbanked poor, who had been left out by the huge investments made in financial market development. These microfinance institutions (MFIs) eventually revolutionized traditional views by showing that that poor are bankable, but that the standard banking technology fails to serve them. Indeed, these MFIs modified the informal lender technology found in rural and urban areas with respect to interest rates, collateral, and collection methods. Their efforts gained momentum during the 1980s and solidified by the 1990s with the documentation of generalized best practices. Today the microfinance revolution continues to evolve in key areas, such as the development of new products aimed at serving wider and deeper markets; commercialization to find alternative sources of funds other than donors; use of improved technology to reduce costs; and alternative methods of regulation, including self-regulation, to discipline the sector.

To date, most MFIs, especially the new and small ones, offer only microcredit. A typical microloan is very small and made for a short term at interest rates higher than most commercial bank rates. These loans are often secured only by peer guarantees but some MFIs also accept as collateral household goods and other assets of high value to their clients. Loan payments are collected frequently to ensure close client monitoring. Incentives are built-in, and clients who maintain good repayment records are rewarded with larger (almost automatic) repeat loans. For some lenders, the size of the first and repeat loans is set according to a pre-determined formula. These techniques stand in sharp contrast to the old paradigm's agricultural credit projects, which often made large and long-term loans primarily to finance agriculture activities based on collateral. The successful performance of several MFIs helped shape the development of the current RF paradigm.³

³ Significant work is still required, since most MFIs are still small, and depends on donors and governments for support and subsidies.

Current microfinance technology is best-suited for extending small, short-term loans to enterprises with quick, high returns; as such, it is not perfectly suited for many rural clients. Moreover, the rural poor demand a variety of financial services other than credit. Therefore, MFIs currently represent only a relatively small share of the total rural financial services in most countries. Their share is expanding as many experiment with ways to expand credit, savings, insurance, and remittance services into rural areas. They are also among the most innovative in striving to serve the poorest and populations in remote areas.

C. The New RF Paradigm

A new RF paradigm began to emerge in the late 1980s and gained momentum in the mid-1990s. It is based on lessons from the old paradigm and the emerging microfinance revolution, but is still being fine-tuned as new information becomes available. The new paradigm reflects a financial systems approach, using market principles to deliver financial services aimed at facilitating rural development that, in turn, promotes asset creation and poverty reduction. The new paradigm treats finance as a valuable way to expand and integrate markets, rather than as a policy tool targeted for specific market segments. Efficient financial markets are expected to increase the productivity of the available factors of production and to improve inter-temporal resource allocations and management of risks. Therefore, proponents of the new paradigm propose that finance should not be controlled or redirected to pursue non-financial goals but needs to be promoted to achieve desired development (Gonzalez-Vega, 2003a).

The new RF paradigm is based on the principle that a commercial, market-based approach is most likely to reach

Box 3: The New Rural Finance Paradigm

The new RF paradigm advocates a financial systems approach that emphasizes three strategic priorities in developing rural financial markets (Gonzalez-Vega, 2003b; Zeller, 2003):

(i) Creating a favorable policy environment, including macroeconomic stability as well as a reduction in the historical bias against the rural sector;

(ii) Strengthening the legal and regulatory framework, including improving the legal basis for secured transactions, and adapting licensing requirements and regulation so that a few, well-performing RFIs can legally provide a variety of financial services, not just credit, to low-income households and their microenterprises; and

(iii) Building the capacity of RFIs to deliver demand-driven credit, savings, and insurance services in a self-sustaining manner

The new RF paradigm also recognizes that financial services may need to be augmented by (Steel and Charitonenko, 2003):

(i) Complementary investments that help rural populations build assets and skills by developing economic and social infrastructure at the community level;

(ii) Social intermediation to facilitate formation of solidarity groups or cooperatives and to build social capital:

(iii) Training in both technical and management skills; and

(iv) Supporting business-development services

large numbers of clients on a sustained basis. It recognizes that financial services are part of an interactive system of financial institutions, financial infrastructure, legal and regulatory frameworks, and social and cultural norms. Government has a role to play in establishing a favorable or “enabling” policy environment, infrastructure and information systems, and supervisory structures to facilitate the smooth functioning of rural financial markets, but it should play a more limited role in direct interventions.

D. Approaching Rural Finance: Clusters and Value Chains

Currently, there is considerable interest in using the value-chain approach to study rural finance. The relevance of this approach to rural finance arises from the observations that integrated operations are emerging between real and financial sectors to facilitate the smooth flow of commodities and services from producers to consumers within the activity clusters or sub-sectors.

The value-chain approach (some times referred to as supply chain analysis) originally emerged as an important tool to study the new production and marketing relationships that have evolved due to economic globalization and the commercialization of agriculture, both of which have penetrated rural areas in most developing countries.⁴ The value-chain approach considers economic activities, clusters, and sub-sectors as a continuous chain with value addition at each successive link. It helps analyze the value added by actors involved at each chain link related to the rural economic activities and clusters of activities that convert raw materials into finished products and market them (Fries and Akin, 2004; Gereffi, 1999; Kaplinsky and Readman, 2001; UNIDO, 2002).

The value-chain approach effectively incorporates different types of coordination and governance arrangements among the various actors involved in the cluster. It also incorporates the macro-environment in the analysis of decisions regarding product design, production process, technology, quality standards, and quantity produced. There are buyer-driven chains and producer-driven chains (Gereffi, 1999). Chains can be linked by such joint actions as: (i) vertical linkages, including backward ties with suppliers and subcontractors and forward ties with traders and buyers; (ii) bilateral horizontal linkages between two or more local producers, including the joint marketing of products, joint purchase of inputs, order sharing, common use of specialized equipment, joint product development, and exchange of know-how and market information; and (iii) multilateral horizontal linkages among a large number of

⁴ For example, the growing prominence of supermarkets in major cities has changed the way products are sourced from rural areas. These changes often require capital-intensive investments. As a result, changes are occurring in farm production systems, distribution channels, financial markets, and the use of information technologies in the food industry (Dries, Reardon and Swinnen, 2004; Reardon and Berdegue, 2002; Weatherspoon and Reardon, 2003).

local producers, including cooperation in business associations and business development service centers (Pietrobelli and Rabelotti, 2004). The approach is used to identify possibilities for upgrading the process, product, functions, and the sector (Schmitz, 2004). The value-chain approach also considers social capital that shapes the nature of interactive relationships among various players involved with a cluster.

Rural finance can be effectively examined for a specific cluster or sub-sector using the value chain approach (see Box 4). Several users of this approach consider the development of sound financial systems as one of the important components that facilitate the smooth flow of commodities from producers to consumers. They explore financial flows within the value chain among the chain participants and potential linkage between chain participants and external finance suppliers such as financial institutions to improve the growth of the chain or cluster. For example, Nagarajan and Meyer (1995) showed how access to external and internal finance to value-chain actors in Gambia importantly shaped the flow of fertilizer through various channels ranging from private traders to NGOs to foreign firms. Agents with good access to all types of finance were vertically integrated, while those with less access operated in spot markets. In turn, different types of coordination mechanisms had implications for the access and costs of fertilizers to small farmers (for other examples, see Kula and Farmer, 2004 in Mozambique; Nagarajan et al., 2005 in India).

The value-chain approach, however, is still evolving. While it may serve as a valuable tool to examine rural financial flows in order to identify intervention points and methodologies, there is danger in using it as a development approach to promote targeted clusters or sub-sectors in isolation and ignoring the development of integrated marketing and financial systems for other rural activities.⁵

⁵ Based on a conversation by co-author Nagarajan with Professor Hubert Schmitz, December 2004 in New Delhi. Some donors, such as the World Bank, appear to consider the flow of finance through value-chain actors for high-value crops as a way to improve competitiveness and, more importantly, as a more appropriate, pro-poor approach to rural finance. In short, financing through the value-chain actors compared to formal financial institutions is considered an effective means to deliver financial services (see World Bank 2004c).

Box 4: Examining Rural Finance within the Value-Chain Approach

In a value chain, developments in enterprises and the financial sector complement and build on each other. Enterprises and financial service providers are analyzed as links in a larger system or chain that delivers goods and services to local, regional, and global markets. Therefore, the new RF paradigm can be embedded within this framework of analysis to examine the role of finance and the modes in which financial transactions at different links of the value chain occur to effect a smooth functioning of the clusters. As a result, value-chain analysis can function as an additional analytical tool to expand the study of the flows and importance of rural finance for a cluster.

In our judgment, the value-chain approach is an additional tool in the toolkit of methods used to examine rural finance issues from both supply- and demand-side perspectives. It can help identify interventions that advance rural finance, as well as gaps and opportunities for improvements in outreach, sustainability, and impact for specific clusters and sub-sectors.

There are now several debates emanating on the role of value-chain financing. Some state that the value-chain financing complements the financial systems approach to rural and agricultural finance. They may imply that value chains are another way to improve access to rural finance (Chalmers et al., 2005). Value-chain financing is now being tested under various contexts (see for example, Kula and Farmer, 2004 in Mozambique; Pietrobelli and Rabelotti, 2004; World Bank, 2004c). These studies may help in understanding if and how the tool may be used in designing rural finance strategies. Such studies will also help to determine whether (i) the value-chain financing is separate from the financial systems approach as an analytical tool; (ii) value chains and financial systems are ways to deliver financial services; or (iii) the financial systems approach embeds essential aspects of value-chain financing in an integrated approach to study specific sub-sectors.

E. Current Donor Strategies for Rural Finance

Donors have played a huge role in contributing to the evolution of RF paradigms. Several donors have always included rural finance in their funding for rural and economic development. However, donor support for analysis and experimentation in rural finance declined between the mid-1980s and late 1990s due to the colossal failures of most of the early RF programs. As a result, donors seldom supported large, stand-alone RF projects during this period.

Nonetheless, donors continued to support rural finance during this period by encouraging microfinance, which has had a profound influence on the new rural finance paradigm. In the mid-1980s, a few donors assisted in the successful restructuring of specialized agricultural development banks, leading to the provision of finance to large numbers of rural clients on a profitable basis (e.g., Indonesia and Thailand). Donors also helped by applying microfinance methodologies that were emerging from a variety of practitioners around the world (Committee of Donor Agencies, 1995; Rhyne and Otero, 1994).

Donors also continued to help improve the macroeconomic and policy environments in developing countries. These efforts included structural adjustment programs and support to a growing number of nongovernmental organizations (NGOs), networks of savings and credit associations, and other MFIs. These efforts sought to achieve substantial improvements in MFI outreach and self-sustainability. Also, components related to rural finance were embedded into rural infrastructure development projects and these indirectly contributed to rural finance.

The persistence of rural poverty and income inequality between urban and rural areas has renewed the donor community's interest in rural finance. Many multilateral and bilateral donors are currently working to strengthen rural finance with a variety of instruments, including loans, grants, guarantees, and technical assistance.⁶ Lessons appear to have been learned in donor organizations (at least at the advisor level) from the results of the old-paradigm programs. These lessons focus on such major areas as the importance of pro-rural policies that improve the climate for developing rural financial markets, strong institutions, pricing of financial products and services to cover costs, capacity building for retail services, and donor coordination.

Currently, a consensus appears to exist among all major donors in supporting the new RF paradigm that emphasizes increasing the impact of financial services by building diverse types of sustainable financial institutions with a large outreach. Several donors also appear to be concerned about improving the efficiency of rural financial markets by reducing transaction costs and risks. Institutional development and innovations are generally being encouraged and funded, and new institutional arrangements and product types are being supported to help expand sustainable outreach to the un-banked in rural areas.

Our review of the strategies of major donors supporting rural finance shows that they focus on:

- creating and fostering a proper enabling environment
- improving the financial infrastructure
- building financial institutional capacity, and
- strengthening the capacity of rural clientele to access financial services

⁶ Donors support rural finance projects using a variety of instruments, ranging from loans to grants. The World Bank, for example, supports rural finance through investment and development policy loans, some grants, and guarantees and risk management products. Investment loans are made for five to 10 years for projects including institution building, social development, and developing the public policy infrastructure needed to facilitate private-sector activity. Projects related to rural finance are generally tucked under rural development projects initiated for formalizing land tenure to increase the security of small farmers. Development policy loans provide quick-disbursing external financing to support policy and institutional reforms and typically run for one to three years. They are generally focused on facilitating the enabling environment, which includes legal, judiciary, and regulatory reforms; privatization; encouraging public-private partnerships; and mitigation of short-term adverse effects of adjustment through the establishment of social-protection funds.

Institutional design, product design, and implementation issues are emphasized in several RF projects. Depending on their mandate and comparative advantages, donors tend to support selected areas that can help improve rural finance. In order to guide their rural finance interventions, almost all types of donors now have developed a comprehensive strategy following the new RF paradigm. Several of the donors' strategy documents are available on their Web sites, which promotes transparency.

The Ford Foundation drafted its approach to RF in a normative statement on development finance and economic security in March 2003. Rural finance is considered to be part of development finance. The foundation considers development finance to be an important component of its efforts to reduce poverty and build the financial, natural, social, and human assets of low-income individuals and communities. The foundation seeks to enhance the ability of low-income people to create, control, and maintain financial assets, such as savings, investments, and the equity in their homes and enterprises.

The World Bank's approach was first detailed in a 1997 strategy paper on rural finance, "Rural Development: From Vision to Action," and was operationally reinforced by its July 1998 issuance of Operational Policy (O.P.) 8.30 and Bank Procedure 8.30 on Financial Intermediary Lending (Steel and Charitonenko, 2003). In 2002, as part of a new Rural Development Strategy to reach the rural poor, the Bank further refined its strategy regarding rural finance activities. Strategic priorities for the expansion of rural finance now include: (a) fostering a more suitable enabling environment for the provision of financial services; (b) supporting the development of efficient, viable financial institutions and products; and (c) promoting investment in social and economic infrastructure to improve financial management skills and business. Rural finance lending at the Bank in recent years, following the new rural finance paradigm, has supported the creation of an enabling environment and promoted institutions providing small loans and saving services instead of financing lending operations for large rural and agricultural enterprises. The Bank is now examining rural-finance interventions appropriate for diverse contexts (World Bank, 2004a).

The Consultative Group to Assist the Poorest (CGAP), formed in 1995 as a consortium of 26 major donors (and housed at World Bank headquarters in Washington, D.C.), now leads the microfinance industry in following the financial systems approach. It facilitates capacity-building and encourages innovations that can lead to the development of sustainable, efficient and transparent MFIs that can reach large numbers of un-banked poor in rural and urban areas to make a lasting impact on their lives. CGAP has extended its focus to rural finance with an emphasis on microfinance for rural clients. Several field notes are being prepared based on case studies of rural-finance prac-

tices⁷. A recent CGAP publication explores the intersection of lessons from microfinance and traditional agricultural finance to help develop a set of best techniques and strategies to expand agricultural microfinance. The authors state that valuable lessons can be gained since microfinance organizations have traditionally managed risk very well, while traditional agriculture lenders have developed specific products that respond well to cash-flow cycles and marketing relationships of farming communities (Christen and Pearce, 2005).

In 1996, the Food and Agriculture Organization (FAO) and the German Society for Technical Cooperation (GTZ) launched a joint initiative, "Agricultural Finance Revisited," to analyze the specific challenges of agricultural finance and weigh the impact of the current rural financial market approach and microfinance technologies on the provision of financial services for farm and off-farm production (see FAO and GTZ websites). A subsequent series of publications reflects the status of rural finance around the world (Klein et al., 1999). GTZ also collaborates with KfW, the development bank in Germany, to provide technical assistance to microfinance and rural-finance institutions, primarily to strengthen linkages among institutions.

The International Fund for Agricultural Development (IFAD) has also developed a policy paper on rural finance, placing special emphasis on women and rural poor (IFAD, 2000). It also collaborates with CGAP to support innovations and gather best practices in rural finance (through the Rural Pro-Poor Innovation awards) and funds many finance projects in the field.

The Inter-American Development Bank (IADB) seeks to promote efficient and sustainable rural financial intermediation through systematic efforts to (a) create a favorable policy and legal environment; (b) develop financial retail capacity; and (c) promote other financial services (such as warehouse receipts, credit cards, leasing, and insurance) in markets where the first two elements are well advanced (IADB, 2001).

The Asian Development Bank (ADB) has no established strategy for rural finance, but it promotes microfinance as a means to develop rural financial markets. Its microfinance approach is detailed in "Finance for the Poor: Microfinance Development Strategies" (ADB, 2000).

⁷ As of this writing, we have been unable to obtain the drafts of these studies in order to evaluate how they might affect future opportunities for donors.

The African Development Bank's (AfDB) "Policy Guidelines for the Rural Financial Sub-Sector" provides operational guidelines to facilitate rural financial intermediation by supporting bottom-up, demand-driven microfinance and rural finance schemes aimed at assisting the poor and vulnerable groups of society.

USAID has emphasized rural and agricultural finance as reflected in a conference, entitled "Paving the Way Forward for Rural Finance," it convened with WOCCU and University of Wisconsin in June 2003 in Washington, D.C. Some of the elements it considers important in developing rural and agricultural finance include: an enabling political and legal environment, efficient risk management, appropriate designs for financial institutional, innovation, and improved outreach in a sustainable way. The conference facilitated the sharing of information and experiences among researchers, practitioners, and several donors. The conference set a conceptual framework and vetted it with practitioner input. There is a clear need for donors to follow-up on the valuable outcomes from the conference and develop rigorous studies based on practitioner feedback to test and validate conceptual propositions and evaluate innovations proposed. Many donors, however, tend to stop short of implementing this critical next step.

There is a general consensus among major donors on the factors that make rural financial institutions successful. They insist on developing RFIs that are autonomous; are rural-based, but not specialized only in agriculture; charge market interest rates; engage in true financial intermediation by mobilizing savings; reduce reliance on donor or state funds; maintain quality of the portfolio and record fewer losses; and retain quality staff through staff incentives. There is also consensus on focusing on microfinance to increase financial services to the rural poor.

The strategies followed in implementing rural finance have helped donor organizations streamline their funding choices and modes. Nonetheless, practical implementation difficulties still exist due to a disconnection between the field-level operators and policy-level advisors in several donor organizations. Recent efforts among donors to subject their rural and microfinance programs to peer review is an important step to improve effectiveness, reach consensus on best practices, and take stock of rural and microfinance activities (see www.cgap.org for peer reviews of major donors' programs on rural and microfinance). The recent reviews of about 12 donors showed that several do not fully follow the new paradigm in the design and implementation of their finance projects (CGAP, 2004).

Also, several governments are still pursuing the old paradigm model, in which rural finance policies and services are treated as a policy tool. As a result, slow progress is being made in developing countries in strengthening rural finance.

Several practitioners are taking the lead in implementing RF projects that feature inventive products, services, and processes. For example, established financial service providers and networks — such as the Grameen Bank, BRAC, ACCION, IPC, and WOCCU — are using diverse and innovative methods to reach rural clients. Many of these efforts are funded by donors, but private investors are also entering into rural financial markets through strategic linkages between the real and financial sectors.

Despite renewed efforts to revive rural finance by following the new RF paradigm, the generation of new knowledge through rigorous studies has lagged and pales compared to what was funded 20 to 30 years ago. Although many concise, descriptive briefs and notes are being produced, few in-depth empirical studies are being conducted based on sound conceptual and theoretical principles. As a result, while descriptive studies and toolkits are now widely available to help understand the performance of rural finance and some donor projects, only a few new studies have appeared that help build an improved understanding of the constraints and opportunities facing rural finance. It is difficult to derive general lessons from isolated case studies that describe a specific time and location.

Moreover, some of the recent, rigorous empirical studies have been designed and written for academic audiences rather than for direct use by governments, donors, and policy makers. It is important for donors to help balance the generation and dissemination of knowledge by supporting both short-term studies that synthesize current knowledge and longer-term rigorous studies designed to test important hypotheses and expand the frontier of new knowledge.

F. Our Framework: The Triangle of Rural Finance

Our RF framework, following Zeller and Meyer (2002), can be depicted as a triangle containing an inner circle and bounded by an outer circle (Fig. 1). The three objectives or goals — outreach, sustainability, and impact — are represented by the three vertices of the triangle. The circle inside the triangle represents innovations that push the sides of the triangle outward to achieve these goals. These advances include (i) institutions that effectively adapt to potential constraints and opportunities presented in rural areas, (ii) products and services that help diverse rural clients smooth consumption and incomes, mitigate risks, and accumulate assets, and (iii) processes that facilitate accelerated rural financial and complimentary services at reduced transaction and fixed costs as well as improve transparency, learning, and dissemination of advances.

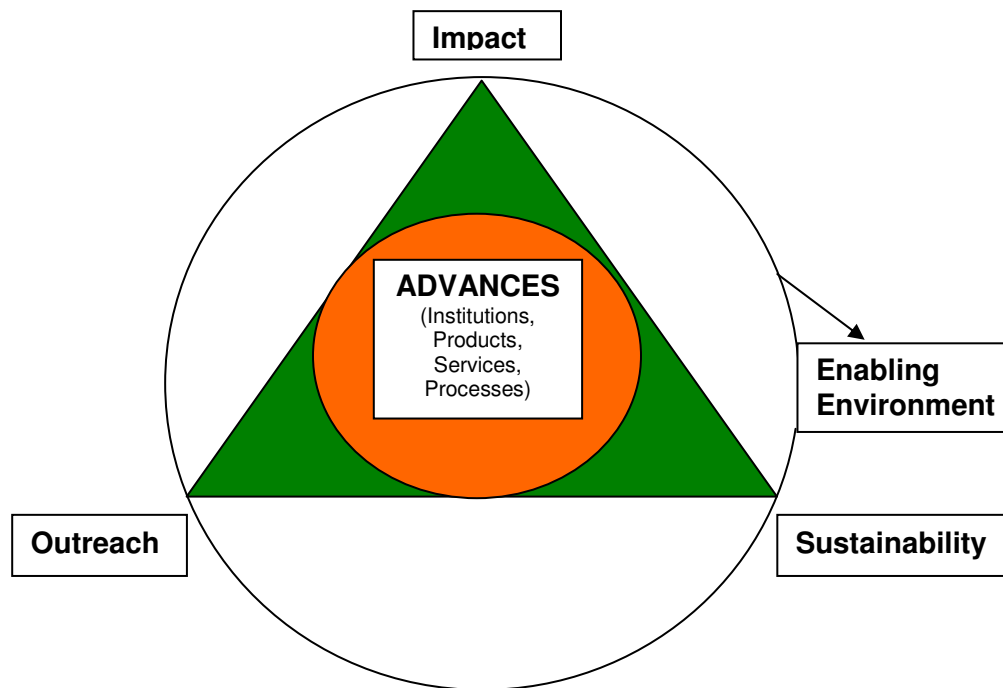


Fig. 1: The Rural Finance Triangle

Source: Adapted from Zeller and Meyer (2002)

Knowledge generation and dissemination is an important part of advancement. However, investments are required to modify old structures and develop, transfer, and adopt new technologies. Efforts to achieve the three objectives, however, are constrained by the external enabling environment, which is depicted by the outer circle. This environment includes such diverse factors as laws, rules, and regulations and the human capital of the rural population. New advances in institutions, products and services, processes, and the enabling environment improve the performance of financial markets, resulting in greater success in achieving the desired objectives.

There is no set formula for developing rural finance, and no preferred recipe for coordinating institutions, products, services, and processes. These factors are specific to each situation, and the varied conditions found in rural areas calls for a diverse set of technologies. These include microfinance, commercial banking, and indigenous, informal technologies that are adapted to serve rural populations based on opportunities and challenges. Experimentation in diverse contexts for fine-tuning technologies is required. However, this work may involve considerable investments that are risky, costly, and require long gestation periods to show results.

Box 5: Rural Finance Triangle Framework

We followed a rural finance triangle framework in this report using the new RF paradigm to present and analyze the latest advances in the field. Our framework rests on the following ideas:

- Rural populations can be bankable through appropriate institutions and with products and services designed for rural conditions.
- Credit is only one of the financial services demanded by rural clients.
- The desired goals for rural financial institutions include maximizing outreach and achieving sustainability in order to make the greatest impact on the lives of the rural clients.
- Advances in institutions, products and services, and processes to produce and market financial services are required in order to effectively respond to the information, incentives, and barriers to contract enforcement that hinder financial transactions in rural areas. These advances are nurtured by a good enabling environment, including sound macroeconomic policies.

Donors seem to agree on the interconnectedness and potential synergies among the three objectives represented by the triangle. Synergies between sustainability, outreach, and impact are important for developing client-oriented products and services. Views differ, however, among donors regarding the relative importance of each goal thus altering the shape of the triangle — which can be depicted as equilateral (with three equal sides), isosceles (with two equal sides), or scalene (with no equal sides). The need for non-financial services for overall rural development has led some analysts to believe that trade-offs are required in reaching the three objectives.⁸

The landscape of rural finance encompasses formal, semi-formal, and informal rural financial institutions. These RFIs provide a variety of financial services to diverse types of rural households and enterprises engaged in farm, off-farm, and non-farm activities. RFIs may be regulated or unregulated. They may be owned by external agents, by their members, or by an entire community. They may be providers of financial services exclusively or be integrated into broader development programs.

The demand for financial services in rural areas is not limited to credit. RFIs directly and indirectly provide cash and in-kind credit with short- and medium-term loans and mandatory or flexible savings products. Recently, some RFIs have begun to provide insurance, remittances, leasing, payment, and BDS services — either directly or in partnership with agents specialized in such services. Many suppliers of financial services are actively trying to serve rural areas, but their outreach falls short of the potential demand. Moreover, few RFIs are sustainable and efficient.

Rigorous studies show mixed results regarding the impact of lending on clients. On the one hand, studies in Bangladesh of clients of Grameen and other MFIs show a reduction of poverty (Khandker, 1998). On the other hand, studies conducted elsewhere have shown little or no impact (Coleman, 2001; Hulme and Mosley, 1996).

⁸ See Zeller and Meyer (2002) for a discussion of possible trade-offs and synergies between outreach and sustainability, outreach and impact, and sustainability and impact.

Innovative processes and methodologies are now being tested in order to increase sustainable and efficient outreach in rural areas. These processes are aimed at helping RFIs serve a wider variety of rural clients based on their comparative advantages while reducing the financial risks and lowering the information costs entailed in providing diverse types of products and services.

On the one hand, formal commercial banks using traditional collateral-based banking technology service the high end of the rural market (large farmers, agribusiness) by offering start-up capital, loans for capital investments, working capital and deposit services. Postal savings banks mobilize deposits from all types of rural people. And specialized rural banks, development banks, and agricultural banks combine informal and formal banking technologies to service the lower end of the market and a broader clientele through working capital and investment loans and flexible deposit services.

On the other hand, member-based organizations (including credit unions, farmers and traders organizations, cooperatives, village banks, community-based organizations, and self-help groups) offer small loans and mobilize deposits from their members. Informal lenders, pawn brokers, self-help savings and credit groups, rotating savings and credit groups, and money keepers are accessible to the poorer end of the income distribution. Remittance companies, insurance providers, input dealers, and output buyers tend to serve the market broadly or specific market segments.

RFIs are experimenting and learning to adapt and innovate so that several types of products and services reach the large, heterogeneous rural market. Competition is emerging on the ground. Collaboration among institutions, through linkages and alliances, is beginning to be explored so rural coverage can be increased. There is considerable optimism that rural finance is possible if key challenges can be effectively met.

G. Key Themes in Rural Finance

The literature on rural finance is too voluminous and broad to study in detail. Therefore, we identified 12 key themes to highlight in this report based on our review of the literature and discussions with knowledgeable donors, practitioners and researchers. In our judgment, these themes reflect important advances in the field and reveal important gaps and issues that warrant further examination. The 12 themes (listed in Box 6) are described below within our proposed framework.

Advances in Institutions

- Reforming state-owned development banks to serve rural areas
- Member-owned institutions: SACCOs, credit unions; self-help groups.
- Expansion of MFIs into rural areas Informal finance provided through buyers and input dealers via value chains
- Apex institutions

Advances in Products

- Savings: flexible savings products for smoothing incomes and asset creation
- Term loan products: housing loans, leasing

Box 6: Twelve Key Themes in Rural Finance

Advances in Institutions

1. State-owned development banks
2. Member-owned institutions
3. Microfinance institutions
4. Trader finance
5. Apex institutions

Advances in Products

6. Savings
7. Term Loans

Advances in Services

8. Insurance
9. Remittances

Advances in Processes

10. Technological advances

Outreach and Sustainability

11. Very poor and remote areas

Enabling Environment

12. Regulation, supervision, and legal reforms

Advances in Services

- Methods of risk reduction: crop, livestock, and health insurance for client protection; credit guarantee schemes for expanding outreach and institutional protection.
- Remittance and transfer services: for increased safety, asset creation, and poverty reduction.

Advances in Processes

- Technological advances to reduce transaction costs and improve information.

Outreach and Sustainability

- Reaching economically active, very poor populations and remote areas sustainably: what institutions, products, services, and technologies can be effective?

Enabling Environment

- Advances in regulation, supervision, and legal reforms.

In the next section, we discuss the latest practices, emerging lessons, and challenges under each of the 12 themes.

Section III: Advances in the Field

A. Advances in Institutions

Both retail and wholesale and formal and informal institutions can shape and expand rural finance. We first discuss important developments among rural retail institutions, such as development banks, microfinance institutions (MFIs), member-based institutions (including cooperatives, credit unions, and self-help groups) and informal finance. This is followed by a brief examination of wholesale and apex institutions created to support rural retail institutions.

1. Reforming State-Owned Development Banks

A significant proportion of bank assets in many countries are held in government-owned financial institutions. In addition, guarantees and other government-sponsored interventions are designed to influence credit, savings, and insurance markets.⁹ An on-going study of the IMF found that 22 countries reported 680 state-owned financial institutions that were engaged in banking, insurance, and securities/investments, with commercial banking by far the most significant. A primary difference between state-owned commercial and development banks was that the commercial banks relied mainly on retail deposits while the development banks tended to rely on public funding (Marston and Narain, 2004).

One of the early rationales for state-owned banks was that the government ownership of firms in “strategic sectors” was critical to development and that these firms needed a guaranteed supply of low-cost funding from government banks. A related economic rationale cites the allocation of loans to underserved groups, such as agriculture, small businesses, housing and export finance. This rationale is often heard in response to perceptions of failures in financial markets and political demands; it involves both the redirection of nationalized banks and the creation of new, separate, public-sector development banks to intermediate between foreign lenders and users of long-term credit. Such policies are intended to change the allocation of credit within the market system, but the lack of credit

⁹ For example, in the United States, federal credit programs offer direct loans and loan guarantees for several activities, primarily in housing, education, business, rural development, and exports. At the end of 2001, there were US\$242 billion in federal direct loans outstanding and US\$1.084 trillion in loan guarantees (Marston and Narain, 2004).

also reflects the difficulties of mobilizing deposits and allocating them in countries with repressed interest rates and uncertain legal, political, and economic conditions (Hanson, 2004).

Many specialized agricultural development banks (AgDBs) were set up in developing countries, especially during the 1960s and 1970s, as part of the expansion of agricultural credit under the old paradigm. Like most state-owned banks, these AgDBs generally performed poorly, although there have been important exceptions. Many have been privatized or closed, especially in Africa and Latin America; many others are technically bankrupt but continue to limp along, unable to attract substantial new funding. The loss of rural banking outlets that occurs with closure plus a few successful cases of reform have contributed to a renewed debate about the appropriate strategy for dealing with failing institutions. A conference held on Feb. 25, 2005, at the Inter-American Development Bank contributed to the debate about the public ownership of banks (www.iadb.org/res/publicbanks).

On the one hand, new empirical evidence was offered to suggest that the case against the state-ownership of banks is not as strong as previously thought. On the other hand, there was only limited evidence that such institutions actually play a useful role in development. Moreover, the results presented for privatized institutions did not make a strong case in favor of privatizing state-owned institutions. No separate analysis was presented for state-owned agricultural development banks (Micco and Panizza, 2005; Levy Yeyati, Micco, and Panizza, 2005).

The arguments in favor of AgDB reform have been made most forcefully by IFAD and GTZ. They emphasize the potential these institutions have to serve the rural poor if they implement an appropriate framework of reform. The successful reforms of BRI in Indonesia and the evolution of BAAC in Thailand are given as evidence of the possibilities (Srinivas and Sitorus, 2004; Seibel, 2000). Incomplete data from the FAO AgriBank-Stat suggested that the AgDBs have a total of 87 million savings accounts in 35 banks and 24 million borrowers in 50 banks, excluding China and India. These figures reflect the importance of these institutions and the implicit loss in financial services that would occur if they were closed (Seibel, Giehler, and Karduck, 2004).

Gonzalez-Vega and Graham (1995) argued that AgDBs usually have fatal organizational flaws that require fundamental overhaul, but in a second-best world it may be possible to strengthen them by adding a microfinance component to their portfolio and adopting best practices. They may possess an infrastructure and human and information capital that will permit them to reach a lower income clientele more efficiently than commercial banks or NGOs. Moreover, they may be able to mitigate the consequences associated with rural income covariance through their broad networks and through access to liquidity markets and lenders of last resort.

GTZ used these ideas in its analysis of public banks in five Asian countries (Haberberger et al., 2003; Hiemann, 2003; Steinwand and Wiedmaier-Pfister, 2003). The results suggested that engaging in low risk microfinance activities could help these banks to stabilize their lending operations while undertaking longer-term fundamental reform. They concluded that there was not a lack of knowledge about how to reform but a lack of political will to do it.

A more negative view about the prospects for successful reform was offered by Dale Adams, who has directly advised several reform attempts, in a Development Finance Network posting (Oct. 11, 2003). Based on his experience in Bangladesh, Uganda, Romania, Ecuador, Egypt, El Salvador, Peru, and Trinidad-Tobago, Adams concluded that the highly touted examples of Indonesia and Thailand are special cases that can't be generalized to most countries. He presented four reasons: (1) bloated personnel staffs are difficult to downsize, (2) managers tend to be political appointees with few banking skills and they stay on the job for short periods, which coupled with weak staff result in poor quality financial services, (3) boards of directors are often controlled by agriculture ministries that are more interested in agricultural production and poverty than in an efficient or sustainable bank, and (4) government ownership makes it nearly impossible to keep politics out of bank operations.

The experience of AgDB reform is in fact complicated and heterogeneous. Successful reform appears to be more of an art than a science. Some highlights drawn from the literature are presented here by region and selected institutions.

The Asian region has the widely touted cases of BRI and BAAC but also several white elephant AgDBs (Nepal, Bangladesh, and Pakistan) that continue to drain public resources (Fernando, 1998). The Agricultural Bank of China (ABC) has been restored twice since its inception in early 1970s but it is still struggling with political intrusions that thwart a clear demarcation between poverty loans and commercial operations. As a result, it has been ineffective despite its wide outreach in rural areas (Zhongfu, 2003).

A recent successful Asian reform case was the Agricultural Bank of Mongolia (AgBank, now called XAAH). Analyses of this case points to the importance of political will to reform (Baumann et al., 2003; Boyer and Dyer, 2003; Dressen et al., 2002; Dyer et al., 2004; Grashof, 2002). The government re-nationalized the bank when it was placed in receivership in 1999 following a failed attempt at privatization. The decision about whether or not to simply close it, along with several other failed banks in the country, hinged on its important role in the economy. The government used it to pay 225,000 pensions and 50,000 salaries each month, and it had the largest network of rural branches potentially able to reach underserved markets. In view of its strategic importance, the World Bank made

reform a loan condition and USAID funded an outside management contract with Development Alternatives, Inc. (DAI) to take over management in July 2000 and prepare it for privatization. A key feature of the agreement was that the government agreed to suspend its normal corporate governance and not interfere in operations in any way. This ended the practice of local governments appointing local bank managers and influencing the granting of loans.

DAI designed new loan, deposit, and money transfer products utilizing lessons learned in microfinance. It also upgraded the staff, created a system with greater accountability for managers, and developed simple paper reporting systems. By February 2004, the number of bank offices had grown from 269 to 379, some 900,000 loans had been made with arrears under 2 percent, 90 percent of all loans were made in rural areas, and deposits grew from US\$9 to US\$75 million. More than 350 of the offices were located in the countryside, so the bank reached about 98 percent of the country's rural communities. On March 25, 2004, the bank was sold to H. S. Securities of Japan. DAI purchased 2.3 percent of the shares and the new owners contracted DAI to continue managing the bank. The owners are committed to following the business plan for expanding financial services designed by DAI.

The African region reportedly has examples of successfully restructured state-owned banks in Senegal, Burkina Faso and Mali, but no analysis could be located about them. A more common situation is that many countries in the region resist accepting the new paradigm of development finance, and several attempts at reforming AgDBs have failed. Some existing legal restrictions also keep development banks from reaching sustainability (Bering, 2002; Coetzee and Graham, 2002; Ikpeleu, 2002; Mutunhu, 2002). For example, the Agricultural Finance Corporation (AFC) of Kenya and the Land Bank in South Africa cannot collect deposits (Seibel, 2004).

Tanzania is cited as an African success story. The reform that created the National Microfinance Bank (NMB) there is similar to the Mongolian case, and DAI also has the management contract (Dressen et al., 2002). The NMB grew out of the 1997 separation of the state-owned National Bank of Commerce into two entities. The new National Bank of Commerce (NBC) retained mainly the urban outlets and was eventually sold to a South African conglomerate. The new NMB was allocated the rural network with the objective of setting up retail operations in its 100 outlets. It also processes government payments throughout the country. No buyers were found for the NMB, so with financial assistance from the World Bank, DAI was contracted in 1999 to make it more attractive for investors. The government agreed to assist the bank in making loans to creditworthy clients and in resisting political interference. The transfer products were revamped and loan products were developed for microenterprises, small-scale farmers and employees. These products are being progressively rolled out to the branches. Financial performance has im-

proved, and 2001 marked three years of profitable operations. This performance was realized without closing branches. In 2002, the bank was in the process of privatization.

Northern Africa has lagged behind other regions in attempting to reform AgDBs. Egypt is one exception. Beginning in 1976, the Principal Bank for Development and Agricultural Credit (PBDAC) was made sole agricultural lender and was given a monopoly over the sale of farm inputs. Economic reforms in the 1980s broke this monopoly, so PBDAC was faced with excess capacity and a need to reduce costs, enhance employee skills, upgrade its facilities, switch to creditworthy lending rather than meeting planning targets, and change its image to a client-friendly, modern banking institution. At the same time, there were opportunities to design new loan products for emerging rural non-farm enterprises, and to offer savings instruments attractive to rural people, especially women. The large number of PBDAC staff members who participated in rotating saving and credit associations (ROSCAs) and the many rural people who participated in informal finance even in villages well served by banks suggested there was a demand for better-designed savings products (Baydas et al., 1995).

USAID financed a team to reform and strengthen the bank (Adams and Kamel, 1996). The project trained 3,000 bank staff on cash-flow lending and PBDAC expanded its outreach to small enterprises and clients with little or no collateral. However, when the project ended in 1998, PBDAC rolled back the reforms, quickly abandoned the cash-flow appraisal methods and reverted to the old collateral-based lending system to secure loans. The reversal appears to have stemmed from a lack of conviction and commitment by the management as well as a lack of donor funds needed to continue developing the new methods and products. This attempted reform appears to have been a huge waste of donor funds. An important lesson is that reforms take a long time to work and require long-term commitments from the government, bank management, and donors.¹⁰

Latin America: Some of the most negative experiences with AgDBs have occurred in Latin America. AgDBs have been closed in several countries. There are also cases (like Ecuador) where they continue to operate but provide poor quality financial services and depend on the government for periodic transfusions of resources. Some attempts at reform have failed due to lack of commitment by major stakeholders (Guadamillas et al., 2003). A recent reform creating BANRURAL in Guatemala appears to be more successful, at least in its early stages (Alfaro-Gramajo, 2003).

¹⁰ David Munro, e-mail communication on October 26, 2004.

A new activity of USAID, the Accelerated Micro-enterprise Advancement Project (www.microlinks.org), has compiled information about state-owned retail banks (SORBS). Carried out by DAI, it includes a framework for analysis, a census of banks, some short case studies, and a bibliography. Several case studies are being planned for the next few months that will focus heavily on governance issues, but the resources for each will be limited so no detailed analysis will be done of each institution or its clients. The first case study is expected to be of the Amhara Credit and Savings Institution (ACSI) in Ethiopia. It is a registered MFI that was transformed from an NGO in 1995. Amhara primarily makes agricultural loans using a group-lending methodology and currently serves more than 300,000 clients. The second case study will look at the Land Bank of the Philippines (LBP), an old and large bank that engages in both retailing and wholesaling bank services to many types of rural and urban clients. A third case study may examine Banque du Caire, which was the first Egyptian bank to turn its attention to microlending. By 2004, it was serving more than 70,000 clients. Other case studies may be conducted in later stages of the project (Young and Vogel, 2005).

Several lessons have been identified in the literature concerning the complicated topic of AgDBs.

- Successful reform of AgDBs is possible if key stakeholders are committed to it.
- The “technology” of reform is well understood, but there is no clear road map for obtaining the necessary political commitment.
- Building and maintaining a firewall to protect AgDBs from political interference is essential during and after reform.
- Donor agencies and external advisors and managers have played critical roles in the reform process, in part by fostering the political commitment, designing and implementing the reform, and maintaining the firewall.
- Developing products to serve new clients, such as microenterprises and rural non-farm businesses, has been an important feature of many reforms. This change is consistent with the objectives of diversifying the portfolio and reducing the effects of income covariance, but it frustrates traditional agricultural interests who do not view microfinance as being sufficiently supportive of agricultural or rural finance.
- There is no assurance that a reformed or privatized institution will strive to expand its agricultural and rural outreach aggressively. Following reform, governments and donors may still want to support programs designed to help reformed institutions become more dynamic and support other mechanisms or institutions to serve neglected segments of the rural market.

- When governments are blocked from using AgDBs as a means to allocate subsidies for economic and political interests, they may seek other channels, such as cooperatives, provincial banks, and village or community funds, as in Indonesia and Thailand (Koboski 2004). Such efforts may undermine one of the chief objectives of AgDB reform: to create more sustainable financial services for rural areas. Therefore, political commitment to reform may need to extend beyond the specific AgDB. There also needs to be alternative vehicles for governments to meet their political and economic interests in subsidizing agriculture.

Important puzzles remain about AgDBs:

- Under what conditions will technical arguments, technical assistance, and donor conditionality be sufficient to ensure successful reform? Will they work only if there is already a substantial constituency in the country in support of reform?
- Would more in-depth systematic studies of these reforms contribute to answering these questions?
- How can internal constituencies be built to support and maintain the firewall? Can incentive systems be crafted for bank staff so they become an important constituency to support sustainable operations?
- How can donors effectively monitor post-reform developments in order to protect investments they made in supporting reforms?
- What should donors do to meet their poverty objectives if reformed institutions do not or cannot sustainably serve many poor households and remote areas?
- What possibilities exist for creating effective partnerships and wholesale-retail relationships between agricultural banks and MFIs, farmer cooperatives, and commodity associations that will reduce transaction costs, increase outreach, and ensure high loan recovery?
- Under what circumstances will broadening the range of products offered by AgDBs for the whole agricultural chain (i.e., production, processing, and marketing) improve their sustainability?

2. Microfinance Institutions

MFIs have been innovative in expanding the financial frontier to serve more poor clients. As a result, large numbers of poor borrowers now have access to formal financial services without the collateral normally required by banks. The latest estimate from the Micro-credit Summit indicates that nearly 2,200 microfinance institutions globally reach a little more than 80 million clients, of whom 54 million are considered among the world's poorest (i.e., living on less than US\$1 per day) (Daley, 2004).

Microfinance technology, without a doubt, has relaxed the constraints faced by the poor in accessing financial services due to collateral requirements, size and age of the firms, and gender. Since it is flexible, it can be adopted by diverse types of financial agents willing to serve the poor clientele. Microfinance can also be adapted to rural areas in some developing countries where rural poverty is more acute than urban poverty.

Many MFIs now exist to serve the rural poor. They use several methodologies such as individual and solidarity-group lending and village banking to provide services through a variety of agents including NGOs, non-bank financial institutions, *financieras*, commercial banks, rural banks, village banks, and member-owned institutions. Village banks are more commonly found in rural Latin America than in rural areas of other parts of the world.¹¹

The majority of MFIs, especially new and small ones, offer only microcredit. A typical microloan is small and made for a short term at interest rates higher than banks normally charge. The loans are often secured only by peer guarantees but some MFIs also accept as collateral household goods and other assets of high value to their clients. Loan payments are collected on a frequent basis to ensure close monitoring. Incentives are created for clients to maintain good repayment records by rewarding them with (almost automatic) repeat loans. For some lenders, the size of the first and repeat loans follows a pre-determined formula. These techniques are in sharp contrast with the old paradigm agricultural credit projects, which often made large, long-term loans based on collateral primarily to finance agriculture activities.

There are limitations, however, in the applicability of microcredit technologies for rural areas. First, they appear to be best suited to urban enterprises or rural non-farm households and firms with regular and frequent cash incomes such as found with dairy and poultry. They have yet to be rigorously tested with specialized farmers who have highly seasonal cash flows or for medium- and long-term lending.

Second, transaction costs for the financial institutions and their clients are likely to be higher in rural than in urban areas. The clients are more dispersed so travel costs are higher for loan officers, and it is difficult for them to serve as many clients. Some MFIs reduce transaction costs through group lending, but this raises borrower transac-

¹¹ A recent study at the IADB (Westley, 2004) shows that of the 176 of the largest and most sustainable MFIs in 17 Latin American countries, 47 are village banking institutions and several of them function in rural areas, including remote areas. The percentage of clients residing in rural areas is higher for village banking institutions than for group or individual loan clients. In addition to this greater rural focus, the target clientele of most village banks are very poor microentrepreneurs, virtually all of them are women.

tion costs. Moreover, peer pressure may not be as effective in sparsely populated areas where group members have less information about each other and where peer monitoring is more costly.

A third limitation in microlending is that, except for some urban locations, financial markets for the poor are highly segmented with each microlender usually serving only a small market niche. Like most informal lenders, small MFIs often serve only a local clientele because high information and transaction costs discourage competition and constrain them from rapidly expanding to serve new clients and regions. Being limited to local markets, they have concentrated portfolios with a large covariant risk.

Fourth, most MFIs have paid little attention to providing savings services, but a safe and secure place to deposit savings may be more important than credit for farm households that need to smooth consumption in the absence of insurance markets. Many MFIs obtain their resources from subsidized sources, have little experience in mobilizing savings, and conclude that the cost of mobilizing resources from clients is high by comparison. Almost all developing countries restrict deposit mobilization by MFIs from the public since the majority of the MFIs are unregulated institutions (Gonzalez-Vega et al., 2003).

As a result of these factors, microfinance in most rural areas is limited despite its potential to serve rural clients. Rural areas that are not densely populated, or that are dependent on a few principal crops and livestock activities, have generally been avoided by MFIs because of higher transaction costs and risks. For example, MFIs that expand into rural areas in Latin America tend to serve only areas with diversified economies and clients with multiple sources of income. Examples include Caja Los Andes in Bolivia and Financiera Calpiá in El Salvador (Meyer and Buchenau, 2003).

Many lessons learned from urban-based microfinance are, however, considered relevant for rural and agricultural microfinance. It seems that several similarities exist between urban and rural microcredit technologies with respect to lending methodology, interest rates, and term structure. Some modifications in term structure and slight variations for microcredit in collateral requirements have often proven useful in accommodating rural clients (see Table 1 below). As a result, it is now shown that expanding microfinance into rural areas is possible.

Some innovative MFIs are leading the way in adapting their operations and products to expand viably into rural and agricultural lending. Indeed, in densely populated rural Asia, especially Bangladesh, MFIs have always been active but often limit their clients to those with enterprises with quick turnover and a limited number of standardized

products. There have been problems in developing appropriate products, so some MFIs are now attempting to develop and test flexible products for rural clients (Meyer, 2003; Wright, 2000).

In Latin America, by contrast, MFIs have tended to serve urban areas, but some innovative ones are now experimenting with modifying their products to serve rural areas. This trend is also emerging in Africa, especially in Uganda. Donor support is now available to help existing MFIs with innovative outreach expand into rural areas and agricultural finance. For example, CGAP and IFAD make small grants through the Rural Pro-Poor Innovation Challenge (RPPIC) awards. Since 2000, the program has recognized more than 25 MFIs around the world that are piloting new products and services to reach the rural poor (for a listing, see www.cgap.org/projects/PPIC/ppic.html).

Some MFIs in Latin America are now expanding in rural areas, primarily to find new clientele, reach scale, and compete. PRODEM in Bolivia is one of the largest providers of rural financial services. It researched the market and developed products with donor support, then adapted its range of financial products to better fit the needs of its clients. A customized repayment scheme was introduced for small farmers, with different repayment schedules, even for members of the same solidarity group. For example, soybean farmers only repay the loan principal during periods of income from the soy harvest. Individual agricultural loans have also been offered with collateral valued at 1.5 times the loan amount. PRODEM further minimizes risk by restricting final loan payments to a maximum of 60 percent of the loan amount, and by limiting each office's portfolio to 30 percent in each economic sector (otherwise provisioning has to be increased appropriately). Money transfer, microleasing, and, later, savings products, were also offered. Agricultural lending now accounts for about one-fifth of PRODEM's loan portfolio (Manndorff, 2004).

Another MFI with good rural outreach in Latin America, Calpiá in El Salvador, has been successful largely as a result of its flexibility on timing, amount disbursed, and repayment schedules. With regular bimonthly, trimester, semester, annual, or even end-of-crop-cycle and irregular repayment schedules, loans are sufficiently flexible to be attractive and fit a range of agricultural activities. Calpiá's agricultural lending product treats the farm household as a financial unit (which is typical for those MFIs that provide financing in rural areas) and bases lending decisions on overall repayment capacity (Buchenau 2003; Manndorff, 2004; Meyer and Buchenau, 2003).

In Asia, BASIX in India can be cited as an example of a MFI that provides credit, deposit and crop and livestock insurance in rural areas to farm and non-farm households. This MFI has successfully accessed commercial funds from within and outside the country to expand its rural outreach. It has also developed partnerships with existing institutions to provide insurance services.

Table 1: Comparison of Urban and Rural Microcredit Technologies

Items	Similarities	Differences
Types of contracts offered	Individual, group loan and village banking products are used	No distinction
Range of interest rates	2 to 4 percent per month (cost covering)	Minor distinction, Rural lenders charge slightly less than 4 percent.
Typical terms	3 to 18 months	For the duration of the harvest
Payment schedules	Often weekly or monthly	More flexible and less frequent in rural cases. Set according to household cash flow patterns
Specific characteristics of lending technology	Series of graduating loans, using “terminating incentives”	No distinction
	Short processing time (average loan approval 3 to 21 days for new clients, compared with 2 to 4 months with commercial and state owned banks)	None
	Adequate management information systems (information is used primarily for performance improvement, not donor reporting)	More information is required, due to greater income variability and covariance
	Credit assessment focuses on households as unit of analysis, not on proposed investment projects	Rural microcredit favors households with multiple and varied sources of income
	Decentralized loan approval authority	None
	Staff incentives for productivity and maintenance of asset quality	None
	Frequent monitoring visits	Less frequent monitoring
	Strict control over delinquency	None
	Committed loan officers. All recruits have high-school diplomas, most are pursuing bachelor’s degrees in economics, finance, business, or other social sciences, and some have completed an undergraduate degree in one of the aforementioned fields	Typical recruit has bachelor’s degree in agronomy completed or in process. Intensive training given in financial analysis and accounting once hired. Preference is for recruits without prior lending experience but knowledgeable about assigned region.
	Relationship lending, not transaction-based lending, is promoted. Loan officers seek to cultivate a trusting and long-standing relationship with clients. Loan officers also aim to intimately understand assigned clients’ sectors and particular line of economic activities.	None
Special risk-management techniques	Alternative forms of collateral accepted. For example, post dated checks, liens on equipment and home appliances and cosigners	Increased number of cosigners. Spouse asked to cosign the loan
	Diversify portfolio across sectors. Majority of portfolio is in commerce	Limits exposure to agricultural lending. Most of portfolio content is nonagricultural.
	Limits maximum loan exposure to a single client	None
	Fully provisioned for overdue loans	None

Source: Adapted from Valenzuela (2000)

In summary, the principal lessons for microfinance institutions in rural areas include:

- Demand for microfinance exists in rural areas, and current microfinance technology can be adapted to provide services to rural clients;
- Flexible disbursement and repayment schedules are important for rural outreach, but such flexible terms may increase default risk and present challenges for MFIs in managing liquidity;
- MFIs need to diversify their portfolios with various types of rural and agricultural clients to reduce their portfolio risk;
- Economies of scale and scope are important in reducing MFI costs;
- Partnerships and alliances with existing institutions and infrastructure may facilitate increased outreach and the provision of diverse services at reduced costs;
- Technology can help reduce the higher transportation and communication costs found in rural areas;
- MFIs need to assess client demand using market research to design appropriate products and services;
- MFIs may need to offer financial products other than credit to achieve sustainability. Access to remittance and deposit services can help both clients and MFIs smooth seasonal cash flows and protect against risks;
- Successful MFIs with rural coverage acknowledge that rural operations are expensive and risky, so cross-subsidization with robust urban operations may be required.

MFIs that are successful in serving rural populations appear to follow the same basic best practices established for microfinance (Gonzalez-Vega, 2003b). Their clientele is not concentrated only in agriculture, but is diversified into non-farm households and enterprises. These MFIs address idiosyncratic risks by relying on income diversification strategies of the households. They do not condition loans for specific purposes, they rely on individual and detailed screening and offer flexible terms and conditions to suit household cash flows, and they require higher borrower equity participation to reduce moral hazards. Finally, they assess loan applications not just on average cash flows but also based on cash flows during the worst periods and future forecasts.

The microfinance field is still evolving, and many design questions still need to be resolved to effectively service rural areas on a large scale. For example, rural microfinance must deal with clients subject to the systemic risks of floods, drought, and disease, but relatively little is known about the capacity of MFIs to cope with such adversities. The 1998 floods in Bangladesh and financial crisis in Asia in 2000 created liquidity problems for MFIs. Most have little capital and are dependent on donor or government sources to provide new funds to cover losses and supply

liquidity. Emergency procedures to deal with this problem must be worked out in advance to enable MFIs operating in high-risk areas to plan prudent levels of reserves (Nagarajan and Brown, 2000).

Non-financial services also present a challenge. Financial services alone may not be sufficient for the rural poor, but cost recovery for the provision of non-financial services presents a serious problem. Some rural poor are reluctant to participate in group-based financial activities and a process of social intermediation may be necessary to link them to financial markets.

Many issues require further analysis and experimentation:

- Microfinance has now gained legitimacy with many donors, governments, and private investors. The push for cost recovery using market interest rates has often been successful. Will the good will and support for MFIs from donors and governments continue if MFIs service agriculture and rural areas on a cost-recovery basis? Can the new MFIs compete with existing RFI without subsidization?
- Most MFIs tend to serve clients slightly below and above the poverty lines in urban areas (Chen and Snodgrass, 2001; Dunn and Arbuckle, 2001). Can MFIs be effective in rural areas where poverty is more acute than in urban areas?
- What types of MFI agents and MFI products are effective in remote and thinly populated areas?

3. Member-Based Institutions¹²

Member-based institutions share the characteristic that the members have the responsibility for owning, managing and operating the financial institutions at the same time as they are the main or only customers of those same institutions. When members absorb most or all of the operating costs, they become the most logical choice of institution for expanding the financial frontier to the most distant and costly customer to reach. Often these institutions are built on principles and procedures traditionally used by ROSCAs (Rotating Savings and Credit Associations) and ASCAs (Accumulating Savings and Credit Associations) that are ubiquitous in the developing world.

Member-owned institutions include a variety of forms and operate along a wide continuum of formalization. Many operate informally and exclusively outside of the world of formal finance, others are linked to it such as when self-help groups mobilize savings that are deposited in banks, and others are formal cooperatives or credit unions or

¹² We consider member-based and member-owned institutions to be synonymous in this report.

village banks that are regulated and supervised by specialized federations or regular banking authorities. We discuss below credit unions, SACCOs, and SHGs under the theme of member-based institutions.

i. SACCOs and Credit Unions

SACCOs (Savings and Credit Cooperatives) are found in many countries and are similar to, and often aspire to become, registered credit unions. They usually require membership fees, and/or share capital or obligatory savings from all members. In addition, they may offer voluntary savings possibilities, but many have been formed with the hope of capturing external resources (Johnson et al., 2004). This is the case in Uganda where thousands of SACCOs, most of them weak, have little motivation to build their capacity or become more viable financial intermediaries (Meyer, Roberts, and Mugume, 2004). A WOCCU strengthening project was terminated prior to its end date even though it had the same components as has been used successfully in reforming moribund credit unions in other countries (Westley and Branch, 2000).

Local SACCOs have been successful in some remote areas. With the start of the Mata Masu Dubara program in Niger in 1991, CARE introduced one of the more innovative types of local, self-managed systems of financial intermediation through savings and credit groups for use in remote areas (Grant and Allen, 2002). CARE provides only training and monitoring, while all funds lent come from member savings. Groups of up to 30 women meet weekly to make contributions, with each participant deciding how much to save. When enough capital has been collected, the first loans are made, with interest usually set at 10 percent per month. Unlike ROSCAs, members must repay their loans with interest each month. Loan sizes are flexible and are granted based on need and ability to repay. A metal strong box with three padlocks secures the group funds between meetings. Three different members hold the keys to avoid collusion. A fixed end-date for each cycle provides a self-auditing function and tangible incentives to the members as they receive their savings plus a share of the earnings. No written records are kept in order to minimize paper work for members in remote areas who are generally illiterate. All information about amounts saved, lent, and due at each meeting must be remembered by the members. This may sound strange compared to the traditional wisdom of maintaining written records, but it appears to work in this situation. The program has experienced steady growth, as the membership climbed from 1,500 in 1993 to 162,000 in June 2002. Some groups have formed local networks that are registered to facilitate linkages with other financial institutions, including credit unions, to access services that cannot be provided locally.

The Mata Masu Dubara program has been replicated in Mozambique, Zimbabwe, Malawi, Zanzibar, Mali, Eritrea, Rwanda, and Uganda. To fit local conditions, adaptations have been made in the frequency of meetings, flexibility of savings contributions, degree of payout at the end of the cycle, length of loan term, and average interest rate. In countries with higher levels of financial sophistication, these groups have adopted written accounts and do not follow the self-auditing model of terminating at the end of a specific cycle, paying out all funds, and restarting with the same or different members (CARE, 2004a, CARE 2004b). These local innovations, however, can also introduce weaknesses. In Uganda, for example, the failure of several promoting agencies to follow a specific model led to a muddle on the ground, as some groups formed to gain access to government resources rather than to accumulate savings (Meyer, Roberts, and Mugume, 2004).

Several organizations in the Central Province in Kenya have developed a method that uses agents to help solve some of the management and governance problems of small groups organized into ASCAs (Mule et al., 2001). ASCA Management Agencies (AMAs) operate as sole proprietorships and are hired to assist women to form groups, make monthly contributions called shares, and convert the shares into loans. The AMA charges a monthly service fee equal to one percent of the value of the fund. Field officers keep the accounts and assist with loan recovery. The AMAs penetrated deeper into rural areas than other financial intermediaries and served almost 30,000 clients by mid-2001. Weaknesses were found, however, in the nature of the service agreements between the groups and the AMAs, which resulted in a lack of clear authority and appropriate incentives for debt collection.

Credit unions are found in rural areas in Latin America and some parts of Asia. However, few WOCCU-supported credit unions are active in rural areas (authors' conversation with Brian Branch of WOCCU, June 2004). Governance is often perceived as a weakness and the many weak and failed credit unions in developing countries reflect this problem (Hirschland, forthcoming b).

Local producer and trader credit cooperatives also exist in rural areas. These cooperatives generally follow the Raiffeisen model found in Germany. Registered cooperatives are regulated by a directorate of cooperatives in almost every country. Such cooperatives in Nepal are discussed later in this report under institutions used to reach remote areas.

ii. Self-Help Groups

Self-help groups (SHGs) in their current form first emerged in India in late 1980s. An SHG is a small homogeneous group of poor, rural residents coming together to save small amounts regularly and contribute to a common fund

that makes loans to individual members per group decisions (NABARD, 2004). Generally, group formation may take six months to a year, and representatives selected by the group members are responsible for management. SHGs can be seen as a hybrid form that shares certain characteristics with SACCOs, village banks and community banks, and solidarity groups.

In India, some SHGs formed endogenously and were later nurtured by NGOs. But now many SHGs are organized through a program of the National Bank for Agriculture and Rural Development (NABARD) aimed at promoting e-linkages between SHGs and banks. Many are organized by NGOs and linked with banks as part of a broader package of activities implemented by the NGOs in villages. NGOs can simply be facilitators in linking the groups with financial institutions, or they can act as financial intermediaries themselves. Banks can lend to NGOs or directly to SHGs, but several banks choose to lend to SHGs using NGOs as facilitators. In a few experimental efforts, banks are hiring promotional agents to form groups. Lately, some commercial banks are directly promoting and financing SHGs. However, many banks are reported to be skeptical because of their past poor experience with lending in rural areas (Meyer, 2003).

Linking banks and SHGs is seen as an innovative way to utilize India's large banking network rather than creating special MFIs for the poor, especially in rural areas. Linkages with commercial banks are expected to bring formal banks closer to the poor and also to help commercialize microfinance. As SHGs increase in number and size, they may begin to compete and also federate for expanded financial intermediation across regions. On the one hand, these developments may lead to financial deepening and access to competitive financial services to the poor; on the other hand, they may increase liquidity and diversification of portfolios for the banks (NABARD, 2004; Srinivasan, 2003).

The number of SHGs has grown rapidly in India. Between 1996 and 2004, microfinance through SHGs in India became the largest microfinance program in the world. By March 2004, SHG banking had expanded to almost all the major states. About 1,080,000 SHGs with a total of 15 million members, 90 percent of them rural poor women, were linked to banks and cooperatives. As of March 2003, 504 banks with a total of 30,942 branches (including cooperatives) were involved. Among them were: 48 commercial banks, accounting for 50 percent of the credit linkages; 192 regional rural banks (39 percent); and 264 cooperative banks (11 percent). Twenty percent of the groups were formed and financed by banks; 72 percent were formed by governmental and non-government organizations

and financed by banks; and 8 percent were formed and financed by NGOs, which in turn were refinanced by banks (Seibel and Karduck, 2004).

The linkage program grew extremely rapidly during FY 2003-04, with 361,731 new groups receiving bank loans — a growth rate of 50.4 percent. Some existing SHGs formed under the linkage program have expanded, both geographically and within the same market. However, several others vanished after the NGOs stopped providing them with technical assistance and banks stopped making loans due to repayment problems. Many SHGs have also replaced member savings with loans from cheap institutional sources and have stopped mobilizing savings from members (Meyer, 2003).

Nevertheless, there have been important success stories. Some banks are now convinced that the poor are bankable and have begun developing their own linkage programs with SHGs (Seibel and Karduck, 2004; Wilson 2002a). Some of the individually sustainable SHGs have, like credit unions, begun to federate in order to achieve wider financial intermediation, utilize economies of scale, and diversify risks (e.g., *kalanjams* in South India). These federations function as second-tier organizations that coordinate the activities of member SHGs. Some receive technical assistance from NGOs, and several have good access to bank loans and deposit facilities (Sa-Dhan, 2004; Tankha, 2002). A recent study conducted at the World Bank of three SHG federations in Southern India suggests that federations could help SHGs become institutionally and financially sustainable because they provide the economies of scale that reduce transaction costs and make the provision of these services viable. The author, however, states that their sustainability is constrained by several factors — some internal, related to the federations themselves, and some external, related to the other stakeholders (Nair, 2005).

Some studies report that the SHG-bank linkage program has made a significant impact on participating members and on the outreach of the RFIs. They also show that the costs of providing banking services to rural areas and the poor through such linkages is low and that repayment rates for RFIs are high (Harper, 2002; Puhazhendi and Satyasai, 2000; Seibel, and Karduck, 2004; Wilson, 2002b).¹³

Puhazhendi and Satyasai (2000) conducted an impact evaluation of 560 members from 223 SHGs sampled in 11 states. Roughly a third of the SHGs were drawn from each of the three models: (a) groups developed by banks, (b)

¹³ Seibel and Karduck (2004), based on a study of SHGs in Karnataka, India, showed that transaction costs of SHGs and members were generally low. Annual transaction costs of SHGs were found to amount to US\$27 per group or 1.22 percent of loans outstanding to members (averaging US\$2,230), comprising 51 percent real costs and 49 percent opportunity costs.

groups with NGOs as only facilitators, and (c) groups with NGOs as financial intermediaries. To assess their impact, the authors compared the members' pre-group situation (apparently established by member recall) with the post-linkage situation of 1999. The groups formed by banks tended to be somewhat smaller than the other two types of groups, but even so they saved significantly larger amounts and received larger loans.¹⁴ The total size of the loan portfolios grew with the age of the groups, and the share of income-generating to non-income-generating loans rose over time. However, because of the fungibility of money, it is impossible to know for certain how loans were actually used. These data may simply reflect reporting bias if banks and NGOs consider income-generating loans to be more desirable. This evaluation concluded that the SHG linkage program had significant economic and social impacts on members. For example, member households were reported to experience more than a 70 percent increase in assets, more than a tripling of annual savings, and almost a doubling of annual borrowing. Average net household income reportedly rose by a third compared to pre-SHG levels, and the greatest increase was observed among groups with NGOs as facilitators. Perhaps the assistance provided by NGOs in the form of services other than finance contributed to this difference. The proportion of members below the poverty line before joining the SHG (42 percent) fell to half that level at the time of the survey. The proportion of members who rose out of poverty was higher among those who engaged in off-farm activities, had smaller families, and had incomes before joining. Estimated levels of monthly household consumption rose 24 percent. These results may indicate that SHGs, when linked to formal institutions, are an appropriate vehicle for mobilizing savings and creating assets among the rural poor. Although promising, these results must be interpreted with caution. The evaluation did not address possible problems of self-selection bias, measurement errors in using recall data, and the lack of a control group to help determine if the changes reported for the members should be attributed to the SHGs rather than to other factors (Meyer, 2003).

The use of SHGs to provide services to rural poor has now spread to several other countries. For example, in Niger, the CARE Mata Masu Dubara savings groups serve more than 160,000 members. CARE's Kupfuma Ishungu Programme (KIP) operates in sparsely populated, rural Zimbabwe. In just four years, it has promoted 2,221 SHGs that provide simple financial services to their more than 14,000 members, one-fifth of whom are net savers. The total cumulative cost to KIP has been about US\$24 per member. The KIP groups are largely sustainable, and 95 percent remain in operation even after the NGO support has decreased. The groups appear to be cohesive, highly

¹⁴ The explanation may be that bank-organized groups are encouraged to emphasize financial services rather than other developmental activities, or perhaps people more interested in obtaining financial services chose bank-promoted groups. When banks organize the groups and are able to monitor them more closely, they may be willing to lend more than they do to groups associated with NGOs (Meyer, 2003).

motivated, and confident. They have written regulations, well-crafted and well-maintained accounting systems, strong officers, and attentive supportive members. In Mexico, savings groups promoted with support from the Department of Agriculture serve more than 12,800 women (Hirschland, forthcoming a).

SHGs may provide convenient services to the poor in rural areas and make an impact, but closer ties to the formal financial sector are a requisite for their growth. Efficient linkages may facilitate financial deepening and long-term asset creation for the members. The existence of banks and cooperatives located close to SHGs is necessary for such linkage programs to work effectively. As a result, SHGs may be less suitable for remote areas and regions thinly served by formal financial institutions. SHGs located in remote areas and farther from formal institutions will be limited in their capacity to grow without constant support, including funds and technical assistance, from external sources. India may be an exceptional case because, from the 1970s to the 1990s, banks and cooperatives were mandated to extend their networks to serve the poor and priority sectors in rural areas.

Furthermore, issues regarding the governance of SHGs as well as the appropriate regulatory and supervisory guidelines have yet to be sorted out. The available studies are not adequate to determine whether SHGs are substituting for or complementing formal finance institutions in rural areas. The gaps in knowledge in these areas need to be addressed for a clearer understanding of the role of SHGs in rural poverty reduction.

A comparison of member-based institutions by Hirschland (forthcoming a) examined the costs of establishing different types of member-owned institutions, such as SHGs, cooperatives and village banks. The costs per member appear to be lowest for SHGs and highest for village banks. But the costs of SHGs ranged from US\$67 in Zimbabwe to about US\$11 in India, indicating some regional differences among the same type of member-owned organizations (see Table 2). The factors that cause cost differences need to be further examined to understand the suitability of member-owned institutions for diverse rural contexts.

While member-owned institutions are prevalent in many rural areas, including remote areas, and serve poorer segments of the population, they have limitations in becoming the prime financial intermediaries. Since they are generally self-managed, an appropriate form of governance needs to be developed for each type to ensure sustainability.

Table 2: Cost of Establishing Member-Managed Organizations

Program	Type of Organization	Outreach / Age of Program	Years for Group to Become Sustainable	Cost per Member
Kupfuma Ishungu Project, Zimbabwe (CARE)	Self-help groups (about 6 members per group)	14,000 in 4 years	1 year	US\$67
DEPROSC cooperatives, Nepal (CBED)	Savings and credit organizations (cooperatives, about 140 members in each)	15,000 in 3 years	3 – 5 years	US\$12 – \$20
CVECA, Mali (CIDR)	Member-owned village banks (413 members per bank)	21,500 in 10 years	11 years for banks and federation, including technical assistance	US\$140
NABARD, India	Self-help groups (about 20 members per group)	7.8 million in 10 years	3 years, followed by minimal on-going support	about US\$10.50

Source: Reproduced from Hirschland (forthcoming a)

4. Traders: Buyers and Suppliers

Examining informal buyer and supplier credit in rural areas can yield important lessons for agricultural lending. In his study on the latest developments in trader credit in rural financial markets, Pearce (2003) reported several examples in which traders, processors, input suppliers, exporters, and moneylenders are the primary source of credit for poor agriculture-dependent households. Buyers and suppliers link their credit to the provision of other services, such as input supply and product purchasing transactions. These linkages help manage the problems of asymmetric information and high operating costs associated with agricultural lending.

Some donors are now engaged in widening the financial services offered by traders to poor farmers. One such example is the AGENT project of CARE in Zimbabwe. The project initially provided a temporary guarantee to wholesalers/distributors that provide inputs as inventory credit to traders. AGENT also worked with traders to advance their business skills. Technical assistance and guarantees are designed to be phased out as traders develop independent commercial relationships with suppliers after one agricultural season of trading. Since 1995, a total of 580 traders were linked to the private wholesalers, and 60 percent were fully absorbed into the private-sector distribution network. Farmers have benefited from the increased product range offered through the program, such as a wider variety of seed and fertilizer, basic processing and irrigation equipment, and general construction materials. The Zimbabwe Fertilizer Company (ZFC), the largest fertilizer manufacturer in Zimbabwe, has since launched its own input-distribution system modeled on the AGENT program. Eleven private-sector companies have worked with the program and have subsequently continued to work with the AGENT traders (CARE, 2001; Pearce, 2003). Another

example of expanding product ranges for farmers through traders using credit guarantees is found in the REAP program of CARE in Kenya (CARE, 2002).

In addition to credit, traders also provide non-financial services such as technical advice and marketing facilities. Pearce (2003) observed that trader credit is widespread in rural areas where financial markets are shallow and poorly developed. Therefore, trader finance may appear as a good solution for rural areas that are not well served by financial institutions. But trader finance may more likely be a compliment to rather than a substitute for formal financial markets. Pearce (2003) noted that the traders offered very limited types of financial products — primarily seasonal credit and short-term advances. A recent study clearly shows that trader finances meet working capital requirements in rural areas but not start-up and capital investments. For example, trader finances are generally limited to clients with long-term relations and to large producers. In addition, financial contracts from traders are bundled with production activities and are found non-transparent (Fries and Akin, 2004). Moreover, other essential financial services such as deposits and insurance are not provided by trader lenders. Finally, poorer populations and those in remote areas may depend entirely on such traders for credit, thereby receiving less favorable terms and conditions.

An experiment in the Philippines used traders as direct conduits for channeling bank credit to farmers, but it was terminated because it proved inefficient and failed to add a significant contribution in rural outreach (Esguerra and Meyer, 1995). However, financial institutions may benefit from linkages with traders to expand rural finance, especially in poor rural and remote areas. One such linkage in Peru is led by Critecnia, which sells inputs and buys and markets cotton for contract farmers. Critecnia also links the contacted farmers with financial institutions. It brokers loans on behalf of the farmers and the farmers provide loan guarantees in the form of land. This arrangement has led many financial institutions to finance cotton farmers who were previously rejected for lack of guarantees. Critecnia subtracts loan payments and fees for technical assistance and management at the point of sale, then splits the net profits equally with the farmers. Interest on loans is 24 percent from the bank, with a balloon payment at harvest. Total costs, including Critecnia services, raise the loan cost to an effective interest rate of 30 percent. Critecnia is reportedly profitable, with very high repayment rates in most years (Alvarado and Galarza, 2003).

Donors can help amplify trader activities through projects that foster linkages with financial markets and non-financial providers and thereby support small farmers who demand financial and other services. While traders can provide marketing and technical advice, financial markets can provide financial services. Donors also have a role in supporting an enabling environment that does not discourage the private sector. Indeed, improving infrastructure,

services, information, collateral and property registries, and other conditions for financial intermediation may be more vital than direct donor support for trader finance. Recent donor and governmental efforts to develop trading places in India and Nepal — such as wholesale markets, warehouses, and grading and packaging facilities — appear to encourage traders to link up with small farmers to source products. These linkages in turn are reported to have increased the access to bank and MFI credit for farmers with assured markets (see IDE-India website: <http://www.ide-india.org/ide>). In short, donors need to be creative in finding ways to engage with private-sector actors in product markets without distorting the markets. These efforts require a long time-horizon and donor patience.

5. Apex Institutions

Apex institutions are organizations that channel funds, with or without technical assistance, to retail financial institutions for on-lending, often to targeted categories of borrowers. Many function as conduits for governments and donors to finance MFIs. There is debate about their impact on the microfinance industry. Fred Levy (2002) examined 37 apex institutions in 28 developing countries and summarized the issues from the perspective of microfinance.¹⁵ However, the conclusions point to issues equally relevant for agricultural and rural finance. Levy identified several expectations about what apex institutions will accomplish. They included (i) receiving large volumes of funds, re-packaging them into smaller amounts, and passing them on to MFIs, (ii) building retail MFI capacity, (iii) bridging the gap between MFIs and financial markets, (iv) improving donor coordination, and (v) supervising the borrowing MFIs.

Two large apex institutions included in the study are of particular importance for agriculture and rural areas in Asia. They represent sharply divergent models. One is the Palli Karma-Sahayak Foundation (PKSF) in Bangladesh, which lends to about 200 MFIs but 75-80 percent of the funds go to the four or five largest ones that have most of their loan portfolios in rural areas.¹⁶ The other is the National Bank for Agriculture and Rural Development (NABARD) in India, which focuses exclusively on agriculture. NABARD's strategy in the 1970s and 1980s was to stimulate the banking sector to lend in rural areas by providing subsidized funds for agriculture, but it shifted in the

¹⁵ Of the 37 apex institutions examined, the earliest was started in 1953 (FOGAIN in Mexico) and the most recent was started in 1999 in Madagascar. Several were started in the 1990s. Many of the conclusions were drawn from case studies done by the Ohio State University in Bangladesh, Benin, Bolivia, Costa Rica, Honduras, India, Mexico, and Paraguay. Several studies of the IADB Microenterprise Global Credit Program were also reviewed.

¹⁶ PKSF presents the image of carefully selecting the MFIs to which it lends and reportedly little more than ten percent of MFI applications for a first disbursement are accepted. However, several years ago it was reported to have asked a local consulting firm to find some 19 of its missing MFI borrowers. This reflects the challenge of working with the microfinance sector that had over 500 NGOs supplying microfinance products, most of which operated in rural areas.

1990s to offering subsidized funds to banks that lend to self-help groups. The Bangladesh microfinance industry, heavily dominated by the Grameen Bank and several large NGOs, largely bypasses the banking system, while the NABARD approach is geared to creating self-help groups and linking them to banks. Compared to Bangladesh, India has a much larger network of thousands of rural banking institutions. Most were created in the supply-led period when augmenting the supply of cheap funds to agriculture and other priority sectors and massively expanding the banking system was a key strategy to speed rural development. The Levy study also reviewed the experience of small apex institutions such as K-Rep in Kenya, which funded only four MFIs, of which two were reportedly non-functioning.

Levy (2002) raised several questions about the effectiveness of apex institutions. First, there is not likely to be 100 percent additionality; that is, some of the funds lent by apexes would likely find their way from governments and donors to MFIs even if the apexes did not exist. Few apexes were found to have established sufficient creditworthiness to be able to tap local or international financial markets. Apex loans, offered at below-market interest rates, were found to undercut resource mobilization of MFIs that had demonstrated their ability to tap market funds. Some participants that received Micro-Global funds from the IADB in Latin America for microlending were found to have diverted their own funds for microfinance to other purposes. Micro-Global programs that included strong long-term technical assistance from the German consulting firm IPC produced better results in this regard.

The amount of money provided by the apex must also be kept in perspective. Even in the PKSF case, it provided only about 15 percent of the funds for micro loans in Bangladesh at the end of the 1990s. Therefore, in cases where funding is not the primary issue, the impact of apexes on capacity building is potentially important. Here the results were also mixed. Few regulated financial institutions that participated in Micro-Global programs responded by making a long-term commitment to microfinance, unless they were supported by strong technical assistance programs such as provided by IPC. The success in capacity building of unlicensed MFIs depends on the approach used by apexes, which ranged from doing virtually nothing to providing extensive training, consulting services, transfer of software, etc. Most apexes working with NGOs treat financial sustainability as an outcome of the program rather than an entry requirement. Continual eligibility is to be monitored through specific indicators, but few apexes have the capacity for rigorous monitoring, and enforcement ranges from lax to stringent. Some apexes have been subject to political pressures to favor particular MFIs regardless of their performance. PKSF is recognized as benefiting from a board composed of internationally prominent individuals who help protect it from such pressures.

Most apexes were found to have failed to build bridges to financial markets and there was little evidence of success in coordinating the efforts of donors in support of microfinance. Many studies found that the efforts of apexes were undercut by competing donors that offered funds at subsidized rates.

Rural finance—unlike microfinance, and especially finance for agriculture production—does not yet have a fairly clear set of best practices. Therefore, the role of apexes in supporting rural MFIs at this stage of development is especially tricky. PKSF offers an example of this challenge. It has been criticized for requiring borrowing MFIs only to follow the standard Grameen methodology (Nagarajan and Gonzalez-Vega, 1998). On the one hand, this seems to be a prudent policy, given the long-term experimentation that gave birth to the methodology. On the other hand, in the early 1990s, a view emerged that the standard, one-size-fits-all approach needed to be modified to allow more flexibility and greater market-driven product design (Meyer, 2002; Wright, 1999 and 2000). Too strict enforcement of a particular methodology as part of capacity-building by an apex can impose a straight jacket on its borrowers and inhibit the experimentation and innovation required for massive outreach, sustainability, and impact.

The lessons learned include the following: Apexes may play a useful role in strengthening the development and expansion of financial services but there is no single design for success. The contribution that apexes have made to the development of microfinance varies considerably from country to country, but overall it seems to have been rather modest. Part of the problem is that lack of funds continues to be a secondary problem compared to the primary problem of limited retail capacity in most countries, and apexes are not necessarily the best mechanism to build such capacity. The potential conflict of interest that occurs when apexes are designed to be both major funders and capacity builders of the financial sector means that they are unlikely to perform both roles equally well. Governments and donors have frequently supported apexes as a convenient channel to pump liquidity into the financial sector rather than as the best strategy to build the sector.

Remaining challenges: The challenges for rural finance in most countries include designing appropriate products, creating sustainable institutions, and developing supportive institutions, an enabling environment, and a regulatory and supervisory framework. Given this broad agenda, what role should apex institutions play? When should they be introduced in the sequencing of assistance? How can they be designed to effectively serve the dual role of relaxing resource constraints and simultaneously building capacity? Given the mixed results of apex institutions in building MFIs, caution is required in using them for rural finance. Studies are needed to carefully analyze their effects on rural finance and whether the resources spent would generate a better return if invested elsewhere.

B. Advances in Products

6. Savings¹⁷

The poor need very little compulsion to save but require safe and convenient saving mechanisms (Robinson, 2001; Wright, 1999, 2003). The population that is poorest and most risk averse may require access to deposit services more than loans, since savings function as a good risk management strategy (GTZ, 2003 and 2004; Kamewe and Koning, 2003; Sebstad and Cohen, 2001).

Commercial banks often offer deposit services to poor clients, but rarely to the very poorest. Credit unions frequently serve salaried employees and up-stream clients (Richardson, 2003). Informal mechanisms such as ROSCAs, ASCAs, money keepers, and deposit collectors (such as susu collectors in Ghana) are commonly found in market places in urban and peri-urban areas of Africa (Chao-Béroff, 2003). Legal constraints in most countries prevent non-regulated NGOs from mobilizing deposits from the public, but they often use innovative methods, such as compulsory savings to capture deposits from their members.¹⁸

Although several formal, semi-formal, and informal financial institutions offer deposit services in urban areas and in some densely populated rural areas, the challenge is to provide savings services in areas that are thinly populated, poor, and remote.

Chao-Béroff (2003) shows that the rural poor generally have informal savings and other mechanisms to help mitigate some shocks. However, savings mechanisms to help build assets generally do not exist due to (i) lack of incentives for institutions, and (ii) lack of demand because of inflexible and inconvenient deposit products. Inflexible and mandatory deposit services are often treated as a prerequisite for loans and not as a means to accumulate assets (Chao-Béroff, 2003; Wright, 2003). Moreover, the availability of cheap funds from donors and governments tends to discourage deposit mobilization. As a result, the volume of deposits mobilized by RFIs has been low. In the mid-1990s, several NGO-MFIs, using a variety of terms and conditions, began to offer flexible savings services to their members and associated members. Important examples include ASA, SafeSave, and BURO Tangail in Bangla-

¹⁷ Rutherford (2000) describes three types of savings mechanisms — savings up, savings down, and savings through — that are generally used by households to accumulate assets and to reduce their vulnerability to shocks. He considers loans as savings down while the typical accumulation of funds in savings accounts of financial intermediaries as savings up and transactions through ROSCAs as savings through mechanisms. We do not discuss savings down mechanism here.

¹⁸ Compulsory savings can hardly qualify as a good savings service. Saving services should be able to offer clients with ability and ease for accrual of funds, accessibility to funds, and anonymity of transactions.

desh. However, offering flexible savings service is expensive and not easy for RFIs. Matin and Christen (2001) studied ASA, a large MFI in Bangladesh, and found that offering flexible savings products in addition to loans required staff with good financial management skills as well as a change in staff attitudes towards clients.

Some advances are being made in expanding deposit services into rural areas, especially for the rural poor. In India, non-bank financial institutions mobilize deposits using flexible terms and conditions. For example, the local area bank of BASIX, Krishna Bhima Samruddhi, offers a flexible daily-deposit scheme in which savings are collected daily at the doorsteps of rural depositors by mobile deposit collectors (called micro-savings agents) who typically cover about 150 depositors a day.¹⁹ As of March 2004, the local area bank covered four villages and held 851 savings accounts with US\$2,827 as a savings balance. As an incentive, the bank offers loans of up to US\$110 to depositors who have regularly saved for a minimum period of 100 days without a break lasting more than 20 days (BASIX, 2004).

An IFAD-funded pilot project in Corredor Puno-Cuzco in Peru, which started in early 2003, focuses on rural deposit services along with microinsurance, transfer services, remittances, and microcredit.²⁰ The program has designed individual savings accounts that are offered through regulated financial institutions. These accounts are promoted through an explicit and individual matching grant mechanism that rewards the opening of personal savings accounts, increases the average outstanding balance, and permits withdrawals for asset-building purposes (such as education, health, housing, and microbusiness investments). As of September 2004, some 1,500 individual savings accounts were reported. This a grant-based program that makes a direct and automatic transfer of the matching funds from public financial resources to the client's personal bank account as an incentive to accumulate savings (e-mail communication with Yves Moury, CEO, Edge Finance S.A., Peru, on Oct. 7, 2004).²¹

¹⁹ Savings with a minimum of US\$0.22 to a maximum of US\$5 per day per depositor are collected. On average, clients deposit about US\$0.45 per day for a period ranging from 60 to 90 days. Depositors are allowed to withdraw after six months of initial savings or any time before that with five days' notice. Interest is about 3 percent per annum calculated on daily average outstanding balances. Only those depositors who save regularly without a break lasting more than 20 days are paid interest on the deposits.

²⁰ The design is based on the individual development accounts (IDA) used in the United States for the past ten years to increase savings among the poor (see Sherraden, 2000; Schreiner, 2002) as well as various long-time accumulated experiences of public savings promotion as seen in La Posta Italiana and the Livret A program in France.

²¹ There are now plans for another IFAD-financed regional initiative to promote savings mobilization by formal financial institutions for the rural poor, based on an adjusted, very small, matching-grant mechanism to be financed in the long term from the expected annual return of a rural-finance investment fund operating in Latin America and the Caribbean (Yves Moury, personal communication via e-mail).

Post Office Savings Banks (POSBs) are emerging as significant providers of deposit services in rural areas, especially catering to the poor. More than 50 developing countries around the world have some form of postal savings system, many several decades old. Indeed, in several countries, POSBs are the only major provider of deposit services in rural areas. POSBs operate with several retail outlets providing wide coverage in rural and remote areas. For example, POSBs in China, Indonesia, South Korea, and the Philippines actively serve more than 138 million clients through 73,750 branches, most in rural areas with deposit, payment, and money transfer services. The Mongol Post in Mongolia also serves many clients in remote areas. In India, the majority of POSB clients live in rural areas. They make small deposits, maintain an average balance of US\$22 in passbook savings schemes, and account for 13 percent of the total volume of deposits and 52 percent of the clients of POSBs (Nagarajan, 2003a). Coverage by POSBs in Asia is growing. Between 2000 and 2002, the number of savings accounts in POSBs increased by 80 million in China, by 12.92 million in India, by 2.26 million in Pakistan, and by 108,000 in Sri Lanka. The majority of these depositors reside in rural and peri-urban areas (Fernando, 2004a). In Africa, the Kenya POSB and the Tanzania POSB, respectively, maintain 486 and 136 branches — the majority of them in rural areas—that hold more than 1.65 million and 1.01 million savings accounts. The deposit balances in these accounts from individual clients are reported to be US\$100 million in Kenya and US\$45 million in Tanzania. The POSBs in Kenya and Tanzania, report a return on assets of 0.56 and 2.17 percent, respectively (Kamewe and Koning, 2003).

As of 2000, the banking system in India comprised of 2,200 banks with about 67,000 branches, mobilized deposits of over US\$205 billion, accounting for 44 percent of GDP. In comparison, POSBs have about 154,000 branches, of which 137,000 are in rural areas, accounting for US\$38.5 billion in outstanding deposits. The financial savings of households, including deposits and insurance products, totaled US\$43.8 billion, about 12 percent of which were held by POSBs and 37 percent by banks. It is interesting to note that in Indonesia, as of 2000, while unit desks of the BRI were very active in capturing deposits from over 25 million savers, the POSBs serviced over 7 million savings accounts through more than 2,500 branches (Nagarajan, 2003a). The Kenya Post Office Savings Bank (KPOSB) operated 486 branches in 2002 of which 80 percent were in rural areas compared to approximately 370 branches for all commercial banks of which only about 45 percent were in rural areas (Kamewe and Koning, 2003).

While POSBs are active in mobilizing rural savings, they are also saddled with governance issues and have little capacity to intermedicate the funds mobilized in rural areas. The latest developments include linkages between POSBs and financial intermediaries to provide better services to the rural poor (Nagarajan, 2003a). For example, the

Union Bank (formerly Worker's Bank) in Jamaica has linked up with post offices to use their outlets to offer deposit services to more than 75,000 depositors in rural areas at a reduced cost (Owens, 2003).

Hirschland (2003) thoroughly examined several types of savings schemes currently offered in rural areas in developing countries and found that proximity and convenience are crucial for rural depositors. In rural areas, it is very challenging to offer services that are close enough to attract small depositors while still covering costs. Several mechanisms are now used to help increase the volume of deposits in rural areas at reduced costs. These developments (several of which are thoroughly discussed in Hirschland (forthcoming c) include:

- Small offices with part-time staff and/or small offices that operate within the existing infrastructure, such as post offices and community-based organizations.
- Strategic alliances among financial institutions. An example is the partnership agreement between FIE and Pro Mujer in Bolivia, whereby FIE operates teller windows within Pro Mujer rural branches (Wise, 2004)
- Use of mobile units and/or staff who are mobile. Examples include mobile units used in Vietnam and by the Equity Building Society (EBS) in Kenya (discussed in detail later in this report).
- In places with good access to commercial banks or with MFI branches close to rural areas, it is useful to train group members and self-help groups to collect and manage savings accounts at the bank. Such arrangements are found in India, where SHGs are linked with commercial banks, and in the BISCOL cooperative in Nepal.²²
- Use of lockboxes for clients to deposit their savings and collect or accept the contents of the box at periodic intervals. An example includes the “ganansya box” provided by several Rural Banks in the Philippines (Campion and Owens, 2003).
- Piggybacking savings services onto other delivery systems, with savings services offered at a time and place where clients are already transacting other business (see further discussion of this topic below).
- In technologically advanced countries, the use of electronic banking technologies such as hand-held personal digital assistants, smart cards, point of service devices, automatic teller machines, and phone and Internet

²² In the URAC-UDEC program in Mexico, a volunteer treasurer chosen by the group collects deposits weekly from individual members and takes them to the nearest branch. Potential mishandling is offset by a requirement that clients can only withdraw in person at the office and by conducting internal audits every six months. The minimum deposit is US\$0.22. This member-based institution has 12,700 members, of whom about 15 percent save each week. Fifty-three percent of members have balances of US\$0.11 to US\$11.26. Another 15 percent have balances of US\$11.37 to US\$22.52. At the BISCOL Cooperative in Nepal, a group of at least 10 members collects an equal amount of monthly savings from each of its members at a meeting held within a kilometer of their homes. Then, a representative of the group deposits this amount with a staff person from the cooperative at a designated time at a collection site within six kilometers of their homes (Hirschland, forthcoming, b).

banking can be effective in reducing transaction costs. Several experiments are now under way using automated teller machines, or ATMs, in rural areas. For example, ICICI bank in India is installing ATMs in fairly developed rural areas (ICICI Bank, 2004). PRODEM in Bolivia installed seven of its 20 ATMs in rural areas and reported an increase of 22,000 new deposit accounts (Hirschland, 2003).

Rural savings mobilization involves very high costs and may produce small total volumes of savings. Richardson (2003) states that the viability of savings products depends on operating costs and savings volume. In order to increase volumes, some RFIs are now cross-subsidizing their rural operations with urban operations. For example, COOPECS in West Africa is migrating to urban areas to capture larger volumes of savings to make rural deposit mobilization viable (Chao-Bérouff, 2003). Some institutions, such as BURO Tangail and ASA in Bangladesh, are increasing savings volume by including clients higher in the poverty strata as associate members who are only eligible to save with the institutions. However, Kamewe and Koning (2003) caution that obtaining a proper balance between urban and rural operations is a challenge for reducing costs and offering efficient and good services to the rural poor.

Experience with rural deposit mobilization by CVECA (Caisses Villageoises d'Épargne et de Crédit Autogérées) in West Africa clearly shows that savings products intended for asset-building should provide attractive returns in addition to flexibility and easy accessibility (Chao-Bérouff, 2003). Attractive returns for term deposits helped rural populations switch from liquid, non-interest-bearing deposits to term deposits that facilitate asset-building and to shift from holding livestock to financial assets.

Several important challenges remain in order for savings mobilization to become widespread and sustainable in rural areas. First, reducing transaction costs for savers is very important for populations that are highly dispersed and save in only small quantities. Mobile deposit collectors that collect deposits at the savers' doorstep, increased points of sale, and collecting savings during periodic group meetings are effective ways of reducing transaction costs for savers. They may also reduce transaction costs for financial institutions if they help increase the size of transactions. Electronic innovations may also eventually help drive down the costs of handling many small transactions in areas where high-tech alternatives are feasible. In spite of these developments, the high cost of processing small savings in remote areas is still a significant constraint.

Designing appropriate savings products poses a second challenge, as demonstrated in the well-documented experiences of ASA in Bangladesh and BRI in Indonesia. Successful savings mobilization involves more than simply

adopting products developed elsewhere. Products must meet the specific demands of local populations for security, easy access, and return on savings. Post offices, for example, offer the greatest potential for convenience because of their rural outreach, but postal savings have languished in many countries because of their notoriously bad service and complicated withdrawal procedures. An interesting area to monitor for future developments concerns the possibility of linking rural remittances to contractual savings products, so that remittances are not immediately consumed upon receipt.

Third, improving the security of savings is essential to prevent the savings of the poor from being lost through fraud or unsafe practices of financial institutions. Several countries have created special categories of licensed, regulated and supervised microfinance institutions. For those institutions that eventually qualify, this development allows those committed to serving the lower end of the market to mobilize savings legally, and provides some assurance that they will be managed properly. Savers may also see this formalization process as an implicit guarantee of the safety of their savings. Whether the authorities have the capacity to effectively regulate and supervise this new class of institutions is yet to be determined. Moreover, this formalization opportunity is only feasible for a relatively small proportion of the NGOs currently providing financial services in most countries. Therefore, there is still a huge need to foster greater linkages between larger, urban-oriented, regulated institutions and smaller, non-regulated institutions that are culturally and physically closer to the rural population.

Finally, although donors give lip service to efforts to support savings mobilization and innovations, their main objective and metric for performance is to “move money” through projects. Financial institutions are discouraged from aggressively seeking ways to mobilize savings when they have access to funds directly from donors or indirectly through apex institutions that are cheaper and easier to obtain. Therefore, most donor projects that provide major amounts of resources for RFIs to expand their loan portfolios cannot help but undermine savings mobilization. The few donor projects that support deposit mobilization often focus on deposits as an insurance substitute for emergency purposes, resulting in flexible but short-term deposit products. There is a clear need to find ways to meet the demand for term deposits required for asset accumulation. Much is yet to be learned in reaching rural clients with term deposits sustainably through a variety of institutions including member-owned institutions and possible linkages among them.

7. Term Loans

i. Housing Loans

In rural areas, people generally finance their housing needs by slowly accumulating building materials, then building the main part of their homes, and adding to it as they accumulate more materials. But this process takes a long time and slows down the process of creating assets. When basic housing and consumption requirements are not adequately met, external financing for economic activities tends to get diverted due to fungibility. There is also a need to unlock the passive capital in houses so it can be used as collateral for loans (De Soto, 2000). There is clearly a need for more housing finance in most countries. However, housing finance for low-income people has typically been part of slum upgrading or an urban-development strategy, with the financial service accompanied by construction assistance or land-rights advocacy. Increasingly, established MFIs such as the Grameen Bank are offering housing finance, but these loans are generally made to low-income salaried workers and poor, microentrepreneurs, primarily in urban areas (Brusky and CGAP, 2004). Financing for rural housing is only slowly emerging.

Inadequate capital limits many RFIs from providing housing finance. Therefore, the Rural Housing Loan Fund (RHLF) in South Africa was established in 1996 as a wholesaler for rural housing finance. It is supported by the national Department of Housing in partnership with the German development bank, the Kreditanstalt für Wiederaufbau (KfW). RHLF operates as a wholesale finance institution and facilitates loans for rural housing through approved housing lenders (finance companies) that are willing and able to on-lend to rural clients seeking to improve and extend their existing houses. To date, RHLF has disbursed more than R230 million (US\$29 million) through 11 housing finance retail lenders, resulting in over 50,000 housing loans to clients with incomes below R3,500 (US\$ 440) per month. For example, Norufin Housing Ltd. in South Africa, a client of RHLF, has provided housing finance in rural areas using its six branches in three provinces to serve about 6,000 clients (MFRC, Newsletter Issue 7, 2003, www.mfrc.co.za). Research conducted by RHLF shows that clients match half the loan amount with their own resources such as savings, building materials, and labor. Accumulated bad debts at RHLF have been very low: about R6 million, accounting for about 2.5 percent of the cumulative loans disbursed. Loan repayments collected are recycled into new loans for the community. RHLF also educates consumers to be responsible borrowers and to use safe, environmentally friendly building materials (Rust, 2003).

Emerging lessons from the limited experiments in South Africa include:

- Homelessness is not necessarily the biggest problem in rural areas. Rural people may not have housing as their foremost credit need, but there is a demand for expansion and improvements as a means to enhance their assets.

- Diversification of loan products is important: a strict focus on the housing market may be too risky at this stage for most developing countries. Housing loans are by nature generally larger than consumption loans, and are therefore repayable over longer periods. This increases both the risk of non-payment and the amount lost in the event of default.
- Coordination with input suppliers and housing developers is needed so that inputs are available in order for loans to be used effectively.

Challenging issues in rural-housing finance include:

- Regulations for housing lenders: In South Africa, the practice of making housing loans to salaried workers (generally assumed to be safer clients) is facing some challenges. Non-bank lenders, such as housing companies, are now restricted by the government in their seniority to claim payments made through salary deductions. They can only be residual claimants after the major regulated banks have collected their dues. This has increased the risks for non-bank housing lenders and led them to ration their services to clients who have bank loans.
- Insecure land titles still limit the use of improved and extended houses from being used as collateral or as assets that can be liquidated to pay loans.

ii. Leasing

Leasing is now recognized as an alternative financial mechanism for reaching poor rural clients with limited access to term loans. Leasing can be a means to acquire equipment and machinery needed to expand and diversify microbusinesses and farm businesses and to acquire capital assets through pay-as-you-go leasing contracts.

Leasing may incur lower transaction costs compared to collateral-based term loans due to lower costs in developing and enforcing contracts in rural areas where asset registries and judicial systems for contract enforcement are especially poorly developed. Recent studies conducted at IADB (Westley, 2003) and the World Bank (Nair, Kloepinger-Todd, and Mulder, 2004) on current leasing arrangements in rural areas suggest advantages for both lessors and lessees in terms of costs and risks involved. Leasing is also beginning to emerge in Central Asia due to efforts by the IFC to assist countries in developing appropriate laws and tax policies (International Finance Corporation, 2004).

Nair et al. (2004) surveyed about 10 lessors in Africa, South and Central Asia and Latin America and found that they collectively provided more than US\$125 million in leases to rural enterprises, with more than 75 percent of it covering agricultural machinery and agricultural processing equipment. For example, in 2002-03, John Deere in Mexico, Uzelmalhosh Leasing in Uzbekistan, and AgroMash Leasing in Kazakhstan operated exclusively in rural areas and provided leasing contracts for more than US\$25 million, US\$40 million, and US\$1.5 million, respectively, for agricultural equipment and processing units. The Grameen Bank in Bangladesh is the largest provider of leases to rural microenterprises, with a lease portfolio valued at US\$22 million. Grameen and AgroMash reported no repayment problems on their leasing portfolio, while John Deere and Uzelmalhosh reported a portfolio at risk of 3.9 percent (30 days) and 4.3 percent (60 days), respectively. Several other leasing companies (such as DFCU in Uganda, Uzbek leasing, and Net Work Leasing Company in Pakistan) and MFIs (such as CECAM in Madagascar and ANED in Bolivia) also offer leasing for agriculture-based enterprises in small towns adjacent to villages. The average size of rural leases ranged from US\$364 through the Grameen Bank in Bangladesh to US\$200,000 through Uzbek leasing in Uzbekistan. In general, while leasing accounted for more than 75 percent of the total assets in stand-alone leasing companies, it represented a very small portion of the total portfolio of financial institutions. For example, ANED's equipment leasing in rural Bolivia represents only eight percent of its loan portfolio.

Emerging lessons from the information available on leasing experiments in rural areas show that:

- Leasing contracts are suitable for individual, rather than group, transactions.
- Leasing contracts require a significant down payment or pledge collateral to reduce the risks for the lessor.
- Leasing provides a viable financial option for a large proportion of the poor, rural residents who are engaged in agriculture-based enterprises.
- Leasing may offer fewer options for remote areas because of high transportation costs and the lack of servicing stations for the leased equipment.
- There are instances where leasing arrangements are used to avoid taxes, and leasing has been designed to circumvent strict Islamic interpretation of financial transactions (as in Pakistan).
- Committed funding sources were required for leasing companies to survive.
- Human capital requirements were also found to be higher for leasing operations than for standardized loan operations.
- Many legal and tax issues must be resolved before leasing can become an attractive alternative for lease pro-

viders.

Debates about leasing include:

- Do leasing institutions require special prudential regulations?
- How can regulated institutions offer leasing contracts to the rural poor?
- What types of linkages between leasing companies, private investors, donors, and financial institutions can effectively benefit rural clients?
- Should leasing arrangements be offered to solidarity groups and communities, and if so, how?
- How important is leasing for asset accumulation?

C. Advances in Services

8. Insurance

Large idiosyncratic and systemic risks affect rural areas and pose considerable challenges that affect the outreach, sustainability, and impact of rural finance. While insurance can mitigate some risks, formal insurance is unavailable in most developing countries, especially in rural areas. Challenges in providing insurance in rural areas include: (i) difficulties in achieving scale and covering costs, (ii) low awareness about insurance, (iii) very few rural insurance products are available, and (iv) the lack of an effective distribution system. Morduch (2004) has shown that informal insurance provided through familial relationships and kinships is an imperfect substitute for formal insurance in times of systemic disasters, due in part to the covariance in incomes. Research in India (BASIX, 2004) found that, among wage-laborers and poor people without assets, savings and insurance services are more important than credit because they enable clients to build capital and reduce their vulnerability to disasters. Advances are being made to develop insurance products such as crop, livestock, life, and health insurance suitable for rural clients in low-income countries.

i. Crop Insurance

Agriculture is still a major economic activity in developing countries, especially in vibrant and diversified rural areas. It is also a risky enterprise that can benefit from insurance. While several countries have tried crop insurance, failures are common. For example, the recent pilot crop insurance scheme for rice in Vietnam had to be discontinued after only three years due to high loss ratios, ranging from 110 percent to more than 300 percent in certain prov-

inces.²³ A study conducted by FAO shows that other Asian countries implementing crop-insurance schemes (such as Sri Lanka, Bangladesh, the Philippines, and India) are also encountering high loss ratios and high operational costs (Abada, 2001).

Several of the failed or failing crop-insurance programs have followed the traditional yield-based approach to insure losses. These contracts may cover a single peril, like hail, or multiple perils. They rely on on-farm assessments and the determination of actual yield losses in order to determine payouts to farmers. In addition, farmers often need to provide historical yield data for their farm to qualify for multi-peril crop insurance. These programs often encounter problems due to issues such as (i) attempting to cover multiple perils and uninsurable risks, (ii) moral-hazard problems among insurers leading to poor premium setting and operating practices, (iii) moral-hazard problems among producers resulting in their failure to follow sound farming practices, and (iv) political interventions (Yaron, Benjamin, and Piprek, 1997). Even in developed countries like the United States, Canada, and Japan, traditional crop insurance has been shown to be unsustainable without heavy and continuous state subsidies (Makki, 2002).²⁴ Many developing countries cannot afford to heavily subsidize the premium costs, which are usually too high for small farmers to pay otherwise. Research and pilot projects are now underway to design appropriate insurance products at affordable prices.

Some analysts suggest that multiple perils can be insured sustainably with traditional insurance products if there are highly skilled staff members, extensive information systems, and statistical modeling, but these are hard to obtain in developing countries. Others refute this approach and propose instead index-based crop insurance that ties indemnity payments to an easily observable trigger such as rainfall or temperature. In order to evaluate the amount of damage that has occurred, traditional crop insurance measures actual farmer losses through field inspections and on-site visits. Index-based insurance, however, uses a weather-based index as a proxy measurement of losses. Conceptually, weather-based insurance instruments are expected to eliminate moral hazard and dramatically lower administrative costs associated with monitoring and making claim adjustments. Farmers can easily understand the characteristics and value of weather-based insurance contracts. Experiments in weather-based crop insurance are

²³ It was implemented in five provinces in high-risk areas by BaoViet, the state-run insurance company.

²⁴ The program in Japan involves subsidies for premiums between 50 percent and 80 percent and for administrative costs and reinsurance support. In the United States, premiums paid by the farmers cover only half of the actual costs incurred (Makki and Somwaru, 2001)

underway in India, Mexico, and other countries.²⁵ The latest thinking in this area recommends creating a more dynamic product that covers output risk by using satellite imagery to determine levels of vegetative growth.

A potential role for financial institutions is to retail these insurance products, to protect both their clients and themselves, and thereby expand their agriculture portfolios. RFIs, including MFIs, are now exploring ways to establish linkages with insurance agencies to provide such index-based crop insurance products to their clients. Weather-based insurance can also be extended to small and medium enterprises whose income is vulnerable to fluctuations in weather as a way to achieve adequate scale. There are also opportunities for RFIs to use information from weather-based insurance contracts to market newer product lines like the one provided by ABN Amro since 2002. Dutch clients are offered a weather-linked, three-month deposit product, Weergaloos Sparen, at an annual interest rate of 7.5 percent if the weather during July, August, and September is particularly unseasonable and 2 percent during good seasons. Regular deposit products paid an annual interest of 3.3 percent.

The World Bank is now piloting weather-based insurance in India — not as a stand-alone insurance product, but as one that is embedded in loan contracts and combined with compulsory savings accounts. The design consists of a rainfall-based index insurance whereby all the insured are paid the same amount per unit of insurance during bad years and no payment during good years. A risk-management account enabling the insured to save during good years acts as an income stabilization mechanism to top off losses not adequately covered by the insurance payouts.²⁶ Smart cards may be used to reduce transaction costs and reduce indemnity time for the insured. ICICI bank in India is working with ICICI Lombard General Insurance Company to pilot the product (Hess, 2003).

A Local Area Bank (LAB) called Krishna Bhima Samruddhi (KBS) in India (BASIX annual report, 2003-04) is providing weather-based crop insurance for dry-land agriculture. KBS is a subsidiary of BASIX Ltd., an NBFIs in India. KBS collaborates with ICICI Lombard General Insurance Company to provide weather-based crop insurance to small farmers in dry-land areas for groundnut and castor crops based on rainfall data in the region over the past 30 years. Payouts are based on the deviation of actual rainfall from the predetermined rainfall index. Since June 2003,

²⁵ Weather-based insurance is not commonly used in the United States and Europe because highly subsidized traditional crop insurance based on individual loss adjustment is available. However, Australia, South Africa, Canada, and recently Mexico and India are trying weather-based insurance.

²⁶ This concept is modeled after a program in Canada called National Income Stabilization Accounts (NISA). The latest study that examined NISA shows that the farmer savings are matched by the government and paid interest at rates higher than the prevailing bank rates for deposits. As a result, farmers were reluctant to withdraw from these savings to cover losses not covered by crop insurance. Indeed, they reported using the NISA savings as collateral for obtaining loans (Makki and Somwaru, 2004). Therefore, CAIS (Canadian Account for Income Stabilization) was initiated in 2004 and introduced limits to savings that can be accumulated into these accounts.

KSB has bought a bulk insurance policy from ICICI Lombard and has sold individual insurance policies to more than 230 individual farmers; these policies provide coverage of US\$70,880 over a period of nine months to clients in an area hit by consecutive droughts in the three past years. Premiums collected were around US\$2,135. As of March 2004, 156 claims were settled for a payout of US\$935. The product, if successful, could insure rain-dependent farmers in rural India, who are amongst the nation's poorest. This weather insurance product comes in addition to the government-sponsored crop-insurance program mandatory for farmers who borrow from formal banks (BASIX, 2004). The product is also being marketed to 50 soy farmers in Madhya Pradesh through PRADAN, an NGO, and to some paddy farmers in Aligarh in Uttar Pradesh through an agribusiness company. These products are still in experimental stages and need to be monitored carefully before wider implementation.

Skees (2002, 2003) discusses index-based weather insurance to deal with weather risk in developing countries and distills lessons in providing index-based crop insurance in developing countries.

- Not all crop failures or food insecurities are caused by weather risk. Civil strife, poor farm management, inadequate seed and fertilizer supplies, and pest attacks may be as important as weather in determining crop productivity levels.
- Index-based weather insurance is ineffective and too costly in marginal farming areas and in areas where weather trends are changing (e.g. where yearly average rainfall has been declining). Index-based weather insurance creates an index that is based on past weather patterns. When weather trends change, payouts will be triggered too frequently and hence re-insurers will charge an appropriate premium for taking such risk. These actuarially priced premiums are often too high for end-users in these regions.
- A continuous record of accurate weather data with at least 30 years of daily data and only a few missing data points is usually difficult to find in developing countries. Additionally, many countries do not have a sufficient density of weather stations to provide accurate information for the remote areas that may require such products. Local insurance companies can be used to write insurance contracts on non-official weather stations, such as rain gauges, closer to the farmers' fields. These stations cannot be reinsured but may offer better protection for the farmer than a nationwide scale. The local insurance company would then take the basis risk between these rain gauges and the nearest official weather station on which reinsurance could be provided.

Continuing debates in crop insurance include the following:

- Several proponents of the new index-based crop insurance do not discard the need for subsidies, but debates continue regarding the level of subsidization for crop-insurance programs. Some proponents including the Spanish Agricultural Insurance Agency (ENESA, La Entidad Estatal de Seguros Agrarios) argue for a public-private partnership that includes heavy public subsidies. They note that the cost of such subsidies is generally less than the cost of providing ex-post emergency relief after a disaster. The key to such a system, however, is a requirement that all farmers must purchase insurance to be eligible for disaster relief. While state subsidies may not pose a big burden in countries with few farmers, it is a huge burden in countries where the majority of the population is engaged in risky agricultural activities (*MicroInsurance*, 2004).
- There are diverse views about whether crop insurance should be mandatory or voluntary. On the one hand, mandatory insurance may increase scale, but it may not eliminate adverse selection problems. On the other hand, voluntary programs may not be able to achieve scale and may only attract very risky clients (Abada, 2001).
- There is doubt whether a standardized insurance package can apply to all types of farmers (e.g., small, large, and commercial). Some propose cross-subsidization of small and large farmers (Abada, 2001).

ii. Livestock Insurance

Requiring insurance when livestock are financed by bank loans has been practiced in several countries, including India). The Grameen Bank in Bangladesh started such a program in the mid-1990s, offering it only to its borrowers via its insurance wing (Nagarajan, 1998). As shown by the Grameen experience, the costs of providing livestock insurance during rainy months have been prohibitively high, due in part to limited staff skills and the inability to pool risks and achieve volume. This has been especially challenging for semi-formal institutions such as cooperatives, credit unions, NBFIs, and MFIs that function in rural areas.

Therefore, RFIs in some countries are now attempting to provide crop, life, livestock, and health insurance to their clients by partnering with specialized insurance firms that have the ability and skills to design and manage insurance contracts. For example, SHEPARD, an MFI operating with SHGs in rural India, offers group-based livestock insurance in partnership with a local insurance agency. The product covers accidental and natural death of cattle financed by a loan. The member pays four percent of the animal's value as a premium, of which 2.25 percent goes to the insurance partner. The insurance product is voluntary for clients. The number of policyholders rose from 126 in 2000 to 302 in 2002, but fell to 85 in 2003. The product's sustainability has been difficult to assess since the

organization does not measure the costs associated with insurance delivery (Churchill and Ramm, 2004). BASIX, an NBF in India, has been offering livestock insurance to its borrowers since October 2002. It partners with Royal Sundaram Alliance General Insurance Company Ltd., for the distribution of livestock insurance products. As of March 2004, BASIX had insured livestock for a value of US\$99,534 through this company (BASIX, 2004, www.basixindia.com/insurance.asp).

There are several challenges to managing livestock-insurance projects when the trigger mechanism to settle claims is not very transparent. To increase transparency and reduce the time required to settle claims, index-based schemes for livestock insurance (based on index-based schemes for crop insurance) are now being considered for pilot projects. World Bank specialists reported that Mongolia is preparing to provide support for a pilot scheme for index-based livestock insurance. The pilot will be carried out in selected provinces to ascertain the scheme's viability. The proposed insurance is expected to enhance the financial security of livestock-owning households by reducing the impact of livestock deaths (Skees, 2003; World Bank, 2004b).

iii. Life and Health Insurance

Life insurance is typically offered to urban clients, but some MFIs, such as the Grameen Bank, are successfully providing life insurance in rural areas. However, access to health insurance in rural areas is still a challenge. While there are some instances of providing health insurance to MFI clients in India, Uganda, and Zimbabwe through partnerships with hospitals and insurers, they have not yet been extended to rural areas, especially to cover high-risk RFI clients such as HIV/AIDS patients. The examples discussed below suggest some possibilities for serving rural clients.

In Nepal, a SACCO named BISCOL is piloting a life insurance product in rural areas in partnership with the National Life and General Insurance Company (NLGIC). BISCOL began offering life, health, and livestock insurance products in November 2001 with some donor funds and fees collected from members. Clients buy health or life insurance by paying an annual premium of five percent of their monthly savings accumulated, or about US\$3.40 (whichever is less). BISCOL provides an equal amount as a matching fund to the insurance fund. The premiums collected are also used for on-lending to members. In case of natural death of the insured, a family member or named beneficiary receives Rs.10,000 (US\$135), Rs.20,000 (US\$ 270), or Rs.40,000 (US\$540) according to the annual premium paid [Rs.70 (US\$1), Rs.140 (US\$2), and Rs.280 (US\$4)]. In case of accidental death, the family member or nominee receives double benefit; that is, Rs.20,000 (US\$270), Rs.40,000 (US\$540), and Rs.80,000

(US\$1,080). The benefit paid can cover the outstanding loan debt, pay for funeral costs, and provide additional cash to the beneficiary. In case of hospitalization and treatment, the insured will be reimbursed on the basis of the actual hospital and medical costs. As part of the compulsory insurance policy, the maximum medical benefit paid is Rs.10,000 (US\$135) or two times the savings accumulated, whichever is less. Benefits cover medical expenses. For serious illness that cannot be treated in local hospitals, BISCOL pays the medical costs related to the referral to a hospital in Kathmandu. In the event of the death of insured livestock, benefits equal 80 percent of the livestock value. From July 2001 to 2003, BISCOL accumulated total premiums of US\$55,891. A total of 26 health insurance claims were made for US\$2,177, and three life insurance claims were made for US\$726. Overall, the life insurance product was profitable (Simkhada, 2004).

iv. Islamic Insurance

Recently, a new form of insurance called *takaful* is emerging in some Islamic countries, including Malaysia and Sudan (Patel, 2004). It is a slight variation of mutual insurance and is compliant with Islamic *Shariah* laws. *Takaful* is based on mutuality, cooperation, shared responsibility, and joint indemnity. Policyholders co-operate among themselves for their common good. Losses are divided and liabilities are spread according to a community pooling system. *Takaful* is conceptualized as an enterprise rather than a charity (Patel, 2004).

The first *takaful* company, the Islamic Insurance Company, was established in Sudan in 1979. There are now more than 50 *takaful* companies worldwide, and their insurance premiums represent 0.02 percent of world insurance premiums. *Takaful* is used primarily to cover trade related losses. Studies now show that demand exists for micro-*takaful* products among the poor. However, the outreach of micro-*takaful* is limited by a lack of trained personnel; a lack of awareness regarding insurance among the poor, insurers, and re-insurers; and a lack of appropriate regulations. Islamic laws allow linkages between cooperatives and *takaful* companies (but not cooperatives and commercial insurance companies) to help with increased outreach to the socially excluded poor.

The first micro-*takaful* scheme, the Agricultural Mutual Fund, was established in Lebanon in 1997 to provide health insurance for the rural poor. The scheme covers expenses not met by the government program, which pays 85 percent of hospital costs. The fund is currently operational in 180 villages and covers 23,000 members. It is open to members of any religion. Each insured family is required to pay US\$10 each month but communities cover the cost for the poorest who cannot afford to pay. Premiums are kept down since health costs are low in Lebanon and the program receives large government subsidies. The scheme may need to raise premiums if the government withdraws

or reduce its subsidies. There is also a need for wider coverage beyond rural areas, for technical assistance, and for reinsurance to help achieve sustainability.

Insurance services are important for rural areas, but providing them to clients at an affordable cost without massive subsidization remains challenging. While rural subsidies may not be an excessive drain on resources in developed countries where rural clients account for a small proportion of the population, they may choke a developing country where the majority live in rural areas. There are some ongoing rural experiments that may prove successful for wider replication, but the sustainability of these programs is yet to be proven. Partnerships and effective linkages are needed for the effective provision of insurance services. However, it has been difficult to find partners and to foster linkages. It is also debatable whether high-risk populations, such as those affected by HIV/AIDS, can be insured without subsidization.

v. Credit-Guarantee Funds

Credit guarantees and guarantee funds are often advocated as a way to reduce the risk of lending to potential borrowers who are perceived as being creditworthy but are unable to obtain loans from regular banking sources. They function as a kind of insurance for the financial institutions.

There has been considerable debate, however, about the effectiveness of guarantees and whether their impact has been worth the cost of creating, funding and operating them. There are formidable methodological challenges in evaluating their impact, as there is in most impact analysis, which makes it difficult to derive firm conclusions and recommendations (Gudger, 1998; Levitsky, 1997; Meyer and Nagarajan, 1996).

Many guarantee schemes have been created in developing countries, but most struggle to achieve sustainability and either collapse or must be continually propped up with subsidies. They impose high transaction costs on lenders, and administrators often slow down the processing of claims or completely refuse to honor them when faced with too many claims (Levitsky, 1997). This has prompted many lenders to stop participating. Some lenders report they are still unwilling to lend for projects that are perceived to be risky, just because there is a guarantee that may eventually cover part of future losses. Some organizations have discontinued offering guarantees. For example, the Swiss-based international fund, FUNDES, stopped granting guarantees for SME loans made by banks in Latin America because the benefits did not justify the costs.

Design clearly matters in guarantees. One guarantee that seemed to be successful in meeting its goals was the ACCION Bridge Fund (Stearns, 1993). An example of a poor design was recently reported in Uganda (Meyer, Roberts, and Mugume, 2004.) An AID contractor offered a 100 percent guarantee to the Centenary Rural Development Bank for making loans to farmers who would be sanctioned by another AID contractor that was working on a technology and marketing project to increase agricultural production. Beginning in 1998, Centenary began to slowly experiment with agricultural lending in one of its branches and was able to keep loan losses to a minimum. However, with the guarantee and the loan sanctioning process by the contractor, Centenary was induced to expand agricultural lending quickly to seven branches and made dozens of guaranteed loans. Following a season of abundant harvests and a collapse in maize prices, Centenary requested that the guarantee reimburse 29 percent of the total agricultural portfolio that it argued was non-recoverable. This was a case of moral hazard induced by a guarantee. The new loan officers and branch managers ignored the sound procedures being carefully developed in the first branch and did not perform due diligence in lending.

USAID is now expanding its central DCA loan guarantee in developing countries.²⁷ In Uganda, the SPEED project is administering the DCA. This guarantee covers 50 percent of the losses incurred in loans made by Ugandan banks to SMEs and MFIs. As of Sept. 30, 2003, seven participating banks had placed US\$13.1 million in 84 guaranteed loans. A number of these loans were made to agribusinesses, including a sunflower-seed crushing plant and a vegetable oil refining plant. About 45 percent of the loans made were classified as agricultural.²⁸ The SPEED project provides training to the lenders and some of the borrowers, and business development services are offered at a number of locations. The project interviewed some of the bankers involved with the guarantee. One reported that the guarantee resulted in the bank giving larger loans than it would have otherwise. Another reported that the guarantee resulted in loans being made that otherwise would have been rejected.

The Rural Enterprise Agribusiness Promotion Project (REAP), a donor-funded CARE program in Kenya, has established a Central Management Unit (CMU) that has an input supply loan fund that either directly provides loans to farmer units or guarantees credit from private-sector buyers and processors. The private sector is eventually expected to deal directly with the production units without this guarantee. The loan fund is reported to have enabled

²⁷ USAID/Washington did not provide information requested to evaluate why the DCA program may be more successful than earlier guarantees. Meyer and Nagarajan (1996) speculated that training and the transfer of a lending technology successfully developed elsewhere was more important than the actual guarantee in encouraging lenders to become involved in microfinance, but this argument requires additional study.

²⁸ Internal SPEED reports.

the farmers to get more flexible and diverse loans in addition to standard seasonal input credit (for example, for longer-term irrigation infrastructure loans). The CMU also provides technical assistance and fosters linkages with credit markets for legally registered farmers associations (Pearce, 2003).

Lessons learned include:

- Designing a sustainable guarantee scheme is complicated, so it is hard to point to many clearly successful cases. Far more have failed than have succeeded in developing countries, and many have required continuous subsidization.
- Even where schemes are sustainable and are used to guarantee loans, there is no clear evidence that they contribute much to additionality in lending.
- Training and technical assistance may be more important to lenders than guarantees in inducing them to become more involved in serving some under-served segment of the market.

Remaining challenges are:

- If a guarantee is being promoted to stimulate the expansion of rural lending, the design must be done carefully by learning from the many past failures.
- The absence of a clear set of best practices for rural finance makes it difficult to design a guarantee that is likely to be sustainable. The lack of good data concerning lending risks in agriculture makes it difficult to set the level of guarantee fees needed for sustainability.
- Given these uncertainties, it is difficult to evaluate whether subsidizing guarantee schemes is really the best use of resources to support rural finance.

9. Remittances

With globalization and increased migration, the flow of remittances from developed to developing countries has increased markedly. The global flow of remittances was found to have doubled in between 1991, when US\$33 billion in remittances were recorded, and 2002 (Ratha, 2003).²⁹ This has created significant interest among donors,

²⁹ Remittances flowing into Asia and the Pacific amounted to US\$27 billion in 2002, US\$11 billion of which went to East Asia and the Pacific, while US\$16 billion went to South Asian countries. These flows were equivalent to 2.5 percent of GDP in South Asia. India accounted for 63 percent of inflows into South Asia, while the Philippines accounted for 58 percent of the total inflows to East Asia and the Pacific in 2001. Bangladesh, Pakistan, Philippines, Sri Lanka, and Thailand were also among the top 20 developing country recipients of workers' remittances in 2001 (Fernando, 2003; Ratha, 2004). Sub-Saharan African countries received US\$4 billion, or about five percent of total workers' remittances sent to all developing countries in 2002 and represent-

governments in remittance-receiving countries,³⁰ and private companies. Some financial institutions, such as WOCCU and ACCION, are also interested in providing remittance services. They provide the services themselves or in partnership with remittance companies, with the expectation of increasing their outreach to newer clients and offering newer products, such as housing loans and contractual and time deposits linked to remittances. Increasing competition is now driving down costs.

Remittances can be an important source of income for poor households, especially for the vulnerable poor and help them meet basic consumption needs. Some argue that remittances reduce poverty, as it is the poor who migrate and send back remittances, while others maintain that they increase inequality, since the rich tend to migrate and send remittances that make the recipients even richer. One of the few impact studies conducted on remittances focuses on remittance receivers in El Salvador. It found that remittances relax liquidity constraints for children entering and staying in school (Cox-Edwards and Ureta, 2003). The school drop-out ratio was observed to be lower, and the enrollment ratio higher, in households that receive remittances. This may imply asset formation in terms of human and social capital.

While international remittances and domestic transfer money services are generally accessible to urban clients, they are increasingly expanding into rural areas. In rural El Salvador, remittances average about US\$137 per month per household and are primarily used for consumption (Wenner, 2004). In 1997, 14 percent of rural and 15 percent of urban of Salvadoran households received remittances from relatives or friends living abroad (Cox-Edwards and Ureta, 2003). Pleitez Chavez (2004) reported that almost one-fifth of all Salvadoran households received remittances in 2000, and about 20 percent of rural households received them. In his analysis of a rural data set, transfers (mostly remittances) were higher for households that were sometimes poor compared to those classified as always poor or non-poor. Average remittances represented 8 to 17 percent of average total household income during the four survey years of 1995, 1997, 1999, and 2001. The amount that a household received in remittances tended to increase if it experienced negative income shocks. Therefore, remittances served as a type of informal insurance.

ing about 1.3 percent of the region's GDP. Average remittances range from US\$4,000 to US\$14,000 per year (Sander, 2004). In 2003, remittances sent to Latin American and Caribbean countries surpassed US\$38 billion, exceeding the flows of foreign direct investment and net official development assistance (IADB, 2004). Currently, more than 150 million separate transactions are sent each year from all over the world to approximately 20 million families in the region —typically US\$200-US\$300 at a time, with an average of US\$2,000 per family per year — mostly outside of the financial system (Buchenau, 2004).

³⁰ Since 9/11, governments in remittance-sending countries, such as the United States, have taken an interest in remittance flows in order to trace transfers to and from terrorists.

There is a concern that remittances may tend to be used for unproductive purposes by receiving households. Adams (2005) tested this possibility in Guatemala with a national data set collected in 2000 and consisting of a survey of over 7,000 households. He found that almost 78 percent reported receiving no remittances, almost 15 percent reported receiving internal remittances, and 8 percent reported receiving international remittances. Those receiving remittances tended to have more education and were more likely to be urban. At the margin, they spent less on consumption goods, but more on education (especially at the secondary school level) and on housing. If these findings hold true in other countries, there would be cause for financial institutions to create savings and loan programs linked to remittances that are destined for these investment purposes. More research is needed to clarify the use of remittances in rural areas and the potential for channeling them into productive investments.

There are important issues regarding remittances sent to rural areas, such as the cost, safety, and speed of transfers, especially for small sums. A study in South Africa, for instance, estimated that as much as 40 percent of the total value of a remittance of up to approximately US\$30 sent to a rural recipient could be spent on banking charges and transport costs (Cross, 2003).

Several types of agents, including financial institutions, are entering the remittance market.³¹ Some are formal providers, such as specialized remittance companies (Western Union, credit unions, MFIs, commercial banks, and postal savings banks).³² Others are informal providers, such as hawala traders, transport operators, travel agents, traders, friends, and relatives — all of whom play a significant role in transferring monies across and within countries.³³

Remittances may offer a means for financial institutions to increase their outreach and relevance to poor clients. Some MFIs are trying to develop this market. For example, Banco Solidario in Ecuador estimated that it would re-

³¹ MFIs engaged in remittances to and from rural areas include the National Microfinance Bank of Tanzania; Uganda Microfinance Union for domestic transfers; Equity Building Society in Kenya and Centenary Rural Development Bank in Uganda for domestic transfers using Western Union as sub-agent; Teba Bank for mineworkers in South Africa making transfers domestically and to Botswana, Lesotho, Mozambique, and Swaziland; Fonkoze in Haiti; Banco Solidario in Ecuador; PRODEM in Bolivia; and the microfinance bank in Kosovo (Sander, 2004).

³² Cross (2003) describes the effect of theft and robbery in South Africa on rural post offices leading to discontinuance of the service.

³³ Hawala (typically used in the Middle East and Arab countries) and hundi (used in South Asia, especially in Nepal and Bangladesh) can be used interchangeably. Hawala simply means ‘transfer’ in Arabic and is often used to refer to both formal and informal transfer services generally. Informal services typically operate on the basis of phone, fax, and email and are often offered by import-export traders, forex bureaus, travel agents, or retail shop owners. The client deposits the funds, identifying the recipient and his or her location. In some cases a password is involved; in other cases the funds are delivered to the recipient, but in many cases the sender just informs the recipient where to pick up the funds and how much should be paid out. The service provider, or hawaladar, informs his counterpart at the receiving end and books are reconciled either through trading or through cash transfers. Sometimes, transfers involve settlements through bank accounts (see Maimbo, 2003).

ceive US\$75 million in remittances in 2003, with 20 percent into savings accounts (Sander, 2004; Quesada, 2003). Banco Solidario also offers three additional products to low-income, remittance-receiving clients within its 'Programa de apoyo al emigrante' in partnership with a Spanish bank. These are: short-term credit to cover urgent needs in Spain, mortgage loans, and a dollar savings account for the migrant's family in Ecuador or for their return ('Mi familia, mi país, mi regreso'). Partner Spanish savings banks also offer migrants access to bank accounts and to debit and credit cards, based on good performance. Demand for these remittance-related credit and deposit services offered by Banco Solidario and its Spanish partners have increased with the volume of remittances. About two-thirds of the clients who receive remittances through Calpiá in El Salvador are attracted to the MFI by the new service, which brought in more than 5,000 new customers who were not previously served by any financial institution due to their very low incomes and high vulnerability. Currently, about one-third of the remittance clients hold savings accounts, and about 7 percent have obtained credit. Approximately 16 percent of the savings account holders save regularly, averaging around 12 percent of their remittances (Buchenau, 2004).

The costs of international remittances have declined significantly with the entry of several players, linkages, the bundling of several services, and the use of new technology. Most financial institutions offering remittance services are licensed or registered to ensure safety, and they reduce costs by offering international money transfer services as an agent for an existing money transfer agent, such as Western Union or Money Gram (Sander, 2004). Some examples that illustrate the trend are discussed below.

The Microfinance International Corporation (MFIC), a private remittance company, recently started to provide remittance services to the poor in El Salvador. It is a subsidiary of the Bank of Tokyo and is funded by IADB, JICA, and GTZ. MFIC is linked with MFIs in El Salvador. It uses an electronic settlement system over the Internet, called the Cooperative Open Banking Information System (COBIS). The system allows an almost instant transfer of remittances to Latin American countries; money can either be deposited in the recipient's savings account in the microfinance institution or paid out in a check to the recipient's school or electricity provider. A remittance-backed lending program to partner with microfinance institutions is also motivating MFIs to expand their operations to newer clients such as remittance receivers. The actual remittances are safely kept in the U.S. banking system, where they are pooled and generate interest. The MFI's partners pay recipients with local funds, and each institution keeps an individual remittance account with MFIC in the United States. These funds are pooled and made available to the institution's partners as needed.

MFIC charges the sender a flat fee for remittances services. The fee for amounts less than US\$150 is US\$6, and the fee for greater amounts is US\$9, much lower than currently charged by major remittance companies in the United States. The company also offers a wide array of financial services to the remittance senders in the United States through a chain of one-stop financial service centers called Mi Pueblo. Check cashing, consumer loans, credit lines, and other products are offered through these shops, which also allow microfinance institution partners in Latin America to market their services among their expatriate customer base in the United States. MFIC has opened Mi Pueblo shops in Washington, D.C., and Maryland, and it expects to launch operations soon in Guatemala and Honduras. Expansion is planned in Ecuador, Peru, Bolivia, and Mexico (MFIC, 2004).

The International Remittance Network (IRnet) is an electronic funds transfer service developed by the World Council of Credit Unions (WOCCU). IRnet provides this service to more than 40 countries in Latin America, Asia, Africa, and Europe and at more than 3,200 locations in some 36 U.S. states. It charges a flat fee of US\$10 to send up to US\$1,500.³⁴ While senders are required to be credit union members, recipients are not. IRnet has generated competition in the U.S. remittance market. In some markets where it operates, remittance charges for transfers to Mexico have dropped by approximately 37 percent. The provision of remittance services has been shown to benefit credit union members and their transnational families. It has also benefited credit unions themselves by attracting new clients who tend to open savings accounts and thereby accumulate financial assets. Fees for remittance services also provide a new source of income for credit unions (Grace, 2004).

MFIs in Latin America — such as Financiera Calpiá in El Salvador, Caja Los Andes in Bolivia, Financiera Confia in Nicaragua, Sociedad Micro Credit National in Haiti, and Sociedad Financiera Ecuatorial in Ecuador³⁵ — have received funds from the IADB in an attempt to link remittance services to their other financial services. Together, these MFIs have processed more than 12,000 remittance transfers amounting to US\$2.2 million in about a year. To ensure the speed and security of these transfers and to reduce costs, these MFIs have developed alliances with specialized remittance-transfer companies. For instance, Financiera Calpiá entered into an agreement with the largest remitting agent to El Salvador from the United States. Then, it trained its staff to inform the public about the new service and equipped them with skills necessary to deliver remittance services (Buchenau, 2004).

Lessons from experiences of MFIs with remittance services include the following:

³⁴ WOCCU claims that IRnet charges its members 33 percent to 50 percent less than Western Union or Money Gram charges.

³⁵ These MFIs belong to a network of MFIs affiliated with IMI, a German company dedicated to investing in microfinance.

- Successful remittance services require listening to clients in order to design appropriate products and choosing strategic partners to affect transfers at both sides of the remittance markets.
- The use of formal international remittance services with service points in both receiving and remitting countries has been shown to be safe, cost-efficient, and time-efficient. This is because remittance operations require volume in order to reduce costs and make profits.
- The market for supplying remittances is generally much more competitive than the market for providing loan and deposit services in many remittance-receiving countries in Asia and Latin America (Grace, 2004)
- Providing easy and inexpensive access to domestic remittances is a key issue and requires the development of easily accessible and low-cost internal money-transfer mechanisms.³⁶
- There is a need to improve transparency, promote fair competition and pricing, apply appropriate technology, and develop partnerships and alliances among institutions to reduce costs and increase availability.
- Some financial literacy is required to raise awareness of the benefits of savings and other financial products and to inform consumers of their rights with regard to remittance transfers.

Current advances in the provision of remittance services are driven by private investors, not by governments or donor agencies. However, there is increased interest among the major multilateral and bilateral donors and some governments such as the Philippines, Mexico, El Salvador and India. For example, GTZ organized a recent dialogue on remittances that brought donors together with the heads of government of major remittance-receiving countries in Central America.³⁷ A working group is now promoting the exchange of experiences on remittances issues, discussing lessons learned about linking remittances and local economic development, and exploring possibilities for more effective uses of remittances.

The United States and Mexico are entering into arrangements to lower the cost of remittances. The Federal Deposit Insurance Corporation (FDIC) and the Mexican Consulate in Chicago recently launched the New Alliance Task Force to enhance the economic well-being of immigrants working and living in the United States. The task force is considering ways to improve access to the U.S. banking system, provide financial education to remitters, develop financial products with remittance features, and design innovative mortgage programs for remitters. Identity

³⁶ A study in Vietnam indicated that as many as seven out of eight transfers are domestic, although they only constitute half the value of international remittances (Sander, 2004).

³⁷ The dialogue took place June 29-30, 2004, at the Central American Forum on Remittances, entitled "Alternatives of Participation for Microfinance Institutions (MFI) in the Central American Remittances Marketplace." The event was organized by GTZ with support from IADB, the Central American Bank for Economic Integration (CABEI), and the Ford Foundation.

cards issued by the Mexican government to seasonal migrant workers are now accepted at U.S. banks and credit unions in border states, making it easier to become a member, open a bank account, or remit money in a safe, efficient manner.

Several issues need to be explored about remittances:

- Is there an optimum market size for remittance and transfer services in rural areas?
- Do rural financial institutions have the operational, managerial, and financial capacity to provide new remittance services on their own? What is required to strengthen them in order to provide remittance services?
- How can remittances become better linked to loans and savings products, such as remittance-day loans, housing loans, or guarantees for loans? MFIs may begin searching for ways to use remittance streams more systematically in their credit evaluations in order to help clients leverage this income to qualify for larger loans (Jaramillo, 2004).
- Is there a need for more regulation of financial institutions that engage in remittance services?
- Several remittance companies function as quasi-banking agents, providing trade finance and deposit accounts. Whether these remittance companies will remain primarily money-transfer businesses or evolve into banks remains uncertain.

D. Advances in Processes

10. Technological Advances

i. Reducing Transaction Costs

The costs for supplying financial services are high in rural areas in developing countries. Often, these costs cannot be adequately covered through interest charges because usury laws or traditions prevent charging high rates to clients. Therefore, RFIs tend to reduce the quality and/or quantity of their services, which increases transaction costs for the clients. Several advances being made to reduce transaction costs for rural finance are discussed below. These measures help minimize time-consuming travel that contributes to high staff costs.

Mobile Banking

One objective of many RMF projects is to expand financial services to remote rural areas at a minimum cost using new techniques such as mobile banking. Old paradigm projects (e.g., India) usually failed to meet this goal, but

new paradigm projects are approaching it in more careful ways. Mobile banking may involve either providing banking services from movable vehicles or using part-time, partial service locations and agents.

Mobile banks using vehicles are being tested in some rural areas to provide loans and deposits at reduced costs for clients and RFIs. One such example is a network of 330 mobile banks in Vietnam operated by VBARD (Vietnam Bank for Agriculture and Rural Development). This project is supported by the World Bank, which helps procure the vehicles. The interest rates and fees charged by these mobile banks tend to cover costs. Operational efficiency keeps the costs down, resulting in low fees and interest rates for the borrowers. Transaction costs for clients are also kept low since savings are collected at the savers doorstep and the hours of operation are long to meet client needs. A total of 315,000 rural clients have received loans since 1998. On average, each mobile bank has disbursed 1,921 loans, collected 1,387 payments and transported cash on 75 occasions to 16 local points per month. Loan repayment is reported to be around 98 percent. The program has mobilized deposits from 1,983 clients every month. Although demand exists for deposit services, the limited accessibility of deposits for withdrawal tends to limit their growth. VBARD's mobile banking initiative is considered profitable, with an average profit of US\$1,000 a month for each mobile branch.³⁸

Another example of mobile banking involves the Equity Building Society (EBS) in Kenya, where mobile banks use Global System for Mobile Communications (GSM) technology to process transaction data on-line and provide rural clients with a greater range of services. Solar units, rechargeable batteries, and inverters provide uninterrupted power to laptops. As of July 2003, about 10,000 clients were served by 28 mobile units connected to seven branches. Loans were made to 65 percent of the clients served. Three of the seven branches were profitable. Profitability was related to high portfolio size, savings balance, and number of clients served. The units, however, face competition from the existing SACCOs and cooperative banks (Coetzee et al., 2003).

Some RFIs hire mobile staff to help reduce operating costs and improve access in more remote areas. Salaried staff or commissioned agents collect deposits at people's homes, workplaces, marketplaces, or other central locations. The mobile loan officers of Constanta, a leading MFI in Georgia, travel between service points set up in rented rooms in local bank branches in order to provide services in thinly populated rural areas. They coordinate with nearby Constanta area offices to lower the costs of operating in rural areas (Nagarajan, 2003b).

³⁸ For more information on mobile banks in Vietnam, see Tien Hung (2004) and Chupek (2004).

The successful use of mobile banks is context specific and depends on the status of security; law and order in rural areas; the availability of good roads for transport; and regulatory issues regarding the collection of savings. Clients in remote areas have raised concerns about mobile units that drive away with their deposits and then visit them only occasionally or at inconvenient times. These concerns demonstrate the importance of establishing confidence with rural clients before using mobile units. This problem may limit the expansion of mobile banking by new RFIs. Mobile banking also may not be ideal for all types of institutions. For example, credit unions reported that mobile collection agents significantly increased their administrative costs (Hirschland, forthcoming b).

Piggybacking

Piggybacking involves providing financial services at points where clients from rural and remote areas regularly travel to obtain non-financial services. Offering financial services at a time and place where clients are already transacting other business can lower their transaction costs and also make it affordable for the RFI to provide convenient services.

SafeSave in Bangladesh layers several of its services. Staff members collect savings at the same time as they travel through neighborhoods collecting loan payments, and they use the same management systems for both savings and loans. Similarly, at negligible cost, ASA offers its borrowers a voluntary savings service by allowing them to deposit and withdraw amounts in excess of their mandatory weekly deposits. In many countries, RFIs reduce fixed costs by using their management systems and staff to offer deposit services in convenient locations, often through windows in local post offices or other existing buildings.

In the remote hills of Nepal, farmers regularly walk several hours to deliver their milk to a dairy cooperative. Depositing money at the same time as they sell their milk is convenient, and the cooperative cannot afford to offer services closer to their homes (Hirschland, forthcoming b).

Piggybacking is found to effectively reduce travel costs by delivering financial services on a large scale in unbanked areas (Littlefield and Rosenberg, 2004). Examples of such piggybacking includes the South African social payments system that uses over 8,000 armored trucks and cars to deliver grant money (child grants and pensions, among others) monthly to almost 5.5 million South Africans. Staff members move from village to village, using thumbprint recognition to verify identities. Another example of RFIs piggybacking onto non-financial infrastructure to offer financial services involves the use of the network of more than 800,000 long-distance telephone booths in rural India to quickly connect head offices with mobile agents to provide remittance services. The brightly painted

kiosks along the dirt roads of rural Haiti where lottery tickets are sold are now being considered for deposit collection. These new strategies hold promise, but before attempting to replicate them in a large scale, they must be carefully tested within a given regulatory environment and security considerations for holding money.

Electronic Banking

Electronic banking involves the use of several types of information technology to deliver financial services through personal digital assistants (PDAs), automated teller machines (ATMs), debit and credit cards, point of sale (PoS) devices, and cell phones. Recent studies in Asia and Latin America show that Palm Pilots and smart cards can reduce costs and increase the number of clients per loan officer (Microfinance Network, 2003). The majority of such initiatives are funded by private investors that have realized that the poor offer a good market for businesses. Several alliances and partnerships among different types of stakeholders have been formed to provide diverse financial products using e-banking in a cost-efficient way.

Information technology companies are entering the electronic banking industry. For example, cell phone companies are entering the remittance markets. In the Philippines, SMART communications uses cell phones for remittance services. Another initiative started by the Hewlett-Packard Company in August 2003 spawned a public-private consortium of microfinance leaders, technology specialists, and business thinkers who are now testing a Remote Transaction System (RTS) in Uganda. The RTS combines technology and business processes to enable cash deposits and withdrawals by MFI clients through a network of loan officers, rural branches, and/or agents. The RTS will electronically capture transaction data on individual clients and groups for MFIs and create an electronic identification system for MFI clients. The RTS can be applied to the unique business needs of microfinance institutions (MFIs), whether they seek to improve client tracking, extend their rural outreach, or increase business efficiencies. The technology infrastructure required for the RTS in Uganda is functionally represented by a point of sale (PoS) device with a card reader and cell phone kept by an MFI agent. Clients will be issued electronic identification cards to authenticate deposits or withdrawals. Middleware technology (hardware and software) will allow transaction requests to be routed to the appropriate MFI and/or commercial bank. Pilots are now planned to test the RTS technology and the operational and collaborative processes required for implementation among the affiliates and other stakeholders (Joanna Ledgerwood, e-mail communication with authors in October 2004).

A low-cost methodology using low-level technology is found in the DrumNet model designed for smallholder farmers in Africa. The system uses embossed credit cards and old-style embossing machines to create a transaction

trail. The magnetic stripes are used at appropriate transaction points where the IT and manual system can be reliably linked. DrumNet works with a partner bank, Equity Building Society, to develop an ATM interface to enable cashless transactions to DrumNet clients (Jonathan Campaigne, DFN posting in October 2004).

A recent virtual conference on e-banking raised several issues pertinent to the use of electronic technology for delivering financial services to the poor (Waterfield, 2004). Participants identified several examples of financial Institutions offering e-banking services. The participants often partner with others to provide such services. Some examples include:

- SKS in India: Smart cards are largely replacing existing operations.
- Banco Ademi in Dominican Republic: Debit card for making payments to vendors.
- PRODEM in Bolivia: Low-cost uses of ATMs with additional functionalities.
- Teba Bank in South Africa: Debit cards with enhanced functionality.
- Compartamos in Mexico, Banco del Estado in Chile, and several ACCION affiliates in Latin America: Use of Palm Pilots for loan assessments and recording loan payments.
- SafeSave in Bangladesh: Palm Pilots for recording loan payments. The direct cost during a two-year experiment involving two branches and about 3,000 clients was estimated at US\$15,000. Paper and manual data entry are comparatively cheaper, but the handhelds were found to provide better internal control and a more professional image. The system has proven popular so far with both staff and clients.
- CRDB bank in Tanzania: Debit card with gradually increasing functionality.
- ICICI in India: Designing a low-cost cash dispenser similar to ATMs.
- ValueCard in Nigeria: A smart-card (e-Wallet) initiative dispenses cash through merchants and ATMs. The project has issued some 375,000 cards with 16 participating financial institutions.
- Union Bank, Pakistan: Agricultural credit-card-based, farm-input scheme for small farmers between the bank and agricultural input supply firms.
- Mpoweni/Namitech Benefit Payout Service: Operating in Mpumalanga province in South Africa, this service implements the monthly payout of state benefits to approximately 1.7 million recipients.
- Zimbabwe's Central Africa Building Society (CABS): Provides debit card services to hundreds of thousands of workers in urban areas. CABS replaced a passbook and labor/teller intensive service with debit cards in the middle to late 1980's and now operates one of the richest e-banking services in Africa.

- Malswitch in Malawi: The central bank established a smart card infrastructure with a few biometric-enabled ATMs. Most small- to medium-sized financial institutions are using Malswitch, which is targeted to middle- and low-income Malawians and is being rolled out slowly.
- Celpay in Zambia: Offers mobile-phone-based banking facilities targeted at the high end of market. It is currently in the rollout phase.
- In Ghana, ATMs/cash deposit machines in the back of radio-equipped vehicles are bringing services to some remote communities with radio communication lines.
- Botswana Savings Bank is using an electronic passbook.
- PRIDE AFRICA is currently working on a credit card system in Kenya to create a model for providing farm input credit and marketing services to small farmers. The goal is to develop a system to link up with a participating financial institution, in this case the Equity Building Society.
- FOCCAS, FINCA, UMU, and PRIDE AFRICA in Uganda, along with their affiliate institutions (Freedom from Hunger, FINCA, ACCION, and PRIDE, respectively) are working with Hewlett Packard to pilot-test a remote transaction system (RTS) that uses handheld devices to capture transaction data and, via a GSM network, transmit it back to a head office server and, in turn, a management information system (MIS).
- NABARD-backed *Kisan* (farmers) Credit Card in India: Has extended lines of credit to 25 million farmers for use at agricultural suppliers throughout the country. It is now a manually operated card but can be potentially upgraded to smart cards.

The initial lessons include:

- Electronic banking is not appropriate for all financial institutions. Indeed, some financial institutions have stopped using these technologies because they incur higher operating costs than manual systems, especially in labor-intensive countries (CGAP notes, 2003; Cracknell, 2004; Waterfield, 2004).
- E-banking may not suit all clients. Hirschland (2003) suggests that while smart cards might provide much more convenience and security for slightly larger depositors and might lower the costs for financial institutions, they are not relevant for many smaller depositors, especially in rural areas.
- The initial investment to build an appropriate electronic infrastructure is high.
- To be cost-effective in rural areas, e-banking requires: Access to reliable and affordable power/data communications, a strong MIS and an MIS team, and suppliers who can offer and support software, hardware, se-

curity, and communications at a reasonable price (CGAP, 2003).

- Economies of scale and scope are necessary for reducing costs. Bundling financial services into the new infrastructure and widening the client base through strategic partnerships are important steps for attaining scale and scope.

The major challenges for e-banking in rural and remote areas involve the following:

- The regulation of e-banking outlets such as Internet kiosks, point of sale (PoS) agents, and merchants is complex and challenging. Incentives need to be in place for self-regulation and minimizing rent-seeking behavior.
- Investing in financial literacy is important, but the costs of such education need to be examined. Experiments in a financial education program for poor clients are now being carried out in six countries by Microfinance Opportunities, with support from Citibank. One component deals with e-banking (Monique Cohen, e-mail communication in September 2004).
- Security within the electronic infrastructure needs to be strengthened to avoid electronic theft and money laundering.

i. Reducing Information Costs

The costs of providing rural finance are high due to the lack of reliable information and appropriate collateral to substitute for missing information about clients. New developments have occurred in recent years to improve the availability of information leading to reduced costs and improved outreach. Some examples are reported below.

Credit Scoring

Credit scoring has been traditionally used by large commercial banks in developing countries. It was assumed that credit scoring can be efficient in reducing information costs for financial institutions only when credit bureaus are present and capable of providing reliable historical data on clients. But now credit-scoring methods are being used to predict future repayment risk even with imperfect, incomplete, unverified, noisy data for first-time, self-employed borrowers who lack credit-bureau records. As a result, credit-scoring models are now being adapted to evaluate the client risk of low-income, self-employed borrowers (Schreiner, 2003).

The major issue, however, with the use of credit scoring in rural areas involves costs. While RFIs may incur some initial set-up costs, experiences in Colombia and Uganda have shown that the models are less complex and less

costly to operate compared with computerized MIS. To reduce costs, scoring can be integrated into the regular MIS to automatically compute scores and produce reports. Scoring for microfinance can work with the types and quality of data that most cash-flow-based individual microlenders already collect. In many cases, scoring models introduce objectivity into the otherwise subjective client evaluation practiced by several RFIs that do not use collateral. Tests with historical data show that scoring for microfinance can systematically detect high- and low-risk cases that are overlooked by loan officers. As a result, scoring helps individual lenders increase profits, reach poorer clients, and serve more clients. However, it has also been shown that scoring cannot substitute for the “soft” and “qualitative” information gathered by qualified loan officers. It can only complement it for better client appraisal (Mark Schreiner, e-mail and phone conversations in August and September, 2004).

Internet Kiosks and E-Choupals

Internet kiosks are spreading in some rural and remote areas and offer opportunities to reduce information costs and facilitate better assessment of risks in rural areas. Traditionally, *choupals* in India are gathering places in villages where locals meet to discuss issues and settle disputes. In the digital age, e-choupals are gradually improving the way Indian farmers do business.

E-choupals are still emerging. The first set of six choupals was pioneered in June 2000 by one of India’s largest exporters of agricultural commodities, Indian Tobacco Company’s International Business Division (ITC-IBD). Dubbed as a click-and-mortar business model, the system constitutes an Internet-enabled kiosk in a village, which is operated by a local farmer familiar with computers, known as the ‘*choupal sanchalak*.’ Setting up each e-choupal entails an investment of US\$2,500 to US\$7,000. The sanchalak operates the kiosk, stays in touch with company representatives, and guides other farmers in the use of the technology. Farmers can use the kiosks to check the current market prices of their commodities, access market data, and obtain information on local and global weather and best farming practices. By 2002, some 1,200 Internet kiosks had been installed in 6,000 villages across 18 states in India and were used to procure soybeans, coffee, shrimp, wheat, rice, and lentils directly from farmers, saving time and money. Currently, more than 2,600 choupals are in operation. There are plans to upgrade the system to become a one-stop shop for farmers, enabling them not only to sell farm products but also to buy inputs and consumer products on cash and credit. For instance, ITC has teamed up with Monsanto and the Seeds Corporation in Madhya Pradesh to sell seeds and teamed up with BASF to sell fertilizers. ITC charges a 10 percent commission on sales transacted through the choupals, half of which is passed on to the sanchalak for executing the sale. Some farmers have begun to track soy futures on the Chicago Board of Trade, and most of them soon began bypassing local auc-

tion markets to sell their crops directly to ITC for about US\$6 more per ton (Prahalad, 2005). There are opportunities for RFIs to develop ties with such operations. For example, Megatop in India is offering a microinsurance program for farmers in Andhra Pradesh and Madhya Pradesh through the e-choupals (Waterfield, 2004). However, poor rural infrastructure and unreliable Web connectivity limits the use of such models.

Undoubtedly, the use of information technology is catching on with financial service providers. These initiatives are often led by private companies. They tend to be found in countries that regulate the technology industry less than the financial sector. Several issues remain to be examined before endorsing many information technologies for use providing finance in rural areas. There is a need to carefully monitor these initiatives to understand the types of linkages and alliances that can work effectively for different types of rural clients and RFIs. With the involvement of private investors, there may be proprietary rights that may limit wider use. Donors have a role to play in carefully documenting and monitoring these developments and assessing their implications for the rural poor and for inequality in rural areas. Some areas to explore include improving consumer education, helping RFIs assess the costs and benefits of technology adoption, and developing effective, low-cost information technology methods.³⁹ It is yet to be seen whether a technological divide between countries and regions affects the development of rural finance. Countries that are more technologically advanced — such as Brazil, China, India, and South Africa — may be able to leapfrog some stages in the development of rural finance by using their technological edge to counterbalance some constraints due to their large size (Robert Christen, conversation in February 2005).

E. Advances in Outreach and Sustainability

11. Reaching Very Poor Rural Residents and Remote Areas Sustainably

While formal rural finance is generally weak and the effective demand exceeds supply in many developing countries, it is generally inaccessible for the economically active, vulnerable rural poor and people living in remote areas. Moreover, there is no uniform method to measure and document levels of poverty as a means to easily identify the vulnerable and the poorest. Efforts are now under way to systematically examine the available tools to measure poverty levels (see USAID-funded study conducted by IRIS, 2004, www.iris.umd.edu/research.asp). In addition, few RFIs collect information that can help identify the poorest. Besides the identification and data problems, there are

³⁹ See the short note by CGAP (2003) on 10 key questions for technology investment decisions.

debates about the potential for the poorest and those living in the most remote areas to become viable clients for market-oriented financial services.

There are three schools of thought on the issue of providing financial services for the poorest (Fernando, 2004b). One school rejects the hypothesis that the poorest can be reached with financial services on a sustainable basis. This school's views are based on the interrelated assumptions that (i) there is very little effective demand for financial services among the poorest, (ii) the cost of providing services to the poorest is too high for financial institutions committed to sustainability, and (iii) the poorest cannot afford to pay the prices that providers of sustainable micro-finance services will likely need to charge them.

A second school of thought argues that the poorest of the poor can be reached, not only on a sustainable basis but also on a large scale. According to this group, if funding agencies and financial institutions target the poorest and if funding agencies make more funds available to these financial institutions, outreach to the poorest can be rapidly increased.

The third school recognizes that the potential for reaching the poorest on a sustainable and a large-scale basis is limited, but maintains that the search for innovative approaches to expand outreach to the poorest must continue. This school does not totally reject the potential for reaching the poorest with financial services on a sustainable basis. However, it does not accept the view that there is a vast effective demand for finance among the poorest or that there is a great deal of knowledge about the requirements for providing sustainable financial services to the poorest. As a result, this group does not agree that the major constraints to large-scale outreach are the lack of support from the donor community and inadequate funds for the expansion of credit operations of financial institutions.

The third school argues that the search for sustainable models to deliver financial services for the poorest must continue and that funding agencies have an important role to play in promoting innovations toward this end. However, mere increases in funds for on-lending do not address the problem. This school also recognizes that subsidies are vital in developing sustainable mechanisms to reach the poorest.

The assumption that there is no effective demand for microfinance services among the poorest does not seem to be realistic. Although BRAC and ASA in Bangladesh and Share Microfin Ltd. in India do not exclusively serve the poorest, these institutions serve some clients among the bottom 50 percent of those living below the poverty line.

Similarly, about 7 percent of Mibanco clients in Peru belong to the poorest category (Welch and Devaney, 2003). The poorest households also have an effective demand for safety-deposit facilities (Rutherford, 2000).

The Income Generation for Vulnerable Groups Development (IGVGD) program of BRAC provides the best documented evidence that the poorest can be bankable if provided sufficient non-financial support services. The program targets destitute, rural Bangladeshi women who have few or no income-earning opportunities. The IGVGD program has provided food-grain assistance and savings and credit services to nearly a million participants over a ten-year period. About 85 percent of its members also received training and support in poultry and livestock rearing, vegetable gardening, agriculture, fishery production, or grocery business. Two-thirds of these women have graduated from absolute poverty to become microfinance clients, and have not slipped back into requiring government handouts (CGAP, 2001).

BRAC provides smaller loans to IGVGD clients, and these loans are cross-subsidized by its regular microcredit programs. BRAC's subsidy for both credit and training services has been estimated at Taka 725 (about US\$16) per client. Adding the cost of the food grain provided by the World Food Program (WFP) brings the total subsidy for each woman to about Taka 6,275 (about US\$135) (CGAP, 2001). The IGVGD experience confirms that programs that combine livelihood protection (food aid) and livelihood promotion (skills training and microfinance) can reach deeper than purely promotional schemes to benefit the chronic poor.⁴⁰ However, while the IGVGD program has achieved impressive results, it is important to note that about a third of the women did not benefit significantly in the long term. BRAC also excludes about 10 percent of the women receiving food grain from IGVGD for being too old or disabled (CGAP, 2001).

ASA, another giant MFI in Bangladesh, has introduced business development services to improve the capacity of the poorest to productively use credit. It will also establish 1,200 outposts in remote locations so that hard-core poor households can access its products and services more easily. The local staff is required to operate from these remote outposts. ASA expects the program to reach 1 million hard-core poor households by the end of 2006 (Fernando, 2004b).

Hirschland (forthcoming b) conducted a careful analysis of deposit-taking Institutions suitable for remote areas, as shown by their ability to increase access in an efficient and sustainable way. She concluded that member-based

⁴⁰ These programs cannot substitute for social nets since some very vulnerable and deprived populations can only be supported using traditional social welfare programs.

and member-owned cooperatives are best suited for remote areas, followed, to a lesser extent, by self-help groups. Autonomous cooperatives, SACCOs, may be able to viably serve remote areas due to lower transport and staff costs involved in traveling to and from a distant central office. Remote cooperatives usually cover their full operating costs from the outset by relying on a volunteer board until they can afford to pay a bookkeeper or management committee. Because their board and staff typically have little schooling, young cooperatives usually offer only a few products that are not managerially demanding, such as compulsory savings and loans. Over time, some grow and offer voluntary savings services and longer hours.

Remote autonomous cooperatives, however, have important limitations. First, because they serve a single market and lack access to a ready source of excess liquidity, they may be subject to higher covariant and liquidity risk. Second, share requirements, mandatory savings, and membership fees that are typical of cooperatives may be prohibitive for the very poor. Finally, governance of many member-owned and member-managed financial institutions has proven to be a serious problem. Management committees that are not business-minded may make loans that are unsound or may concentrate loans among themselves. Such insider lending can contribute to high rates of default and, in extreme cases, bankruptcy. These risks can be lessened through strong by-laws, strong internal controls, a simple and transparent MIS, and a sound credit methodology. Furthermore, the management committee should ideally consist of business-oriented community members who oversee daily operations, but care needs to be taken so they do not dominate the organization.

SACCOs in remote areas in Nepal are observed to be active in remote hilly areas (Staschen, 2001). More than half of Nepalis live in areas defined as “hills,” where the high costs of service delivery inhibit traditional financial institutions from operating. While the NGO DEPROSC supports Grameen-style MFIs in the plains, it promotes autonomous cooperatives, such as the Bhumiraj Savings and Credit Cooperative Society Ltd., in the remote hilly areas. Similarly, another hill cooperative, VYCAI, is one of 106 SACCOs supported by the Centre d’Étude et de Coopération Internationale, or CECI (www.ceci.ca/eng/accueileng.html). All SACCOs were found to be profitable, with board members handling transactions until they could afford to pay a bookkeeper to do so.⁴¹ The cooperatives serve an average of 140 members and become self-reliant in three to five years. During this period, the promoting NGO mobilizes the groups, trains the members, provides technical support, and monitors their work. The total developmental cost for each cooperative ranges from US\$1,700 to US\$3,000, or US\$12 to US\$21 per member. If a

⁴¹ Initially, bookkeepers are paid US\$4 a month, but cooperatives that offer more products, have at least 400 members, and require longer hours pay about US\$75.

cooperative cannot meet the members' demand for credit, CECI helps it access an external loan. Unfortunately, CECI and DEPROSC do not provide data on loan capital or operating expenses (Hirschland, forthcoming b).

The village banks are also observed to serve sparsely populated Sahelian areas in Africa. The *Caisses Villageoises d'Épargne et de Crédit Autogérées* (CVECA) are autonomous village banks that serve a low-income, sparsely populated region of Mali where the illiteracy rate exceeds 95 percent. The banks provide high-interest time deposits, which represent most of their accounts, as well as a no-interest passbook service right in clients' villages. Nearly 10 percent of the region's adults are active members, with an average of 231 per bank. More than two-thirds of the accounts have balances of less than US\$50. The banks receive an initial subsidy that covers investment costs, training, and supervision. They recover their operating and financial expenses from the outset. Over time, they also cover the costs of technical support by developing low-cost support structures. They have decentralized operations, use local labor and resources, volunteers, part-time staff whose salaries are based on profits, simple record keeping, and a limited number of products (such as short-term loans, passbook accounts, and time deposits) to reduce costs. These measures have helped produced good performance of these village banks in remote areas (Hirschland, forthcoming b).

Some institutions reduce the costs of providing financial services in remote areas by piggybacking financial services onto non-financial service delivery systems that already attract clients from more remote areas for other reasons.⁴² Some use mobile banking to reach remote areas (see earlier discussion under technology). The use of mobile banks to reach remote areas is, nonetheless, context-specific and depends on the status of security, law and order in rural areas, the availability of good roads for transport, and regulatory issues regarding the collection of savings.

Serving environmentally sensitive areas has also become important in recent years, but little documentation of these efforts is available (Muñoz and Christen, 2005). One effort to provide services in environmentally sensitive areas is that of EcoLogic Finance, a nonprofit organization that offers affordable financial services to community-based businesses operating in environmentally sensitive areas of Latin America and Africa. Founded in late 1999, EcoLogic makes loans of US\$25,000 to US\$500,000 to commercially viable businesses that do not meet traditional requirements to access credit from local financial institutions. With more than US\$8 million in low-interest loan capital from 50 private investors and multilateral investors, including the Inter-American Development Bank, the fund has made 90 loans, benefiting approximately 10,000 people, with a gross value of US\$13 million to rural pro-

⁴² For example, people in remote areas may travel to nearby village centers or cities to sell milk in dairy cooperatives.

ducer organizations located in nine Latin American countries. EcoLogic Finance clients are located in low-income communities in threatened habitats of Mexico (coffee, fisheries, eco-tourism), Guatemala (coffee, spices), Belize (eco-tourism), Nicaragua (coffee), Costa Rica (coffee, cocoa), Ecuador (cocoa, eco-tourism), Peru (coffee, cocoa), Bolivia (coffee) and Brazil (acaí fruit) (IADB, 2004; EcoLOGIC Finance website: <http://www.ecologicfinance.org/borrow.html>).

In order to reach the poorest people and remote areas in a sustainable way, the following steps need to be addressed:

- cultivating appropriate institutions, products, and services as well as innovative programs and delivery mechanisms that can provide those products and services at affordable prices;
- investing significantly in institutional efforts to improve retail capacity and adequate incentives for these institutions to provide the services;
- developing economic opportunities for the very poor and remote areas to generate incomes;
- improving physical infrastructure to reduce the costs of reaching the poorest populations and remote areas;
- developing structures for institutional governance that are suitable for remote areas; and
- fostering long-term commitment to reaching remote areas sustainably and in large numbers.

It is not clear, however, if the poorest can afford to pay interest rates high enough to cover the full costs incurred in serving them. It is also not clear of the role played by community funds in reaching remote and poor rural areas in a sustainable way.⁴³

F. Advances in the Macro-Environment

12. Laws, Regulations, and the Supervision of Financial Institutions

The laws governing the financial sector and the quality of the legal, regulatory, and supervisory institutions that enforce these laws largely determine the shape and depth of a financial sector (Carter and Waters, 2004). Therefore, governments and donors increasingly support the development of legal, regulatory, and supervisory frameworks that contribute to a favorable institutional environment. Recent microfinance laws that formalize microfinance operations and enable deposit mobilization by MFIs in many countries are one such major effort.

⁴³ See discussions on use of community based funds in marginalized rural areas – Koboski (2004) in Thailand and Zapata (2002) in Mexico.

It has been shown that the institutional environment — which includes property rights, regulations, and prudential supervision — significantly affects the supply of, and demand for, rural finance (Gonzalez-Vega et al., 2003). However, a good institutional environment for rural financial institutions and agents is still lacking in many countries. Various rural financial institutions, especially NGOs and member-owned institutions, operate completely outside prudential regulations. Laws that affect secured transactions are very weak. The weak institutional environment may partly explain the failure of many donor-funded rural-finance programs (Fleisig and de la Peña, 2003).

The prudential supervision of rural financial intermediaries is warranted since small rural depositors are unable to monitor the management of financial institutions where they voluntarily deposit their funds, especially in weakly governed, member-owned institutions (Fiebig, 2001). Since they are not regulated by the general market devices that discipline banks and other common stock firms, credit unions and other member-owned institutions are in greater need of prudential regulation and supervision to protect depositors (Branch and Baker, 2000). The regulation and supervision of large numbers of rural financial institutions and agents by an apex body, however, requires sufficient capacity and need to be cost-effective (Hannig and Omar, 2000). Many countries, such as Ghana, remain burdened by a number of weak rural units due to the low capacity of regulatory and supervisory authorities (Steel and Andah, 2003). Therefore, many countries permit self-regulation by peers as well as the regulation of credit unions by a member-owned apex body. However, self-supervision so far has not proven to be effective due to the lack of basic preconditions for supervision, such as the legal backing to enforce compliance with given standards and the power to close insolvent institutions (Hannig and Omar, 2000).

Recent learning shows that collateralized lending expands the scale and scope of rural finance beyond what is possible with only non-collateralized lending products. It can also help protect lenders in the event of default and lower the interest rates charged on loans. There is an urgent need in rural areas to facilitate the use of movable property as collateral for loans, since few potential borrowers possess lands with titles (Fleisig and de la Peña, 2003). To that end, the expansion of rural financing requires secured transaction laws that facilitate pledging of movable properties as collateral as well as financing for equipment, inventory, receivables, and consumers (Welsh, 2003). However, most developing countries currently lack such laws. There is also a need for laws that recognize land-user rights along with land titles as collateral (Heywood and de la Peña, 2003). Current efforts by the IRIS center to develop and test laws for secured lending can be further examined for their effectiveness for rural finance in various developing country contexts (see www.iris.umd.edu/research/USAID.asp#legal).

The emerging lessons also underscore several issues that profoundly affect rural finance, such as the scope and coverage of the civil registry, age requirements for entering contracts, laws for formalizing business, effective judicial system, means for contract enforcement, land-titling procedures, collateral registries for movable properties, and bankruptcy laws (Fleisig and de la Peña, 2003). However, gaps remain in our understanding of the causal relations between institutional environment factors and rural financial markets.

Section IV: Emerging Lessons and Gaps and Roles for Donors

In this section, we first summarize the emerging lessons and remaining gaps for further learning from our review of 12 key themes on rural finance. Then we discuss recent trends and selected initiatives being undertaken by donors and practitioners related to rural finance. Finally, we present several broad suggestions for how donors can address the existing gaps in knowledge concerning rural finance.

A. Emerging Lessons in Rural Finance

The key lessons learned from the literature review undertaken for this study can be summarized as follows:

Institutions

- The “technology” of reforming agricultural development banks (AgDBs) is well understood, but there is no clear road map for obtaining the political commitment required for success.
- When governments are blocked from using AgDBs to allocate subsidies for economic and political interests, they may seek other channels, such as cooperatives, provincial banks, and village or community funds. Therefore, political commitment to reform may be needed to extend beyond the specific AgDB being reformed.
- There is no assurance that a reformed or privatized AgDBs will strive to expand its agricultural and rural outreach aggressively.
- Demand for microfinance exists in rural areas, and the current microfinance technology can be adapted to provide services to rural clients. However, rural operations are expensive and risky so increasing scale and cross-subsidization with robust urban operations is often required.
- Local cooperatives such as SACCOs appear to be suitable for remote rural areas if access to external funds is feasible and governed well.
- SHGs may be used to provide services to the poor in rural areas that are well connected to formal financial institutions. SHGs located in remote areas and farther from formal institutions are limited in their capacity to grow without receiving continuous support from external sources, especially additional funds and technical assistance.

- Important issues of governance, regulation, and supervision remain to be resolved for SACCOs and SHGs in many countries
- Trader credit is still very important in rural areas. It is useful to foster greater linkages between traders and the financial and real markets through the development of value chains in rural areas to expand rural finance. This development requires an enabling environment in which the growth of the private sector is not discouraged.
- Apex and second-tier institutions have contributed only modestly to rural finance, largely because of the limited retail capacity that exists in most countries.

Products

- A proper balance may be required between urban and rural operations to reduce costs so that efficient and good services can be offered to rural poor.
- Savings products intended for asset building must provide attractive returns in addition to flexibility and easy accessibility.
- Reducing transaction costs is very important for populations that are highly dispersed and that save only in small quantities. Mobile deposit collectors who collect deposits at the savers' doorsteps, increased points of sale, and collecting savings during periodic group meetings are effective ways of reducing saver transaction costs. Mobile banks may also reduce transaction costs for financial institutions if they help increase the size of transactions. Also, electronic innovations may help drive down the costs of handling many small transactions in areas where high-tech alternatives are feasible.
- Rural housing finance is still very rare. Experiences of few providers of housing finance indicate that homelessness is not necessarily the biggest problem in rural areas but there is a demand for expansion and improvements as a means to enhance their assets; a strict focus on the housing niche market might be too risky at this stage; linkages with input suppliers and housing developers are required to be developed for clients to effectively utilize the loans.
- Leasing may provide a viable financial option for the rural poor and those engaged in agriculture-based enterprises. Leasing may offer fewer options for remote areas, however, because of high costs of transporting equipment and machinery and the lack of servicing stations for the leased equipment. Also, the vulnerable poor may seldom require assets that are suitable for leasing for their income generating activities.

- Leasing products are suitable for individual-based transactions but require a significant down payment or collateral for reducing the risks for the lessor. Many legal and tax issues must also be resolved before leasing can become an attractive alternative for loan products.

Services

- Insurance services are important for rural areas, but it is very challenging to provide them at an affordable cost to rural clients without massive subsidization.
- Index-based weather insurance is ineffective and too costly in marginal farming areas and in areas where weather trends are changing.
- Credit guarantees function as a kind of insurance for financial institutions. However, designing sustainable credit-guarantee schemes for rural financial institutions is complicated. Even when they are sustainable and are used to guarantee loans, there is no clear evidence that they contribute much to additionality in rural lending.
- Training and technical assistance may do more than guarantees to induce lenders to become more involved in serving some under-served segments of the rural market.
- Successful remittance services require listening to the clients to design appropriate products and choosing strategic partners to affect transfers at both sides of the remittance.
- The use of formal international remittance services with service points in both receiving and remitting countries is shown to be safe, cost-efficient, and time-efficient. This is because remittance operations require volume in order to reduce costs and make profits.
- The market for supplying remittances is generally much more competitive than the market for loan and deposit services in many Asian and Latin American countries that receive remittances.

Technology for reducing transaction and risk costs

- Banks tend to make greater use of information technology in countries where the technology industry is less regulated than the financial sector.
- Electronic banking is not appropriate for all financial institutions, especially in countries with abundant labor supplies. Also, electronic banking may not suit all clients, especially the vulnerable poor. It may provide convenience and security for slightly larger depositors and might lower the costs for financial institutions, but may not be relevant for many smaller depositors, especially in rural areas.

- For electronic banking to be cost-effective, economies of scale and scope are necessary.
- To reduce costs of information technology, it is important to bundle financial services into the physical infrastructure and to widen the client base through strategic partnerships with service providers.
- Credit scoring can be efficient in reducing information costs for financial institutions only when there are credit bureaus capable of providing reliable historical data on clients.

Reaching the vulnerable poor and remote areas sustainably:

- Rural finance is currently mostly inaccessible for the economically active, vulnerable poor and for populations living in remote areas.
- Member-owned institutions, such as autonomous cooperatives and SACCOs, can viably serve remote areas if they can access external sources for excess liquidity, keep costs low, and achieve good governance.
- The use of mobile banks to reach remote areas is context-specific and depends on the status of security, law and order in rural areas, the availability of good roads for transport, and regulatory issues regarding the collection of savings.
- Serving environmentally sensitive areas may become important, but there is little documentation of successful efforts to date.

Enabling environment

- Insecure land titles still limit the use of land as collateral
- Strict regulation of rural financial institutions at the very early stages of institutional and process development tends to curb innovations.
- The effectiveness of self-regulation and peer monitoring as means to supervise rural financial institutions is still unclear.

B. Current Trends and Initiatives in Rural Finance

Currently, supporters of RF maintain that an integrated approach is required for rural areas. As a result, several donors embed RF programs within other thematic activities directed towards rural areas. Many financial and non-financial instruments, such as technical assistance and training, are used as means to provide donor support. GTZ and the Ford Foundation also promote linkages between financial and non-financial institutions, such as BDS pro-

viders, to enhance the services provided to rural clients. USAID advocates a sub-sector or value-chain approach to promote BDS providers along with rural finance providers.⁴⁴

There is considerable enthusiasm to support microfinance initiatives for rural areas, since it is thought to have improved access to banking services by the poor, leading to income generation, poverty reduction, and asset creation.⁴⁵ Rural microfinance projects are often embedded into rural-development and gender-development projects.

A consensus seems to be emerging among donors about the best ways to expand sustainable rural and microfinance. Several donors belong to the CGAP consortium of donors. CGAP's recent efforts to conduct peer reviews of donor programs in rural finance and microfinance is an important step toward building consensus on best practices and taking stock of rural finance and microfinance activities (see www.cgap.org for peer reviews conducted of major donors' programs on rural finance and microfinance). The peer reviews of 17 multilateral and bilateral donor agencies identified basic elements that help improve aid effectiveness. These elements include: strategic clarity, strong staff capacity, accountability of results, relevant knowledge management, and appropriate instruments. The reviews have helped to develop donor best-practice guidelines for providing financial services for the poor.

As a result of these developments, several notable initiatives in rural finance have emerged among donors in recent years. They include:

- Emphasis on knowledge generation, especially by learning from practitioners and listening to clients. This implies a movement towards a demand-driven approach to developing the industry. RF practitioners are being drawn in as partners in research and in advancing the field. Widespread dissemination of best practices

⁴⁴ Embedding rural finance components into other rural development and financial sector themes may have helped improve scope economies and project impact. However, it has also caused tractability problems for evaluating the performance of rural finance projects. For instance, it is impossible to conclude unambiguously that financing for agriculture has declined in recent years, since credit going to agriculture from microenterprise and enterprise finance cannot be tracked. Much of this support has been channeled through non-financial institutions. Due to the fungibility of resources, it has been impossible to determine if this resulted in additionality in the support for rural financing. Some projects include a small fund for microfinance within a much larger project for purposes as varied as railroad privatization or community health services. Donor institutions have little data about these component projects, but there are good reasons to doubt that they lead to sustainable finance. In fact, they may undermine other activities designed to develop sustainable finance. In addition, it has been extremely difficult to assess the outcome of technical assistance, because often the value added by these activities is defined only in terms of inputs (such as consultant-months invested) and not in terms of well-defined outputs.

⁴⁵ As a result, smaller rural finance projects have become the norm among donors, including the World Bank, which has traditionally funded megaprojects. For example, at IADB, the number of RF projects has increased since 1995, but the volume of funds has declined. The project size averages about US\$500,000 for concessional loans, and the range is about US\$300,000 to US\$1.5 million for the Multilateral Investment Fund. Support is provided through grants, loans, subordinated loans, equity, or guarantees for innovations, loanable capital, technical assistance to non-regulated small-scale rural financial institutions, and the restructuring or liquidation of state-owned banks (Wenner et al., 2003). At the World Bank, the size of projects has declined since FY 1992-94. While funding per project averaged US\$44.19 million during that period, it fell to US\$27.42 million during FY 2001-03 (Steel and Charitonenko, 2003).

is emphasized for quickly broadcasting information in short, clear formats that encourage practical application in the field. As a result, information technology is being used to establish Internet-based platforms for quick and cost-effective dissemination.

- Encouragement for resolving specific issues related to the development of financial markets, such as improved legal and regulatory frameworks.
- Documentation of advanced technologies in process-related innovations intended to reduce costs and improve access. This includes encouraging pilot projects that test innovative new products and services other than credit as well as processes that reduce the cost of providing services to the unbanked.

Several parallel initiatives to advance rural finance are currently under way. As a result, some overlaps in themes and regions of operations have been noted. However, donors appear to be developing linkages, partnerships, and alliances to reduce duplication of efforts and to leverage scarce resources. The partnership between Ford Foundation and GTZ is one such joint effort.

Among practitioners, one of the latest initiatives to merit donors' attention is the development of pro-consumer policies. Pro-consumer policies encourage financial institutions to provide products, services, and procedures that are good for clients. The focus on pro-consumer policies may be important for rural finance because: (i) when rural finance becomes increasingly competitive, with new players offering diverse products, the issue of educating and protecting consumers will likely become important, and (ii) until now, microfinance has been largely shielded from the political issue of charging market interest rates for loans to the poor. As a result, microfinance in rural areas could avoid implicit and explicit interest-rate ceilings generally faced by agricultural finance, which involves sensitive food-security issues and large risks. Unfortunately, several countries are now contemplating the imposition of usury laws that may negatively affect microfinance and constrain their operations in rural areas. Focused efforts to protect and educate consumers and improved transparency in RF operations can help offset proposals for usury laws. The development of pro-consumer policies affecting the microfinance industry in some countries with competitive markets offers valuable initial insights into potential concerns for rural finance in the future.

Consumer protection has become an important concern in microfinance with the entry of several new types of suppliers, such as consumer lenders, that target low-income people. From the client perspective, suppliers are nearly indistinguishable, and bad practices by some may undermine the entire industry (Rhyne, 2003). Microfinance markets in Latin America and South Africa are in the early stages of implementing consumer protections to ensure that

the multiplicity of suppliers and competitive pressures does not weaken the quality of service provided to consumers. Rhyne (2003) considers consumer protection to be a customer service issue, a public relations issue, a regulatory issue, and a competition issue that will ultimately affect the long-term market share of MFIs.⁴⁶ Self-regulation of MFIs has been proposed as a way to protect consumer rights, on the grounds that this approach is both morally correct and in the industry's long-term business interests (McAllister, 2003). Consumer protection can reinforce consumer rights and can also be considered as non-prudential self-regulation.⁴⁷

Consumer education is another feature of pro-consumer policies. It involves helping clients develop the knowledge, skills, and attitudes required to adopt good money-management practices for earning, spending, saving, borrowing, and investing. Participants are equipped with the information and tools to make better financial choices and to work toward their financial goals and economic well-being. It is argued that financial education will help both clients and financial institutions. On the one hand, financial education can help build the capacity of the poor to gain control, become proactive, use information and resources to enhance their economic security, and use financial services more effectively. On the other hand, financial institutions also benefit when better-informed clients become better consumers of financial services. They can attract and retain more clients when consumers fully understand financial services and products. Market research conducted in India, Morocco, South Africa, and Bolivia by Microfinance Opportunities with support from the Citigroup Foundation found a consistent demand for financial education on money, savings, debt management, financial negotiations, and the use of bank services (Cohen et al., 2004).⁴⁸ However, it is not clear if the financial institutions will be able to cover their costs and if it will have a desirable ef-

⁴⁶ Practitioner networks such as ACCION International recently pledged to voluntarily adopt pro-consumer policies that protect their clients. By adopting this pledge, the members of the ACCION Network agree to: (i) promote the widespread application of these principles among microfinance institutions in their countries; (ii) engage with regulatory authorities in their countries where needed to promote effective, yet non-burdensome, policies or rules, and (iii) raise awareness in the global microfinance industry about the importance of pro-consumer principles that include quality of service, transparent pricing, fair pricing, avoiding over-indebtedness, appropriate debt-collection practices, privacy of customer information, ethical behavior of staff, developing effective feedback mechanisms, and integrating pro-consumer policies into operations (read the full pledge at www.accion.org).

⁴⁷ In South Africa, the Debt Collectors Council monitors lenders for a fee paid by the debt collectors (www.debtcollector.co.za). Other institutions supporting consumer protections in the South African financial market include: the Banking Council (www.banking.org.za); the Association of Debt Recovery Agents; the Banking Adjudicator, an independent body that provides a dispute resolution service about banking services or products; the Credit Bureau Association with credit bureau Experian (www.experian.co.za) and Trans-Union ITC (www.transunionitc.co.za); and the Micro Finance Regulatory Council, a private, non-profit body appointed by the government to regulate the microlending industry and protect the interests of consumers (www.mfrc.co.za).

⁴⁸ The microlender AMSA in South Africa offers consumers education on personal financial management, the contents of the loan agreements, and their rights and responsibilities. Staff are trained to present this information using annually updated pamphlets, newsletters, posters, and through radio programs (MFRC, 2003). Another large microlender in South Africa, African Bank, offers free consumer education. It is called "money school" to educate consumers who have not previously had access to credit and need to be empowered with the tools and knowledge to plan and manage their financial affairs (MFRC, 2003). The Microfinance Regulation Council (MFRC) in South Africa is slowly succeeding in convincing participants to pay for consumer education.

fect on retaining and disciplining clients. These efforts are at their early stages of development, so they merit monitoring.

C. Remaining Debates, Puzzles, and Gaps

Despite the recent initiatives to advance rural finance, several debates, puzzles, and gaps remain. They include the following:

- What is the role of value chains in examining rural finance issues? Can they serve as an effective analytical tool to identify leverage points for intervention with financial services, to design projects for integrated rural development, or both?
- What should donors do to meet their poverty objectives if reformed public institutions do not or cannot sustainably serve many poor households and populations in remote areas?
- Are there many possibilities for creating more wholesaling and retailing partnerships between agricultural banks, farmer cooperatives, commodity associations, and MFIs to expand rural finance, reduce costs, and ensure high loan recovery?
- The push for cost-recovery using market interest rates has often been successful in urban microfinance. Will the goodwill and support that MFIs have received from donors and governments continue if they service agriculture and rural areas on a cost-recovery basis that requires even higher interest rates? Can MFIs that compete with existing RFI survive without subsidization?
- Few member-owned institutions are linked with an umbrella organization such as WOCCU. Why is this so? Why are credit unions not the logical legal form for most member-owned institutions to strive for, and why are there so few systematic interactions among the member-owned organizations, such as cooperatives, credit unions, and SHGs? What are the strengths and weaknesses of these member-owned institutions in serving rural areas, especially the very poor and remote areas?
- Can large countries that have recently become technologically advanced — such as Brazil, China, India, and South Africa — leapfrog in rural finance by utilizing their technological edge to counterbalance some constraints due to their large size?
- Under what circumstances are non-financial services critical for the rural poor, and how can they be supplied efficiently?
- What changes are required in the regulatory framework in most countries to support financial institutions at-

tempting to serve rural areas?

- Can insurance be provided to high-risk populations, such as those affected by HIV/AIDS, without large amounts of subsidies?
- What is the appropriate role for detailed impact studies? How can the impacts of rural financial services be measured at an affordable cost and in a reliable way? Is there a need for new tools and methods to measure impacts, especially for rural financial services geared toward vulnerable poor populations and remote areas? What is the relevance of social performance indicators for evaluating impact of rural finance?

There are several key gaps in recent rural financial initiatives that require further examination.

- How are the production and marketing contracts that are used in value chains being designed and enforced? How is finance being handled in these contracts? What can be done to facilitate and ensure the participation of small-scale farmers? What is the demand for and supply of domestic transfer and payment services, especially for small players within value chains?
- What challenges inhibit donors from engaging effectively with traders without creating market distortions?
- Under what conditions will technical arguments, technical assistance, and donor conditionality be sufficient to ensure successful reform of development banks? Will they work only if there is already a substantial constituency in the country in support of reform? Would more in-depth, systematic studies of successful and failed reforms contribute to answering these questions?
- Are SHGs substituting for or complementing formal finance institutions in rural areas? How can they viably serve remote areas and the vulnerable rural poor?
- How can rural finance institutions, including MFIs, successfully serve those rural clients who are most exposed to the systemic risks of floods, drought, and disease?
- What role should apex institutions play in rural areas? When and under what circumstances should they be introduced in the sequencing of assistance? How can they be designed more effectively to relax resource constraints while simultaneously building capacity?
- What types of institutions are best suited to serving the vulnerable poor and populations in remote areas? How can financial products be designed for serving remote areas if it is really a problem due to poor products?
- What role should community-level funds and development programs play in improving access to finance in

rural areas?

- How can term deposits be offered in rural areas by a variety of institutions and through possible linkages among them to increase and improve the quality of services?
- What roles do remittances and leasing play in asset accumulation in rural areas?
- What types of appropriate information technologies need to be developed for use in rural areas to reduce transaction and risk costs?
- Which institutions, products, services, programs, and delivery mechanisms can serve remote areas most viably?
- What is the feasibility of piggybacking rural-finance services with non-financial providers to increase outreach at reduced costs, especially in remote areas?

D. General Suggestions for Donors

The recent donor reviews conducted by CGAP partners concluded that five core elements are needed to improve the effectiveness of support for microfinance at the individual agency level. These elements also help determine a donor agency's comparative advantage in supporting financial services for the poor.

Fig. 2: Core Elements of Effective Support



Source: CGAP (2004)

The five core elements include (see Fig. 2 above): (i) Strategic Clarity and Coherence: The extent to which an agency-wide vision of microfinance exists and whether this vision and agency policies are in line with accepted good practice; (ii) Strong Staff Capacity: Whether the microfinance focal unit has sufficient capacity and resources to provide skilled technical support to operational colleagues. Also, whether the overall level of technical capacity is adequate to ensure quality operations; (iii) Accountability for Results: The level of knowledge of the microfinance

portfolio (e.g., whether it is "visible" to the agency) and transparency of portfolio performance; (iv) Relevant Knowledge Management: How well the agency learns from its own and others' experience through the creation, dissemination, and use of practical, user-friendly knowledge; and (v) Appropriate Instruments: Whether an agency has instruments that allow it to work directly with the private sector, a critical pre-condition for effectiveness in rural and microfinance. The quality, range, and flexibility of instruments are also crucial. The findings from these CGAP microfinance peer reviews are highly relevant for rural finance. Indeed, developing a clear rural finance strategy is a prerequisite for engaging in rural finance.

Broad suggestions for donors to consider in advancing rural finance are discussed below. The donors can expand, consolidate, delegate, collaborate with others, or phase out of rural finance based on their own vision and comparative advantages.

Knowledge generation and dissemination:

- Encourage and facilitate the documentation of emerging best practices in the provision of agricultural and rural finance and disseminate them broadly to the stakeholder community.
- Encourage research and pilot testing of innovative types of collateral substitutes for the rural sector that will help asset-poor, economically active, low-income people qualify for loans.
- Encourage rigorous studies that use a sound conceptual framework to examine the feasibility of institutions, products, and services for rural clients, especially for those who are very poor or live in remote areas.

Operations:

- Support experimental designs for supplying financial services in rural areas, and especially to finance populations in remote areas and for agricultural production. Options could include creative uses of local institutions, including member-owned institutions, community-based organizations, post offices, retail stores, lottery outlets, and schools.
- Fund innovative pilot projects that may generate breakthroughs for rural finance. Examples include smart cards and credit cards for farmers, rural housing finance in South Africa, index-based crop and livestock insurance in Mongolia, financial extension workers in Uganda, and the Hewlett-Packard experiment to create an electronic identification system for MFI clients in Uganda.
- Support curriculum development for client-education programs.
- Support feasibility studies to assist RFIs in making informed decisions about the adoption of new informa-

tion technologies.

Advocacy

- Encourage better accountability for results through improved transparency of rural finance institutions by providing incentives to share information and follow industry standards.

E. Conclusion

Most rural areas are still underserved with regard to financial services, but financial and non-financial service providers are entering in field to expand services. In addition to donors, several rural-finance practitioners and private investors are attempting to advance the field by using advanced technologies to efficiently provide innovative products and services. Still, several large challenges remain. One is to develop an enabling macro-policy environment. Another is to integrate rural finance into the broader financial sector so donor funds finance those things that the private sector considers too risky and unprofitable. Others include bridging the digital and information divide for knowledge sharing and enhancement and extending financial services to remote areas and economically active, very poor populations to ensure that relatively few economically active clients are left behind.

Several studies now inform our understanding of rural finance. However, many gaps remain. Part of the problem is due to donors' almost universal focus on producing brief, descriptive, state-of-the-art studies and toolkits at the expense of supporting rigorous studies to advance knowledge and develop new ideas for extending the financial frontier, as envisioned by J.D. Von Pischke (1991). These briefs and toolkits help summarize experiences and lessons for immediate consideration in the field by donor staff. However, they often lack the theoretical and empirical rigor needed to address important issues regarding product and institutional design and to carefully assess the impacts of the ideas being tested. A more balanced approach is needed between supporting short-term summary documents and rigorous longer-term studies.

References

- Abada, Jorge, 2001, "Strategies for Improved Social Protection in Asia: Micro- and Area-Based Schemes," The Asia and Pacific Forum on Poverty: Reforming Policies and Institutions for Poverty Reduction, Asian Development Bank, Manila, February 5-9.
- Adams, Dale W, 2003. "Development Banks," October 11 posting on Development Finance Network (electronic listserv).
- Adams, Dale W, Douglas H. Graham and J.D. Von Pischke (eds.), 1984, *Undermining Rural Development with Cheap Credit*, Boulder, Colorado: Westview Press.
- Adams, Dale W and Ali Kamel, 1996, "Financial Reforms and Rural Credit: PBDAC's Evolving Role," in *Egypt's Agriculture in a Reform Era*, Lehman B. Fletcher (ed.), Ames, Iowa: Iowa State University Press, 1996, pp. 254-267.
- Adams, Richard H. Jr., 2005, "Remittances, Household Expenditure, and Investment in Guatemala," Policy Research Working Paper 3532. Washington, D.C.: World Bank (econ.worldbank.org).
- ADB, 2000, "Finance for the Poor: Microfinance Development Strategy" Manila: Asian Development Bank (www.adb.org).
- Alfaro-Gramajo, Luis Noel, 2003, "Reverting the Tendency in Developing Finance: The Case of Banrural S.A. in Guatemala," paper presented at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, organized by USAID, Washington D.C., June 2-4, (www.basis.wisc.edu/rfc).
- Alvarado, Javier and Francisco Galarza, 2003, "Critecna, Peru: The Private Sector Bank Small Farmer Linkage Approach", in *Promising Practices in Rural Finance: Experiences from Latin America and the Caribbean*, edited by Mark D. Wenner, Javier Alvarado and Francisco Galarza, Washington, DC: IADB, Rural Development Unit (www.iadb.org/sds).
- BASIX, 2004, *Annual report 2003-04* and information posted on Web site (www.basixindia.com/insurance..asp)
- Baumann, Harry and Badamtsetseg Dash-Ulzii, Aug. 2003, "The Ag Bank's Turnaround: From Insolvency to Profits," Bethesda, Maryland: DAI, Final Report of the EPSP's Technical Assistance to the Ag Bank of Mongolia, Prepared by DAI for USAID under Contract No. 410-C-00-93-00483-00 (www.dai.com).
- Baydas, Mayada M., Zakaria Bahloul, and Dale W. Adams, 1995, "Informal Finance in Egypt: 'Banks' Within Banks," *World Development*, Vol. 23, No. 4, pp. 651-661.
- Bering, Ntee, 2002, "The Lesotho Agricultural Development Bank," in *Agricultural Development Banks in Africa: The Way Forward*, edited by Gerhard Coetzee, Nairobi: African Rural and Agricultural Credit Association.

- Boyer, Debra and Dyer, Jay, 2003, "The Agricultural Bank of Mongolia: From Insolvent State Bank to Thriving Private Bank," paper presented at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, organized by USAID, Washington D.C., June 2-4, (www.basis.wisc.edu/rfc).
- Branch, Brian and Christopher Baker, 2000, "Overcoming Credit Union Governance Problems," in *Safe Money: Building Effective Credit Unions in Latin America*, Westley, Glenn D. and Brian Branch (eds.), Washington, D.C.: Inter-American Development Bank and World Council of Credit Unions, pp. 203-223.
- Brusky, B. & CGAP, 2004, "Applying Good Microfinance Practice to Housing Finance" Washington, D.C.: CGAP, Donor Brief, Sept. 16, 2004. www.cgap.org
- Buchenau, Juan, 2003, "Innovative Products and Adaptations for Rural Finance," paper presented at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, organized by USAID, Washington D.C., June 2-4, (www.basis.wisc.edu/rfc).
- _____, 2004, "Remittances and Microfinance: A Practical Application." Washington, D.C.: IADB, *Microenterprise Development Review*, July 2004, Vol. 7, No. 1. www.iadb.org
- Campaigne, Jonathan, posting on Development Finance Network, Oct. 2004. www.dfn.org
- Campion, Anita and John Owens, 2003, "MABS: A Sustainable Approach to Rural Microfinance," *The MicroBanking Bulletin*, Issue No. 9, July 2003, pp. 33-36 (www.mixmbb.org).
- CARE, 2001, "AGENT Case Study, BDS 2002 Training Course", Atlanta, Georgia, internal document, CARE.
- _____, 2002, "REAP/Kenya IFAD Contract Grant: Final Report for the Period Feb. 2000 to June 2002", Internal document, Nairobi: CARE International, Kenya.
- _____, 2004a, "The Musow Ka Jigiya Ton (MJT) Savings and Credit System in Mali," Mali: CARE.
- _____, 2004b, "Village Savings and Credit Program in Malawi: Documentation of Best Practices," Malawi: CARE.
- Carter, Michael and Eliza Waters, 2004, "Rethinking Rural Finance: A Synthesis of the Paving the Way Forward for Rural Finance Conference," Madison: University of Wisconsin, BASIS Collaborative Research Support Program. www.basis.wisc.edu/rfc
- CGAP, 2001, "Linking Microfinance and Safety Net Programs to Include the Poorest: The Case of IGVGD in Bangladesh," Washington, DC: CGAP, Focus Note No. 21, May 2001.
- _____, 2003, "Technology Investment Dimensions: 10 Key Questions," "Automated Teller machine," "PDAs," and "Smart Cards," Washington, D.C.: CGAP, Innovation Notes Series. www.cgap.org

- _____, 2004, "Elements of Donor Effectiveness in Microfinance: Analysis of Results from Donor Peer Reviews and Policy Implications", Washington, DC: CGAP, April (www.cgap.org).
- Chalmers, Geoffrey et al., Jan. 2005, "A Fresh Look at Rural and Agricultural Finance," Washington, D.C.: AMAP/USAID, Rural and Agricultural Finance Note No. 1 (www.microlinks.org).
- Chao-Bérouff, Renée, 2003, "Rural Savings Mobilization in West Africa: Guard Against Shocks or Build an Asset Base?" *The MicroBanking Bulletin*, Issue No. 9, July 2003, pp. 16-18 (www.mixmbb.org)
- Chen, Martha A. and Donald Snodgrass, 2001, "Managing Resources, Activities, and Risk in Urban India: The Impact of Sewa Bank", AIMS publication. Washington, DC: USAID. (www.microlinks.org)
- Christen, Robert Peck and Douglas Pearce, 2005 (forthcoming), "Managing Risk and Product Design in Agricultural Microfinance," Washington, D.C.: CGAP. www.cgap.org
- Chupek, Arie, 2004, "Innovative Activity Profile: Vietnam: Mobile Banking for Rural People," pp. 334-5 in "Agriculture Investment Sourcebook, Module 7: Investments in Rural Finance for Agriculture," Washington, D.C.: The World Bank. www.worldbank.org
- Churchill, Craig and Gaby Ramm, 2004, "Indian MicroInsurance: Breeding Ground for Innovation," *MicroInsurance*, April 2004, No. 3, pp. 3-4.
- Coetzee, Gerhard and Douglas Graham, 2002, "Restructuring Agricultural Development Banks in South Africa," in *Agricultural Development Banks in Africa: The Way Forward*, Gerhard Coetzee (ed.), Nairobi: African Rural and Agricultural Credit Assn., 2002.
- Coetzee, Gerhard, Kamau Kabbucho, and Andrew Njema, 2003, "Taking Banking Services to the Poor: Equity's Mobile Banking Unit," Nairobi, Kenya: MicroSave, Nov. 2003. www.microsave.org
- Cohen, Monique, Kathleen Stack, and McGuinness E., 2004, "Financial Education: A Win-Win for Clients and MFIs", Microfinance Gateway Highlights, June 2004, www.microfinancegateway.org
- Coleman, Brent, 2001, "Measuring Impact of Microfinance Programs," *Finance for the Poor*, Vol. 2, No. 4, pp. 5-8, Dec. 2001.
- Committee of Donor Agencies for Small Enterprise Development, 1995, "Small and Microenterprise Finance: Guiding Principles for Selecting and Supporting Intermediaries and Donor Guidelines for Microfinance International Best Practices", Committee of Donor Agencies for Small Enterprise Development Donor's Working Group on Financial Sector Development & UNDP SUM, www.microfinancegateway.org
- Conning, Jonathan and Michael Kevane, 2004, "Why isn't there more Financial Intermediation in Developing Countries?", in *Insurance against Poverty*, S. Dercon (ed), Oxford University Press, 2004.

- Cox-Edwards, Alejandra and Manuelita Ureta, 2003, "International Migration, Remittances and Schooling: Evidence from El Salvador", *Journal of Development Economics*, Vol. 2, No. 72, pp. 429-461.
- Cracknell, David, 2004, "Synthesis of E-conference on Electronic Banking," Nairobi, Kenya: MicroSave. www.microsave.org
- Cross, Catherine, 2003, "Migrant Workers Remittances and Microfinance in South Africa", Unpublished internal report, Geneva: ILO, and Pretoria: Teba Bank, South Africa.
- Daley-Harris, Sam, 2004, "State of the Microcredit Summit Campaign Report 2004." www.microcreditsummit.org
- De Soto, Hernando 2000, "The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else", New York: Basic Books, 2000.
- Dressen, Robert, Jay Dyer, and Zan Northrip, 2002, "Turning Around State-Owned Banks in Underserved Markets," *Small Enterprise Development*, Vol. 13, No. 4, Dec. 2002, pp. 58-67.
- Dries, Leisbeth, Thomas Reardon and Johan F.M. Swinnen, 2004, "The Rapid Rise of Supermarkets in Central and Eastern Europe: Implications for the Agrifood Sector and Rural Development", *Development Policy Review*, Vol.22, Issue 5, pp. 525-556.
- Dunn, Elizabeth and Gordon J. Arbuckle, Jr., 2001, "The Impacts of Microcredit: A Case Study from Peru", Washington, DC: USAID, AIMS publication, Sep. 2001, www.microlinks.org
- Dyer, Jay, J. Peter Morrow, and Robin Young, 2004, "The Agricultural Bank of Mongolia," in *Scaling Up Poverty Reduction: Case Studies in Microfinance*, Washington, D.C.: CGAP.
- Esguerra, Emmanuel and Meyer, Richard, 1995 "Collateral Substitutes in Rural Informal Financial Markets in the Philippines," in Dale W Adams and Delbert A. Fitchett (eds.), *Informal Finance in Low-Income Countries*, Boulder, Colorado: Westview Press, 1992, pp. 149-164.
- Fernando, Nimal A., 1998, "White Elephants in Rural Finance in South Asia," paper submitted to Development Finance Conference, Frankfurt, Germany.
- _____, 2003, "Workers' Remittances and Microfinance: The Neglected Nexus" Manila: ADB, *Finance for the Poor*, Vol. 4, No. 2, pp. 5-7 (June) www.adb.org
- _____, 2004a, "Postal Savings Bank", Posting on Development Finance Network, August 19, 2004.
- _____, 2004b, "Microfinance Outreach to the Poorest: A Realistic Objective?," *Finance for the Poor*, Vol. 5, No. 1, pp. 1-5 (March). www.adb.org/documents/periodicals
- Fiebig, Michael, 2001, "Prudential Regulation and Supervision for Agricultural Finance," Rome: FAO, *Agricultural Finance Revisited*, Vol. 5. www.ruralfinance.org/cds_static/en/prudential_regulation_supervision_agricultural__en_2870_2895.html

- Fleisig, Heywood and Nuria de la Peña, 2003, "Legal and Regulatory Requirements for Effective Rural Financial Markets," paper presented at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, Washington, D.C., June 2-4, 2003. www.basis.wisc.edu/rfc
- Fries, Bob and Banu Akin, 2004, "Value Chains and Their Significance for Addressing the Rural Finance Challenge," Washington, D.C.: ACDI/VOCA microREPORT #20 produced for AMAP/USAID (www.microlinks.org).
- Gereffi, G., 1999, "International Trade and Industrial Upgrading in the Apparel Commodity Chain," *Journal of International Economics*, Vol. 48, pp. 37-70.
- Gonzalez-Vega, Claudio, 2003a, "Deepening Rural Financial Markets: Macroeconomic Policy and Political Dimensions," Lead Theme Paper at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, Washington, D.C., June 2-4, 2003. www.woccu.org
- _____, 2003b, "Lessons for Rural Finance from the Microfinance Revolution," in *Promising Practices in Rural Finance: Experiences from Latin America and the Caribbean*, Mark D. Wenner et al. (eds.), pp. 53-66.
- Gonzalez-Vega, Claudio and Douglas H. Graham, 1995, "State-Owned Agricultural Development Banks: Lessons and Opportunities for Microfinance," Economics and Sociology Occasional Paper No. 2245, Department of Agricultural Economics, Ohio State University, Columbus, Ohio, June 1995.
- Gonzalez-Vega, Claudio et al., 2003, "The Economic, Legal, and Regulatory Environment: Deepening Rural Financial Markets," Chapter 3 in *Promising Practices in Rural Finance: Experiences from Latin America and the Caribbean*, Mark D. Wenner et al. (eds.), pp. 68-174.
- Grace, David, 2004, "Using Remittances to Build Financial Relationships with Credit Unions," *Small Enterprise Development*, Vol. 15, No. 1, March 2004, pp. 35-43.
- Grant, William J. and Hugh C. Allen, 2002, "CARE's Mata Masu Dubara (Women on the Move) Program in Niger: Successful Financial Intermediation in the Rural Sahel," *Journal of Microfinance*, Vol. 4, No. 2, Fall 2002, pp. 189-216. <http://marriottschool.byu.edu/microfinance/archives.cfm?issue=fall02>
- Grashof, Lutz, 2002, "Country Case Study: Agricultural Bank of Mongolia," Eschborn, Germany: GTZ, March 2002.
- GTZ, 2003 and 2004, "Case Studies on Savings Mobilization," Eschborn, Germany: GTZ. www.gtz.de/fsd/products/saving_mobilization_details.htm
- Guadamillas, Mario, Giovanni Majnoni, and Yira Mascaro, 2003, "The Banking System," in *Ecuador: An Economic and Social Agenda in the New Millennium*, Vicente Freter-Cibils, Marcelo M. Giugale, and Jose Roberto Lopez-Caliz (eds.), Washington, D.C., 2003: World Bank, pp. 85-113.

- Gudger, Michael, 1998, *Credit Guarantees: An Assessment of the State of Knowledge and New Avenues of Research*, Rome: Food and Agriculture Organization, Agricultural Services Bulletin No. 129.
- Haberberger, Marie Luise, Luck Wajananawat, and Nipath Kuasakul, 2003, "Case Study: Bank for Agriculture and Agricultural Cooperatives, Thailand," in *The Challenge of Sustainable Outreach: How Can Public Banks Contribute to Outreach in Rural Areas? Five Case Studies from Asia*, Dirk Steinwand and Martina Wiedmaier-Pfister (eds.), Eschborn, Germany: GTZ. www.gtz.de/fsd/products/saving_mobilization_details.htm
- Hannig, Alfred and N. Omar, 2000, *How to Regulate and Supervise Microfinance: Key Issues in an International Perspective: The Emerging Consensus in the Regulation and Supervision of Microfinance: Synthesis of the Debate*, Eschborn, Germany: GTZ.
- Hanson, James A., 2004, "The Role of State-Owned Financial Institutions: Policy and Practice," paper presented at the 6th Annual Financial Markets and Development Conference, World Bank and IMF, Washington, D.C., April 26-27, 2004. www.worldbank.org/wbi/banking/finsecpolicy/stateowned2004/agenda.html
- Harper, Malcolm, 2002, "Promotion of Self Help Groups under the SHG Linkage Programme in India", Paper presented at the Seminar on SHG-bank Linkage programme at New Delhi, Nov. 25-26, 2002. www.nabard.org/roles/mcid/malcolmharper.pdf.
- Hess, Ulrich, 2003, "Innovative Financial Services for Rural Services for Rural India: Monsoon-Indexed Lending and Insurance for Small Holders," Washington, D.C.: World Bank, ARD Working Paper No.9.
- Hiemann, Wolfram, 2003, "Case Study: Bank Rakyat Indonesia," in *The Challenge of Sustainable Outreach: How Can Public Banks Contribute to Outreach in Rural Areas? Five Case Studies from Asia*, Dirk Steinwand and Martina Wiedmaier-Pfister (eds.), Eschborn, Germany: GTZ.
- Hirschland, Madeline, 2003, "Serving Small Rural Depositors: Proximity, Innovations, and Trade-Offs," paper presented at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, Washington, D.C., June 2-4, 2003, (www.basis.wisc.edu/rfc)
- _____, forthcoming a, "Savings Products", Ch. 7, in *Savings Services for the Poor: An Operational Guide*. Bloomfield, Connecticut: Kumarian Press.
- _____, forthcoming b, "Beyond Full Service Branches: Other Delivery Options", Ch. 8, in *Savings Services for the Poor: An Operational Guide*. Bloomfield, Connecticut: Kumarian Press.
- _____, forthcoming c, "Overview", Part One, in Madeline Hirschland, editor, *Savings Services for the Poor: An Operational Guide*. Bloomfield, Connecticut: Kumarian Press.
- Hulme, David and Paul Mosley, 1996, *Finance Against Poverty: Effective Institutions for Lending to Small Farmers and Micro-enterprises in Developing Countries, Volume 1: Theory and Policy Recommendations*, London, England: Routledge.

- IADB, 2001, "Rural Finance Strategy," Washington, D.C.: IADB Sustainable Development Department, Sector Strategy and Policy Papers Series.
- IADB, 2004, "Social Entrepreneurship program to support Indigenous Coffee Growers in Guatemala through EcoLOGIC Finance ", www.iadb.org/news/display/prprint.cfm?pr_num=244_04&language=english
- IFAD, 2000, "IFAD Rural Finance Policy," presented to the Executive Board at the Sixty-Ninth Session, Rome, May 3-4, 2000.
- Ikpeleu, Ike, 2002, "The Nigerian Agricultural and Cooperative Bank Limited," in *Agricultural Development Banks in Africa: The Way Forward*, Gerhard Coetzee (ed.), Nairobi: African Rural and Agricultural Credit Association.
- International Finance Corporation, 2004, "Analysis of the Financial Leasing Market in Central Asia," May 2004. www2.ifc.org/centralasia/leasing/etjmain.htm
- Jaramillo, María F., 2004, "Leveraging the Impact of Remittances through Microfinance Products," ACCION *InSight* No. 10, p. 15. www.accion.org
- Johnson, Susan, Markku Malkamaki, and Kuria Wanjau, April 2004, "One Step Beyond: Tackling the Frontier of Microfinance Provision in Kenya (through SACCOs)," Nairobi, Kenya: Decentralised Financial Services (DFS), MicroSave. www.microsave.org
- Kamewe, Hugues and Antonique Koning, 2003, "The Experience of Savings Banks," *The MicroBanking Bulletin*, Issue No. 9, July 2003, pp. 37-42. www.mixmbb.org
- Kaplinsky, R., and J. Readman, 2001, 'How can SME producers Serve Global Markets and Sustain Income Growth?', Brighton: University of Brighton and University of Sussex, <http://www.ids.ac.uk/ids/global/valchn.html>
- Khandker, Shahidur R., 1998, *Fighting Poverty with Microcredit: Experience in Bangladesh*, Washington, D.C.: The World Bank.
- Klein, Brigitte, Richard Meyer, Alfred Hannig, Jill Burnett, and Michael Fiebig, 1999, "Better Practices in Agricultural Lending," Rome: FAO and GTZ, Agricultural Finance Revisited, No 3. www.gtz.org
- Koboski, Joe, 2004, "Overview of Thai Million Bhat Village Fund Initiative," Columbus, Ohio: Ohio State University.
- Kropp, E.W. and B.S. Suran, 2002, "Linking Banks and Self-Help Groups in India: An Assessment," Bombay: NABARD. www.nabard.org/roles/mcid/erhardkropp.pdf
- Kula, Olaf and E. Farmer, 2004, "Mozambique Rural Financial Services Study", Washington, DC: ACDI/VOCA, MicroREPORT prepared for AMAP project funded by USAID, Washington, DC. www.microLINKS.org.
- Levitsky, Jacob, 1997, "Credit Guarantee Schemes for SMEs: An International Review," *Small Enterprise Development*, Vol. 8, No. 2, June 1997, pp. 4-17.

- Levy Yeyati, Eduardo, Alejandro Micco, and Ugo Panizza, 2005, "State-Owned Banks: Do They Promote or Depress Financial Development and Economic Growth?," background paper prepared for the conference Public Banks in Latin America: Myths and Reality, Inter-American Development Bank, Washington, D.C., Feb. 25, 2005.
- Levy, Fred, 2002, "Apex Institutions in Microfinance," CGAP Occasional Paper No. 6, Washington, D.C., Jan. 2002.
www.cgap.org
- Littlefield, Elizabeth and Richard Rosenberg, 2004, "Microfinance and the Poor: Breaking Down Walls Between Microfinance and Formal Finance," *Finance and Development*, June 2004.
- Littlefield, Elizabeth, 2003, "Building Financial Services for the Poor," *Finance for the Poor*, Manila: ADB, June 2003, Vol. 4, No.2, pp.2-4. www.adb.org
- Maimbo, Samuel Munzele, 2003, "The Money Exchange Dealers of Kabul: A Study of the Hawala System in Afghanistan," Washington, D.C.: The World Bank, Working Paper No. 13. http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000090341_20031016085357
- Makki, Shiva, 2002, "Crop Insurance: Inherent Problems and Innovative Solutions," in *Agricultural Policy for the 21st Century*, Luther Tweeten and Stanley Thompson (eds.), Ames: Iowa State University Press, 2002.
- Makki, Shiva and Agapi Somwaru, 2001, "Evidence of Adverse Selection in Crop Insurance Markets," *Journal of Risk and Insurance*, Vol. 68, No. 4, pp 685-708.
- _____, 2004, "Review and Analysis of Canadian Net Income Stabilization Account Programs," Economic Research Service Report, Nov. 2004.
- Mannorff, Hannes, 2004, "ACCION's Experiences with Rural Finance in Latin America and Africa," Washington, DC: ACCION, *InSight* No. 11, www.accion.org/micro_pubs_list_new.asp?free=true
- Marston, David and Aditya Narain, 2004, "Painting the SFI Landscape," paper presented at the 6th Annual Financial Markets and Development Conference, World Bank and IMF, Washington, D.C., April 26-27. www.worldbank.org/wbi/banking/finsecpolicy/stateowned2004/agenda.html
- Matin, Imran and Robert Christen, 2001, "ASA's Culture, Competition, and Choice: Introducing Savings Services into Micro-credit Institutions," Kampala: MicroSave-Africa.
- McAllister, Patrick, 2003, "Trust through Transparency: Applicability of Consumer Protection Self-Regulation to Microfinance", Washington, DC: USAID, Microenterprise Innovation Project.
- Meyer, Richard L., 2002, "The Demand for Flexible Microfinance Products: Lessons from Bangladesh," *Journal of International Development*, Vol. 14, No. 3, pp. 351-368.

- Meyer, Richard L., 2003, "Microfinance, Poverty Alleviation, and Improving Food Security: Implications for India," Chapter 24 in *Food Security and Environmental Quality in the Developing World*, Rattan Lal, David Hansen, Norman Uphoff, and Steven Slack (eds.), Boca Raton, Florida: CRC Press LLC, 2003.
- Meyer, Richard L. and Juan Buchenau, 2003, "Individual Lending in Rural Finance: The IPC Model," Paper Presented at the Seminar Current Issues in Microfinance, Misty Hills, Johannesburg, South Africa, August 12-14, 2003.
- Meyer, Richard L. and Donald Larson, 2002, "Issues in Providing Agricultural Services in Developing Countries" in *Promoting Third-World Development and Food Security*, Luther G. Tweeten and Donald McClelland (eds.), Westport: Praeger Publishers, 1997, pp. 119-151.
- Meyer, Richard L. and Geetha Nagarajan, 1996, "Credit Guarantee Schemes for Developing Countries: Theory, Design, and Evaluation," Washington, D.C.: USAID, Center for Economic Growth, May 22, 1996.
- _____, 2000, *Rural Financial Markets in Asia: Policies, Paradigms, and Performance*, Manila: Asian Development Bank and Hong Kong: Oxford University Press, Aug. 2000. www.adb.org
- Meyer, Richard L., Richard Roberts, and Adam Mugume, 2004, "Developing Rural Financial Markets in Uganda: The Way Forward," Financial Systems Development Programme, Bank of Uganda, GTZ/KfW/Sida, Kampala, Oct. 2004. www.gtz.org
- MFIC, 2004, "Mi Pueblo Financial Service Centers for Latin Immigrants in the US of MicroFinance International Corporation", Information found on the website, <http://www.mfi-corp.com/mficw/index.php>, <http://www.serviciosmipueblo.com>.
- MFRC, 2003, "Norufin Housing Ltd.," Newsletter Issue 7. www.mfrc.co.za
- Micco, Alejandro and Ugo Panizza, 2005, "Public Banks in Latin America," background paper prepared for the conference Public Banks in Latin America: Myths and Reality, Inter-American Development Bank, Washington, D.C., Feb. 25, 2005.
- Microfinance Network, 2003, "Summary of Annual Conference Proceedings," Washington, D.C.: MFN. www.bellanet.org/partners/mfn
- MicroInsurance*, 2004, "The Risks of Crop Insurance," *MicroInsurance*, Sept. 2004, No. 3, pp. 1-2.
- Miller, Calvin, 2004, "Twelve Key Challenges in Rural Finance," unpublished paper presented at the SEEP annual meetings held in Washington, D.C., Oct. 28, 2004.
- Morduch, Jonathan, 2004, "Consumption Smoothing Across Space: Tests for Village-Level Responses to Risk" in Stefan Dercon, ed., *Insurance Against Poverty*, Oxford University Press, 2004. www.nyu.edu/projects/morduch/insurance/index.html
- Mule, Nthenya, Susan Johnson, Robert Hickson, and Wambui Mwangi, 2001, "The Managed ASCA Model: Innovation in Kenya's Microfinance Industry," MicroSave-Africa, Kenya, Nov. 2001. www.microsave.org

- Muñoz, Araya M.C. and Robert Christen, 2005, "Microfinance as a Tool to Protect Biodiversity Hot-Spots," Washington D.C.: CGAP, Microfinance Gateway Highlights. www.microfinancegateway.org/content/article/detail/22607
- Munro, David, 2004, "PBDAC in Egypt," e-mail communication on Oct. 26, 2004.
- Mutunhu, T.E., 2002, "Agribank of Zimbabwe," in *Agricultural Development Banks in Africa: The Way Forward*, Gerhard Coetzee (ed.), Nairobi: African Rural and Agricultural Credit Association.
- NABARD, 2004, "NABARD and Microfinance: SHG Bank Linkage Programme." www.nabard.org
- Nagarajan, Geetha, 1998, "Microfinance in the Wake of Natural Disasters: Challenges and Opportunities", Washington D.C.: Development Alternatives Inc., Prepared for MBP funded by USAID, March 1998. [www. microLINKS.org](http://www.microLINKS.org)
- Nagarajan, Geetha, 2003a, "Going Postal to Deliver Financial Services to Microclients," *Finance for the Poor*, Newsletter of Asian Development Bank, Manila, the Philippines, Vol. 4, No. 1, pp. 5-8. www.adb.org/Documents/Periodicals/Microfinance/finance_200341.pdf
- Nagarajan, Geetha, 2003b, "Poverty Outreach in C&EE and NIS Countries by Microfinance Institutions," in *The State of Microfinance in C&EE and NIS*, Sarah Forster, Seth Greene, and Justyna Pytkowska (eds.), Washington, D.C.: CGAP. www.mfc.org.pl/doc/Publication/Mapping/chapter5
- Nagarajan, Geetha and Warren Brown, 2000, "Bangladeshi Experience in Adapting Financial Services to Cope with Floods: Implications for the Microfinance Industry," Bethesda: DAI, papers prepared for USAID under Micro-enterprise Best Practices Project, June 2000. www.usaidmicro.org/pubs/mbp-def.htm
- Nagarajan, Geetha, Joan Hall, Rajeev Gupta and Deepak Kindo, 2005, "Financial Services to Growth Oriented SMEs in India", Washington: DC: ACDI/VOCA, Internal Report submitted to USAID, New Delhi, India.
- Nagarajan, Geetha and Claudio Gonzalez-Vega, 1998, "Evaluation of Apex Institutions: The Cases of PKSF in Bangladesh and FWFB in India," Columbus: The Ohio State University, Paper prepared for CGAP, August 1998. www.microfinancegateway.org
- Nagarajan, Geetha and Richard L. Meyer, 1995 "Incorporating Finance into a Modified Sub-Sector Framework as Applied to the Fertilizer Sub-Sector in The Gambia", *World Development*, Vol. 23, No. 7, July 1995.
- Nair, Ajai, 2005, "Sustainability of Microfinance Self-Help Groups in India: Would Federating Help?," Washington, D.C.: The World Bank, Policy Research Working Paper 3516, Feb. 2005. <http://econ.worldbank.org/>
- Nair, Ajai, Renate Kloeppinger-Todd, and Annabel Mulder, 2004, "Leasing: An Underutilized Tool in Rural Finance," Washington, D.C.: The World Bank, ARD Discussion Paper No. 7. www.worldbank.org

- Owens, John, 2003, "The Partner Savings Plan of the Workers Bank, Jamaica: Lessons in Microsavings from ROSCAs," Chapter 9 in *Promising Practices in Rural Finance: Experiences from Latin America and the Caribbean*, Mark D. Wenner et al. (eds.), pp. 303-328.
- Patel, Sabbir, Oct. 2004, "Takaful and Poverty Alleviation," UK: The International Cooperative and Mutual Insurance Federation (ICMIF). www.icmif.org/takaful
- Pearce, Douglas, 2003, "Buyer and Supplier Credit to Farmers: Do Donors have a Role to Play?" Paving the Way Forward for Rural Finance: An International Conference on Best Practices, Washington, D.C., June 2-4, 2003. www.basis.wisc.edu/live/rfc/cs_15b.pdf
- Pietrobelli, Carlo and Roberta Rabellotti, Jan. 2004, "Upgrading in Clusters and Value Chains in Latin America: The Role of Policies," Washington, D.C.: Inter-American Development Bank, Sustainable Development Department, Best Practices Series. www.iadb.org/sds/mic
- Pleitez Chavez, Rafael Antonio, 2004, "Remittances as a Strategy to Cope with Systemic Risk: Panel Results from Rural Households in El Salvador," unpublished Ph.D. dissertation, Department of Agricultural, Environmental, and Development Economics, Ohio State University, Columbus, Ohio.
- Prahalad, C.K., 2005, *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits*, New Jersey: Wharton School Publishing.
- Puhazhendhi, V. and K.J.S. Satyasai, 2000, *Microfinance for Rural People: An Impact Evaluation*, Mumbai, India: National Bank for Agriculture and Rural Development. www.nabard.org
- Quesada, C., 2003, "Profitable Solidarity: An Ecuadorian Bank with Social Aims and Health Profits", Washington, DC: IADB, July 2003.
- Ratha, Dilip, 2004, "Enhancing the Developmental Effect of Workers' Remittances to Developing Countries," Appendix A to *Global Development Finance 2004*, Washington, D.C.: The World Bank. See also Chapter 7.
- Reardon, Thomas and Julio A. Berdegue, 2002, "The Rise of Supermarkets in Latin America: Challenges and Opportunities for Development", *Development Policy Review*, Vol. 20, Issue 4, pp. 371-388, 2002.
- Rhyne, Elisabeth and Maria Otero, 1994, "Financial Services for Micro enterprise: Principles and Institutions" in *The New World of Microenterprise Finance: Building Healthy Financial Institutions for the Poor*, Eds. Maria Otero and Elisabeth Rhyne, Kumarian Press.
- Rhyne, Elizabeth, 2003, Taking Stock of Consumer Protection in Microfinance - A Non-Regulatory Approach, Oct. 2003, Microfinance Gateway Highlight, www.microfinancegateway.com/content/article/detail/21419.

- Richardson, Dave, 2003, "Going to Barricades with Microsavings Mobilization: A View of the Real Costs from the Trenches," *The MicroBanking Bulletin*, Issue No. 9, July 2003, pp. 9-13, www.mixmbb.org
- Robinson, Marguerite, 2001, "Savings and the New Microfinance," Chapter 7 in *The Microfinance Revolution*, Washington, D.C.: World Bank, 2001.
- Rural Housing Loan Fund. www.rhlf.co.za
- Rust, Kecia, 2003, "Sink or Swim: Progress in the relationship between banks and alternative lenders in South Africa's low-income housing finance sector," Rural Housing Loan Fund. www.rhlf.co.za
- Rutherford, Stuart, 2000, "The Poor and Their Money," New Delhi: Oxford University Press, 2000.
- Sa-Dhan, 2004, "SHG Federations in India: Emerging Structures and Practices." www.sa-dhan.org
- Sander, Cerstin, 2004, "Capturing Market Share? Migrant Remittances and Money Transfers as a Microfinance Service in Sub-Saharan Africa," *Small Enterprise Development*, Vol. 15, No. 1, March 2004, pp. 20-34.
- Schmitz, Hubert, 2004, "Local Upgrading in Global value Chains – Recent Findings", DRUID Summer Conference Paper, 2004.
- Schreiner, Mark, 2002, "What do Individual Development Accounts Cost? The First Three years at CAPTC", St.Louis: Center for Social Development, Washington University. www.gwbweb.wustl.edu/csd/Publications
- _____, 2003, "Scoring: The Next Breakthrough in Microcredit?," Washington, D.C.: CGAP, Occasional Paper No. 7, Jan. 2003. www.cgap.org
- Sebstad, Jennifer and Monique Cohen, 2001, "Microfinance, Risk Management and Poverty", Washington, DC: CGAP, 2001, www.cgap.org
- Seibel, Hans Dieter, 2000, "Agricultural Development Banks: Close Them or Reform Them?," *Finance and Development*, Vol. 37, No. 2, June 2000.
- _____, 2004, "Report of the AFRACA Workshop Sustainability of Agricultural Banks, September 13-15, 2004, Harare, Zimbabwe.
- Seibel, Hans Dieter, Thorsten Giehler and Stefan Karduck, 2004, "Reforming Agricultural Banks," Eschborn, Germany: GTZ, Jan. 21, 2004.
- Seibel, Hans Dieter and Stefan Karduck, 2004, "Transaction Costs of Self-Help Groups in NABARD's SHG Banking Programme: A Study in Karnataka State," Mumbai: NABARD, June 2004. www.nabard.org and www.gtz.org
- Sherraden, Michael, 2000, 'On the Costs and Future of Individual Development Accounts in the US', St.Louis: Center for Social Development, Washington University. www.gwbweb.wustl.edu/csd/Publications

- Simkhada, Nav Raj, Feb. 2004, "A case study of four Savings and Credit Cooperatives Societies (SACCOs) operating in the hill of Nepal," Kathmandu: Paper presented at BWTP-CMF workshop at Agricultural Development Bank of Nepal, RUFIN project funded by GTZ. www.bwtp.org
- Skees, Jerry, 2003, "Risk Management Challenges in Rural Financial Markets: Blending risk-management innovations with rural finance," paper presented at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, sponsored by USAID and WOCCU, Washington, D.C., June 2-4, 2003. www.basis.wisc.edu/rfc
- Skees, Jerry et al., 2002, "Can financial markets be tapped to help poor people cope with weather risks?," Washington, D.C.: The World Bank, Policy Research Working Paper No. 2812, March 2002. www.worldbank.org
- Srinivas, P.S. and Djauhari Sitorus, 2004, "The Role of State Owned Banks in Indonesia," paper presented at the 6th Annual Financial Markets and Development Conference, World Bank and IMF, Washington, D.C., April 26-27, 2004. www.worldbank.org/wbi/banking/finsecpolicy/stateowned2004/agenda.html
- Srinivasan, R., 2003, "Self-Help Groups as Financial Institutions," *Journal of Microfinance*, Vol. 5, No. 1, Spring 2003. <http://marriottschool.byu.edu/microfinance/archives.cfm?issue=spring03>
- Staschen, Stefan, Jan. 2001, "Financial Technology of Small Farmer Co-operatives Ltd. (SFCLs): Products and Innovations," Kathmandu: Agricultural Development Bank, Rural Finance Nepal project, Working Paper No. 2.
- Stearns, Katherine, 1993, "Leverage or Loss? Guarantee Funds and Microenterprise," ACCION Monograph Series No. 8, ACCION, Cambridge, Massachusetts, 1993. www.accion.org
- Steel, William and David Andah, 2003, "Rural and Microfinance Regulation in Ghana: Implications for Development and Performance of the Industry," Washington, D.C.: The World Bank, Africa Region Working Paper Series No. 49. www.worldbank.org/afr/wps/wp49.pdf
- Steel, William F. and Stephanie Charitonenko, 2003, "Implementing The Bank's Strategy To Reach The Rural Poor," Washington, D.C.: Agriculture & Rural Development Department Rural Private Sector, Markets, Finance, and Infrastructure Thematic Group, Report No. 26030, Rural Financial Services, The World Bank. First web posting: June 2003. www.worldbank.org
- Steinwand, Dirk and Martina Wiedmaier-Pfister (eds.), 2003, *The Challenge of Sustainable Outreach: How Can Public Banks Contribute to Outreach in Rural Areas? Five Case Studies from Asia*, Eschborn: Germany: GTZ.
- Tankha, Ajay, 2002, "Self-Help Groups as Financial Intermediaries in India: Cost of Promotion, Sustainability, and Impact," New Delhi: Sa-Dhan, study prepared for ICCO and Cordaid, The Netherlands, Aug. 2002. www.microfinancegateway.org/files/3736_SHGREPORT.pdf
- Tien Hung, G. Nguyen, 2004, "Bank on Wheels," *Finance and Development* (June), pp. 42-43. www.imf.org

- UNIDO, 2002, "Industrial Development Report 2002-03", Vienna: United Nations.
- Valenzuela, Liza, 2000, "Comments on Lending Institutions," presentation at the IADB conference "Promising Practices in Rural Finance," Washington, D.C., May 22.
- Von Pischke, J.D., 1991, *Finance at the Frontier: Debt Capacity and the Role of Credit in the Private Economy*, Washington D.C.: World Bank Institute, Development Studies Series.
- _____, 1996, "Measuring the Trade-off between Outreach and Sustainability of Microenterprise Lenders," *Journal of International Development*, Vol. 8, No. 2, pp. 225-239, 1996
- Von Pischke, J.D., 2003, "The Evolution of Institutional Issues in Rural Finance Outreach, Risk Management, and Sustainability," Lead Theme Paper at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, Washington, D.C., June 2-4, 2003. www.woccu.org
- Waterfield, Charles, 2004, "Summary of E-Conference on Electronic Banking," Nairobi, Kenya: MicroSave. www.microsave.org
- Weatherspoon, Dave and Thomas Reardon, 2003, "Supermarkets in Sub-Saharan Africa: Challenges and Opportunities for Agri-food Suppliers", London: The Economist Intelligence Unit: Africa Regional Overview, Q2, pp. 1-6.
- Wehnert, Ulrich and Roshan Shakya, Jan. 2003, "Microfinance and Armed Conflict in Nepal: The Adverse Effects of Insurgency on Small Farmers Cooperatives Limited (SFCLs)," Kathmandu: Agricultural Development Bank, Rural Finance Nepal project, Working Paper No. 3.
- Welch, Horn and Karen, Patricia Lee Devaney, 2003, "Poverty Outreach Findings: Mibanco, Peru," Washington, DC: ACCION, InSight #5. www.accion.org/micro_pubs_list.asp
- Welsh, Allen, 2003, "Secured Transactions Law: Best Practices and Policy Options," College Park, Maryland: University of Maryland, IRIS Center, Paper No. 03/06, Aug. 2003. <http://128.8.56.108/iris-data/docs/dp306.pdf>
- Wenner, Mark, 2004, "Intermediation of Remittances" Posting on Development Finance Network, , July 6, 2004.
- Wenner, Mark, Javier Alvarado, and Francisco Galarza (eds.), 2003, *Promising Practices in Rural Finance*, Lima, Peru: CEPES, IADB, Academia de Centroamérica.
- Westley, Glenn D., 2003, "Equipment Leasing and Lending: A Guide for Microfinance," Washington, D.C.: IADB, Sustainable Development Department Best Practices Series, Micro, Small and Medium Enterprise Division. www.iadb.org
- _____, 2004, "A Tale of Four Village Banking Programs: Best Practices in Latin America," Washington, D.C.: IADB, Sustainable Development Department Best Practices Series MSM-125. www.iadb.org
- Westley, Glenn D. and Brian Branch, 2000, *Safe Money: Building Effective Unions in Latin America*, Washington, D.C.: Inter-American Development Bank. www.iadb.org

- Wilson, Kim, 2002a, "The New Microfinance: An Essay on the Self-Help Group Movement in India," *Journal of Microfinance*, Vol. 4, No. 2, Fall 2002, <http://marriottschool.byu.edu/microfinance/archives.cfm?issue=fall02>
- Wilson, Kim, 2002b, "The Role of Self-Help Group Bank Linkage Programme in Preventing Rural Emergencies in India," Mumbai, India: NABARD MicroCredit Innovations Department. www.nabard.org/roles/mcid/kimwilson.pdf
- Wise, Hillary Miller, 2004, "Cajas Externas in Bolivia: A Strategic Alliance to Increase Savings in Under-Served Markets", Washington, DC: SEEP, Paper presented at the 2004 AGM SEEP Meetings at the Innovations in Rural Finance training session, October 26, 2004, . <http://www.seepnetwork.org/content/library/detail/>
- World Bank, 2004a, "Agriculture Investment Sourcebook, Module 7: Rural Finance for Agriculture." <http://www-esd.worldbank.org/ais/index.cfm?Page=Modules>
- _____, 2004b, "Agriculture Investment Sourcebook, Module 10: Agricultural Risk, Vulnerability, and Disaster." www-esd.worldbank.org/ais/index.cfm?Page=Modules
- _____, 2004c, "Supply Chains Development in Tanzania: An Assessment of Three Products/Commodities," Washington, D.C.: The World Bank, Working Paper.
- Wright, Graham, 1999, "The Case for Voluntary Open Access Savings Facilities and Why Bangladesh's Largest MFIs Were Slow to React," CGAP Working Group on Savings Mobilization, Eschborn, Germany: GTZ.
- _____, 2000, *Microfinance Systems: Designing Quality Financial Services for the Poor*, London: Zed Books.
- _____, 2003, "Designing Savings: Equity Building Society's Jilenge Savings Accounts," *The MicroBanking Bulletin*, Issue No. 9, July 2003, pp. 29-32. www.mixmbb.org
- Yaron, Jacob and Stephanie Charitonenco, Dec. 2000, "Review of Bank Rural Finance Lending: Projects Approved FY94 – FY99," Washington, D.C.: World Bank Rural Development Department, Environmentally and Socially Sustainable Development Vice Presidency
- Yaron, Jacob, McDonald P. Benjamin Jr., and Gerda L. Piprek, 1997, *Rural Finance: Issues, Design, and Best Practices*, Development Studies and Monographs Series 14, World Bank, Washington, D.C. www.worldbank.org

- Young, Robin and Robert Vogel, 2005, "State-Owned Retail Banks (SORBS) in Rural and Microfinance Markets: A Framework for Considering the Constraints and Potential," microREPORT, AMAP, Jan. 2005. www.microlinks.org
- Zapata, Gabriela, 2002, "Community Savings Funds: Providing Access to Basic Financial Services in Marginalized Rural Areas of Mexico," *Journal of Microfinance*, Vol. 4, No. 2, Fall 2002. <http://marriottschool.byu.edu/microfinance/archives.cfm?issue=fall02>
- Zeller, Manfred, 2003, "Models of Rural Financial institutions," Lead Theme Paper at Paving the Way Forward for Rural Finance: An International Conference on Best Practices, Washington, D.C., June 2-4, 2003. www.woccu.org
- Zeller, Manfred and Richard L. Meyer, 2002, *The Triangle of Microfinance: Financial Sustainability, Outreach and Impact*, Baltimore, Maryland: Johns Hopkins University Press.
- Zhongfu, Ma, 2003, "The Evolution of the Rural Financial System and Policy," in *Rural Financial Markets in China*, Canberra, Australia: Asia Pacific Press, 2003, pp. 35-45.

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 IRIS Center, University of Maryland
 Cranfield University
 Georg-August University, Goettingen
 Washington University
 London School of Economics
 University of Bath
 University of Tokyo
 IRIS Center, University of Maryland
 Michigan State University
 University of Tokyo

CARE
 NABARD (Bombay, India)
 WOCCU
 WOCCU
 ACCION
 Oxfam America
 Microfinance International Corporation
 MEDA
 Freedom from Hunger
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