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CREATING A SUSTAINABLE SUPPLY OF FINANCIAL SERVICES FOR THE RURAL POOR : A CHALLENGE FOR THE AGRICULTURAL ECONOMICS PROFESSION

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1. Introduction

I would like to thank the Management of the Agricultural Economics Association of South Africa for having invited me to give the Simon Brand key note address at this years annual meeting. Given the theme of the conference, "The Role of the Agricultural Economist in the Reconstruction Process", I have chosen to frame my talk around this topic but with a change of emphasis from the role to the challenge of agricultural economists to address the issue of creating a policy and institutional framework that will achieve a sustainable supply of financial services for the rural poor. Given my limited knowledge and experience in South Africa, I will necessarily be shaping my remarks in more general rather than in South African specific terms.

This challenge does not rest with agricultural economists alone. Donor officials, NGO development practitioners, and those in other social science disciplines also have to face this challenge. This will become evident as I work myself through the topic. Indeed I shall begin this discussion by first identifying the challenge for the donor community. This will be followed by a detailed discussion of the major initiatives recently undertaken by the donor and the NGO communities in designing and implementing best practice microenterprise programs to reach the rural poor. The final section revisits the familiar terrain of public sector agricultural development banks to identify the potential for the restructuring of these largely failed institutions in today's developing world.

2. The challenge for donors

It is only appropriate to begin this analysis of sustainable financial services for the rural poor with the donor community. Donors of course are the proverbial purveyors of good intentions that create unexpected and frequently deleterious consequences. During the 1970s international donors launched a large number of small farmer credit programs and financed the expansion of a large number of agricultural development banks. Subsidised interest rates and costly supervised credit programs characterised these efforts to promote a supply leading financial development strategy (Adams, Graham, and Von Pischke). Of course the negative results of these efforts are now widely documented. Failed subsidised credit programs and insolvent development banks still litter the landscape of many developing countries. Commonly documented credit diversions and fungible substitutions of borrowed funds for own funds meant there was little to no additionality of credit use in targeted clientele or areas despite massive injections of credit (Von Pischke and Adams). Moreover the widespread hijacking of most subsidised credit programs by better off rural constituencies worsened the distribution of income and wealth in rural areas. Finally the persistently negative real interest rate environment generated by these program interventions penalised lower income savers to subsidise higher income borrowers and, at the same time, distort and damage the capacity of the financial system to allocate resources in the most efficient manner (Adams, Graham, and Von Pischke).

The agricultural economics profession has played no small role in this unfortunate evolution of rural financial markets in the 1970s. Two strong intellectual traditions in the profession helped to indirectly shape this evolution: One associated with John Mellor, the other with T W Schultz. The former with Bruce Johnston was famous for describing the many contributions of agriculture to balanced economic growth, always emphasising the role of technological change in promoting agricultural development (Johnston and Mellor, Mellor). T W Schultz, among his many valuable contributions to the profession, highlighted the need for high payoff inputs to replace the traditional low productivity inputs of traditional producers (T W Schultz). Both traditions highlighted the technological push for the successful Green Revolution that emerged as a visible force in South and Southeast Asian agriculture in the 1970s. The Green Revolution in the end strongly influenced the supply-led approach to finance promoting agricultural growth with cheap credit. It was strongly felt that the adoption of new technology could be promoted more rapidly through subsidised credit schemes.

This vision was also consistent with traditional farm management finance where the perspective was always on the borrower. The Green Revolution and its farming system progeny in the 1980s also always took the perspective of the farm borrower. In short, donor policy in the 1970s emphasised the need to promote small farmer technological adoption with supply-led finance to further agricultural modernisation. At the same time, this policy would serve the ends of basic needs by reaching traditional low income farmers in developing countries. Throughout this period the emphasis was always on the farm borrower, never on the lender. Indeed the lending institution was invariably reduced to a credit delivery channel, not an institution with governance rules, ownership rights and a right to sustainable development in its own right.

The challenge for both the agricultural economics profession and the donor community is to shift its focus to include the institutional design of financial agents as well as the welfare of borrowers. This issue has emerged more importantly during the decade of the

1980s as development bank initiatives have receded and the NGO movement has arisen to supply financial services to the poor. Not surprisingly this experiment has had its share of failures similar to the small farmer credit experience. (Adams & Von Pischke). Subsidised credit and grant funding to cover all overhead costs predominated in the early years of the NGO experience. Many donors were confused. No criteria existed concerning which program to support and for how long. This was further compounded by the apparent inability of donors to "exit" from supporting these projects (Von Pischke, 1992).

Clearly there is an ongoing challenge for donors to address their funding decisions. To achieve this they must demand an accountability of progress towards both outreach and sustainability goals from their financial service NGO programs. This in turn requires systematic documentation of outreach indicators (number, volume, size of loans and deposits, gender, etc.), productivity variables (case loads per loan officer) and self sufficiency performance indicators drawn from accurate financial statements emphasising the gross and the net return on the loan portfolio, carefully defined arrears measures and the ratio of non-interest operational costs to the loan portfolio. In addition a subsidy dependence index should be estimated for each NGO or at the very least a leverage coefficient that shows the changing ratio of loans outstanding to all costs and grants in the program at selected points in time (Yaron, 1992).

Required systematic documentation of these performance indicators inherently creates an incentive for tighter management control in NGO micro finance programs. This incentive is further reinforced if the donor community has finite time horizons for continued grant funding and an "exit" provision for suspending funding if no progress is apparent towards both outreach and financial sustainability as evidenced through these measures. The World Bank and the Inter American Development Bank have recently become the first donors to take on these responsibilities seriously with program requirements along the lines described above (Yaron, 1992; Inter American Development Bank 1994).

On the other hand, donors have a responsibility to maintain a secure level of funding over the initial start up years to allow the institutions to achieve the management base and training required to achieve best practice or near best practice lending technologies. Evidence to date suggests that these levels should be substantially reached between 5 to 7 years of operation (Christen *et al*, 1994). Secure funding tied to the implementation of unambiguous indicators of outreach, productivity, and sustainability with appropriate exit provisions should go a long way to contribute to more intelligently designed and operated NGO financial facilities.

3. The NGO world and the ambiguous role of the agricultural economist

NGO micro finance programs in the developing world have expanded rapidly in the past ten years. This growth has come about in part to fill the vacuum left with the failure of the development bank strategy of the 1970s and, in part, to devise a means to reach the poor without depending on government departments and agencies. Given the growing disillusionment of the role of the government in effectively reaching the poor, NGOs have in part arisen as a substitute for government failure to reach the poor as well as a answer to the alleged market failure of formal finance to reach the poor.

The decade of the 1980s also gave birth (or maturation) to the new institutional economics of Williamson, Bardhan and North among others and the growing principal agent literature of the information theoretic school of Stiglitz and others. This joined the earlier tradition of Hayami and Ruttan's work on institutional and organisational change and Mancur Olson's logic of collective action.

The collective importance of these intermingling strands of intellectual inquiry was the reemergence of institutions and organisations as the focus of analysis. Incentives structures, governance rules, property rights, transaction costs, and cooperative and opportunistic behaviour within specified institutional settings now became the research problem. The NGO micro-finance world, among many others, lends itself to these strands of analysis, especially through the lens of incentive structures for institutional sustainability as seen through a principal-agent framework. The contrasting financial technologies and institutional focus of micro-finance can be seen through different institutional frameworks such as savings first vs credit first institutional designs, minimalist vs integrated financial service organisations and individual vs group loan technologies.

a. Savings first strategies

Micro financial facilities using the savings-first strategy of institutional growth grows more slowly than those using a credit-first approach. Savings and credit associations and the credit union movement are two of the more common savings first institutions in the developing world. These programs typically engage in drawn out educational campaigns by promoters of these institutions to properly indoctrinate members on the careful handling and use of the locally mobilised savings deposits. Six to twelve months of voluntary savings activity may occur before lending activity begins. The loan deposit ratio remains fairly low until the institution acquires sufficient experience in handling loans before expanding its loan portfolio to members. A mature credit union may reach a loan deposit ratio of 70 to 80 percent with 20 to 30 percent held in contingent reserves in an interest bearing account of a bank branch.

In later stages the demand for loans in local cooperatives may exceed the local supply of savings. This then requires a central finance facility for a network of cooperatives to intermediate the cash flows between surplus and deficit cooperatives or associations in the regional or national network. At the same time local cooperatives can ration credit among its members by introducing lower, more conservative loan limits for borrowers, higher interest rates or longer waiting times to secure loans.

Any financial intermediary must address its principal-agent problem effectively if it is to survive and become viable. In this case the principal (the lender) must be able to create a contract that creates a strong likelihood that the agent (the borrower) will honor the obligation to repay the loan. To do this the lender must first overcome information problems that limit knowledge about the borrower's honesty and entrepreneurial ability. Second, the lender must have the capacity to monitor the borrower's behavior. Finally the lender must create a contract enforcement mechanism or an incentive environment that ensures loan repayment.

To some extent credit unions and savings and credit associations are designed to meet these principal-agent challenges. The close knit nature of a small credit union implies that members know each other well, thereby reducing substantially the incomplete or asymmetric information problem that creates the risk of adverse selection, making loans to dishonest or unreasonably risky borrowers. Moreover, in living and working close together in village settings, cooperative members are able to monitor their colleagues' behavior and report and challenge suspicious or irresponsible behavior. Finally contract enforcement is enhanced through the knowledge that loans are made from member savings and not from outside money, which is more likely to produce the "take the money and run" syndrome. In short, this client-owned and client-generated savings base assists credit unions to reduce these classic principal-agent problems by introducing some rigor into the management of credit risks. This argument carries more weight for rural settings where social linkages are stronger and client monitoring more feasible than in urban areas.

Finally it should be noted that there is an important demand for savings services per-se, particularly in areas bereft of banking services. Moreover, responsible savings activity is evidence of creditworthiness, a useful collateral substitute. Savings services also allow households to engage in consumption smoothing to manage idiosyncratic risk. At the same time the management of savings accounts by an institution is excellent training for the management of the institution as a whole. It is a learning process with high positive externalities for acquiring the skills to the manage other services, primarily loans. Finally savings services are a valuable service for the poor. Indeed they constitute the most cost-effective financial instrument to reach the poor.

Some researchers, however, point out risks in the savings first strategy (Schmidt & Zeitinger, 1994a). First, it can still be costly and demanding to manage a large number of deposit accounts, especially the high turnover of accounts without fixed maturities for small savers. Second, depositors are at great risk in institutions that are not capable of managing their funds carefully. Savings first strategies mean slower institutional growth than under credit first strategies, thereby retarding achievement of the scale economies required to lower lending costs. To the extent that ample alternative savings opportunities exist for the poor and near-poor through neighboring financial institutions, as in urban and peri-urban Latin America, a rationale can be made for the promotion of credit-first NGO financial intermediaries. On the other hand, where formal financial savings services are largely absent, as in most small towns and all the villages of Africa, savings-first strategies are more likely to prevail given the strong demand for savings services in these rural areas (Ouattara *et. al.*).

Finally the advantages in tackling the agency problem discussed earlier could be weakened if savers are so numerous, each with such a small account that it is not in the interest of any one small group of savers to incur the transaction costs of organizing themselves to monitor the management of the institution. This free rider problem has manifested itself from time to time in credit unions in which the one person one vote ownership principle regardless of the ownership of shares or deposits held, weakens the vigilance of the widespread ownership base (Chaves, 1994). In short there are trade-offs between the virtues and the costs or limitations of the savings first path to institutional development.

b. The credit-first strategy

Credit-first or credit-only institutional development strategies characterise most NGO financial programs in developing countries. These programs depend on outside donor resources, not only to cover their administrative overhead, but also to fund loans. They often include a large technical assistance component. Credit-first programs expand much more rapidly than savings-first programs for two reasons. First, they avoid the time-consuming task of educating a village constituency on managing savings and mobilizing these savings; lending is funded from an ample supply of external funds. Second, credit-first strategies frequently employ group loans as part of their lending technology thereby quickly multiplying the clientele.

Nevertheless, credit-first programs face a serious moral hazard. In contrast to savings-first programs where vigilant savers in principle have a vested interest (i.e. their savings) in monitoring borrowers and inculcating rigorous contract enforcement practices, credit-first programs depend on outside funds from sponsors who generally enjoy none of the virtues or strengths represented by a locally based savers constituency. In short it has no built-in institutional constituency instilling discipline to evaluate loans carefully, monitor borrowers, and design contracts with credible enforcement features. A "take the money and run" syndrome could overwhelm the project.

Credit first programs have tried to deal with this moral hazard by designing contracts that reduce opportunistic or irresponsible borrower behavior. This typically has been done in two ways. The most commonly followed financial technology is to establish an efficiency wage that creates the incentive for loan officers to perform well or otherwise lose their jobs in an environment in which the most likely alternative employment would pay considerably less (Chaves & Gonzalez-Vega). Various formulae are drawn upon to reward local managers, but typical criteria for bonuses emphasize rewards based on the number and volume of loans issued after meeting a rigorous standard of loan recovery.

Recent research has underscored the high cost of credit-led NGO programs. Even with a near perfect loan recovery record a program still could be financially unviable if it incurs high costs to achieve this result, particularly in the early stages of program development where total administrative costs can reach 50 to 60 percent of the outstanding portfolio in well run programs and twice these levels in poor or early stage programs. These findings highlight two important prescriptions to attain sustainability: the need to achieve rapid growth in the loan portfolio to achieve scale economies, and the need for a long run commitment on the part of donors to allow these programs time, often five to seven years, to achieve these economies (Schmidt & Zeitinger, 1994a). These findings further emphasize the need to avoid savings mobilization, which increases costs, for the first four to five years until break even lending operations are achieved. Finally, the strategic role of a "disciplined" donor is invariably necessary to pressure these young institutions to quickly learn how to cut costs, increase productivity (i.e. high case loads per officer) and become viable while still serving a targeted low income population.

In summary most researchers are arriving at a consensus concerning the financial technologies required to secure sustainability in credit-first NGO programs serving micro and small enterprises (Christen *et al*, 1994; and Schmidt & Zeitinger, 1994a). Interest rates must be high enough to cover a realistic cost of funds, all administrative expenses, loan losses and a decent return on capital. Furthermore, loan recovery must be well over 90 percent. Loan officers should plan on serving around 200 to 250 accounts each in a densely populated urban or peri-urban environment to keep total administration costs down to 15 to 20 percent of the portfolio by the time the program achieves scale economies in five to seven years. To achieve these goals loan administration must be decentralized with an incentive compatible internal organization and control structure using frequent audits and attractive performance based remuneration for managers and loan officers. Character lending is feasible but loan maturities and repayment schedules must be consistent with the customer's cash flow. Lending should start with smaller, short term loans to allow customers to prove their creditworthiness before obtaining larger loans. A limited range of simple, standardized loan services should be offered in the beginning; an information management system for timely loan tracking is essential. This implies computerization. Finally savings services have to be developed to provide leverage for funds and reduce moral hazard once the lending activities achieve viability.

Once the better run programs move beyond the break-even stage (5 to 7 years) and reach viable maturity after 7 to 9 years, their portfolios and procedures can change. First, many of their original microenterprise borrowers would have expanded with repeat loans of growing size to become larger borrowers. Instead of receiving the equivalent of 100 to 300 dollar loans, as in their initial period of borrowing, they could be receiving 2000 to 3000 dollar loans seven to nine years later. Second, as a result, the institution becomes more vulnerable to larger loan size risks with collateral based lending necessarily designed for these loans.

An important issue emerges at this stage. To what extent does the institution maintain its original target group orientation to a new set of small microenterprise borrowers replacing its larger, more successful customers? Or, on the contrary, does the institution graduate through time with its original but now larger and better established clientele to become a potential bank for small and medium enterprise borrowers? As more and more successful microenterprise programs move into the 1990s they will necessarily face this question in defining their future institutional evolution.

c. Group lending strategy

A second way for credit-first programs to mitigate moral hazard is group lending. Small, socially cohesive borrower groups can greatly reduce information problems as all members presumably know and trust each other and are usually in a position to monitor each other's behavior. Finally joint liability implies that group members are responsible for each other's obligations in case of default. Hence, it is argued, considerable effort will be exercised to ensure peer monitoring and peer pressure to remove opportunistic or free rider behavior. For larger groups where group solidarity and peer pressure is weaker, the group leader's assets in some cases have been pledged to ensure contract enforcement. This group loan design also allows these programs to increase their client base rapidly compared to savings-first programs.

The Grameen Bank in Bangladesh stands out as the most renown practitioner of the group loan strategy. Its success has been emulated by a large number of Grameen Bank replications in Asia, Latin America and Africa. However, many of these replications have encountered problems. The African experiments in Malawi and Burkina Faso illustrate some of the issues.[1] First, group lending in the Grameen Bank was built on a strong investment in group formation and substantial investment in recruiting committed and well trained staff before lending began. Neither of these human capital investments has been strong in the African programs.

One of the more important obstacles in the African programs is the very high cost of scarce trained personnel compared to Bangladesh where an ample supply of low cost university graduates have been available for the Grameen program from the beginning. Second, migration is more prevalent in rural Africa, creating more unstable groups, particularly these that would have male members. Third, weekly or biweekly repayment schedules are established to generate frequent meetings for the interaction and discipline required to maintain group cohesion and regular repayments. This does not always fit into the cash flow patterns of agriculture. Hence groups made up of farmers in the African program can encounter difficulties. The risk of cash flow interruption is too high as farm groups suffer from covariant risk and the transaction costs of managing a spatially more dispersed clientele are also high. Group lending programs built on microenterprise activity in towns have generally been more successful.

Fourth, joint solidarity has its limits as evident in the Burkina program. Once members in a group have made up for the shortfall of their delinquent members on two or three occasions the group collapses on the next default or members drop out of the programs after repaying for others. Intra-group solidarity in this experiment has been frequently compromised by free riding behavior.

Finally the practice of holding other groups in a village (i.e., a sector) or centre responsible for the failure of a delinquent group is followed in many programs, expanding the group solidarity concept into a broader neighborhood or village sector or centre solidarity strategy. This has on occasion proven counterproductive as groups who are current on their loans resist covering for delinquent groups with whom they may feel less solidarity.

The least documented and least known "black box" of group lending is the nature of the group dynamics within these programs. What specific contractual pass-through arrangements govern loans through the group for individuals? What are the prior arrangements and understanding among the group members, if any, concerning important features of monitoring and contract enforcement? What is the nature of the joint liability, if any, agreed to by the group? What are the transaction costs for members to function within the group, monitor other member loans, and engage in peer pressure activities? Is there a delinquency threshold (one vs. two members, etc.) beyond which joint liability collapses? How does one operationally define and empirically measure such important but slippery concepts as group homogeneity, group solidarity and, in the absence of group solidarity, peer pressure? Conventional econometric techniques are generally not suitable to test hypotheses built on these concepts. This is where the discipline of economics may have to borrow methods of measurement from sociology and psychology. In the end, though the task may be difficult, answers to these questions could contribute to better institutional design and the measurement of program performance for group lending programs.

A final issue concerns the group lending program itself. What is the learning curve for program managers and field agents who, in contrast to conventional individual loan programs, delegate member selection, monitoring and peer pressure contract enforcement tasks to the group members themselves? Field agents are not necessarily expected to know the creditworthiness of the individuals, i.e., their cash flow profiles, character, etc., since they deal only with groups. Moreover, if program managers and field agents come from a different social class than members, this social distance makes it less likely they would know their group member's individual business world and relevant personal histories.

In the end any learning curve generating improved productivity and efficiency must come from techniques that allow group program managers to determine quickly and effectively which groups work well and which do not and the strategic variables that can generate this group scoring profile. To the extent these managers and field agents are successful in identifying and incorporating these scoring techniques into their management style, they will necessarily have to know the answers to many if not all of the questions raised earlier about group dynamics. However, as mentioned above, this is still an unsatisfactorily documented feature of the group lending experience.

d. The role of the agricultural economist

The above description of the programatic challenges and controversies surrounding the various micro financial experiments in reaching the poor raise the question of what possible role agricultural economists could play in this development arena? the agricultural economics community has not typically been concerned with this NGO micro-financial world. Farm finance of commercial agriculture or small farmer credit programs has more characteristically dominated its research agenda in rural financial markets. It is time to broaden this agenda. First, agricultural economists should be prepared to address and analyse the constraints and the opportunities for non-farm rural enterprises and not restrict themselves to agricultural activity. Second, the alleviation of poverty through micro financial facilities should be researched more extensively. In many developing countries the avenue for escaping poverty in rural areas may lie more in non-farm than farm activity thus the design of institutions to service this clientele with sustainable financial services acquires greater importance than commonly thought. Finally the rich tradition of tenure institutions in agricultural settings which generated such a long history of sharecropping research should presage the development of a stronger focus on institutional innovation to reach the poor with financial services through decentralised financial systems. New incentive structures and organisational designs, the issue of effective property rights in client owned intermediaries, and innovative contract enforcement mechanisms for micro finance facilities offer a rich menu for empirical research with policy making implications for the next generation of agricultural economists in developing countries.

4. Agricultural development banks revisited: The classic terrain for agricultural economists

A final issue that merits discussion is the fate of the agricultural development banks currently littering the financial landscape of developing countries. This is particularly pertinent for the agricultural economics profession since in conjunction with the donor community the profession played a role in creating these weak and failing institutions back in the 1970s in the hope of promoting the adoption of modern technology and small farmer development. First, any attempt to restructure and reform the institutional structure of these institutions must recognise the high social costs and lamentable rent seeking behaviour of many of these institutions that characterised the performance that left many of them insolvent in the 1980s.

Most development banks have been closed in Francophone West Africa and this pattern of closure or privatisation is now occurring in a number of Anglophone West African countries. The financial status of many of the publicly owned development banks and agricultural development corporations in the former homelands of South Africa and in Zimbabwe are also under serious review for restructuring, down-scaling or possible closure.

The challenge for the agricultural economics profession is twofold. first it should recognise and build on the fact that most decentralised NGO micro finance facilities largely ignore farmers and concentrate on non-farm entrepreneurs and enterprises. Thus it should address the task of researching institutional innovations that can successfully incorporate the riskier constituency of farm producers into the NGO's usual non-farm loan portfolio's. Second, it should also recognise that institutions that specialise in farm finance are frequently candidates for failure since they do not diversify risk in their portfolios. Hence any reform of agricultural development banks must accept the fact that they should be less agriculturally oriented than in the past.

As mentioned earlier, state-owned banks in many developing countries have fallen into insolvency, been closed or are operating at a scaled down level. However, in some countries they are the only banks operating in rural areas, giving them a potential franchise value. If possible, these institutions should be privatized. When their current financial state does not make them sufficiently attractive to investors, consideration should be given to improving their condition to the point where they can be sold to private buyers. Where privatization is not feasible a second best alternative may be to restructure radically their internal organization and external mission to survive as sustainable institutions supplying realistically priced financial services earning decent rates of return. Ordinarily the intangible value of the institutional, information and human capital embedded in these institutions will not be sufficiently high to warrant reform if their arrears are above 30 percent.

The most successful reform of state-owned banks has occurred in South East Asia (Yaron, 1992). Much of what follows distills this experience and that of several other successful reorganizations of state-owned banks (Yaron, 1992, Patten & Rosengard, 1992). The question is how to reorganize these institutions so they do not fall prey to the same vices that largely destroyed their usefulness as financial institutions in the past. This restructuring should include the following:

i) Funding. A strong deposit base offering a wide range of deposit facilities throughout its branch network to support its lending;

ii) Capitalization. Initial recapitalization by the government (if necessary), with additions to capital limited to retained earnings and sales of shares to the public. The bank's charter should specify its minimum capital ratio;

iii) Independence. Defense against political intrusion, especially from the Ministry of Agriculture which seems always concerned with loan targeting and seldom in promoting viable lending institutions. Any official appointed to the Board should be from the Ministry of Finance or the Central Bank. Exemption from usury laws and other interest rate controls is also required;

iv) Governance. Creation of a Board of Directors in which no government official is the chairman, on which no elected officials should serve and where private sector members carry more weight than public sector members.

v) Loan Policy. An emphasis on portfolio diversification especially in rural areas where non-farm rural enterprises would be equally important as farmers. Explicit targeting would be avoided. Commercial short term overdraft facilities should be incorporated into its portfolio to balance medium term lending, along with remunerative government treasury bills up to a specified portion of its financial assets. This gives the institution the means to manage both risk and liquidity;

vi) Decentralization. Branches should be small. Decentralized decision making should rule at the branch level. Performance based remuneration and related bonus schemes should prevail for branch managers and relevant loan evaluation and loan collection personnel based on criteria including the number and volume of loans, loan recovery, and deposit mobilization. Bonus schemes would only be triggered after meeting a high loan recovery standard. Transfer pricing incentives would be required to reward deposit mobilization beyond that used to fund local loans;

vii) Human Resource Policy. The freedom to hire and fire employees (who would not be permitted to organize) and to set wages free from civil service regulations;

viii) Transparency. State-owned institutions, especially financial institutions, should be at the forefront of disclosure. Accountability should include quarterly and independently audited annual reports issued to the public, specifying financial condition truly and fairly. Reports should include balance sheets, income statements, sources and uses of funds statements and additional tables showing the aging of loan arrears, write-offs, reserves and the market value of the investment portfolio. Most importantly, subsidy dependence, indexes should be carried out yearly and figure prominently in all annual reports. Income should be realized only in cash rather than including accruals. Expenses should include accruals. Large exposures and large defaulters should be listed by name, exempted from the confidentiality that is appropriate for private banks and their clients. Likewise, loans to directors, officers, staff and family members should be disclosed. Statements of loan and other policies, particularly those relating to loans on which payments are not received in full and on time, should be included in annual reports. Any events having a material impact on financial condition should be announced to the press immediately.

ix) Donor Support. Donors should not fund loans, but rather build up human capital to manage credit risk intelligently. Important here is the implementation of a management information system that permits the tracking of loans on a weekly basis. Thus training, technical assistance and judicious support for computerization is appropriate. Some of the institution's own funds should be committed to these endeavors as well to ensure continued investment in management information systems upon donor withdrawal.

If such an institution performed well, it could offer through its extensive rural branch network a range of deposit and savings services for the poor (as legitimate a demand as for loans) far better than many NGO programs. Moreover portfolio diversification and extensive branching would alleviate the covariant risk associated with site specific unit banks or limited reach NGOs. Second, these institutions can serve an agricultural clientele that are rarely included in NGO portfolios. Third, these savings services could be used by young NGO organizations to manage their own liquidity in the absence of a convenient commercial bank branch network. Fourth, these reformed state-owned banks should be in a good position to serve the input suppliers and output buyers at the wholesale level who play such an important role in lending downstream to micro-entrepreneurs. In short, these banks could positively shape the market environment within which microenterprises operate. In the end viable NGO intermediaries and reformed rural development banks could complement each other in rural areas.

These reformed institutions would clearly not expand as rapidly as in their heyday of irresponsible portfolio growth. However, it is important that agricultural producers be relieved of any price penalization and indeed benefit from well designed government investments in human capital formation, agricultural research and related support services. Otherwise there will be an unfortunate tendency for policy makers to resort to subsidized credit through development banks as a convenient substitute for their failure to provide these services. In short, a threat will always exist for donors and the government to recolonize these institutions with targeted loan programs and a political agenda, however, this is less likely in countries with intelligent agricultural support services and appropriate price policies.

5. Conclusions

This paper raised the question of the possible role of the agricultural economics profession in addressing the challenge of creating a sustainable supply of financial services for the rural poor. Several important lessons emerge. First the profession has to broaden its research agenda to move beyond the agricultural constituency and incorporate rural non-farm enterprises in its mandate as well. Second, the traditional focus on the farm borrower should be shifted to look at lending institutions both formal and informal. Third, to properly address the issues of institutional sustainability, the growing literature on the new institutional economics and principal agent theory must be exploited to tease out the subtleties of the information theoretic framework such as the incentive structures inherent to given institutional governance structures and property rights regimes ruling for both borrower and lender.

The two institutional forms that would clearly deserve attention are NGO micro-financial facilities, on the one hand, and surviving development banks on the other. Both are shaped and frequently constrained by inefficient internal incentive structures, poorly specified governance rules and unclear or counterproductive property right (i.e. ownership) regimes. Whereas the former (i.e. NGOs) can sometimes achieve appropriate outreach goals (i.e. low-income female clients) it frequently does this with lending technologies that can achieve relatively low arrears but only by generating high unit costs of operation preventing sustainability and, at the same time, avoiding a farmer clientele. The latter (i.e. development banks), on the other hand, generally avoids non-farm rural enterprises, fails to reach small scale farmers on a sizeable scale, generates high arrears, is male client oriented, and also generates high unit costs of operation preventing sustainable growth without permanent subsidies.

Some important features of lending technologies and institutional designs were reviewed at some length in this paper. However, much more work needs to be done. It is hoped that the agricultural economics profession in South Africa and elsewhere will build on its rich tradition of successful applied research to contribute more to this new research agenda of creating sustainable financial institutions serving the rural poor and near poor in developing countries.

Note:

1. For the Muhzdi Program in Malawi see Buckley 1993. Information was gathered in 1994 on the projet de promotion de Petit Credit Rural(PPPCR) in Burkina Faso through field interviews with staff and project members by Ohio State University researchers, Julia Paxtan and Tgenevieve Nguyen.

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