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1. Project/Subproject Number	2. Contract/Grant Number	3. Publication Date
936-5315	DAN-5315-A-00-2070-00	[illegible]

4. Document Title/Translated Title

5. Author(s)
1.
2.
3.

6. Contributing Organization(s)

The Ohio State University

7. Pagination	8. Report Number	9. Sponsoring A.I.D. Office
[illegible]	[illegible] 1457	ST/RD

10. Abstract (optional - 250 word limit)

11. Subject Keywords (optional)

1. Rural Financial Markets	4.
2. Credit	5.
3.	6.

12. Supplementary Notes

13. Submitting Official	14. Telephone Number	15. Today's Date
John Craig[illegible]	875-4410	5/28/88

.... DO NOT write below this line ....

16. DOCID	17. Document Disposition
	DOCRD [ ] INV [ ] DUPLICATE [ ]

WORK SHEET

PN-ABB-097

Economics and Sociology
Occasional Paper No. 1454

THE VIABILITY OF RURAL FINANCIAL INTERMEDIATION

by

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Paper Prepared for the
Fourth Technical Consultation on the
Scheme for Agricultural Credit Development (SACRED)
FAO
Rome, June 21 - 23, 1988

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My appreciation to Pekka Hussi for the opportunity to prepare this paper and to H.J. Mittendorf who first introduced me to the SACRED system. I thank my colleagues Dale W Adams, Carlos E. Cuevas, Claudio Gonzalez-Vega, Douglas H. Graham, Jerry Ladman, Don Larson, Robert C. Vogel and J.D. Von Pischke from whom I've learned a great deal about rural finance and whose ideas I have used liberally in this paper. My appreciation also to the Agency for International Development and Sandra Frydman, Eric Chetwynd and John Grayzell for their indispensable support to the Ohio State University study of rural finance in developing countries. The normal disclaimers apply.

THE VIABILITY OF RURAL FINANCIAL INTERMEDIATION

INTRODUCTION

A financial crisis exists in many countries in the world today (Long). Several banks have been forced to close or merge with stronger institutions. Many others teeter on the verge of closing with their insolvencies hidden by government subsidies. Bank regulators often must overlook the true magnitude of nonperforming assets knowing that if the assets of many financial institutions were written down to their market value, liabilities would exceed assets. Insurance and guarantee funds, when they exist, often have too few assets to cover potential losses.

These financial problems exist in widely disparate situations. They exist in rapidly growing countries (Hong Kong), in oil rich countries (Mexico), in poor countries (Bangladesh), and in rich countries (U.S.). They exist with institutions that have little or no agricultural loan exposure, and with specialized agricultural lenders. They exist in financial institutions once considered models for agricultural development, such as the Cooperative Farm Credit System of the U.S. The causes of this crisis are complex. In the agricultural arena they include macro policy changes (tight monetary policy which doubled farm interest rates in the U.S. in three years), cyclical declines in commodity prices, controlled interest rates which forced lenders to rely on government funds rather than deposits, poor management of financial institutions, excessively rapid

expansion of bank and branch networks, and inefficient lending sometimes linked to corruption.

Although some problems would have been difficult to avoid because of unforeseen macroeconomic developments, it is also obvious that policymakers in developing countries paid too little attention to the viability of financial institutions during the past two decades. Instead, due to their concern for short-falls in food production, slow technological change, and little formal credit going to the rural poor, they designed "supply-leading" financial strategies to expand the supply of and reduce the interest rate on agricultural loans, and especially loans to the rural poor. The negative impact of these strategies on the financial institutions was either unforeseen, ignored, or accepted as a reasonable social cost for the benefits expected.

It is surprising that the financial problems that now seem so clear were not anticipated before they reached crisis proportions. In fact many agricultural credit projects were judged successful while the rural financial markets in which they operated failed (Adams, 1988). The explanation for this paradox is also linked, in part, to the misplaced emphasis of trying to meet the perceived credit needs of farmers, while ignoring the development of viable financial institutions or rural financial systems.

Space does not permit a complete discussion of the supply-leading strategy, the various policies, institutions, and projects that make up the strategy in different developing

countries, and the widely documented problems.[1] This paper is limited to a discussion of 1) the factors that contribute to institutional viability, and 2) the priorities for development of a viable rural financial system.

ACHIEVING VIABILITY

A viable rural financial institution in a developing country is one that is self-sustaining, that covers its costs, that provides services valued by rural households and businesses, that serves an ever increasing number of rural customers, that is dynamic in providing new financial products and services, and that actively searches for ways to improve efficiency reflected in reduced transaction costs for itself and/or its customers. By implication, it operates over a long time horizon and becomes a reliable rural institution for its clientele.

Viability must be an important goal for financial development. An institution that fails to cover its costs and recover its loans must rely on government and donor handouts to continue operating. An institution that fails to mobilize its own resources will be a prisoner to the ebbs and flows of external funds. An institution that has money to lend this year but not next, or that provides its services under highly restrictive terms will not be valued by its customers. Several signs are evident when institutions lack credibility: they cannot mobilize deposits; their borrowers repay loans from other sources before paying them; their volume of operations decline due to inflation and loan default; they cannot retain good management

and staff. In short, unviable institutions eventually die or wither into irrelevancy. Their failure may produce significant social costs. Future financial developments may suffer because of the bad banking habits and expectations created, and because of the fear and skepticism towards banking that follows a failure.

Many factors influence institutional viability but the important ones discussed here are 1) cost recovery, 2) loan recovery, 3) deposit mobilization, 4) appropriate regulation, and 5) economic environment. Management and other factors unique to specific institutions are obviously important but, unless the broader policy, regulatory and economic environment is conducive, even good management will have difficulty in achieving and maintaining institutional viability.

<u>Cost Recovery</u>

To be financially viable over the long term, a financial institution must cover its interest costs (frequently the largest component of operating costs), noninterest costs, and bad debts. These represent the transaction costs of financial intermediation: mobilizing funds, allocating loans, and recovering loans made. These costs must be recovered through interest and noninterest income.

Supply-leading financial policies have frequently frustrated an institution's ability to recover costs. First, interest rate margins are often tightly regulated so the spread between cost of

funds and lending rates is too narrow to cover operating costs. Second, the costs of reporting and documenting the use and impact of "cheap" funds provided by central banks and donors for targeted agricultural credit programs is often very high.[2] Third, many institutions are prevented from making non-targeted loans or non-loan investments that earn higher returns. Therefore, because of regulations, institutions find it difficult to cover costs even if they achieve 100 percent loan recovery.

On the other hand, many financial institutions are inefficient. They have not developed cost-reducing technologies, nor have there been many incentives for efficiency because the primary institutional objective has been to increase loans. Some of the specialized institutions and government owned banks have had an implicit objective of employment creation. A balance must be struck between increasing interest rate margins sufficiently to cover costs versus reducing costs through improved efficiencies and new operating technologies.

Loan Recovery

All financial institutions anticipate some loan losses. A well-functioning efficient agricultural institution may expect losses of 1 or 2 percent of the value of loans made. Problems beyond the control of borrowers and lenders, such as cyclical downturns in commodity prices, poor weather, and unusual production problems, may temporarily increase loss rates above these levels. Losses of this magnitude, however, can usually be

absorbed by paying customers through higher interest rates so that institutional viability is not threatened.

Loan delinquency in many targeted programs and specialized agricultural institutions, however, may reach 20, 30, or more percent[3], too large to recover by raising interest rates. Furthermore, the operating costs associated with defaulted loans are also lost. Cuevas compared lending costs in Bangladesh, the Philippines, Honduras, Dominican Republic, Togo and Niger. Bangladesh banks reported the lowest costs of 1 to 4 percent while other countries reported costs in the range of 5 to 10 percent of the amount lent. However, when risk premia were estimated considering current past-due ratios and a 10 percent opportunity cost for funds, total non-interest costs in Bangladesh soared to 50 to over 300 percent, much higher than in the other countries.

Targeted agricultural credit policies and projects often directly contribute to poor loan recovery because institutions are rewarded for loans made rather than loans recovered. Borrowers correctly perceive institutional priorities and respond by ignoring repayment. Subsidized interest rates cause excess demand for funds so nonprice rationing must be used to clear the market. This provides fertile ground for political intervention into the determination of the lucky few to get the cheap funds. Borrowers who have sufficient political influence to get the loans can also use that influence to avoid repayment. Furthermore, once it is decided that it is socially desirable to

subsidize a group in society (such as the rural poor), it is difficult to adopt stern measures against that group, such as threatening the foreclosure of mortgaged assets to stimulate loan repayment.

Loan guarantee programs have been introduced in many countries to protect institutions against loan losses, but they have proven to be difficult to operate with financial integrity. On the one hand, if collecting on the guarantee is too easy, lenders may make risky loans (moral hazard) knowing they are covered by the guarantee or may not aggressively try to collect. The guarantee fund then goes broke. On the other hand, if the procedures are too stringent, the guarantee will not be utilized by the lenders or will be used only for the riskiest loans.

Making loans to groups of borrowers instead of individuals and requiring joint liability has been attempted in many programs. Although theoretically appealing, the results are far from conclusive (Adams and Ladman). In some cases, nonpayment by one group member leads to nonpayment by all. One of the most successful uses of the group concept is the Bangladesh Grameen Bank (Hossain). It makes very small loans to the poorest rural residents who form groups with five members. Two members of a new group get loans first and the remaining members cannot borrow until the first two establish a good repayment record. In addition, the groups are given a large amount of training, they must save weekly for several weeks before borrowing, and most loans are repaid on a weekly schedule regardless of the cash flow

of the investment made with the loan. Thus the impact of group liability cannot be easily separated from the other characteristics of the program which together result in a repayment rate exceeding 95 percent.

The will and effort expanded to collect by the financial institution, as exemplified by the Grameen Bank, appears to be a crucial factor in achieving high loan recovery rates.[4] This is usually associated with the ability of a financial institution to avoid political pressure in deciding who should get a loan and targets for total lending. It also is associated with the discipline of mobilizing deposits and having funds available to meet depositor's demands for withdrawals.

Deposit Mobilization

The supply-leading agricultural credit strategy employed in many countries has frequently used banks, cooperatives and credit unions as retail outlets for on-lending funds provided by the central bank and/or donors. The amount of funds mobilized by these institutions, therefore, has usually been small compared to total loans made. Regulations even prevent some specialized agricultural development banks from mobilizing deposits.

Perceptions about households and financial institutions explain the lack of concern for deposit mobilization. On the household side, it is frequently assumed that rural households, especially the poor, have little capacity to save. On the financial institution side, it is assumed that they cannot mobilize savings from their rural customers and, even if they

could, they would prefer to channel them into urban lending. Therefore, just as it is assumed that farmers must be bribed with subsidized loans to adopt new risky technology, so it is often assumed that financial institutions must be bribed with cheap rediscount funds to make risky agricultural loans.

Greater emphasis on deposit mobilization can help correct some problems and distortions found in rural financial markets.[5] Not only do rural residents benefit by having a reliable and secure place to hold their financial savings, but the viability of financial institutions can be increased. First, as mentioned above, some so-called cheap funds are actually quite expensive to administer; deposits may actually be cheaper. Secondly, because of economies of scope, it may be cost effective to utilize manpower and other resources currently employed in lending to also mobilize deposits. When the Agricultural Development Bank in the Dominican Republic began accepting deposits in its branch network established for lending, it found it could do so by adding just a few employees. Cuevas and Graham also found it was cost-effective for the agricultural bank in Honduras to mobilize more deposits rather than rely so heavily on other sources of funds.

Financial intermediaries may be more efficient in making good loans and improving loan recovery when they actively engage in deposit mobilization. First, information collection is important for loan screening. Depositors reveal important aspects about their financial management abilities by the way

they conduct deposit operations. This information is useful to the financial institution when it processes their loan applications. Secondly, when they mobilize deposits, lending institutions can develop lending programs and practices more appropriate to the needs and capabilities of local customers rather than relying on targeted program regulations on loan size, term structure, disbursement schedule, and repayment plan. In so doing, they also avoid some political pressures about who should be granted a loan. In Bangladesh, for example, where bank-customer relations are not well developed in the nationalized commercial banks, local committees prepared lists of borrowers eligible for targeted loans. Once a farmer's name appeared on the list, he considered that he had a right to a loan rather than merely being eligible. Local politicians often supported this view.

Borrower responsibility regarding loan repayment may increase when it is known that local deposits are the source of funds. It is commonly argued in the Philippines that a "dole-out" mentality helps explain low recovery in government sponsored lending (Sacay, et. al). The source of funds also affects the group dynamics of institutions. Poyo observed that Honduran credit unions that mobilized a large amount of deposits were "saver-dominated"; they developed policies and procedures that protected savers by ensuring a high rate of loan recovery. Credit unions that relied heavily on borrowing, however, became "borrower-dominated" and experienced lower loan recovery.

Latin American cooperatives and credit unions represent an example of what happens when a financial institution abandons its commitment to deposit mobilization. Credit unions thrived in many countries in the 1960's. In the 1970's, several began retailing large amounts of external funds. Over time, interest rates paid on deposits fell in real terms, the real level of deposits contracted, and loan recovery declined. This combination was almost fatal to many credit unions. Projects were designed in the 1980's to resurrect morbid credit unions and cooperatives in Peru (Vogel), in Honduras (Poyo), and the Dominican Republic (Gonzalez-Vega and Poyo) through deposit mobilization. Raising interest rates and savings promotion campaigns caused a dramatic increase in deposits. Loan recovery also improved. In the Dominican Republic, delinquency declined from 71 to 10 percent in one credit union, from 48 to 7 percent in a second, and from 45 to 15 percent in a third. An important reason for making loan payments on schedule is the prospect of a future larger loan. When credit union liquidity recovered so new loans could be made, borrowers were more inclined to repay existing loans.

Regulation and Supervision

There is great concern today over the proper role and function of institutions, especially central banks, that regulate and supervise financial institutions. It is clear that the supply-leading strategy of rural finance, undertaken in many cases through central bank leadership, distracted central banks

from their traditional role of creating and maintaining a strong currency and banking system. Instead they became preoccupied with developing policies for and monitoring the performance of agricultural lending. Therefore, vast resources are spent compiling data and reporting on scores of different lending programs. The lending institutions in turn must devote their scarce resources to generate the primary data. The Agricultural Development (Krishi) Bank in Bangladesh, for example, developed a form with over 150 rows to document lending by crop, loan type and donor program. For a time, the Central Bank required all 3,000 plus rural bank branches to submit complicated reports with this information. This flood of data swamped the Bank's ability to computer process and analyze it.

At the same time that central bank resources are spent to compile information that makes little contribution to monitoring the health of the financial system, resources are unavailable to conduct regular comprehensive bank inspections. It is not uncommon to find that banks and/or bank branches have not been inspected for several years. Furthermore, inspections are often limited to a cursory review of whether or not appropriate records are being maintained of targeted programs.

To insure the viability of financial institutions, regulation and supervision must be refocused on three areas: portfolio diversification, insider lending, and liquidity management. A financial institution must diversify its asset portfolio to survive in the long term. This implies a mix of

loans and other assets, and within its loans a mixture of types, borrowers and geographic locations. Policies that encourage targeted lending increase a lender's risk by encouraging high loan/deposit ratios and a concentration of loans on particular crops, types of borrowers, or regions. Then any adversity, such as production or marketing problems, affecting those crops, borrowers, or regions has a disastrous impact on the lender.

Loans to insiders (management, staff, directors, and their relatives) require special monitoring. They contribute to portfolio concentration, they frequently increase loan delinquency, and they demoralize depositors who have worthy projects but are crowded out of getting loans. The problem may be exacerbated in credit unions that are largely self-regulated and that receive external funds without appropriate controls (Marion).

Financial institutions must be sufficiently liquid to meet unexpected demands from depositors and to make emergency loans to valued customers. The seasonality of sources and uses of funds, especially in regions where agriculture predominates and is highly seasonal, increases liquidity management problems for rural financial institutions. High reserve requirements are sometimes rationalized because of this problem; but, in fact, their real purpose is to tax the financial sector. Financial regulators must monitor financial institutions to ascertain that they have a diversified portfolio of loans and non-loan assets, and provide them with a mechanism for loans and discounts to

bridge temporary liquidity constraints. Credit union federations have created their own central liquidity facilities to act as a lender of last resort for credit unions experiencing liquidity needs, and to monitor credit union safety and soundness.[6] In some cases in South America, federations have increased the funds available by engaging in direct retail savings mobilization (Marion).

Economic Environment

The agricultural sector in many developing countries frequently suffers from discriminatory policies. Food prices are kept low to aid urban consumers. Exchange rates are overvalued to protect local industries. Furthermore, frequent policy changes have sometimes introduced more variability in domestic prices than exist in international markets. Subsidized interest rates are sometimes rationalized as means to compensate for some of this discrimination. But the obvious point is that if profit margins are low and highly variable, rational farmers should be wary about their ability to repay loans, and lenders should be cautious about lending to them. Crop insurance and guarantee funds are poor substitutes for good reliable farm income when evaluating debt repayment capacity.

Rather than concentrate so much attention on inducing lenders to make more loans to farmers, policy makers need to be more concerned about improving the economic environment so farmers become better credit risks. As Gonzalez-Vega observed "credit interventions cannot correct for the negative impact of

other policies or compensate for low returns from rural investments. Subsidized loans are neither an efficient nor an equitable instrument to reduce the urban bias of price policies.. Subsidized loans do not make unprofitable investments profitable. Credit does not make the required inputs available: it does not build nonexistent roads, bridge or storage facilities; it does not create missing markets or reduce yield variability" (pg. 9).

CREATING VIABLE FINANCIAL SYSTEMS

A major problem in building rural financial institutions is to select the right type of organization (Mittendorf, 1986). There may be no single type of institution that is superior to another in a particular situation. Rather each type of institution may have a comparative advantage in some aspect of finance (Rielly). For example, a unit bank has the advantage of being flexible in adapting tc local market needs, but may have a risky portfolio of loans concentrated in a small geographic area. Informal sources of funds such as moneylenders may be able to provide loans at low borrower transaction costs, but rarely mobilize a large amount of savings from other households or make large, long-term investment loans.

Secondly, bad policies can destroy good institutions. The case described above of failing credit unions in Latin America when they became retailers of government and donor funds is an example. Many unit banks in the Philippines have failed in recent years because of low recovery rates on targeted loan programs, while several others have prospered because they

mobilized deposits and carefully chose their borrowers independent of government programs (Sacay, et. al).

Third, some institutions appear to be successful for a time because their weaknesses are hidden. The nationalized commercial banks in Bangladesh can be considered successful if one accepts the large amount of implicit government subsidy represented by their delinquent loan portfolios. However, when two of them were denationalized two years ago, they quickly liquidated several rural branches and stopped participating in government agricultural credit programs. Pilot efforts such as the Comilla Cooperatives in Bangladesh were successful but encountered great problems when expanded nationwide. One suspects that if the subsidies and privileges provided in many programs were made transparent, enthusiasm would wane for many so-called success stories, or at least there would be a clearer understanding of their supposed success.

Transaction costs are a key variable in determining the type of institution that is most appropriate for a given situation. Commercial and development banks are large, impersonal, highly regulated, bureaucratic institutions. They are most efficient in handling large, complex transactions. They can operate across broad geographic regions including international transactions. They are capable of providing important nonbank services to their clientele. They are expensive to operate, however, so are not likely to be cost effective in offering simple, low transaction cost services to the poorest, geographically isolated households.

Therefore there are definite limits to the extent that bank branching can resolve the problem of access to financial services for many rural households.[7]

On the other hand, ROSCAS (rotating credit societies), credit unions, and informal self-help groups can inexpensively provide simple financial services. Some of their transaction costs are transferred to their members who are happy to absorb them in order to receive financial services otherwise unavailable to them. Additional use needs to be made of informal sources (traders, merchants) who operate in interlinked markets.[8] By providing loans with inputs and marketing services, they can reduce transaction costs for borrowers and improve loan recovery.

The key to developing a viable financial system is to encourage the most simple organizations to emerge at the lowest level, and provide increased linkages between institutions and between the formal and informal sector so that the limitations of the simple organizations can be overcome.

PRIORITIES FOR DEVELOPING VIABLE RURAL FINANCIAL SYSTEMS

The experiences of the past two decades in supply-leading rural finance have helped identify several priorities to be addressed in the future development of rural financial systems in developing countries.

1. Economic environment. The economic environment in which rural farm and nonfarm businesses operate must be substantially improved in many countries before rural financial institutions will thrive. The attempts in Sub-

Saharan Africa in recent years to increase farmer incentives by improving product prices and marketing efficiency can be expected to also improve prospects for improved rural financial intermediation (Mittendorf, 1987). The improved supply of farm inputs, exemplified by the privatization of fertilizer and tubewell distribution in Bangladesh, is another example of improved economic environment.

2. Financial policies. Progress is being made in several countries to improve financial policies. The deregulation or reduced regulation of interest rates is reducing disincentives to rural lending in Honduras, the Philippines, Thailand, and Indonesia. Countries like Brazil with high inflation rates, however, are encountering difficulty in establishing a consistent interest rate policy. Bangladesh and the Philippines have tightened rediscount policies to stimulate deposit mobilization, but many countries still rely on government and donors for a large amount of loanable funds to agriculture.

3. Deposit mobilization. Several countries are improving their performance in mobilizing rural deposits and several institutions are becoming true financial intermediaries. Deposit mobilization in Bangladesh has grown much faster in rural than in urban bank branches. The Agricultural Development Bank in the Dominican Republic is demonstrating the potential that specialized banks have for deposit mobilization when encouraged or permitted to do so. The

recent credit union experience in Peru, Honduras and the Dominican Republic demonstrates the impact that key policy and management changes can have on deposits. Deposit mobilization is not easy or cheap, but is an important source of funds for institutions that obtain the confidence of rural households and provide financial instruments to meet their needs.

4. Regulation and supervision. The capacity to adequately regulate and inspect financial institutions has not kept pace with their expansion and development (Polizatto). Unless this capacity is increased several fold in the next few years, corruption and other abuses will continue in several countries, depositors and investors will be inadequately protected, and accounting practices will continue to overstate the soundness of financial institutions. One of the problems of financial innovation has been the bureaucratic nature of central banks and other regulatory authorities. The Reserve Bank of India has been innovative itself but was negative towards the innovative practices of the Syndicate Bank (Bhatt). The central bank in Bangladesh has often been resistant to innovations proposed by the nationalized commercial banks. Far too frequently, regulatory authorities have prevented banks from operating at more convenient hours, or offering new financial products and services, or experimenting with new innovations. A good deal of institution building is needed

in central banks, and in insurance and guarantee funds so that the important functions of regulation and inspection are speedily performed. SACRED can provide an important role in disseminating information about successful innovation and in lobbying for flexibility and change by regulatory bodies.

5. Self-help organizations. The literature on developing societies is filled with examples of traditional self-help and mutual aid organizations. Frequently, however, they have been regarded as interesting artifacts of traditional societies that are expected to disappear as countries modernize. Many countries, of course, have supported formal cooperatives with results that typically range from mediocre to disastrous with South Korea and Taiwan being clear exceptions. Thanks to the tenacious efforts of a few authors (such as Bouman; Holst; Seibel and Damachi), the important financial services these organizations provide to low-income people are becoming better appreciated. A better understanding of how these organizations can be expanded and strengthened through linkage with the formal financial sector is still needed. The efforts underway by APRACA should make important contributions to this knowledge (Quinones, 1987). The Asian Development Bank and OECD will also soon report on their informal financial sector research in Asia and Africa. The central question is how government

and donors can relate to these organizations without undermining them.

6. Credit unions. Credit unions are formal financial institutions, although less regulated than banking institutions, that embody self-help principles. They are also the one form of cooperative that seems to be expanding worldwide on a fairly sound financial base. Surprisingly, like self-help groups, they are often ignored in discussions about the development of rural finance. Clearly they offer advantages in reduced transaction costs, intimate knowledge of clientele needs, important deposit services, and potential for good loan recovery. They have made important strides in strengthening themselves through federations that provide management and financial services. Increased attention is needed to determine under what conditions self-help groups evolve into more formal credit unions, and credit unions evolve into financial institutions providing more complex bank and non-bank services.

7. Cost and risk reducing innovations. Many regulations implemented in the supply-leading strategies have been cost and risk increasing for financial institutions. Thus banks have avoided making targeted loans or have passed the costs and risks on to borrowers through non-interest charges that raise borrower transaction costs (Bhatt). Experiments are underway with innovations to reduce costs and risks, and there may be interventions that policymakers can take to

induce innovations. The FAO experimentation with microcomputers in Asian bank branches will help determine the conditions under which they are a cost effective way to manage small deposit and loan accounts. Many countries are using mobile banks and mini-bank outlets to increase access and reduce costs. The Philippines has been successful in expanding rural loans through the Quedan Guarantee Fund Board program, and the Guarantee Fund for Small and Medium Enterprises (Tolentino). Deposit insurance is not yet widespread but could reduce the subjective risk of small savers. The Syndicate Bank in India effectively used the Pigmy Deposit Scheme to collect at the doorsteps of the saver. Several Bangladesh banks are testing whether increased mass marketing or direct financial incentives to depositors or bank staff are more effective in mobilizing deposits. The weekly repayment schedule on Grameen Bank loans raises operating costs but helps maintain a high loan recovery rate. A frequent repayment schedule seems to have also been effective in many lending projects for small nonfarm enterprises.

Conclusions

Prospects are better today than anytime in the past two decades for developing viable rural financial institutions. Privatization and deregulation are underway around the world. Market incentives are increasingly taking the place of plans, targets and quotas in directing economic activities. Scholars,

policymakers and donors are expressing their dissatisfaction with large, bureaucratic, public sector operations and have rediscovered the forgotten strengths of the informal sector. The weaknesses of the supply-leading rural finance model have been exposed, and neither governments nor donors have the resources to sustain the required subsidies. The trend is clearly towards rural financial intermediation rather than simply agricultural lending.

Rural finance is important. A country must develop a financial system to accompany and stimulate economic development. Self-finance, barter, and informal finance all have a role to play at a particular stage in the development of a household or a nation. Formal institutions must emerge, however, to supplement and strengthen the financial system.

The development of a viable financial system is difficult, costly and time-consuming. No one model is likely to serve the needs of all nations at all stages of development. Developing the appropriate mix of policies and institutions is a task each country must face. The exchange of information and experiences that occurs through SACRED represents an important part of the search for solutions.

FOOTNOTES

1. For those readers desiring more information, the following items will be useful: Adams and Graham; Adams, Graham and Von Pischke; Adams and Vogel; Chew; Donald; Howell; Hussi; Lieberson; Meyer; Schmidt and Kropp; Von Pischke; Von Pischke, Adams and Donald.

2. For example, Cuevas and Graham found that lender transaction costs for lending through a government-owned and a privately-owned bank in Honduras far exceeded the 3-4 percent margin allowed with donor funds. Lending costs for the private bank using donor funds were nearly five times the cost of lending its own money for farmers. Likewise, Ahmed and Adams found that the Agricultural Bank of Sudan was limited to charging 7-9 percent per year on loans when its administration costs average 10-15 percent of the value of loans.

3. Mittendorf (1986) cites Quinones' (1985) summary of recovery rates in several Asian countries.

4. The variables representing effort to collect were the most significant in a Nepal study conducted by Maharjan, et al.

5. The link between deposit mobilization and viable financial institutions is discussed in greater detail in my paper included in the Report of the Third SACRED Consultation.

6. Almeida Pinho and Graham recently completed an analvsis of ways to strengthen credit unions in Portugal through portfolio diversification and improvements in the newly created central liquidity facility.

7. Research by Khalily, et. al showed how bank branching in Bangladesh contributed to deposit mobilization but did not provide evidence of branch viability.

8. Esguerra showed how some of the linked programs in the Philippines operated better than some direct lending programs.

REFERENCES

Adams, Dale W, 1988, "The Conundrum of Successful Credit Projects in Floundering Rural Financial Markets", Economic Development and Cultural Change, Vol. 36, No. 2, pp. 355-367.

Adams, Dale W and Douglas H. Graham, 1981, "A Critique of Traditional Agricultural Credit Projects and Policies", Journal of Development Economics, Vol. 8, pp. 347-366.

Adams, Dale W, Douglas H. Graham and J.D. Von Pischke, 1984, Undermining Rural Development with Cheap Credit, Westview Press, Boulder.

Adams, Dale W and Jerry R. Ladman, 1979, "Lending to Rural Poor Through Informal Groups: A Promising Financial Market Innovation?", Savings and Development, Vol. III, No. 2, pp. 85-94.

Adams, Dale W and Robert C. Vogel, 1986, "Rural Financial Markets in Low Income Countries: Recent Controversies and Lessons", World Development, Vol.14, No.4, pp.477-487.

Ahmed, H. Ahmed and Dale W Adams, 1988, "Transaction Costs in Sudan's Rural Financial Markets", Savings and Development, Supplementary Issue 1-1987, pp.1-12.

Almeida Pinho, Ezequiel de and Douglas H. Graham, 1988, "Agricultural Credit Cooperatives and the Restructuring of the Supply of Agricultural Credit in Portugal: Healthy Innovation or Institutional Collapse?", Paper to be presented at the XX International Conference of Agricultural Economists, Buenos Aires, August 24-31.

Bhatt, V.V., 1987, "On Financial Innovations and Credit Market Evolution", Economic Development Institute, World Bank, Washington.

Bouman, F.J.A., 1979, "The ROSCA: Financial Technology of an Informal Savings and Credit Institution in Developing Economies", Savings and Development, Vol. III, No. 4, pp. 253-276.

Chew, Siew Tuan, 1987, Credit Programs for Small Farmers: A Project Manager's Reference, AID Evaluation Special Study No. 47, Agency for International Development, Washington, D.C.

Cuevas, Carlos E., 1988, "Transaction Costs of Agricultural Lending in Developing Countries", Paper to be presented at the XX International Conference of Agricultural Economists, Buenos Aires, August 24-31.

Cuevas, Carlos E., 1984, "Intermediation Costs and Scale Economies of Banking Under Financial Regulations in Honduras", unpublished Ph.D. dissertation, The Ohio State University, Columbus, Ohio.

Cuevas, Carlos E. and Douglas H. Graham, 1984, "Agricultural Lending Costs in Honduras", in Undermining Rural Development with Cheap Credit, Dale W Adams, Douglas H. Graham and J.D. Von Pischke (eds.), Westview Press, Boulder.

Donald, Gordon, 1976, Credit for Small Farmers in Developing Countries, Westview Press, Boulder.

Esguerra, Emmanuel F., 1987, "On the Use of Informal Lenders as Conduits for Formal Credit: The Case of the National Agricultural Productivity Programs in the Philippines", Economics and Sociology Occasional Paper No. 1351, Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio.

Gonzalez-Vega, Claudio, 1986, "The Ohio State University's Approach to Rural Financial Markets: A Concepts Paper", Economics and Sociology Occasional Paper No. 1248, Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio.

Gonzalez-Vega, Claudio and Jeffrey Poyo, 1985, "Rural Savings Mobilization in the Dominican Republic: Challenges, Accomplishments, and Lessons", Economics and Sociology Occasional Paper No. 1226, Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio.

Graham, Douglas H. et. al, 1987, Rural Finance in Niger: A Critical Appraisal and Recommendations for Change, Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio.

Holst, Juergen U., 1984, "The Role of Informal Financial Institutions in the Mobilization of Savings", in Savings and Development, Denis Kessler and Pierre-Antoine Ullmo (eds.), Ed. Economica, Paris.

Hossain, Mahabub, 1986, "Credit for Alleviation of Rural Poverty: The Experience of Grameen Bank in Bangladesh", Draft paper, International Food Policy Research Institute, Washington, D.C.

Howell, John (ed.), 1980, Borrowers and Lenders: Rural Financial Markets and Institutions in Developing Countries, Overseas Development Institute, London.

Hussi, Pekka, 1987, "Problems in Financing the Agricultural Sector in Developing Countries", Paper presented at the Eighth World Congress on Agricultural Credit, Istanbul.

Khalily, M.A. Baqui, Richard L. Meyer and Leroy Hushak, 1987, "Deposit Mobilization in Bangladesh: Implications for Rural Financial Institutions and Financial Policies", The Bangladesh Development Studies, Vol. XV, No. 4.

Lieberson, Joseph M., et al., 1985, A Synthesis of AID Experience: Small Farmer Credit, 1973 - 1985. AID Special Study No. 41, Agency for International Development, Washington, D.C.

Long, Millard, 1987, "Crisis in the Financial Sector", State Bank of India Monthly Review, June, pp. 289-297.

Maharjan, Krishna H., Chesada Loohawenchit and Richard L. Meyer, 1983, "Small Farmer Loan Repayment Performance in Nepal". Research Paper Series No. 20, AD/C - APROSC, Kathmandu.

Marion, J. Peter, 1987, "Building Successful Financial Systems: The Role of Credit Unions in Financial Sector Development", World Council of Credit Unions, Madison.

Meyer, Richard L., 1985, "Deposit Mobilization for Rural Lending", in Report of the Third Technical Consultation of the Scheme for Agricultural Credit Development, FAO, Rome.

Mittendorf, H.J., 1987, "Reform of Agricultural and Food Marketing Policies in Sub-Saharan Africa", FAO, Rome.

Mittendorf, H.J., 1986, "Promotion of Rural Banking for Agricultural Development", FAO, Rome.

Polizatto, Vincent P., 1987, "Regulation and Supervision in Financial Systems Development", in Report of the Workshop on Rural Finance and Financial Sector Development, Agency for International Development, Washington, D.C.

Poyo, Jeffrey, "Development Without Dependency: Financial Repression and Deposit Mobilization Among the Rural Credit Unions in Honduras", unpublished Ph.D. Dissertation, Syracuse University, 1985.

Quinones, Jr. B.R., 1987, "Financial Intermediation System for Low-Income Groups", Paper presented at the Third Meeting of the Yaounde-Stockholm Initiative, Mobilization of Personal Savings for Development, Paris.

Quinones, B.R., 1985, An Overview of Agricultural Credit Systems in Selected Asian Countries, APRACA, Bangkok.

Rielly, Catherine A., 1988, "Improving Rural Financial Markets: Appropriate Design of Savings Projects", Harvard Institute for International Development, Cambridge.

Sacay, Orlando J., Meliza H. Agabin, and Chita Irene E. Tanchoco, 1985, Small Farmer Credit Dilemma, Technical Board for Agricultural Credit, Manila.

Schmidt, R.H. and Erhard Kropp, 1987, Rural Finance: Guiding Principles, GTZ, Boun, West Germany.

Seibel, Hans Dieter and Ukandi G. Damachi, 1982, Self Help Organizations, Friedrick-Ebert-Sliftung, Boun, West Germany.

Tolentino, V. Bruce J., 1987, "Current Imperatives and Developments in Philippine Agricultural Credit Policy", Economics and Sociology Occasional Paper No. 1324, Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio.

Vogel, Robert C., 1984, "Savings Mobilization: The Forgotten Half of Rural Finance", In Undermining Rural Development with Cheap Credit, Dale W Adams, Douglas H. Graham, J.D. Von Pischke (eds.), Westview Press, Boulder.

Von Pischke, J.D., 1981, "The Political Economy of Specialized Farm Credit Institutions in Low-Income Countries", World Bank Staff Working Paper No. 446, Washington, D.C.

Von Pischke, J.D., Dale W Adams and Gordon Donald (eds.), 1983, Rural Financial Markets in Developing Countries, John Hopkins University Press, Baltimore.