THE BIRTH OF A NEW PARADIGM IN RURAL FINANCE
AID’S ROLE

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ACRONYMS

ACDI/VOCA  Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance  
ACPC  Agricultural Credit Policy Council  
AID  Agency for International Development  
BANCOP  Banco National para Las Cooperativas  
BKK  Bandan Kredit Kecamatan  
BRI  Bank Rakyat Indonesia  
CEMLA  Center for Latin American Monetary Studies  
CGAP  Consultative Group to Assist the Poor  
COFIDE  Corporación Financiera de Desarrollo  
COLAC  Confederación Latinoamericana de Cooperativas de Ahorro and Crédito  
CRIP  Credit Policy Improvement Program  
DAI  Development Alternatives Inc.  
DEC  USAID Development Experience Clearinghouse  
DR  Dominican Republic  
EDI  Economic Development Institute (The World Bank)  
FACACH  Federación de Cooperativo Federado de Ahorro y Crédito de Honduras  
FAO  Food and Agriculture Organization  
FENACOAC  El Systema Cooperativo Federado de Ahorro y Crédito de Guatemala  
FIRA  Fidecomisos Instuidos en Relación con la Agricultura  
GSMA  Global System for Mobile Communications Association  
IDB  Inter-American Development Bank  
HIID  Harvard Institute for International Development  
ICA  International Cooperation Administration  
INCAE  Instituto Centro Americano de Administración de Empresas  
INCORA  Instituto Colombiano de Reforma Agraria  
LTC  Land Tenure Center, University of Wisconsin  
MABS  Micro Access to Banking Services  
NABARD  National Bank for Agriculture and Rural Development  
NGO  Non-governmental organization  
OSU  The Ohio State University  
PIDS  Philippines Institute for Development Studies  
PRODEM  Fundación para la Promoción y Desarrollo de la Microempresa  
TBAC  Technical Board on Agricultural Credit  
USAID  U.S. Agency for International Development  
VSL  VSL Associates  
WOCCU  World Council of Credit Unions
THE BIRTH OF A NEW PARADIGM IN RURAL FINANCE: AID’S ROLE

Dale W Adams

“Ideas die hard. They linger long after their native soil has been supplanted. To their loyal devotee, the case for them never appears entirely hopeless… no idea ever becomes so obsolete that it cannot in some form or other, at some time or other, reawaken the enthusiasm which was once its portion. So long as ideas survive in memory, they preserve a hold upon life, however tenuous. Seemingly dead ideas sometimes lead extremely active spectral existences.”

….Benjamin N. Nelson, p. 108

Executive Summary

The history of agricultural development and poverty alleviation projects is littered with failures. Unsuccessful agricultural credit projects, some of which AID funded, contributed to this litter. It is to AID’s credit, nonetheless, that it recognized these problems in the 1970s and later supported the search for new ways of doing rural finance. There are several over-arching success stories imbedded in the following account. The first, and perhaps the most important, is AID’s contribution to forming a new paradigm for providing rural financial services. A second success story is a collection of thriving applications of this new paradigm: reforming development banks, creating dynamic credit unions, applying new technology to rural finance, and forming policy/research groups that defend the new paradigm from the specter of the one it replaced. A third story of note is AID’s contribution to the formation of a substantial number of individual supporters of the new paradigm, without whom the paradigm would have perished. Finally, the Agency deserves kudos for sponsoring a fruitful relationship with a university that helped to form the new paradigm and to foster its application.

Introduction

Using credit to promote agricultural development and to alleviate poverty has a long and checkered history. Contributing to that tradition, agricultural credit was an early and major component of the U.S.’s post-war development programs in countries such as Paraguay, the Philippines, and Iran. Later, credit projects came to dominate the Agency for International Development’s (AID) early efforts to spur agricultural development, in part, because they were relatively easy to do. These efforts trace back to programs in the United States during the 1930s done by the Farm Security Administration and later carried on by the Farmers Home Administration. Most of the early AID programs were designed and managed by staff with Farmers’ Home Administration experience. Other efforts, led by U.S. cooperative organizations, focused on developing credit cooperatives, similar to the production credit associations

1 Various colleagues contributed to this paper, especially Claudio Gonzalez-Vega, Douglas Graham, Jerry Ladman, Richard Meyer, and Robert Vogel. I’ve also drawn freely from the publications and ideas of other colleagues and friends such as Luis Noel Alfaro, Lee Arbuckle, Carlos Cuevas, Delbert Fitchett, Richard Patten, J. D. Von Pischke, Jeffrey Poyo, E. B. Rice, David Richardson, H. D. Seibel, and Jacob Yaron. They are absolved, however, from any shortcomings therein.

2 See E. B. Rice 1973 for additional details.

3 Somewhat surprisingly, the successful, post-war development efforts in Japan, South Korea, and Taiwan didn’t influence the design of AID’s early credit programs. The rural finance components of programs in these countries were mostly handled by Farmers Associations. Similar financial infrastructure did not exist in most countries where AID later worked, thereby forcing the emphasis on institution building.
found in the U.S., notable examples being the Philippines, Thailand, and Iran. A few additional projects in Ghana and the Philippines fostered rural private banks similar to those in the U.S. Still other projects promoted credit unions in rural and semi-rural areas, mostly with the help of U.S. organizations. This collage of efforts was aimed at building rural financial infrastructure based on U.S. examples, and almost uniformly, these programs provided loans at concessionary interest rates. These rates were below those charged on commercial loans, and often below the rates of inflation in the country, thus resulting in negative real rates of interest.4

AID’s enthusiasm for agricultural credit was accompanied by similar fervor among other donors such as the World Bank and the Inter-American Development Bank (IDB). Some donor projects were joint efforts with two donors contributing funds to the same project. Instead of institution building, however, other donors stressed directing money into agricultural credit programs. The basic assumption behind these efforts was that loans were needed to boost technological change and output. Poverty alleviation was a further objective in many of AID’s agricultural credit activities.

The World Bank encouraged governments to establish agricultural development banks, the first being in Peru in the early 1950s. Most low-income countries eventually formed such banks and they were used by donors and governments to manage targeted credit. Subsequently, these banks moved large amounts of money into agricultural lending. During the 1960s, in Latin America alone, donors poured more than a billion dollars into agricultural lending. Part of this money went into development banks, part went directly into donor-sponsored projects, and part went into central banks and was then disbursed to other lenders through rediscount facilities. A few central banks established semi-independent organizations to administer targeted agricultural lending. Examples of this were FIRA in Mexico, CODIFE in Peru, and NABARD in India. In other cases, central banks established internal offices that managed lines of credit. The central bank in the Dominican Republic, for example, administered more than two dozen lines of targeted credit, mostly for agriculture lending, and the Indonesian Central Bank, at one time, handled more than 200 lines of credit, many of them for agricultural purposes.

**Questioning the Old Paradigm**

During the 1960s about half of AID’s total expenditures on agricultural activities in Latin America were in the form of credit projects (Adams 1971). Local currency proceeds from P. L. 480 sales were also widely used by AID to augment the supply of farm credit, and many of these projects were packaged as small farmer credit programs. This emphasis on agricultural credit led the Agency in 1964 to support the Agricultural Finance Center at The Ohio State University to do research on the topic.5 Their research later fed into AID evaluations and project design.

In the early 1970s, it became increasingly apparent that AID’s small farmer credit programs were not performing as expected. This led the Agency in 1972-73 to undertake an ambitious assessment called the Spring Review of Small Farmer Credit.6 It reported on about 60 small farmer credit projects around the world, sponsored 20 analytic papers, and collected a number of related studies. All together, the Review generated 20 volumes of papers and a book that summarized the findings (Donald). A major feature of the Review was ten regional workshops that brought together thousands of project managers, policy makers, and authors of analytic papers. The process culminated in a conference in Washington, D.C. in 1973 that was attended by several hundred interested professionals.

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4 The nominal interest rates on government loans in the U.S. during the 1930s were similarly low, but in real terms, because of deflation, the real rates of interest paid by American farmers were quite high.

5 See Appendix I for more details on The Ohio State University’s work on rural finance.

6 The review was led by E. B. Rice and was one of the last comprehensive evaluations that AID did on a portfolio of its agricultural projects.
The Review uncovered systemic difficulties in most of these projects. Loan recovery was a problem, most of the programs were not sustainable without outside subsidies, and many of the associated subsidies were captured by the non-poor. Equally disturbing, there was little evidence that credit programs were boosting agricultural production or significantly easing poverty. For many observers the Review called into question the efficacy of continuing to use the subsidized-and-directed-credit paradigm that guided post-war agricultural credit programs.

Several important changes followed the Spring Review. First, the number of agricultural credit projects in the Agency declined. Second, other major donors later reduced their agricultural lending, initially the Inter-American Development Bank and later the World Bank. Third, AID and other donors began searching for a new paradigm for rural finance, with AID in the lead. As part of this, AID provided The Ohio State University additional support to clarify and propagate new approaches. This involved research, numerous workshops and conferences, and developing a network of individuals who contributed to the formation of a new paradigm. The Economic Development Institute at the World Bank contributed to this by developing a course on agricultural credit that exposed new views and also sponsoring a book on rural finance (Von Pischke and others 1983). An office in the IDB also did research that contributed to a new paradigm.

The culmination of these new efforts was presented in September 1981 in a Colloquium on Rural Finance in Low-income Countries. It was jointly sponsored by AID, the World Bank, and The Ohio State University. Several hundred professionals from the Washington, D. C. area attended this three-day meeting. The presenters in the Colloquium argued for a new paradigm for developing rural financial markets and suggested elements that ought to be included in new approaches. These included avoiding subsidized and directed credit, and instead, focusing on developing efficient financial intermediation. There was also discussion in the Colloquium about placing more emphasis on deposit mobilization. Two books, one in English, and another in Spanish, summarized the findings of the Colloquium (Adams and others 1984 and 1987).

In part, the acceptance of the new paradigm was reinforced by changes in development policies during the 1980s. Most donors and numerous countries shifted from central planning to reliance on market forces. Although the old paradigm was compatible with the targeting and subsidies involved in central planning, it was inconsistent with a market orientation.

These new economic policies and the discrediting of the old paradigm led to a collapse in donor support for agricultural credit during the 1980s, and, concurrently, many governments likewise diminished funding for agricultural lending. This led to the withering away of many of AID’s small farmer credit programs and the liquidation or downsizing of numerous government-owned agricultural development banks. There was also a sharp decline in the real amounts of agricultural credit in large countries such as Brazil, Mexico, and Indonesia where credit programs had been the dominant instrument in rural development. In some countries, such as Peru and Bolivia, where agricultural development banks were liquidated, many rural areas were left without access to formal financial services.

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7 Problems in agricultural credit projects were also due to hostile economic environments. Until about 1980, a variety of factors kept many agricultural yields and prices low. In addition, inflation, interest rate controls, and extensive credit targeting repressed financial intermediation.

8 It’s noteworthy that, despite sharp declines in the real value of agricultural loans, agricultural output was not adversely affected. New technology, and price and trade policies that favored agriculture helped to sustain or even increase agricultural output. One might conclude from this that agricultural output is less dependent on the availability of credit than was previously thought.
Promoting the New Paradigm

Old paradigms, in whatever field, die hard and sometimes slowly (Nelson). As late as the early 1990s there were still individuals in the World Bank who wanted to resurrect the old agricultural credit paradigm (World Bank 1993). Nonetheless, some of AID’s staff soon set aside the old paradigm and explored ways to implement the new one. Early examples of this were two small AID grants to The Ohio State University to study farmers’ saving in Taiwan and South Korea. These studies analyzed farm record keeping information (Ong and others; Lee and others). Both studies found impressive savings performance, with a substantial portion of the savings being placed in accounts in farmers associations. These findings suggested that even relatively poor farmers were willing to save a substantial part of their income if given the opportunity and incentives to do so.

The main differences between the old and new paradigm are summarized in the following table (Vogel and Adams):

**TABLE 1**

<table>
<thead>
<tr>
<th>Elements ↓</th>
<th>Old Paradigm (Subsidized and Directed Credit)</th>
<th>New Paradigm (Financial Market Development)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary problems</td>
<td>Market imperfections and risks</td>
<td>Excessive transaction costs</td>
</tr>
<tr>
<td>Role of financial markets</td>
<td>-boost production -stimulate new technology -offset distortions -help the poor -implement plans</td>
<td>Do financial intermediation and assist with efficient resource allocation</td>
</tr>
<tr>
<td>Users</td>
<td>Beneficiaries (borrowers)</td>
<td>Clients (borrowers and depositors)</td>
</tr>
<tr>
<td>Sources of funds</td>
<td>Governments and donors</td>
<td>Mainly deposits</td>
</tr>
<tr>
<td>Subsidies and taxes</td>
<td>Many</td>
<td>Few</td>
</tr>
<tr>
<td>Information systems</td>
<td>Dense for providers of funds</td>
<td>Mostly for managers of financial institutions</td>
</tr>
<tr>
<td>Evaluations</td>
<td>Credit impact studies</td>
<td>Institutional performance</td>
</tr>
</tbody>
</table>

Early in the search for new ways to do rural finance, concern coalesced around four issues that later became pillars in the new paradigm. The first was the *interest rate issue.* It was shown that subsidized interest rates warped the performance of rural financial systems, damaged financial institutions, and that market rates of interest were more desirable. The interest rate issue, in turn, was closely related to the second pillar, *sustainability.* It was increasingly recognized that sustained access to financial services was far more valuable to clients than getting a subsidized loan from an organization that later imploded.

9 Shaw and McKinnon were the first to clarify the role that interest rate policies play in the performance of financial markets. Gonzalez-Vega’s work on how interest rate restrictions affect the allocation of credit – his "Iron Law of Interest Rate Restrictions" – was a major contribution to this topic (1977). Later, Jacob Yaron in the World Bank reinforced the interest rate argument by developing a subsidy-dependency index that showed the rates of interest that must be charged for a lender to persist without subsidies.
because it failed to charge enough to cover its costs. The third pillar, deposit mobilization, was also closely related to interest rates. Research showed that organizations supplying cheap credit did not offer attractive incentives for depositors, thus limiting the number of clients who accessed financial services. The fourth pillar in the new views was reducing transaction costs. Earlier thinking on rural finance had blamed loan risks and collateral problems as the main impediments to rural lending. The new views, instead, focused on the costs for intermediaries to provide financial services and the costs that clients incurred in accessing these services.

**The Emergence of Microfinance**

AID’s early contributions to the new paradigm in rural finance prepared the foundation for the growth of the microfinance industry from 1980 onward. One of the pillars in the emerging paradigm on rural finance was an initial building block in the new industry: market rates of interest rates. Somewhat later, the microfinance industry stressed sustainability, and still later, deposit taking and reducing transaction costs received attention in the industry. It is inconceivable that the industry could have flowered during and after the 1980s if it had been forced to labor under the aegis of the old paradigm. Instead, the industry was allowed to charge realistic interest rates on loans, to avoid handling loan subsidies, and to stress sustainability. Actually, the microfinance industry was erected on the rubble of earlier agricultural credit programs.

Starting in the 1980s, AID directed most of its energy in development finance to microfinance and this mostly replaced earlier agricultural credit programs. This resulted in increasing AID support for non-governmental organizations (NGOs). Since many of these NGOs concentrated their efforts in urban areas and on women, this meant that agriculture and the rural areas were largely left out, with some exceptions (Meyer and Nagarajan). One of the exceptions was in Bolivia where AID supported an NGO called PRODEM. It provided loans in rural areas and to farmers, and eventually coverted to being a bank called BancoSol in order to capture deposits. Later, PRODEM was hived off and sold to the Venezuelan government.

There are numerous examples where AID support helped microlenders to start their programs: FINCA in Bolivia, Genesis in Guatemala, and Calpia in El Salvador. In some cases P. L. 480, local currency, was used to seed these efforts. In some cases these AID-assisted programs provided some loans in rural areas.

AID also supported the formation of the Consultative Group to Assist the Poor (CGAP), located in the World Bank. It has helped nurture the growth of the microfinance industry. CGAP also played an important role in disseminating information on the progress of electronic banking in rural areas. This technology has the potential to provide financial services to huge numbers of previously, unbanked rural people. In terms of numbers of individuals served, it may eventually dwarf other rural-credit and deposit-taking efforts.

**Bank Reforms**

In addition to microfinance, the new thinking about rural finance has also influenced a number of other AID projects in the 1980s-1990s. The results from these projects, in turn, have reinforced and modified the new paradigm. This has been particularly true in AID’s bank-reform projects.

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10 Grameen Bank’s emphasis on capturing savings, in what it called Grameen II, led to more positive views about savings. Later, the Gates Foundation put heft behind savings/deposit mobilization efforts. The strong emphasis on lowering transaction costs is of more recent vintage in the form of using new technology to extend branchless banking into rural areas.

11 Richard Rosenberg was the AID project officer in Bolivia who guided this project.
Although AID backed away from agricultural credit in the 1970s, it continued to work, somewhat under the radar, with a few agricultural development banks. The objectives in these efforts were to reform them and to boost their capacity to mobilize deposits. Two of these projects focused almost entirely on deposit mobilization, while three others were comprehensive reforms.

In 1979, the USAID mission in Peru provided a half million-dollar grant to the Banco National Para Las Cooperatives, BANCOP (Vogel 1984). BANCOP was, in part, a second story bank for other cooperatives, including credit unions. In addition, it accepted deposits from the public and made loans outside cooperative circles. Half of the grant funds were designated for lending and half were spent on providing technical assistance to promote deposit mobilization. Part of the technical assistance was directed at BANCOP and part helped a few credit unions. Under George Wohanka as project leader, Robert Vogel and John Gadway provided most of the technical assistance. It is noteworthy that the two-year project was carried out under extremely difficult circumstances. Inflation in the country vacillated around 50 percent per year and various interest rate controls restricted what could be paid on deposits. In addition, credit unions found it difficult to adjust the one-percent-per-month that they traditionally charged on loans thereby limiting what they could pay on deposits, thus ultimately threatening their sustainability. Despite the hostile macroeconomic environment, the project demonstrated that many rural people were willing to become depositors. Later, Vogel summarized his experience in Peru in a chapter called the “Forgotten Half of Rural Finance” that became a classic often cited by those arguing for more emphasis on deposit mobilization.

Indonesia is a particularly interesting case where AID helped to reform large segments of the rural financial system. During the 1960s and 1970s the Indonesian government was aggressive in applying the old paradigm to poverty and agricultural problems. One large program, called BIMAS, was mostly carried out by the Bank Rakyat Indonesia (BRI), and it provided subsidized loans to farmers. Another large subsidized credit effort started in 1972 in central Java and was called Badan Kredit Kecamatan (BKK). In 1979 AID funded a Provincial Area Development Project that helped to rehabilitate 65 of the BKK units that had been undermined by cheap and directed credit (Reideinger).12 Richard Patten, who had commercial banking experience, provided technical assistance to the project. As part of the project, Claudio Gonzalez-Vega from The Ohio State University was asked to do an assessment of Indonesia’s rural financial markets, and in doing so, he introduced ideas from the new paradigm (Gonzalez-Vega 1982; Chaves and Gonzalez-Vega). His report stressed interest rate policies, covering costs, and capturing more deposits. An evaluation of the BKK program the following year suggested placing even more emphasis on voluntary deposit mobilization (Goldmark and Rosengard).13 Subsequently, a number of the BKK’s were successful in mobilizing deposits. This caused some Indonesian policy makers to think more favorably about the possibilities of mobilizing savings in rural areas. These views were seeded and reinforced by Marguerite Robinson’s important research that showed surprising interest in savings/deposits among the rural poor (Robinson 2002).

AID’s work with the BKK’s strongly influenced another, even more successful project in Indonesia: the reform of the Bank Rakyat Indonesia (BRI). Prior to 1980 the BRI supplied agricultural loans using the old paradigm through one of its divisions that included more than 3,000 small rural offices, called unit desas. The program was heavily subsidized and in the late 1970s the Minister of Finance decided these subsidies could not be sustained. He raised the possibility of closing all of the unit desas unless someone developed an efficient alternative. At the time, a group from Harvard University was advising the Ministry and they were drawn into the discussion. They eventually convinced the Minister that the unit desas were a valuable asset and that they could be successfully reformed using the new rural finance

12 Douglas Tinsler was the AID staff person who looked after the project.
13 In a later article Jacob Yaron used the BKK as one his four successful examples of rural financial systems and employed the new paradigm in his analysis (Yaron 1994).
paradigm (Patten and Rosengard). Richard Patten, who had participated in AID’s BKK project, was hired to lead the effort. He applied the lessons learned from BKK to the BRI project. Subsequently, interest rate policies were revised, employee incentives were enhanced, and emphasis was placed on deposit mobilization. This resulted in large amounts of money being deposited, the bank ceasing to rely on donor and government money, and it generating large profits from the unit desas. These reforms resulted in BRI providing rural financial services to a much larger number of people and converted it from being a black hole for donor and government money, into a profit center for the government and investors. The BRI reform was a large-scale case showing that huge numbers of rural people would voluntarily save in banks if given proper incentive and attractive deposit products.

Still another early AID contribution to reforming an agricultural bank was in the Dominican Republic. It was part of a pilot, deposit-mobilization effort that also included work with credit unions. The Banco Agricola was founded in 1945, but did not accept deposits until 1984. It suffered most of the problems other development banks endured: loan recovery problems, the need for periodic recapitalization, political intrusions into lending and loan recovery decisions, and a reputation for poor service. Unlike some other AID-sponsored bank reform projects, this effort did not attempt a thorough reform of the institution. Rather, the objective was limited to helping the bank provide deposit services. AID employed The Ohio State University to assist with the project, with Jeffrey Poyo and Claudio Gonzalez Vega sharing the technical assistance responsibilities.

Over a period of seven years, under the project, the bank attracted 174,000 new depositors (Poyo 1992). This, in turn, forced some unexpected changes in the bank. Offering deposit services compelled the bank to compete with other financial institutions, something it had not previously done when it only made loans. This forced the bank to become more astute in dealing with customers and making sure its services were attractive. The increased volume of business induced by offering deposit services also required the bank to update and streamline its data management systems. The results of this case added to the evidence showing that poor people in rural areas could and would save if given the opportunities and incentives to do so.

A fourth case where AID helped to apply the new paradigm occurred in Mongolia in the late 1990s. Like many countries, Mongolia had a government-owned agricultural development bank, and it experienced most of the ills suffered by similar banks in other countries that labored under the old paradigm. Over a period of ten years the bank went bankrupt twice and lost the equivalent of millions of dollars, but had some 40 thousand depositors who depended on the bank (DAI). By 1999 the World Bank concluded that the institution was badly damaged. Nonetheless, AID and the World Bank subsequently jointly funded a technical assistance program aimed at reforming the bank that was implemented by Development Alternatives Inc. (DAI) and led by Peter Marrow. DAI introduced financial discipline, ceased making privileged loans, introduced new loan products, and soon had loan recovery rates up to normal banking standards. The improved performance of the bank attracted more than a ten-fold increase in the number of depositors and it developed a strong, nationwide-network of branches. In 2003 the bank was sold to investors. As was the case with BRI, a government-owned development bank was converted from a liability to an asset through application of the new paradigm. More importantly, hundreds of thousands of Mongolians, particularly in rural areas, were provided with attractive and dependable financial services.

AID also assisted with the reform of another government-owned agricultural development bank in Guatemala, BANDESA. Prior to 1998 BANDESA’s performance was typical of other development banks in Latin and Central America. It suffered loan recovery problems, made many loans to the politically powerful, and required periodic infusion of outside money to remain solvent. With AID’s assistance, in 1998 the government decided to reform the bank (Alfaro-Gramajo). AID’s contribution

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14 In 2003 about 30 percent of the shares of the bank were sold to the public through an IPO.
15 Roberto Castro was the AID staff person who oversaw this project.
was to allow some of the funds it had earlier committed to BANDESA to be rolled over into BANRURAL as part of its initial capital. The reforms involved bringing in new management with commercial banking skills and changing the ownership structure of the bank. Eventually seventy percent of the new bank was owned by various groups such as credit unions and farmers associations, and only 30 percent remained government owned.\(^\text{16}\)

Over the next decade BANRURAL’s performance dramatically improved. It increased its points-of-service from only 90 in 1998 to more than 500 in 2009. Many of these new service points were in rural areas. Its volume of lending increased 30 fold, the volume of savings increased 20 fold, and the number of depositors shot up from only 226 thousand in 1989 to 2.6 million in 2009. Equally impressive was the sharp decline in the bank’s average overhead costs. Through scope- and scale-economies these costs declined from 29 percent in 1998 to 8 percent in 2009. From 2005 to 2010 BANRURAL was the most profitable bank in Guatemala, it received no outside subsides, and it returned a substantial amount of money to the government in the form of taxes and dividends. It is highly unlikely that these favorable outcomes would have occurred without AID’s early support.

AID’s successful efforts in reforming, at least partially, these five banks were out of the ordinary. Most other development banks were liquidated or continued to function on a reduced scale, largely using the old paradigm. AID’s bank reform efforts provide a few guidelines on when and where similar reforms might be carried out. For example, reforms proved easiest where the country was suffering an economic crisis and the government was short of funds to support development banks. This, in turn, forced officials, such as the ministers of finance and agriculture, to seek ways to reduce their funding of these banks. In most successful reform cases, enlightened donor support facilitated the process. This involved individuals who understood the shortcomings of the old paradigm and the advantages of the new one, and could help sell new ideas to local leaders.

In the three comprehensive reform cases, the ownership structures of the banks were altered. In two of the cases, Guatemala and Indonesia, the governments maintained an ownership stake, but played a minor role in governance. In the Mongolian case, the bank was completely privatized. This change in ownership, in turn, increased the immunity of the banks to political intrusions. It also allowed the boards of directors to hire professional managers who work for long terms, and allowed leaders to rationalize the number of employees and their incentives. Finally, at least in the BRI case, the outside advisors, especially Richard Patten, played a critical role in holding off other donors who were not supportive of the new paradigm and tried to use BRI as a funding channel for their projects. The infusion of large amounts of donor funds would have suffocated the savings-mobilization efforts of BRI, and ultimately seriously weakened, if not destroyed, reform efforts.

**Reform of Credit Unions**

Concurrent with efforts to reform development banks, AID also assisted with the reform of credit unions in a few countries by applying the new paradigm. It also started a challenging effort in 2006 in Afghanistan to develop credit unions there. Earlier, several donors, including AID, employed the old paradigm in their credit union programs in various countries. For example, in Ecuador during the 1960s AID had a program that channeled inexpensive agricultural loans through credit unions to farmers. Similarly, the Inter-American Development Bank channeled funds to local cooperatives through COLAC, a regional credit union organization located in Panama. These funds were intended to expand local credit union lending in the region, but ended up distorting the incentives within the participating credit unions by making outside funds less expensive than savers’ deposits. In both cases, this caused leaders of the credit unions to pursue these cheaper outside funds, at the expense of mobilizing funds from members.

\(^\text{16}\) Dr. Luis Noel Alfaro-Gramajo, an INCAE faculty member, and also a graduate from The Ohio State University, provided advice to BANRURAL during the reform. Fernando Peña was the innovative manager of the bank.
Two of AID’s earliest credit union reform efforts were in the Dominican Republic (DR) and in Peru. Parts of the earlier-mentioned programs of reforming BANCOP in Peru and the Banco Agrícola in the DR were to rehabilitate a few credit unions. In Peru, the work focused on several credit unions and in the DR four cooperatives were involved. The project in Peru yielded mixed results. On the one hand, the two credit unions boosted the nominal amount of savings they mobilized, despite a corrosive macroeconomic environment. On the other hand, the leaders of the credit unions resisted raising interest rates on loans because members were accustomed to these rates, because the leaders themselves benefited from negative real rates of interest, and because they often received inexpensive outside funds. In summing up the lessons from the project, Vogel concluded that, “…the desire to maintain low-interest lending policies, and not the arguments against savings mobilization, are the main reasons for the neglect of savings mobilization” (Vogel 1984, p. 249). An additional lesson that might be drawn from the project is that you can’t implement a new paradigm when your partners are still married to the old one.

The reform project in the DR yielded more robust results. It was started in 1983 and focused on improving deposit taking by four credit unions (Poyo 1988). The technical assistance in the project aimed at helping the cooperatives to increase the incentives they paid to savers and also to improve their business practices. At the start of the project these four cooperatives used mostly volunteer or part-time employees. The project resulted in the credit unions increasing their rewards for savers and this led the cooperatives to hire permanent staff and pay more attention to costs and data management. A substantial increase in membership and important increases in the volume of deposits and lending resulted from the project. A further unanticipated result was that loan recovery performance substantially improved as members came to understand they were borrowing other members’ money -- not money provided by a donor. The possibilities of getting future loans from a dependable source also played a part in enhancing loan-recovery performance.

The new paradigm was introduced into Honduras by a team from The Ohio State University, funded by AID, in the form of an assessment of rural financial markets, and especially by path-breaking research on transaction costs in two banks. The assessment stressed deposit mobilization and market rates of interest (Graham and others 1981). The research on transaction costs showed how the use of outside money, instead of deposits, substantially increased transaction costs (Cuevas and Graham 1984). It also showed that banks imposed additional transaction costs on non-preferred clients. Prompted by this work, AID developed the Small Farmer Organization Strengthening Project in 1985. It aimed at helping poor people in rural areas by fortifying five cooperative organizations, one of which was a national organization of credit unions, FACACH (Westley and Branch, pp. 115-128). One segment of the effort focused on strengthening local credit unions so they could provide more loan and deposit services in rural areas.17 The decline of the government-owned agricultural development bank, BANADESA, left a partial void in rural finance that the project hoped to fill.

Credit unions have a long history in Honduras stretching back as far as 1876. Attempts to hasten the spread of credit unions, however, didn’t appear until the 1950s when the Catholic Church became involved in their promotion. AID attempted to speed up the spread in 1966 when it funded the formation of a national federation of credit unions. Soon, however, the Honduran Government and other donors, including COLAC, began using the credit unions to channel cheap credit to farmers, a strong application of the old paradigm. By the mid-1980s nearly three dozen of the open-bonded credit unions in the country had ceased operations, thirty others were in financial difficulty, and less than a dozen were functioning sustainably. The aforementioned AID project focused on strengthening open-bonded credit unions that opted to join the project, and its strategy was consistent with the new paradigm.

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17 Lee Arbuckle led these efforts.
A unique feature of the project was that each cooperative signed two performance contracts: an administrative strengthening contract, which when fulfilled, was followed by a financial strengthening contract. At the outset, only 10 cooperatives committed to participate in the restructuring program. As positive results from the program rapidly became apparent, however, more credit unions committed to transition to the new paradigm. When about half of the open-bonded credit unions were participating in the project, they demanded that FACACH commit to restructuring. Eventually, this weaned FACACH from using external credit lines. Eventually, 37 credit unions went through a 3 to 4 year contract period motivated by a material reward of about 3 percent of their initial assets, if they successfully fulfilled their contracts. Interestingly, the material cash reward grew less important over time as leaders of the cooperatives saw their images improve, their membership rapidly increase, and the amount of deposit become sizable.

By the end of 3 to 4 years, the results of the project far exceeded expectations. The number of members in the participating credit unions more than quadrupled, deposits increased by almost five times, and reserves increased substantially. The growth continued and by 2010 the membership of credit unions had grown to 700 thousand people and credit unions assets had passed US$640 million. This resulted in cooperatives that were much stronger financially and a federation oriented to helping individual cooperatives, rather than to dispensing loan funds. An unanticipated result of the project was that commercial banks were induced to open more rural offices because of the successes they saw among the rural credit unions. The two lessons that stand out from the project are that struggling credit unions can be reformed in a short time, and that deposit mobilization plays an import role in these reforms.

A similar reform of credit unions was supported by AID in Guatemala, again using the new paradigm. The World Council of Credit Unions (WOCCU) managed the project, with David Richardson providing much of the technical assistance (Richardson and Lennon). The project focused on strengthening the national federation of credit unions (FENACOAC) and improving the operations of 20 credit unions. The objectives included offering competitive pricing for loans and deposits, aggressive deposit mobilization, and no use of outside funds for lending.

In just five years the project yielded dramatic results. The value of deposits increased tenfold, share capital increased threefold, and loan volume increased 5 times. A substantial portion of these additional services were in rural areas and a significant amount of the lending went for agricultural purposes. Almeyda and Branch nicely summarized the impact of enhanced deposit mobilization:

As credit unions in Guatemala began to mobilize more savings, they became stronger financially, and the nature of their relationship with the federation changed. As credit unions no longer looked to the federation for sources of funds, the federation began to approach the credit unions to sell to them deposit service for their liquidity investment, offering rates that were competitive with the local bank deposit rates (p. 9).

Although AID’s funding for credit union improvement in Guatemala ended in 1994, these cooperatives continued to grow. From fewer than 60 thousand members in 1987, membership grew to about 1 million by 2010. The deposits in credit unions similarly grew by 2010 to an amount nearing the equivalent of a half billion dollars. These credit unions have also continued to innovate, taking a major role in handling

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18 Paradigm changes require strong support from local people. In the case of Honduras, Rocael Garcia and Raul Sanchez were credit union leaders who aggressively promoted the new paradigm.

19 Barry Lennon was the AID employee who initially developed the project.
remittances and announcing in early 2011 that they were developing a deposit guarantee scheme for credit unions, a first of its kind.

An interesting example of AID’s attempts to build credit unions -- not just reform them -- is in Afghanistan. In 2006 AID awarded the World Council of Credit Unions (WOCCU) a substantial amount to develop credit unions in this war-torn country.20 AID and other donors have since provided additional support to WOCCU for this project. By 2010 some 30 financial cooperative and 9 points of service had been developed, mostly in rural towns, with a total membership of nearly 50 thousand. In 2011 more than half of their lending was for agricultural purposes. To accommodate religious concerns, these new organizations were called Islamic Investment and Finance Cooperatives (IIFCs). As noted in one of WOCCU’s project reports,

WOCCU’s activities in Afghanistan mark the organization’s first experience with Islamic finance. This has required great flexibility and adaptability to ensure the newly established financial cooperatives are tailored not only to the conditions on the ground in Afghanistan but also to broader principles of Islamic law. The financial cooperatives WOCCU originally established in northern Afghanistan were based on a traditional credit union model with volunteer boards of directors and traditional savings and loan products. However, as WOCCU gained experience working in Afghanistan, our approach to credit union development was modified to better address local conditions (WOCCU, p. 3).

In most cases these credit unions were the only access members had to formal or semi-formal financial services, and many of the members were farmers or had close family ties to farming (Spears). Two pillars of the new paradigm were stressed in the project: deposit mobilization and sustainability. What is unique about this project is the problem of accommodating the new paradigm with Sharia Law (Wieland). Interest taking or charging is prohibited, in some interpretation, by Islamic scriptures. The areas in Afghanistan where WOCCU was establishing credit unions were conservative and this forced them to design financial products that were Sharia compliant, and to seek approval of credit union activities by religious authorities. Local customs also forced WOCCU to rely on tribal leaders to manage the cooperatives.

The program in Afghanistan is a mixture of the old and new paradigms. On the one hand it masks interest rates as payment for loans and deposits, and at least initially, relies heavily on outside funding to provide money to lend. On the other hand, the project also stresses making the individual cooperatives self sustaining after a start-up period and promotes savings mobilization. Time will tell if this hybrid survives and thrives.

Policy Groups in the Philippines

Cheap credit programs have an irresistible allure for political leaders who are grasping for options to promote their positions. These projects are relatively easy to implement, give the appearance of doing something, and usually don’t exhibit adverse results until after a politician is out of office. Since the mid-1970s AID has funded, sequentially, three policy/research groups in the Philippines to support rural finance. These efforts gradually formed a nucleus of local professionals who are supporters of, and advocates for, the new paradigm (Geron; Llanto and others 1996).21

20 Jeff Minott and Zach Ratmo were the AID staff who backstopped this project. Curtis Slover directed the implementation for WOCCU.
21 Mario Lamberte, Melissa Agabin, Gilberto Llanto, Bruce Tolentino, and Peidad Geron were a few of these supporters.
The Philippines has a long history of using the old paradigm to address rural problems and AID played an early part in that. With AID’s assistance, this included developing a large number of rural private banks, certainly a notable achievement. However, during the 1970s these banks were drawn into lending to support a rice promotion effort called Masagana 99 (Chandler). The credit component of this program employed the old paradigm: low interest rates, directing credit, and flooding the private banks with funds from the central bank. Masagana 99 boosted rice production, but it debilitated many of the private banks in the process. This led the Agency to support the formation of the Technical Board for Agricultural Credit (TBAC) in the mid-1970s that was housed in the central bank.

TBAC played an important role in sponsoring research and policy dialogue that reinforced the dismantling of the old paradigm in the Philippines, often through research done by the Philippines Institute for Development Studies (PIDS). TBAC also played an important role in attracting and supporting young professionals to do research on rural finance problems, mostly in support of the new paradigm. TBAC’s work, and these increasingly influential young professionals, later played a vital role in defending the new paradigm from periodic spasms of recidivism among politicians (Lamberte; Llanto). Later, many of TBAC’s functions were transferred to the Agricultural Credit Policy Council (ACPC), a new group in the Department of Agriculture. Soon after, 42 subsidized agricultural credit programs were essentially liquidated. Still later, again with AID’s support, policy work on rural finance was transferred to a new group in the Department of Finance called the Credit Policy Improvement Project (CPIP). This group reinforced AID’s efforts in strengthening rural financial institutions, particularly the rural private banks, and AID’s programs in microlending (Geron; Agabin and Daly; Lamberte).

The several policy/research groups that AID supported in the Philippines helped to introduce and defend the use of the new paradigm in the country. They also helped to nurture the successful reform of numerous private rural banks, helped them to provide more microfinancial services, and introduced them to branchless banking technology.

**Transaction Costs and Branchless Banking**

The cases discussed to this point were examples of the application of the new paradigm. They reinforced three paradigm pillars: deposit mobilization, market rates of interest rates, and sustainability. They, however, placed less explicit emphasis on the fourth pillar: lowering transaction costs. This is not to say that these costs were not lowered in these cases, but they were not a central focus in most of these projects. Transaction costs were indirectly lowered through scale- and scope-economies, through more efficient management, and through expanded branching systems that brought services closer to clients. The early work by Cuevas and Graham, Ladman, and Nehman highlighted the importance of these costs in throttling rural finance, and them being used as a rationing device by financial intermediaries. These costs are heavily influenced by the time and distance involved in providing or accessing financial services. Financial institutions find that providing rural financial services is much more expensive than concentrating their businesses in urban centers. Likewise, rural clients usually incur more time and transportation costs to access these services than do urban dwellers. New information and communication technologies offer the promise of virtually eliminating these time- and travel-costs. They also provided an opportunity to enhance the variety of financial services that can be provided in rural areas, namely electronic bill paying and making and receiving transfer payments. Two electronic instruments are increasingly providing these new services: bank agents who use point-of-sale technology, and cell phones.

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22 About a third of the banks were eventually liquidated, another third were eventually rehabilitated, and a third mostly avoided making Masagana 99 loans and were thus not adversely affected by the program.

23 Frank Sheppard was the AID employee who designed the TBAC project and Chita Tanchoco was the first head of the group. Sheppard was earlier exposed to the new paradigm in a seminar in Manila that was part of AID’s Spring Review of Small Farmer Credit in 1973.
The push to provide electronic banking services to the unbanked has come from commercial banks, cell phone companies, and more recently the Gates Foundation. By the end of 2010 there were 147 mobile banking initiatives being planned and 60 were in operation (GSMA). With nearly 2.7 billion cell phones in use around the world, much of the electronic backbone for electronic banking via this medium is already in place.

The bank agent approach has been used in Uganda, Colombia, Malawi, Peru, Guatemala, Mexico, and Brazil. It involves a bank enlisting a local business – examples being pharmacies, post offices, or grocery stores – to act as bank agents. The transactions between the agent and the bank are handled by electronic connections tied to a point-of-sale instrument. The agent is paid a small commission for handling the transaction and clients can pay bills or receive payments through the system.

The bank-agent system has mushroomed in Brazil. In just a few years nearly 100 thousand new bank agents, in virtually every nook and cranny in Brazil, provided financial services to three-quarters of the adult population in 2010. The cell-phone technology is used in a large program in Kenya where almost 50 percent of the population uses M-PESA to effect financial transactions, many of which are to and from rural areas (McKay and Pickens).

AID’s pioneering contribution to branchless banking was in the Philippines where the cell phone technology was employed. Nearly two-thirds of the adults in the country have cell phones, but only about a quarter of all adults have a working relationship with a bank (GSMA). AID’s support for branchless banking was part of a project called by the acronym of MABS (Microfinance Access to Banking Services) that was started in the late 1990s and managed by Chemonics International. When John Owens became project leader he emphasized deposit mobilization and the use of mobile phones to effect transactions. MABS’ primary aim was to expand the amount of financial services available to microenterprises through the rural private banks. Later, the project introduced the technology of customers using cell phones to do financial transactions such as receive payments, pay taxes, pay bills, receive loan payments, repay loans, and to make deposits. By 2010 about 180 rural banks were participating in this electronic system and approximately 200 thousand clients were benefiting from this service, many of them living in rural areas (Owens).

Another successful AID-sponsored branchless-banking project began in Colombia in 2007. It employed the bank agent model that was so successful in Brazil. In only three years commercial banks have established 8,300 service points in virtually all of the 1,096 municipalities in the country. Since the inception of the project, the per capita banking coverage has dramatically improved from 1 service point per 9,200 persons to less than 1 to 4,000 individuals. By late 2009, these branchless banks were processing transactions worth the equivalent of approximately $130 million per month (Davis).

The efforts on branchless-banking were part of a larger project that focused on improving the performance of financial markets in the country, especially in rural areas. Early in the life of the project the Colombian government considered funding a large, new, government-owned development bank, essentially a replication of the old paradigm. Instead, the project influenced the government to consider a market-based approach that was consistent with the new paradigm. This included promoting branchless banking and involving the government-owned bank, Banco Agrario, in the process.

The results of the branchless banking projects in the Philippines and Colombia reinforce the new paradigm and show how transaction costs can be dramatically reduced. They also show that poor people can occasionally benefit from having access to loans, that an even larger number can benefit from having access to deposit services, and that most poor people benefit can benefit from having access to electronic

24 Paul Davis was responsible for managing the project. He was also earlier involved in the MABS project in the Philippines.
bill-paying and money-transfer mechanisms. This is in marked contrast to the assumption imbedded in the old paradigm that the only financial services that all poor people need all of the time were cheap loans.

Training and Publications

To this point, the discussion has focused on how AID contributed to developing and implementing the new paradigm through projects. Perhaps equally important, AID made a major contribution in helping hundreds of young professionals to study, promote, and implement the new paradigm. Many people were influenced by attending seminars and conferences; some were influenced by being an OSU visitor, others by attending short courses, and still others by doing research on rural finance. With AID’s assistance, OSU granted about 100 graduate degrees to students from all over the world who worked on rural finance problems. Some of them went on to work for donor agencies, but most of them went back to their home countries.

Another element that supported the new paradigm is numerous publications: books, journal articles, research reports, and other papers. Many supporters of the new paradigm contributed to this supportive information in ways that are awkward to measure. One partial indication of the size of the library of supporting material is provided by USAID’s DEC/Library. A word search of that library shows nearly 700 items in the library that were authored by The Ohio State University.

The following vignettes illustrate how AID contributed to building this cadre of supporters for the new paradigm. These vignettes could be supplemented by dozens of other examples.

In 1968 the USAID Mission in Costa Rica gave a small research contract to two young economists, Robert Vogel and Claudio Gonzalez-Vega, to do a study of the agricultural credit system in Costa Rica. This led to the two spending the better part of the next four decades working on rural finance issues and making major contributions to the development of the new paradigm.

In 1965 the USAID Mission in Colombia gave the Land Tenure Center of the University of Wisconsin a small grant to evaluate a supervised credit program funded by AID and administered by the land reform agency, INCORA. The study found two unanticipated results. First, the loans were made at a nominal annual rate of 6 percent, but the costs of administering the loans were about 25 percent per year on the amount lent. This, combined with some loan defaults and inflation, resulted in the overall, real value of the loan fund declining by more than a third each year. Second, the study revealed that almost all of the ten thousand INCORA borrowers had previously been clients of the Caja Agraria, the government owned agricultural development bank. As a result, there was almost no additionality involved in the project; INCORA’s lending essentially substituted for lending previously done by the Caja. This experience led Dale Adams to spend most of the next four decades working on problems in rural finance.

In the 1980s Professor Robert Vogel offered a course on development finance in Syracuse University. On two occasions a student by the name of Robert Christen interviewed Professor Vogel to determine if his course was worth taking. Mr. Christen later took the course, liked the topic and decided to transfer to The Ohio State University to do a graduate degree in rural finance. This graduate work was funded by AID. After graduating, Mr. Christen worked with ACCION for a time, as well as with CGAP, and was then hired by the Malinda and Bill Gates Foundation to head their worldwide deposit mobilization efforts. His group is taking the lead in encouraging more deposit taking and adoption of branchless banking in low-income countries.

A young economist from Chile, Carlos Cuevas, was invited to attend a seminar on rural finance in Calgary, Canada that was supported by AID. He later pursued a Ph.D. in rural finance at The Ohio State University, again with AID support. His research on transaction costs in two Honduras banks made a
vital contribution to the understanding of transaction costs in the new paradigm. He later worked for the World Bank on rural finance programs and still later joined the Gates Foundation where he helped to boost deposit mobilization efforts around the world.

A young economist by the name of Laura Vigano spent a few months at Ohio State University as a visiting scholar. She became interested in the new paradigm and later returned to Italy and became editor of the journal Savings and Development.

In 1981 Brian Argyle, the newly appointed agricultural credit officer in the World Bank, attended a workshop in Grandview, Ohio, that was funded by AID. It was a preparatory session for the Colloquium that was later held in Washington, D.C. Initially, he was uncomfortable with many of the elements of the new paradigm that were discussed by the participants, who were preparing papers for Colloquium. By the end of the three day workshop, however, he warmed to the new paradigm and later became a forceful supporter of it in the World Bank.

In 1989 an economist from Sri Lanka, Nimal Fernando, participated in a conference on informal finance in Washington, D.C. that was sponsored by AID and The Ohio State University. He later took a position in the Asian Development Bank and introduced the new view about rural finance in the bank. Subsequently, these new views were reinforced by several bank publications (Meyer and Nagarajan 2000; Mario Lamberte and others 2006).

Professor Hans Dieter Seibel from Cologne University spent a year as a visiting professor at The Ohio State University. He became immersed in the new paradigm there and later worked for IFAD in Rome. There he helped IFAD write a new policy paper on rural finance that embraced the new paradigm (IFAD).

In the mid-1980s an Ohio State University team was doing research sponsored by AID in Niger on informal finance. There they encountered two individuals who later did graduate work at OSU in rural finance: Tom Shaw and Genevieve Nguyen. Shaw subsequently worked for CARE on its rural finance programs and Nguyen became a professor at the University of Toulouse in France. Both are supporters of the new paradigm.

Calvin Miller spent a few years working with farmers’ cooperatives in Bolivia before doing graduate work at The Ohio State University where he was exposed to the new views about rural finance. He later took the position of senior officer in the agribusiness and finance office of FAO in Rome.

The World Bank was engaged in a large number of rural finance projects in the 1970s and 1980s. In the mid-1970s the Bank’s Economic Development Institute (EDI) instituted a six-week long rural finance course. Each course was in Washington, D.C. and had 30 participants, including a one-week field trip abroad. Courses were aimed at mid-level officials from strategic borrowing countries. EDI made extensive use of the new literature and fashioned course materials consistent with the new paradigm. J. Price Gittinger was the EDI Agriculture Division chief who facilitated the course, followed by Walter Schaefer-Kehnert, assisted by Erdmann Zimmer-Vorhaus. J. D. Von Pischke, a proponent of the new paradigm, helped design the course and gave lectures in it. EDI also sponsored a book on rural finance that covered many of the emerging issues in the new paradigm (Von Pischke and others 1983).

**Unfinished Business**

Three major tasks remain for those who are interested in improving rural financial services in low-income countries. The first is to expand the understanding, acceptance, and implementation of the new
Recidivism is a problem in every paradigm shift and there will undoubtedly be calls in the future by advocates of the old paradigm to resuscitate subsidized credit to deal with agricultural problems. It will be important for guardians of the new paradigm to respond intelligently to these calls for cheap credit. This should include pointing out that interest rates play at least three other important functions in financial markets, besides influencing the demand for credit: their effect on depositor/saver behavior, their effect on the sustainability of financial infrastructure, and their effect on the ability of financial intermediation to assist with the efficient allocation of resources in an economy. Supporters should summarize their arguments by pointing out that the modest, short-term benefits that subsidized credit might stimulate in the form of increased agricultural production, is more than offset by the damage done by concessionary interest rates to savers, to the intermediaries who handle the cheap loans, and to the subtle process of allocating resources efficiently in the economy.

Second, a soft spot in the new paradigm is the scarcity in most countries of relatively large loans of medium and long-term that can be used to modernize agriculture. Microfinance institutions, cooperatives, and credit unions are ill suited to provide these types of loans. A few reformed development banks are providing some of these services, along with an occasional commercial bank, and, in some cases, merchants and dealers informally provide these types of loans to promote sales of machinery and irrigation equipment. Nonetheless, in most low-income countries farmers who wish to buy a tractor, for example, have a difficult time finding credit to purchase such capital items. This lack is understandable since large and long-term loans are among the most difficult services that rural financial markets provide. The institution for providing these services may be some hybrid private-government agency, but that will only be determined by future experimentation.

The third challenge lies in making it easier to use electronic banking to capture deposits. Bank agents and mobile telephones are already highly effective in handling money transfers and in bill paying. They also facilitate loan repayments, although most lending will still require some face-to-face time. Where creative work is still needed is in how to handle the liquidity problems involved in handling normal savings deposits.

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APPENDIX 1

AID’s Support for The Ohio State University’s Work in Rural Finance

The genesis of The Ohio State University’s (OSU) work on rural finance in other countries traces back to a study that a predecessor agency of AID, ICA, sponsored jointly with the Center for Monetary Studies in Latin America, located in Mexico City. The study was done in 1957 and its title was “A Study of Agricultural Credit in Latin America.” Mervin G. Smith from Ohio State, who had previously been the U.S. agricultural attaché in Mexico, was hired as a consultant to the study (CEMLA). Later, a friend of Smith’s, Ralph Battles, was employed by AID to work on agricultural credit programs. Battles, in turn, was a colleague of Erven Long’s who was soon charged with strengthen the capacities of U.S. universities to support AID’s agricultural programs.

Soon after AID was founded it began to support several US universities to develop capacities in key agricultural topics. One topic was agricultural credit, and The Ohio State University (OSU) was chosen in 1964 to lead in his area, and was given $637 thousand to support OSU’s Agricultural Finance Center. The initial efforts of the Center focused on research in Colombia, Ecuador, Peru, and Brazil. Mervin Smith and Ray Bailey, plus a number of graduate students, conducted the studies. In addition to research, the Center also offered periodic short courses on agricultural credit for participants sponsored by AID missions. These courses mostly covered the experience with agricultural credit in the United States. From AID’s perspective, the results of this early work were barely useful. The research was mainly descriptive and not linked to AID’s concerns about providing more rural credit. Likewise, the short courses covered U.S. topics that were remote from conditions in low-income countries.

Looking back, these modest results are predictable. The Department of Agricultural Economics and Rural Sociology, within which the Agricultural Finance Center resided, had only four staff members with even modest overseas experience, only two with experience in overseas development programs, and only two of the faculty had any capability in Spanish. About a dozen graduate students participated in the research program and they came to the table with virtually no foreign language skills. Furthermore, none of the faculty or graduate students had experience with field research overseas, nor did they have familiarity with AID’s agricultural credit projects. Both AID and OSU leaders underestimated the time it would take for a university to begin, from scratch, doing research and training that could be relevant and useful to AID. At the same time, AID lacked staff that could adequately backstop work at OSU. Few of the dozen-or-so AID employees who monitored the project over the first few years had professional interest in agricultural credit and many of them had the monitoring responsibility for only a few months or weeks.

Erven Long and staff in the Latin American Bureau had understandable reservations about providing further support for OSU’s work in agricultural credit at the end of the three-year period. Two things tipped Long’s opinion in favor of further support. The first was that OSU had recently hired a new department chairman, along with several other faculty members with extensive experience in Latin America. The second factor in the decision was influenced by an experience Erven Long had. He was asked a question by the AID administrator in a high-level meeting that embarrassed him, because he

26The University of Wisconsin, for example, focused on land tenure, and Michigan State University concentrated on agricultural marketing. Erven Long designed these arrangements and Ralph Battles was the first AID employee who supervised OSU’s project for a short time.
could not give an answer. The question was what is the incremental-capital-output ratio in agriculture in a typical low-income country? This question later led Long to charge OSU with answering farm-level capital formation questions.

Before the new capital formation project, the OSU College of Agriculture had an institution building arrangement, funded by AID, with an agricultural university in Brazil and a similar program in India. In addition, the Department had recently hired several faculty members with experience in Brazil. This led AID and OSU to locate the capital formation project in Brazil. It was funded for five years and concentrated on documenting farm-level capital formation.27

Instead of concentrating on what was happening in Brazil’s rural financial markets, OSU was asked to document an elusive and virtually undocumentable process. The late 1960s and early 1970s were, in fact, a fortuitous time to do research on rural finance in Brazil. With donor assistance, the Brazilian government massively increased the supply of agricultural credit and this was accompanied by rates of inflation that resulted in highly negative real rates of interest on agricultural loans. This provided a unique laboratory for studying the effects of the subsidized-credit paradigm on the performance of an agricultural credit system. Because of its mandate to study capital formation, however, the OSU group only gathered bits and pieces of information that shed light on the performance of Brazil’s rural financial markets.

Norman Rask was the overall project leader and he coordinated seven other faculty members in this effort. The research involved interviews with several thousand farmers in various parts of Brazil that were carried out by faculty members and students from four Brazilian colleges of agriculture.28 Richard Meyer led the data collection efforts in Brazil and a large number of graduate students, both in Brazil and at OSU, did research using these data for their degrees (Ohio State University Research Team).

Despite the concentration on capital formation, some segments of the research shed important light on rural finance. Joseph Tommy’s research, for example, showed that a large part of the subsidies associated with agricultural lending in the country were captured by the non-poor. Second, various studies showed that the relationship between the increased volume of credit and agricultural investment and production was weak. Third, the research further showed that many borrowers recognized the useful property of fungibility and diverted portions of their so-called agricultural loans into real estate purchases. Fourth, Gerald Nehman’s research showed that borrower transaction costs were a large factor in determining loan demand, especially among borrowers of small amounts.

Although the insights into rural finance derived from the project were limited, it had some other important benefits. A substantial number of students and faculty members, both Americans and Brazilian, learned about farming in Brazil. Partly by osmosis, participants in the project learned a lot about the problems found in the subsidized-credit paradigm. It was clear that there was a large gap between what was expected from the massive agricultural credit program, and what actually occurred.

OSU’s work in Brazil straddled AID’s Spring Review on Small Farmer Credit in 1973. The concerns about the old paradigm raised in the Spring Review opened a schism in AID’s staff, with some of the younger staff accepting major elements of the new paradigm, while others clung to the old view. An important supporter of the old paradigm was Erven Long who had much earlier formed his opinions about rural finance in India where the old paradigm was virtually a religion. In a book published many years later, he criticized OSU’s views on interest rates, a critical element in the new paradigm (Long and

27 The value of the cooperative agreement was $1,029,000.
28 Other members of the group were Douglas Graham, Donald Larson, I. J. Singh, Terrance Glover, Dale Adams, Richard Meyer, and Kelso Wessel.
The support for OSU’s new views in the Agency was enough, however, for the Agency to provide additional funding of the rural finance group in the form of a new five-year cooperative agreement in 1977 that was called the Rural Financial Markets Project. Eventually, AID would give OSU $2.2 million for the effort (Barton).

The explicit objective of the agreement was to improve the ability of AID missions and other concerned organizations to design and implement better rural financial market projects. This involved four components: (1) doing applied research and providing related consulting services to AID; (2) doing special studies and evaluations on request; (3) developing a network of consultants; and (4) disseminating useful information for the network.

OSU focused its research that was funded by AID/Washington in four countries: Jamaica, Thailand, Bolivia, and Peru. Other AID country missions later provided additional support for research in a handful of additional countries. A number of other AID missions also called on OSU staff for project evaluations and technical assistance on designing new rural finance projects.

Two methods were used to draw other professionals into a supportive network: workshops and visiting scholars. Workshops on the new views in rural finance were held in Panama, Nepal, Bangladesh, Burkino Faso, Wye College in England; Calgary in Canada, and San Diego in California. Fifty to seventy-five participants attended each of these seminars. Some participants later did graduate work at OSU, and a number of others later provided consulting services on rural finance issues for AID and other donors. In addition, OSU invited a couple dozen visiting scholars to work with the rural finance group at the university, some for a year and others for shorter periods. Also, a similar number of other development professionals were invited to give seminars at OSU.

By the end of the project, OSU had strong working relationships with professionals in the World Bank, the Inter-American Development Bank, the FAO in Rome, as well as with former graduate students, and professionals in Germany, Japan, and the Philippines. OSU supported this informal network by circulating annotated bibliographies and newsletters on rural finance. The newsletter evolved into a discussion group on the internet called Devfinance that has been jointly supported by OSU and FAO/Rome. At one time the group had about 1,500 subscribers.

A high point of the project was a Colloquium held in Washington, D.C. in September 1981 in World Bank facilities, sponsored jointly by AID, the World Bank, and The Ohio State University. A large number of professionals attended the meetings and some two dozen supporters of the new paradigm made presentations.

Subsequently, under the leadership of Richard Meyer and later Douglas Graham, OSU did research, entered into policy dialogues, and provided technical assistance in more than two dozen countries over the next few years. AID was the main source of funding for this work, but, especially in the latter phase, a variety of funders supported the program. Major research projects involved doing large rural finance surveys for AID missions in Honduras, Niger, Portugal, Indonesia, Russia, the Philippines, Bangladesh, The Gambia, and Zaire (Tifft). The work in Honduras was particularly useful. It led the mission to fund a project to reform cooperatives, including credit unions, and it documented, for the first time, the magnitude of transaction costs that were associated with targeted credit programs (Cuevas 1988). The Niger study concentrated on informal finance and the subsequent report became the “Bible” on informal finance for AID missions in the region. The study in Portugal found there was a surfeit of agricultural credit, even though most policymakers thought there was a shortage because of the strong demand for credit fueled by large interest rate subsidies.
OSU’s research in Mozambique, Gambia, and Ghana during 1990 to 1994 focused on financial problems in areas around major urban centers. In all three cases, the financial systems were being reformed from ones that operated under the old paradigm to using major elements of the new paradigm. Various research studies in Mozambique showed severe loan recovery problems among formal loans, alongside a vibrant informal financial system. Studies in Gambia documented a sharp decline in agricultural lending after the government-owned development bank collapsed. Research in Ghana further showed how the process of financial deregulation and liberalization was affecting borrowers, but, also, how informal finance partially filled the void left by the retraction of government lending.

Professor Graham also spent a good deal of time working on rural finance problems in South Africa from 1995 to 2000, partly funded by AID and partly supported by other sources. This included spending a sabbatical year there working with two universities. At the University of Pretoria he and Professor Gerhard Coetzee designed a course on rural finance that presented the new paradigm and also became part of the regular curriculum at the university. The course was accompanied by a local bank endowing a chair in rural finance. Graham also directed some interesting studies in Russia that focused on the problems that microenterprises and microfinancial institutions faced there. Corruption and bureaucratic hurdles were found to be a major constraint on the operations of these small firms (Safavian and others).

The Rural Finance Group conducted another seminar in Washington, D.C. in 1989 that focused on informal financial markets. This meeting was sponsored by several bureaus within AID, two offices in the World Bank, and The Ohio State University. The papers presented in the seminar were later published in book forms in English and French.

From 1989 to 1995 AID supported an OSU project on Financial Resources Management (FIRM). Over a period of two decades, and under the leadership of Claudio Gonzalez-Vega, OSU made a major contribution to the understanding of rural finance and microfinance in Mexico, the Dominican Republic, Costa Rica, and Bolivia. This included training dozens of graduate students, doing dozens of studies, teaching in numerous courses and seminars, and completing a large number of consulting assignments on rural and microfinance.

An important aspect of OSUs work with AID was the role played by AID project monitors, those who monitored and backstopped OSU’s efforts. In the early phases of OSU’s work AID numerous individuals had the responsibility of backstopping OSUs activities, few of whom had any professional interest or experience in rural finance. Later, OSU had several excellent monitors who were professionally interested in rural finance and who backstopped the rural finance activities for more than a few months each.

In the late 1980s and early 1990s AID lessened its support for American Universities, including OSU, and instead, increasingly used consulting firms and non-governmental organizations (NGOs) for its rural development efforts. Firms such as DAI, Chemonics International Nathan Associates, and Abt Associates were increasingly relied on to design and operate AID’s projects. NGOs such as FINCA, ACCION, the Village Saving and Loan Associations (VSL), Women’s World Banking, ACDI/VOCA, and CARE were seen as important agents for providing rural financial services. This strategy had the

30 Clifton Barton, Robert Firestone, Charles Antholt, and Melissa Brinkerhoff are remembered by OSU as being excellent monitors who took a substantive professional interest in rural finance.
advantage of bypassing some government, bureaucratic stumbling blocks that had hindered earlier AID efforts. The increased use of consulting firms also gave AID quicker response times than universities could typically offer, and consulting firms felt more comfortable sending staff into conflict zones than did universities.

AID’s move away from universities, however, also had adverse consequences. The Agency lost domestic support for foreign aid that the earlier university contracts had encouraged. The head of a consulting firm in Washington, D.C., for example, does not have the same clout with senators and congressmen that presidents of large universities have. The diminished AID support for international work in universities resulted in the closing, or substantial shrinking, of numerous international programs: e.g., the Food Research Institute at Stanford, HIID at Harvard, the marketing work in Michigan State, the Land Tenure Center in Wisconsin, and the Rural Finance Center at OSU.

Compared to consulting firms and NGOs, universities contribute several unique ingredients to development. First, they provide degree training that supplies many of the professionals who later design, manage, and evaluate development efforts. Second, they carry out long-term research on complex development issues that is duplicated by rapid project assessments that are typical done by consultants. Third, building on their research activities, academics have the time and incentives to write professional books and articles that document successes and failures in development and analyze the underlying lessons. Most of the individuals who work for AID, NGOs, or consulting firms, or who make their living as independent consultants, do not record and share their experiences in formal publications. Fifth, universities have the inclination to develop long-term relationships with local institutions and to help in developing local human capital.

The capacity of the rural finance group contracted in 1995 when several senior faculty retired, and the group officially turned out the lights in mid-2011 when Professor Gonzalez-Vega retired.

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31 For example, it took an academic, Jay Rosengard, to assist Richard Patten, a project manager, to document the BRI experience (Patten and Rosengard).
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Individuals Contacted

Luis Noel Alfaro
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RURAL FINANCE


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## ANNEX 1: ACHIEVEMENT CRITERIA MATRIX

### THEME: Providing rural financial services

<table>
<thead>
<tr>
<th>Achievement Candidates</th>
<th>Importance</th>
<th>Catalytic</th>
<th>Systemic</th>
<th>Transformative</th>
<th>Sustainable</th>
<th>Scale/Replicability</th>
<th>Time &amp; Duration</th>
<th>FINAL THOUGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>USAID leads search for new paradigm in rural finance based on mobilizing deposits; paying competitive interest rates; achieving financial sustainability, and reducing transaction costs.</td>
<td>Results exceed expectations. Rural financial institutions have mobilized rural savings, even among the poor, when there is proper banking oversight and security.</td>
<td>Deflected funding from the World Bank and Inter-American Development Bank.</td>
<td>The new paradigm has mostly replaced the old paradigm based on subsidized and directed credit that showed little evidence that the poor were benefiting and that credit was boosting agricultural production and reducing poverty.</td>
<td>Changed the perceived role of rural financial markets. Clients include both borrowers and depositors. Willingness to become a depositor is more common than a desire to obtain a loan.</td>
<td>Yes, attractive interest rates attract more funds for lending and fee structures cover operational costs. Previously money-losing rural credit institutions now operate from internally-generated funds and don't need to recapitalize from time to time.</td>
<td>Infinitely scalable, with many &quot;thriving applications&quot; of the new paradigm.</td>
<td>The new paradigm has taken root, but will need reinforcing to avoid recidivism.</td>
<td>This theme has been aided by a) economic crises that make governments more open to reforms; b) enlightened donor support; c) a general shift in development thinking to reliance on markets; and d) shifting attitudes towards rural financial institutions by their members. The new paradigm is the parent-line for contemporary micro-finance.</td>
</tr>
</tbody>
</table>

**Sub-Achievement: Applying information and communications technologies to rural banking is providing financial services to large numbers of rural people, many for the first time.**

| Previously "unbanked" people now have access to banking services | Rapid expansion of electronic banking has enabled making money transfers and bill paying in rural areas. | Point-of-sale and cell phone banking have exponentially expanded access and lowered transaction costs for both clients and Banking and finance has been "democratized" to include the poor, rural and distant. | Ditto. | Enormous sums of rural funds have been mobilized | The technological and institutional advances that permit e-banking are relatively new, but expanding rapidly. | Utilizing appropriate technologies improves access to rural financial services, including credit, savings, payments, and remittance receipts. These relatively low-cost technologies are an efficient way to shorten geographic distances and empower |
dispersed and otherwise underserved rural populations by putting modern financial services within their reach.