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The Role of Groups and Credit Cooperatives in Rural Lending

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and
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Borrowing groups and credit cooperatives are potential channels through which small-scale farmers can improve their access to credit.

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Policy, Planning, and Research

WORKING PAPERS

Agricultural Policies

Small farmers often have no credit records and a mixed reputation for repayment. Processing and collection costs of loans made to small farmers are high relative to the amount lent, so that it is hardly surprising that rural lenders often prefer to channel their funds to larger farmers.

Lending groups and credit cooperatives have been ascribed the potential to reach small farmers with affordable credit because the processing of one large loan rather than numerous small loans may allow for savings in administrative costs. As these lending arrangements entail some form of joint liability, they have also been expected to reduce the risks of loan default.

In practice, the record of group lending schemes and credit cooperatives has been mixed, although unfavorable experiences have mostly been due to shortcomings in implementation and complementary activities rather than inadequacy of the approaches themselves.

Some of the factors crucial for successful group lending are:

- Homogeneous borrowing groups that are jointly liable and assume some managerial and supervisory responsibilities. Mandatory joint liability has only a positive effect on repayments as long as borrowers have strong reason to believe that the majority of their peers will also repay.

- Establishing a common bond other than credit, such as mandatory deposits that will only be reimbursed upon full repayment, enhances loan repayment at the same time as it introduces savings mobilization.

- Denying access to future credit to all group members in the case of default by any member is the most effective and least costly way of enforcing joint liability. But this only works as long as the lending institution can continue to provide clients with favorable and timely credit services.

Important factors for successful outcomes of credit cooperatives include:

- Bottom-up institutional development and training at the grass roots as well as all management level.

- Savings mobilization by credit cooperatives renders them financially less dependent on outside sources and enhances borrowers incentives to repay.

- Credit cooperatives shouldn't rush to expand their activities beyond financial intermediation before strong institutional and managerial capabilities exist.

This paper is a product of the Agricultural Policies Division, Agriculture and Rural Development Department. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Cicely Spooner, room N8-039, extension 30469 (55 pages).

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THE ROLE OF GROUPS AND CREDIT COOPERATIVES
IN RURAL LENDING

I. INTRODUCTION

This paper reviews experiences with group lending and credit cooperatives in rural areas of developing countries and attempts to derive lessons for Bank policy dealing with such lending arrangements. It assesses the factors which are responsible for successful and unsuccessful outcomes of lending groups and credit cooperatives in different parts of the world. The evaluation is based on a literature review. An attempt was made to cover a wide range of sources and go beyond the mere experience of Bank projects. Therefore, most projects referenced in this paper are not Bank projects per se, although some have, amongst others, also received Bank funds.

An assessment of the factors behind successes and failures of group lending and credit cooperatives to derive operational guidelines is in place because the World Bank has been heavily involved in the promotion of rural credit. Rural credit operations accounted for close to a quarter of the Bank's agricultural lending, and over the period 1982-88 a total of US$ 6.59 billion was channeled through such operations. In a sample of 25 projects which involved rural credit, 10 named, amongst others, credit cooperatives or lending groups as participating financial intermediaries.[1] The Bank has thus been directly or indirectly supporting the promotion or

[1]. The number of projects involving credit cooperatives or borrower groups is likely to be even higher, as certain project reports did not explicitly mention all admissible forms of financial intermediation.

maintenance of these institutional arrangements which exist in the rural areas of most of its client countries.

The paper consists of four parts. The next section briefly describes the role of lending groups and credit cooperatives in rural lending. It is followed by a theoretical part elaborating on the basic principles behind lending groups and credit cooperatives. The theoretical section is followed by an empirical part reviewing experiences of group lending and credit cooperatives in different parts of the world. Although this empirical part refers to the elaborations in the theoretical section, it can easily be read separately. The last part summarizes the main lessons from these experiences and draws some conclusions relevant to Bank policy.

II. THE PLACE OF LENDING GROUPS AND CREDIT COOPERATIVES IN RURAL LENDING

The small farmers' limited access to commercial bank credit and the high interest rates charged by non-institutional lenders were important factors that led governments and donors to promote alternative rural credit institutions in developing countries. In many countries, government support and significant donor involvement helped set up specialized agricultural financial institutions such as development banks, agricultural banks and land banks. However, the expectation that these institutions would provide easier access to smaller farmers has often not materialized. The distribution of credit by government owned or sponsored rural financial institutions has frequently been skewed in favor of the wealthier and more influential farmers. Furthermore, many of these institutions have not been financially viable and have either collapsed or only been able to operate with additional infusions of public funds.

The agricultural development banks' and other rural lenders' frequent failure to reach low-income producers with affordable credit has led to a search for other arrangements to achieve this objective. Lenders associate low-income producers with high risks and view them as potential clients for small loans entailing high administrative costs per unit lent. Lending groups and credit cooperatives have been ascribed the potential to reach low-income producers with affordable credit because the processing of one large loan rather than numerous small loans may allow for savings in administrative costs. Credit cooperatives and group arrangements entail some form of joint liability and are therefore also expected to reduce the risks of loan default.

Despite their apparent advantages credit cooperatives and lending groups have yielded mixed results. To determine whether these arrangements hold some unrealized potential, an analysis of experiences with credit cooperatives and group lending projects is in place. The favorable experiences must be carefully assessed to determine whether their success can be attributed to specific design features and the extent of their replicability must be determined. The review of less successful experiences is of equal importance. If the difficulties encountered by many credit cooperatives and lending groups are due to general deficiencies and shortcomings in their implementation rather than factors inherent to these institutions, the mixed record is not necessarily an appropriate indicator of the potential they actually hold.

III. ESSENTIAL CHARACTERISTICS OF GROUP LENDING

The most important elements of a group lending arrangement are the precise form of joint liability and its enforcement, and the extent to which the ultimate lender interacts with the group as a whole or alternatively, with each individual member. Experience has further shown that factors such as who promoted the group formation and the group's involvement in joint activities other than credit can also affect group performance.

A. Transaction Costs and Lender-Group Relationships

Regarding the relationship between the lender and the group, two extreme cases warrant detailed analysis. The lender may lend to the group as a whole, which then disburses the loan to its individual members according to some agreed distribution criteria. Alternatively, the lender may lend to each member individually, with the group jointly guaranteeing all loans or simply furnishing iniormation about the individual participants. If the lender lends to tn group as a whole, he is likely to save on transaction costs. If he is, however, responsible for group formation, he may still incur significant expenses related to the creation and promotion of groups. Further costs may be involved in obtaining information about group members so as to assess the likely effectiveness of joint liability in assuring repayment. In addition, group members may incur significant transaction costs related to decisions on terms and criteria to allocate the loan among themselves and to the monitoring and enforcement of repayments. Thus, it is unclear whether group lending actually reduces overall transaction costs or whether it simply reallocates them.

Lenders are likely to view a reallocation of transaction expenses from themselves to the group as an overall reduction of these costs. Implementors and evaluators of group lending programs have tended to take the same position because labor is the group's main input. They usually assume that the time of group members has relatively lcw value or that group members would participate in group activities in any event. This is not necessarily a valid assumption. If transaction costs (including the opportunity value of time) to group members turn out to be higher than those which they would encounter in other credit arrangements, the organization will not be viable in the long run. In complex cases it is reasonable to expect that groups will resort to rules of thumb that can potentially economize on transaction costs related to credit allocation.

A simple rule could be to allocate the same amount of credit at equal terms and conditions to each member. This would, however, be inefficient if group members differ significantly in resource endowments or investment opportunities. The reduction of transaction costs resulting from this simple rule of thumb may be an important element behind the frequent recommendation that group members should be as similar as possible.

If the lender deals directly with individual group members, there are fewer opportunities to reduce transaction costs. In fact, such loan arrangements have a considerable potential for duplication of effort between the lender and the group. The group may, however, still prove useful to the lender. It may, for example, provide the lender with information about itself and its individual members. It may also afford some form of joint liability, which puts social pressure on delinquent members and induces them to settle overdue debts. This in turn may reduce the costs of loan collection and increase overall lender profitability.

B. Loan Recovery and Joint Liability

The foregoing discussion has pointed to the crucial importance of joint liability and its effect on loan recovery. While some transaction expenditures are incurred by administrative work, the bulk of the lender's costs are related to the assessment of creditworthiness and the enhancement of loan recovery. Farmers who are familiar with each other and have some social or economic ties possesses an asset which is not marketable, but can enhance their prospects as borrowers when they are organized in a group. Familiarity among group members implies better information about the participants' character, farming skills, and consumption and investment needs. Social and economic links provide group members with possioilities of pressuring their peers to perform. Familiarity and linkages among group members are negatively correlated with group size. Large groups are too diluted to possess t ıe informational or kinship advantages which make such arrangements worthwhile for lenders and borrowers.

Joint liability is considered a crucial element in the attainment of more effective and less costly loan collection. However, a thorough understanding of this feature requires careful separation of different aspects of loan collection. In both the group and the individual case the key issue is the extent of the lenders' willingness to bear loan collection costs. In either case much depends on the penalties available against delinquent borrowers and whether legal and social practices make it possible to enforce them. If the legal, political and social environment make joint liability a viable procedure, it is unlikely that groups which are formed by the members themselves and only deal with activities directly related to credit will include borrowers with a high default risk. Such members can only impose additional costs on other group members when joint liability comes into play. An important issue in group lending is whether enforcing various forms of joint liability is more effective and less costly than enforcing individual liability. Experience suggests that full application of the legal procedures to obtain repayments is in most instances equally difficult and costly for joint and individual liability.

Because of the practical difficulties involved in enforcing collection from delinquent borrowers, providing continued access to credit on attractive terms is often a more effective and less costly way to encourage prompt loan repayment. A necessary condition for satisfactory repayment performance under group lending arrangements is thus the lender's willingness and ability to deny future credit to whole groups when they or any member fail to repay. Denying access to future credit may not always be as simple as it seems, especially if the lender is heavily dependent on external sources of funds that mandate lending to particular target groups. It is, however, a powerful weapon to promote loan repayment. If group activities other than credit can also be curtailed in case of loan default, group members are likely to exert strong pressure to repay on their defaulting peers.

It should be noted that joint liability, even if loosely defined as the notion that the whole group can be penalized for bad performance of any member, can lead to excessive borrowing, from a social welfare perspective. This is true because the cost of default is shared while the benefits of additional liquidity accrue to individuals. This deficiency may, however, be overcome by rationing credit to the socially optimal level.

IV. CHARACTERISTICS OF CREDIT COOPERATIVES

Various types of cooperatives are engaged in rural financial activities. Two main categories can be distinguished, namely financial cooperatives whose primary business is funds intermediation, and agricultural cooperatives who are primarily engaged in the provision of agricultural services or joint production, but may offer credit as an adjunct to these functions. Financial cooperatives can further be divided ınto relatively small, savings-funded credit unions, government sponsored credit cooperatives and cooperative banks. In many developing countries credit unions are not re~ognized as formal financial institutions and consequently lack access to central banking services.

The present discussion covers all agricultural cooperatives providing financial services to farmers, but highlights the differences where these are pertinent to strengths and weaknesses.

Credit cooperatives as formal financial institutions had their origin in 19th century Germany. This innovative financial institution was initiated by R.W. Raiffeisen, the mayor of a provincial town, who was motivated by concerns for the poorer segments of his constituency. The Raiffeisen rural credit union model was based on membership and equity contribution of the wealthy as well as the poor, on unlimited joint liability and on voluntary leadership, typically by wealthier members. The involvement of wealthy and respectable individuals helped to create confidence with outside sources of funds. Over time, the unlimited joint liability feature was modified, as it was recognized that it acted as a deterrent for wealthier individuals.

Cooperatives are operated democratically with each member having one vote. Equity is contributed by members and leadership is voluntary and unpaid, although professionals can be hired for day-to-day administration and management. To become a member of a credit cooperative, a small initiation fee is paid together with an initial capital contribution; to remain an active member, regular capital contributions must be made. These contributions do not only provide the institution with its capital but are also the basis upon which the amount that a member can borrow is determined. Most cooperatives allow members to borrow from three to five times the amount of their capital contribution. Cooperative profits are distributed to their members in form of dividends based on their equity contribution or are retained to increase the capital base. This insures that benefits accruing from financial intermediation go to members rather than external intermediaries and their shareholders.

Due to the capital contribution requirement, effective interest rates on loans are higher than stated rates (except in the very unusual case where the dividend payout rate is equal to or higher than the stated interest rate). Effective interest rates on loans may also be increased by requirements to capitalize a portion of the loan (typically 5 or 10 percent) or by fees and commissions similar to those charged by other lenders. A cooperative with liquidity shortage may have to ration the available credit, thus reducing the amount that members can borrow in relation to their paid-in capital. This, of course, also raises effective interest rates on loans and thereby reduces demand for credit; but it does nothing to increase the supply of funds available for lending.

While credit cooperatives are typically initiated with capital contributions from their members, they may also mobilize deposits. Most pure credit unions are very active in this area and the lion's share of their funds for loans come from member deposits and share capital. Reliance on self-financing is obviously a source of strength, as it enhances the perception among members that they have a stake in the institution, and thus contributes to good repayment performance. Other credit cooperatives frequently depend on external funds. These can come from commercial sources such as private banks, but more often they are from apex institutions or development banks which have in turn obtained them from governments or international donor agencies.

Credit cooperatives rely on credit committees to approve loans. Processing time and transaction costs vary significantly across regions and countries. Likewise, cooperatives may require no collateral, cosigners only, or fully-documented mortgages. Unlike banks, cooperatives usually offer automatic loans that are approved and disbursed almost immediately and may amount up to 90 percent of a member's capital contribution. This is facilitated by the fact that the loan is fully secured by the borrower's equity contribution.

The following section discusses potential advantages and disadvantages of rural credit cooperatives.

(i) Technical economies of scale: A cooperative provides financial intermediation services at a local level, thereby saving members significant transaction costs, as they would otherwise have to spend time traveling to urban or regional centers where bank branches are located. Similarly, transaction costs to external lenders may be reduced, as they interact with the cooperative as a whole rather than with its individual members.

(ii) Provision of financial services to otherwise neglected segments of the population: Credit cooperative can offer institutional financial services to people who would otherwise not have access to them. Commercial and agricultural banks are often not willing to service small savers and borrowers because the amounts involved are too modest in relation to the entailed overhead costs. Credit cooperatives, however, can often provide these and other services (e.g. insurance) as they are based on membership participation, voluntary leadership and efficient intermediation between savers and borrowers at the local level.

(iii) Familiarity between cooperative management and members: Because cooperatives are local institutions, management and staff are familiar with the members and can base lending decisions on more accurate information than other institutional lenders. Close ties among members can also enhance the incentive to repay debts, as potential delinquents feel responsible towards their peers whose funds are at stake. Similarly, these links can add a dimension of community pressure on delinquent borrowers, thus reducing the incidence of default.

(iv) Improved bargaining position: Credit cooperatives which want to borrow from external sources can increase their attractiveness as borrowers to external lenders because members pool their demand for credit and contribute equity to the enterprise. Their advantage stems from a lower default risk due to the members' shared obligation to repay the debt to the external lender and savings on the external lender's transaction costs. These aspects, similar to those entailed by group lending, give cooperative members access to external credit on better terms and in greater volume than they would have as individuals.

(v) Risk pooling through joint liability: Like group lending operations, credit cooperatives can help reduce default risk through joint liability.

Larger membership enhances the risk reduction effect of joint liability (if members' activities are not highly correlated), but it may dilute other advantages of credit cooperatives such as close familiarity between management and members. External lenders trying to enforce joint liability upon credit cooperatives face the same practical problems as they do with group lending. Therefore, external lenders' denial of future credit to the cooperative is again a potential penalty of considerable importance.

Some of the above advantages can be enhanced when the cooperative is also involved in joint activities other than credit, such as marketing. Delinquency on repayment can, for example, be penalized by denial of access to cheaper inputs which the cooperative obtains as a wholesale buyer. If the nature of the main product produced by members requires joint marketing the farmers' debts can be settled when sales revenues are collected. In these cases, a member's repayment behavior will be affected by considerations beyond the interaction on credit alone. External lenders will also recognize these advantages and the image of the cooperative as a viable financial intermediary will improve.

The cooperative structure entails not only advantages, but also potential weaknesses which in part overlap with those present in group lending. The following section discusses some of these weaknesses and possible countermeasures:

(i) "Moral hazard" behavior: Under a system of risk sharing through joint liability, all members of a cooperative share the cost entailed by the default of any member (Braverman and Guasch, 1988). The social cost of individual default thus exceeds its private costs. In the absence of effective enforcement mechanisms this may lead to a higher incidence of defaults, which, if not effectively penalized, will be imitated by other members, thus bringing about the demise of the institution. The other side of the coin is a tendency of individual members to borrow more than is socially optimal. Likewise, they may undertake riskier activities than is optimal because the down-side risk is shared. Enforcement of loans and penalization of default, even when potentially feasible, may not actually be pursued in smaller cooperatives. This problem can arise if the management is linked to the defaulters in other ways (e.g. kinship, political affiliation) and is therefore reluctant to antagonize them. Thus, although familiarity between cooperative management and its membership in smaller cooperatives can be an important asset in developing a good loan portfolio, it can also be a source of weakness.

(ii) Inadequate administrative ability: The democratic principle of credit cooperatives may bring unqualified individuals to leadership positions. Many cooperatives recognize this problem and hire financial and administrative staff with better qualifications. However, when properly qualified personnel is to be employed, administrative costs are higher. From a social welfare point of view it might be more efficient to employ this personnel in an organization handling larger volumes of transactions (such as a bank). Because the elected leadership is often not well versed in financial and administrative procedures and the hired non-member professionals have to deal with magnitudes much larger than members of the leadership have ever experienced, cooperatives are exposed to another source of "moral hazard": hired employees, who do not have social kinship with cooperative members may be tempted to take illegal advantage of their situation. Such tendencies can be checked by an efficient auditing system, which, because of economies of scale, should reside with a super-cooperative organization.

(iii) Concentration of the portfolio: The very nature of rural credit cooperatives as a local organization consisting of individuals who live in geographical proximity and engage, most likely, in almost identical economic activities implies a high degree of covariation in members' liquidity and incomes. This factor may be of little significance in a low-risk environment, but as agricultural production is subject to various risks, it has significant implications for rural credit cooperatives. If membership in a local credit cooperative is limited to individuals engaging in the same or very similar activities the loan portfolio is likely to suffer from inadequate diversification. In addition, cash in- and outflows are synchronized, which may lead to liquidity bottlenecks at the beginning of the agricultural production cycle. These arguments would suggest larger, community-based credit cooperatives with mixed membership. Homogeneity is thus not necessarily a desirable attribute for rural credit cooperatives. This distinguishes them quite clearly from lending groups where homogeneity is rather essential for success. The handicap of larger and more heterogeneous cooperatives, of course, is that the cooperative leadership will be less familiar with the individual members and may thus lose one of its major assets with regard to efficient and facilitated lending decisions.

An institutional solution to the problems of synchronized cashflows and limited risk diversification is the creation of a nation- or regionwide apex organization where various cooperatives share membership and equity. Thanks to its wider geographical coverage the apex organization can benefit from greater risk diversification and a more balanced cash profile. These advantages enable the apex organization to act as a lender of last resort, helping its individual member cooperatives overcome liquidity bottlenecks. Although the apex organization is likely to have a more diversified membership, local cooperatives may still want to aim for members of varied backgrounds to increase their base for deposit mobilization. Thanks to its increased size the apex organization can also afford economies of scale in services which would be too costly or inefficient for individual cooperatives, for example staff training and auditing. Given the larger volume of funds involved and the greater degree of diversification, the apex organization can also acquire outside funds at more advantageous terms than its individual members.

V. EXPERIENCE WITH GROUP LENDING

As highlighted by the previous section, group lending has two potential advantages over lending to individual farmers: it can reduce transaction costs for borrowers and lenders, and improve repayment rates through joint responsibility and peer pressure among group members. Consequently, group lending can enable a larger number of small farmers to be serviced with credit from institutional lenders.

This section discusses whether and under what conditions these pctential advantages of group lending have materialized in a number of group lending schemes.

A. Group Formation

Several studies suggest that the performance of a group lending scheme depends much on the way groups are formed, relationships among group members and the functions and responsibilities a lending group assumes. In many countries the costs of group formation and technical assistance have been borne by government organizations such as extension agencies, and lenders have thus been freed from group formation expenses. In other cases, such as the group lending schemes in Ghana, the Dominican Republic, Thailand and the Grameen Bank in Bangladesh, group formation has been left to the initiative of the borrowers who also bear the related costs. Only rarely have lenders themselves assumed the administrative costs of forming borrowing groups. Where this has been the case, like for example in Nepal, an attempt has been made to keep group formation costs low by making loans through existing village organizations or traditional informal groups. Use of these same channels has also kept group formation costs low in Malawi, where groups are formed with the help of extension agents. Group formation along communal and kinship lines is also believed to be at the source of low default rates in this country.

A crucial feature for adequate performance of group schemes is group size. Small size permits closer ties among members and can reduce costs of information within the group. It also facilitates loan supervision and increases the group's ability to impose accountability on its members. Practice has shown that group size is directly related to delinquency rates. In Ghana, large groups with close to 100 members performed markedly worse than small groups of 10 or 20. Similarly, in the Dominican Republic loan recovery rates decreased significantly as group sizes increased. In Zimbabwe, groups of 20 or more proved more susceptible to default than smaller groups. A successful group lending program of the Thai Bank for Agriculture and Agricultural Cooperatives (BAAC) limited group membership to 30 at the most, but typically groups consisted of 12 to 15 members. The Bangladesh Grameen Bank, with a loan recovery rate of over 98%, found that even groups of ten persons proved too large to guarantee cohesiveness and joint responsibility among members. Consequently it limited group size to five. It is obviously questionable whether very small groups allow for much scale economies and cut down on transaction costs. On the other hand, as the Grameen Bank example shows, joint liability is more easily imposed upon small groups. Since their repayment rates are generally higher, total lending costs are significantly reduced. Increasing group size is often a result of deteriorating credit services. If the intermediary's financial situation no longer allows to service a large number of groups, while demand for credit remains unchanged, group size inevitably increases. This in turn affects loan repayment rates and further worsens the intermediary's situation. This vicious circle must be prevented by allowing the financial intermediary to maintain a sound financial situation through full cost recovery.

Besides size, group homogeneity has proved to be important for effective group guarantee of loans and supervision of loan utilization. In Malawi and some areas of Bangladesh, where group lending has performed exceptionally well, loans are only made to relatively homogeneous groups. In Malawi groups are always from the same village and within the village they are often further affiliated through kinship. The Grameen Bank in Bangladesh makes only loans to groups from the same village, consisting of memoers of the same sex with a similar economic background. The Thai BAAC group lending scheme only lends to homogeneous groups which engage in the production of the same crops. An example of where lending to large groups based on administrative definition rather than social coher .on has failed, is the smallholder lending program in Madagascar. In this program loans were channelled through the "fokontany" (the lowest level of local government) and access to new funds was denied to the whole entity if the repayment rate fell below 95%. It was soon found that the guarantee of the "fokontanys" was meaningless and unenforceable. Loan delinquency almost always exceeded the allowed quota so that only very few groups remained eligible after a few years and the program had to be abandoned.

Management of individual borrowing groups is a further crucial aspect of a well functioning group lending scheme. Self-managed groups have generally performed better than groups whose activities were fully managed by outsiders such as extension agents or personnel of the financial intermediary. To the extent that groups have qualified members, self-management with respect to information gathering, loan supervision, collection, recording and treasury functions also allow to reduce lenders' transaction costs, although they add to the borrowers' transaction costs. Adequate training is, however, important if a borrowing group is expected to assume managerial responsibilities. In this respect the Grameen Bank Project goes through painstaking measures, with each newly formed group receiving seven days of continuous training by a bank worker. Following this training, groups meet weekly in a local center consisting of about five groups. Loan applications and other administrative duties are processed through these centers. Bank workers continue to work with the centers and groups throughout the period of outstanding loans. Due to this thorough training, transaction costs to the lender and borrowers are relatively high, but they seem to be essential for the bank's good performance. To the extent that the same group borrows repeatedly, transaction costs should, however, decrease over time. While no quantitative information of transaction costs to borrowers is available, the Grameen Bank's administrative costs (including provision for bad debt) amounted to 18.1% of outstanding loans in 1986, with total operating costs (administrative costs plus borrowing costs) extending to 21.7% (Hossain, 1988) [2],[3] .

[2]. As a comparison, administrative costs of loans to small-scale farmers in the Philippines were found to vary between 3% and 10% of the amount lent. The same costs for the Jamaican Development Bank were estimated at 11.5%, and at 26.3% for the National Agricultural Development Bank in Honduras (Cuevas, 1984). It is not clear whether these comparative figures include depreciation costs and provision for bad debts.

Operating costs as a share of total amount of funds (i.e. total liabilities) in the Grameen Bank ran at 6.5% and 6.7% in 1985 and 1986 respectively. These figures amounted to 6.2% and 6.4% when depreciation and provision of bad debts were netted out. A study of other Bangladesh banks making loans to small farmers came up with figures varying between 0.9% and 3.9% for 1985 (net of depreciation and provision for bad debts). However, all of these banks faced severe loan

Finally, previous experience with group activities in general and with group lending in particular, also seems to have a positive effect on group lending performance. To the extent that groups are formed by group members themselves, it is conceivable that previous experience allows to identify members with good repayment records and exclude others. In Zimbabwe, for example, it was found that groups which had been formed earlier for purposes other than credit, and borrowing groups which had existed for a certain period of time, performed better than newly formed credit groups. In Malawi, where credit groups are newly formed every year, group credit was preceded by group input supply so that farmers were already familiar with group activities before the credit program was launched.

B. Liability and Loan Recovery

Loans can either be made to the group as a whole or to individuals with the group acting as a conduit or a guarantor. If the loan is made directly to individuals, liability can take one of three forms. If individual liability prevails, individual group members bear the sole responsibility for repayment of their loan and the group acts only as a conduit who can either provide the lender with information about its

recovery problems, with total recovery five years after due date averaging only 60% (compared to 98.6% after two years of issue for the Grameen Bank). (Srinivasan, 1987).

[3]. It should be noted that part of these relatively high costs reflect costs incurred by the rapid expansion of the Grameen Bank during this time. Hossain (1988) has estimated that nearly half of the existing administration costs may be due to start-up costs, which should be phased out once the new branches operate at full capacity.

members or assist its participants with loan application. In the case of joint voluntary liability, individuals are only responsible for the repayment of their own loan, but all group members are denied access to future loans if one or several group members fail to repay. In the case of mandatory joint liability, each group member is responsible for the repayment of all loans made to group members and access to new loans is denied to everybody as long as not all outstanding loans have been repaid. Mandatory joint liability normally prevails if the loan is made to the group as a whole. Experience does not clearly indicate whether lending to individuals or lending to a group as a whole yields better results. On the other hand, practice has shown that joint liability has positive effects on loan repayments if certain conditions are met. In Bangladesh and Malawi, where loan recovery rates have been 98.6% and 97.4% respectively, loans have been made to and must be repaid by the individual (Hossain, 1988; Schaefer-Kehnert, 1983). However, the group is jointly liable for default by any of its members and future access to credit is denied to the entire group in case of default. The BAAC's program in Thailand has achieved repayment rates of 82% (vs. an average rate of 66% for comparable loans with individual liability) by lending to individuals under mandatory joint liability. Its experience has also shown that lending to groups collectively results in higher default rates because no-one accepts responsibility (Tohtong, 1988). A comparative study of different group lending schemes in Zimbabwe has found that in normal years current recovery rates for loans made to a group were up to 40% higher (92% vs 53%) than those of loans to individuals and up to 20% higher than those for loans to individuals with joint liability (Bratton, 1986) [4]. However, this trend was completely reversed in a year of exceptionally bad harvests. Loans made to a group as a whole then performed worst. This seems to suggest that under unlimited liability borrowers are only likely to repay if they believe that the majority of their fellow members will also repay. If an individual repays while the majority of the group defaults, he or she would be made worse off by having paid their share and subsequently also being responsible for the share of delinquents.

Regardless of whether loans are made to groups or individuals, all group lending projects reviewed impose some form of joint liability on the group as a whole. In certain cases liability is limited to denial of future access to credit, in others liability is unlimited and each member is formally responsible for all outstanding loans made to the group. In practice, however, enforcement of payment in joint liability programs has been difficult, and the common course of action has been denial of future access to credit. Experience has shown that this threat only works as long as the lender is in a position to provide access to favorable and timely credit services in the future. In Bolivia, the Philippines and the Dominican Republic, for example, loan delinquencies increased rapidly as lenders' services deteriorated and became less timely. In contrast, where access to future credit has been assured, groups have often been found to put significant pressure on their defaulting peers. In some cases intra-group lending has been used to assure timely repayment. This has often been the case in the Grameen Bank program, where credit is given to group

[4]. More specific detail on similarity of loan size, risk, and credit use is, however, not available.

members in different stages, with subsequent members only receiving their share after their predecessor has been satisfactorily repaying for a certain period of time.

Group members are believed to have a further incentive to repay their debts if a common interest other than credit is also at stake. Evidence to substantiate this claim is scant, because groups are generally formed for the sole purpose of getting access to credit. In Bangladesh, Malawi and Nepal a common interest has been created by retaining between 5% and 10% of the total value of the group loan as a deposit. While this capitalization increases effective interest rates on the loan, the deposits earn interest and can be used to cover shortfalls in the repayment of the group's loan. In Malawi and Nepal the entire deposit plus accrued interest is returned to the group upon repayment of the entire debt. In Bangladesh only part of these forced savings is returned to the group after repayment of the debt. In times of need, group members are entitled to borrow up to 50% of this deposit as an interest free loan for specific purposes. This is believed to protect loan quality by preventing members from liquidating their capital or going to informal lenders in times of need. To judge from the relatively high repayment rates in these countries' group lending schemes, the organizational good created from this forced savings function seems to work effectively. A group lending program in the Philippines creates a common interest by having a group of small grain producers pledging their crop against the group's loan. While the program is still at its initiating stage, repayment rates have so far been outstanding at 99.7%.

Finally, the Grameen Bank's experience also suggests that loans made to rural poor are more easily recovered if they are collected in regular (even weekly) small amounts suitable to the circumstances under which these people earn and live. This approach may, however, have to be adapted to constraints imposed by production cycles. The procedure is also likely to increase transaction costs for both borrowers and lenders, but the advantages of significantly higher recovery rates must be considered against these drawbacks.

C. Reduced Lenders' Costs

While improved loan recovery rates are the crucial factor in cutting down lenders' costs and risks, reduced administrative costs due to scale economies are further expected to limit lender transaction costs. If functions such as loan application, information gathering on potential borrowers, loan supervision and collection can be passed from the lender to the borrowing group the lenders' administrative costs are likely to be reduced. This in turn would enhance more lenders to make credit available under similar conditions and hence, the number of small farmers with access to credit would increase. Review of a sample of 15 group lending projects does not provide a clear-cut answer in this regard. From the reports which provided information on transaction costs, it can be concluded that lenders in the Philippines, India, Nepal, Bolivia and the Dominican Republic benefitted from scale economies in administrative costs when making loans to groups. However, in most cases this was only true because lenders were not required to carry group formation costs. In the Dominican Republic these were borne by the refinancing agency, while in

Bolivia, Ghana, Malawi, Thailand, Bangladesh and Nepal the government provided technical services related to group formation. The most striking example with regard to group formation costs is the Zimbabwe Agricultural Finance Corporation's (AFC) group lending scheme. This program only lends to groups that were formed and formerly involved in another group lending program with limited liability. The AFC's administrative costs for its group lending scheme are minuscule (1% of loan capital) compared to the costs of the group 'ending scheme where groups have to be formed and costs of lending tr individual small farmers (12% and 11% of loan capital, respectively). In fact, administrative costs of lending to groups of small farmers compare favorably to those of lending to large-scale commercial farmers (Bratton, 1986). AFC's low administrative costs in the group lending scheme suggest that subsequent to startup costs associated with group formation, group lending programs become much more advantageous in terms of decreased administrative costs.

D. Borrowers' Costs

Except from India and the Philippines, all group lending studies which reported information on borrowers' costs indicated that borrowers incurred lower costs when borrowing as a group member rather than as individuals. For example, a comparative study of borrowing expenses in the Dominican Republic found that the effective rate of borrowing costs on an annual basis was 15% for a group and 18% for individual borrowers (Adams, et.al. 1981). Generally, group borrowers enjoyed advantages of savings on fees for collateral registration, expenses on certificates needed for loan application and on time and transportation costs of visiting lenders. It must be borne in mind, however, that group leaders may incur administrative costs and time loss that are not accounted for in monetary terms. In addition, costs to individual group members may outweigh costs of individual borrowing if certain members default and others are held liable for their share. None of the reviewed studies provided data on these costs.

VI. EXPERIENCE WITH CREDIT COOPERATIVES IN LDCS

Like group lending, credit cooperatives are expected to have two distinctive advantages over other financial institutions involved in rural lending: transaction costs to borrowers and lenders can be reduced and repayment rates increased. In addition, local credit cooperatives can offer their members a wider range of services (relating to both savings and credit) than other financial institutions or informal lenders. Unfortunately, the literature on credit cooperatives in LDCs provides rather scant information about such crucial elements as operating expenses and transaction costs to borrowers, lenders and savers.

Overall, the record of credit cooperatives as an instrument for development of rural finance has been mixed. High delinquency rates may be the major reason for failure in unsuccessful credit cooperatives, but they should be viewed as a symptom rather than the underlying cause of the failure [5]. Areas of particular importance for successful credit cooperatives include:

(1) adequate planning and education of members;

(2) organizational and structural issues, such as clear division of responsibilities between primary and secondary organizations;

(3) availability of supporting infrastructure, proper management and oversight;

[5]. For example, in Thailand over 50% of loans made through credit cooperatives have been in arrears between 1981 and 1986, while the arrears rate of loans made to individual farmers has varied between 10% and 30% (around 10% of long term loans, 20% short term loans, 30% medium term loans) during the same time period (BAAC, Annual Report, 1986). Similarly, in India, the credit cooperatives system has suffered from low recovery rates oscillating around 50%. (The World Bank, SAR, Nabard Credit Project, 1986).

(4) avoiding inappropriate governmental interference.

Below we examine each one of these points in light of experiences in different countries.

A. Importance of Adequate Planning and Education

Membership participation is one of the cornerstones of self-help organizations. Active member involvement is required to foster institution building at the local level, which in turn is expected to promote economic self-sufficiency among members. In order to understand the principle of self-help, and the rationale behind credit cooperatives in particular, cooperative members must comprehend that they can benefit from organization and collective action. The establishment of a cooperative is easier in an environment generally supportive of cooperation and collective action. As was pointed out in the section about group lending, cohesion among participants is easier to achieve with limited membership, a restricted field of action and the participants' active involvement in the decision making process. These principles were very much followed at the initial stage of credit unions in industrialized market economies. The Raiffeisen model built upon small membership, a limited field of action, voluntary management and unlimited liability. The movement clearly drew its initial strength from spontaneous and voluntary initiatives of farmers and leading citizens who were willing to act as organizers and managers. The expansion of these credit cooperatives came gradually. Only when they got involved in input supply and marketing were limited liability and full-time paid managers introduced (Schaefer-Kehnert et.al., 1986).

Promotion of cooperatives can be carried out by three different sectors, namely the government, non-governmental organizations or the cooperative sector itself. Regardless of what agent takes the initiative to promote the cooperative, the members' felt need and self-reliance are essential to success. In many developing countries the government has taken upon itself the initiative to organize farmers in cooperatives. Instead of starting out with a single purpose cooperative, such as, for example, a credit union, governments have often immediately launched a comprehensive multipurpose cooperative offering input supply, as well as marketing and financial services. What has been ignored during these ambitious initiatives is that top-down imposition of such enterprises also involves top-down decision making and exclusion of active membership participation. It is hard to imagine that cooperative members will take an active interest in these organizations and view them as more than just suppliers of cheap services unless they experience a sense of ownership. Furthermore, management of these large enterprises often prohibits direct contacts between leadership and members at the primary level. Consequently, a personal relationship of confidence between the leadership and members can not develop. This relationship, however, is crucial for the well functioning of a credit cooperative. Members' confidence in the management is needed to mobilize savings and encourage loan repayment. The management's knowledge of members' situations, on the other hand, is essential in the appraisal of creditworthiness. Further, if credit is provided in conjunction with other benefits, such as subsidized inputs, farmers often fail to understand that they are beneficiaries of a loan rather than a grant. This evidently has a detrimental effect on loan repayment rates and will eventually affect the financial viability of the cooperative. Many of these government-established cooperatives have only been able to survive with the help of a large influx of outside funds. This in turn has precluded a sense of joint ownership and peer pressure from working as a driving force behind loan repayments, as cooperative members did not see their own capital at stake.

Reports of malfunctioning cooperatives which were subject to top-down organizations and decision making are numerous. A study on cooperatives in Southeast Asia, for example, claims that insufficient preparation of members, especially the absence of a sense of ownership among members, has been one of the major reasons of failed cooperatives in India, Thailand and the Philippines (FAO,1986). Similarly in Jordan, cooperative members have little sense of ownership and responsibility because their managers are appointed by the government. The relatively poor performance of credit cooperatives in Pakistan has been largely attributed to the fact that government workers, rather than cooperative managers, appraise and collect loans. A striking example, which indicates that the functioning of credit cooperatives depends on the way the system is organized and promoted comes from Malawi. In response to the complete breakdown of the Malawi multipurpose cooperative system, the previously discussed group lending program was launched and resulted in one of the most successful programs of its kind.

This is, however, not to say that government support is unnecessary for the development of the cooperative movement. Most failures of government-promoted cooperatives have been due to the fact that governments were not prepared to accept the long gestation period necessary for cooperative development. The South Korean cooperative system is an example where top-down promotion of the movement and effective government support have yielded excellent results. It must, however, be noted that the Koreans have had a long tradition of group organization and responsibility for savings, credits and other purposes before the cooperative system was launched by the national government. Furthermore, a war and two landreforms had eliminated major wealth differences within the rural population. In addition, the Korean movement was put forth with enormous educational campaigns at the member as well as the managerial level. A bottom-up built credit union movement developed parallel to and independently of the government launched cooperative system. As these bottom-up organizations grew rapidly and were very successful in lending and savings mobilization, the government-launched cooperatives eventually adopted methods similar to those of the credit unions in dealing with rural credit and savings mobilization.

Lacking comprehension of the cooperative system's principles has not been limited to member participants. In fact, there has often been significant confusion within governments and international donor agencies about the nature of credit cooperatives as viable financial institutions. Although cooperative profits are redistributed to the participating members rather than outside stockholders, cooperatives should nonetheless aim at adequate profitability. Confusion about the profit-making nature of credit cooperatives results not only from the different ways in which profits can be distributed, but also from the discourse that is often used to promote the cooperative movement in developing countries. This rhetoric ignores the effect of individual self-interest which often motivates membership in a credit cooperative. Thus, it has been widely believed that a sense of community responsibility will entice members to work for the cooperative voluntarily and without pay over a long period. This belief has impeded a careful examination of the incentives that frequently motivate members to participate in cooperative activities. In particular, the board of directors and the credit committee almost always play important and time-consuming roles in the management of a cooperative. It would therefore not be surprising to find that the individuals who participate in these activities capture a disproportionate share of benefits as implicit compensation for their voluntary labor. Often, the desire to keep costs at low levels has also made it difficult for cooperatives to pay adequate salaries to secure and retain skilled managers. This problem is especially pertinent when such salaries appear high relative to the incomes of cooperative members in other leadership positions.

Cooperative rhetoric may also have prevented some credit cooperatives from charging adequate interest rates on their loans, even when those were not government controlled. For example, it has been reported that credit cooperatives in Peru and Togo have charged interest rates at least 10% below what would have been required to cover their operating costs and pay competitive rates on their members' savings deposits. As a result, Peruvian credit cooperatives could not secure enough savings to satisfy the demand for cheap credit, which in turn had to be rationed. This led to a decline in active membership and to serious repayment problems, as members saw no point in repaying old loans when prospects for obtaining new credit were bleak. Another factor inducing delinquency was the high rate of inflation prevailing at the time.

B. Organizational and Structural Issues

Most credit cooperatives are organized in a two- or three-tier system, with a federation of national or regional cooperatives at the top and the local (primary) organization providing services to individual members at the bottom. Regional or national umbrella organizations have a good potential because they can benefit from larger scale economies than their primary associations and contribute to risk reduction through portfolio diversification. In many countries apex institutions have successfully assisted their primary organizations with managerial, auditing and educational tasks. In numerous countries the apex institution acts also as financial intermediary providing liquidity management and intermediary services to its member organizations. In South Korea the national organization also plays an important role in assisting primary organizations with investments outside the agricultural sector. In addition, it provides its member associations with excellent auditing services. However, problems have arisen in cases where the umbrella organization has directly provided financial services to individual customers and the roles of the secondary and primary organization were not clearly defined. In Bolivia, for example, the national organization, FENACRE, has begun to make loans directly to individuals with funding from an international organization. It has also engaged in deposit mobilization, directly competing with its primary associations. In Niger and Honduras, the lack of clearly divided responsibilities between local associations and the umbrella organization introduced greater possibilities of nonrepayment, as it was in many cases not clear who was responsible for allocation and collection efforts (Cuevas et. al, 1988; Vogel, 1988).

Heavy financial inter-reliance of first and second order organizations can also entice moral hazard behavior among borrowing associations who tend to overborrow and engage in riskier undertakings than they would if they could not rely on the apex for funds. This was found to be the case for many primary cooperatives in Israel, where loans from regional organizations were the single most important liability of numerous primary cooperatives. That many local organizations had overborrowed and the financial health of regional organizations rose and fell with the economic performance of their members became clear when funds became scarce at the macro-level and real interest rates skyrocketed as a result of anti-inflationary government policies in 1985. As outside funds became scarce, regional organizations collapsed one by one, leaving their member associations without credit and other vital supplies. Although structural weaknesses in the cooperative system could not be held solely responsible for the financial crisis in Israeli agriculture, excessive financial inter-reliance between first-and second order cooperatives is believed to have played a crucial role (Kislev et al., 1988).

The fact that credit cooperatives are owned and operated by their own clients subjects them to an inherent conflict of interest between the two owner categories, depositors and borrowers. As each party is trying to enhance its interest, the cooperative's policy with regard to loan collection enforcement, moral hazard and interest rates is likely to reflect the interest of the dominating group. Although credit cooperatives were originally conceived as comprehensive financial intermediaries offering credit and deposit services, cooperative rhetoric and government intervention have often led them to pursue a "cheap credit" policy at the expense of the depositors. This policy, made possible through unduly low interest rate ceilings and access to subsidized external credit has affected the composition of the credit cooperative's clientele as members joined to have access to cheap loans rather than to use the organization's savings services. The results of this strategy are stunted savings mobilization, financial dependence on (sometimes uncertain) external sources and, "borrower dominated organizations open to problems of moral hazard and risk exposure in their administration" (Poyo, 1988). The pressure to transfer profits to members can also lead to inadequate allocation of retained funds as reserve.

Reliance on members' savings and capital contribution is an important element in successful credit cooperatives. Indeed, that credit cooperatives can play a vital role in rural savings mobilization has been shown by studies describing experiences in Guatemala, Togo, Cameroon, Rwanda, Bangladesh, Taiwan, South Korea and many others. Extensive savings mobilization campaigns and innovative offers for deposits adapted to local rural conditions have helped credit unions to increase their own funds and attain near self-sufficiency in many of these countries. In Rwanda, where credit unions were created for the specific purpose of rural savings mobilization, membership grew by 47% between 1977-86, with real savings deposits growing at an average annual rate of 34.8% and outstanding loans at 54.4%. In Togo and Cameroon these numbers were 25% and 14.5% for savings respectively, and 33.3% and 32.4% for loans respectively. In all three countries credit union savings and loans grew at significantly higher rates than the national average (Cuevas, 1988) [6]. The proposition that credit cooperatives which rely heavily on members' voluntary savings as funds for their loans generally fare better in terms of loan recovery can be confirmed with examples from Honduras, the Dominican Republic, Cameroon, South Korea, Taiwan and others. A credit cooperative pilot project in the Dominican Republic emphasized technical assistance, savings mobilization and educational campaigns and a significant increase in real interest rates, and resulted in a substantial rise of membership. As a result, savings and concurrently loans grew significantly faster in participating unions than in others. And most indicative of all, loan delinquency rates dropped markedly, to below 10% (from rates as high as 50% in certain cases) (Poyo, 1988). [7] A survey of 18 credit cooperatives in Honduras revealed that the financial health of these organizations was directly related to interest rate policies. Credit cooperatives with higher rates benefitted from higher deposits and lower loan delinquencies

[6]. Although it must be borne in mind that these figures pertain to a national average of all credit unions, it can be concluded that union savings and loans grew significantly in rural areas, as rural credit unions outnumber urban unions.

[7]. An interesting fact about the increased interest rates in the Dominican project is, that effective interest rates remained basically constant despite a doubling in nominal rates. Credit unions required share accounts as compensating deposits. When interest rates were low and funds scarce this balance amounted to up to 67% of the value of the loan, thus significantly increasing the effective interest rate on the loan. With increased funds available from higher savings, this balance was significantly reduced allowing maintenance of constant effective rates despite doubling nominal rates.

and therefore experienced less liquidity problems (Poyo, 1983). In the mid-60s, an interest rate reform and savings mobilization campaign also led to a boost of voluntary savings deposits in South Korea. The proportion of total savings deposits held by rural cooperatives rose from 9% to 16% within a year of the increased rates. The Korean rural cooperative credit system has expanded enormously over the last 15 years and now satisfies about 80% of short term rural credit requirements (Yun, 1987). Local cooperatives have constantly been increasing their own funds thanks to repeated and extensive savings mobilization campaigns and constantly growing diversification of rural credit markets with a multitude of different deposits tailored to the needs of the local farming population. The agricultural cooperatives' mutual credit system carries higher interest rates than other banking institutions, and this is believed to have been a major factor behind the cooperative's deposits growing faster than those of banks (Yun, 1987). While repayment rates in South Korea are generally high, it is interesting to note that low interest loans formed over 98% of the National Agricultural Cooperative Federation's overdues in 1979 (Lee, 1984).

A further question relating to cooperative structure is whether credit cooperatives fare better as single purpose cooperative, such as credit unions, or as multipurpose organizations. Multipurpose cooperatives have theoretically several potential advantages: farmers can satisfy their diverse needs at the same place and therefore save time; the cooperative may gain access to more complete information about a loan applicant; savings deposits and loan repayments can be linked to revenues from crop marketing and production credit can be granted at the same time as inputs are delivered. An example where savings mobilization has been successfully linked to crop marketing is the Kenyan Cooperative Savings Scheme. Under this system, receipts from the marketing of coffee are directly credited to an interest-bearing account with the cooperative. This system has very successfully increased funds available for rural credit. It must, however, be noted that some of this success must be ascribed to the fact that the cooperative is dealing with an export crop for which the farmers can hardly find any other outlets. Whether the scheme could have worked as successfully with crops that can be marketed outside the system is questionable.

Some of the problems of incorporating credit facilities into multipurpose associations have already been noted above. Promotion of multiple services at the same time is likely to heavily strain the organization's managerial and financial resources. Multipurpose cooperatives are also more likely to be subject to government interference, as they can be used to promote a multitude of policy components. Carrying out government policies, however, implies increased reliance on external funds, which, in turn, affects the autonomy and self-sustainability of cooperatives. The performance record of multipurpose organizations, especially those which engage also in cooperative production has generally been poor because they are subject to an inherent conflict between individual production maximization and cooperative production objectives. Multipurpose activities can also endanger credit operations, if these yield surpluses which are then used to finance other affairs. A case in point are the Taiwanese Farmers' Associations. These experienced serious difficulties because their business components drained resources from the profitable credit operations (Sheu, 1980).

Across developing countries, the most successful credit cooperatives have been those which have limited their activities to savings mobilization, lending and related financial services, and largely depended on their own funds. It seems thus fair to conclude that credit cooperatives should not be expanded or linked to other cooperative activities unless particularly conducive circumstances and adequate management capacity exist. For example, a linkage between a marketing and credit cooperative may provide opportunities for better loan collection if farmers have no alternative marketing channels. The link should not be attempted if managerial capacities do not allow for it. The Korean cooperative system did not link credit to other services at the local level until a sound managerial network existed. Although the National Agricultural Cooperative Federation (NACF) took over all the facilities and manpower of the government's agricultural bank right from the beginning, a cooperative financing system involving local cooperatives was not established until almost 10 years after the founding of the multipurpose cooperative organization. Initially the NACF channelled largely government funds. Extensive training of cooperative personnel at the national and local level preceded a step-by-step development of the nationwide cooperative finance system. Local cooperatives did not get involved until they had grown strong from their involvement in other cooperative activities and the NACF's credit and banking business had developed into a financially and organizationally strong entity.

C. Availability of Supporting Infrastructure, Proper Management and Oversight

Similar to Agricultural Development Banks and other rural financial institutions, credit cooperatives have often suffered from inadequate leadership, a lack of well defined managerial responsibilities and insufficient accounting and controlling facilities. The ability to track financial performance is a prerequisite for sound management and overall performance cf any credit institution. Loan collection and denial of access to new loans before outstanding debts are settled depends on adequate record keeping. Yet instances where records of loan collection have been inaccurate or nonexistent are not uncommon. For example, a survey of credit cooperatives in Niger found that less than half of the local leaders were in possession of a record indicating who was eligible for a loan and less than a quarter had records indicating the amounts received by each farmer. Such information was believed to be kept in memorized form by most leaders. (Cuevas et.al., 1988).

One reason for ineffective cooperative management is lack of adequate training, or the frequent focus of training efforts on the national rather than the local level. This danger especially exists when cooperatives are the result of a top-down intervention. In Nigeria, for example, cooperative training was solely directed towards government cooperative officials with the result that conflicts between higher cooperative management, local staff and members seriously affected cooperative performance (Rochin et.al., 1988). This is not to say that training and a strong management at the regional or national level are not essential. In fact, well trained people at this level are crucial if the organization is to assist its member associations in financial management, auditing and training. Strict accounting rules and external control are essential in an environment where the local population does not have the necessary means and skills to check on the performance of local managers. The South Korean agricultural cooperatives and the Comilla Projects in Bangladesh both drew their initial strength from sound planning and management capabilities at the top. In both cases, however, the umbrella organization played subsequently a vital role in training local leaders and individual members. While internal efficiency and organization is undoubtedly important for credit cooperatives, emphasis also needs to be put on social development management at the grass roots level. Credit cooperatives starting as local bottom-up organizations and emphasising institutional and human resources development have been the most successful cooperative financial intermediaries. Excellent results of a project in Cameroon which focussed heavily on training of local managers and borrowing farmers and allowed for active farmer participation in credit cooperatives planning and technical assistance activities further illustrate the importance of these aspects. Members savings in the participating organizations grew two to three times faster than those of other cooperatives and loan delinquency rates fell to 0.5% (from an already low rate of less than 10%) (von Pischke et.al., 1983).

D. Avoiding Inappropriate Governmental and Political Interference

Governments and international donor agencies have often used credit cooperatives to promote social objectives unrelated to their role as financial intermediaries. In some cases these organizations were used to channel government funds for non-financial purposes because they were the only well functioning and effective organizational structures in rural areas. Often, the utilization of external funds obliged the management of credit cooperatives to lend at artifically low interest rates and for activities which would otherwise be considered too risky. Thus, these interventions have often had detrimental effects on the cooperatives' viability. They have often experienced serious problems after government or donor assistance expired. Excess demand for cooperative services promoted by excessively low prices for credit and other services, coupled with low profits and consequent low capitalization, has often made cooperatives highly vulnerable to external shocks or poor internal management. Continuous reliance on government resources can create the impression that the government will bail out indebted farmers and their organization if the need arises. The negative effect of excessive reliance on a continuous inflow of external funds on the credit cooperative's motivation and ability to raise its own resources and the related negative impact on loan repayments has already been discussed above. It is thus advisable that government and donor assistance focus on institution building, training and improvemen~ of management abilities at all levels of the cooperative system rather than supply of cheap credit.

VII. CONCLUSIONS

Rural group and cooperative lending have often been undertaken in response to the failure of specialized financial institutions to supply large numbers of small farmers with adequate amounts of credit while remaining financially viable. It has been expected that lending through groups or credit cooperatives could successfully reach small producers with credit on favorable terms, while being compatible with satisfactory financial performance of the institutions involved. In the case of group lending, this expectation was based on the assumption that transaction costs could be reduced by processing a single large group loan rather than a multitude of small ones. It was further believed that joint liability, a sense of common purpose, peer pressure and access to more accurate information about borrowers would reduce the risk of default and the losses related to it. In the case of cooperatives, savings mobilization was expected to provide a basis for intermediation and thus increase the availability of credit to those who need it. The logical conclusion has been that savings mobilization, reduced lending transaction costs, and smaller delinquency rates would bring about financial viability of credit cooperatives and could significantly improve the performance of lenders engaging in group loans. Therefore, lending to small farmers would be turned into a more profitable enterprise and, hence, more lenders would be willing to supply credit to small farmers. In practice, the record of both group lending and credit cooperatives has been mixed.

The present review of group lending projects has shown that lenders normally faced lower administrative costs as long as they were not responsible for group formation expenses. Some experiences have shown that administrative costs of group lending programs can be significantly reduced over time, as start up costs related to group formation disappear. Where borrowers' transaction costs have been reported, they compared favorably with costs as they would have accrued to individual small borrowers. Although almost all group lending programs reviewed relied on some form of joint liability, loan delinquency rates have not always been reduced compared to individual loans. Nevertheless, experience seems to suggest that joint liability can positively influence repayment under certain circumstances. Successful group lending schemes have shown that high repayment rates can be achieved with small, homogeneous borrowing groups which are jointly liable and assume themselves some managerial and supervisory responsibilities. Most successful group lending programs have only granted relatively small amounts of credit in order to diminish the possibility of borrowers' exceeding their debt capacity. Reimbursement in small, regular installments adapted to the living and earning conditions of the borrowers also has a positive effect on loan repayments. A common bond other than credit, such as mandatory deposits which will only be reimbursed to the group upon full repayment of all loans further enhance loan repayment. Group members' previous experience with group lending or other group activities also has a positive effect on repayment rates.

Practice has shown that in many countries the most effective and least costly (from the lenders' point of view) way of enforcing joint liability is to deny access to future credit to all group members in case of default by the group or any of its members. Obviously, this threat only works as long as the lender is in a position to provide good clients access to favorable and timely credit services in the future. Examples where loan delinquencies increased in correlation with deteriorating and untimely credit services abound. The danger of not being able to guarantee access to future services evidently increases the more a lender depends on continuous infusions of external funds and the less a program is financially viable and self-sustainable through deposit mobilization. In particular, low interest rates on loans made to small-farmers have been a major reason for unsustainability. Because denial of future access to credit has in practice often been the only way to effectively enforce joint liability, mandatory joint liability has in reality almost always been reduced to voluntary joint liability. It is still perceivable that the psychological pressure arising from mandatory joint liability encourages groups to exercise increased pressure on defaulting peers. However, some experiences seem to suggest that mandatory joint liability has only a positive effect on repayments as long as borrowers have strong reason to believe that the majority of their peers will also repay.

Much of the success of group or cooperative programs also depends on the atmosphere in which they are started. Cultural conditioning can very much hinder or facilitate the development of a sense of joint responsibility and cooperation. Education of borrowers and farmer support services are an essential component of successful group or cooperative lending programs. Both the group credit program in Malawi and the Grameen Bank Project in Bangladesh are supported by such services and much of their success has been ascribed to these educational efforts. Similarly, appropriate training of the financial intermediary's employees is crucial. Besides adequate supervisory and accounting techniques, reliable record keeping is essential. Threats to deny future access to credit in case of default are not credible unless the lender has an appropriate means of determining which groups and individuals must be excluded from further benefits.

With a few exceptions, group lending programs as they currently exist have neglected to explore and build up relationships other than credit between the lender and the group or within the group itself. Savings generation can help develop crucial skills such as financial responsibility through regular deposits. It can also enhance better repayment performance because each member's deposit can be viewed as an implicit collateral in case of default by any group member. Despite these advantages, savings mobilization in relation with group lending has largely been neglected so far. Ways to develop borrower groups into self-financing rural credit organizations through savings mobilization should be explored. Developments along this path could lead to a natural extension of successful group lending schemes into credit cooperatives. Such a development could allow credit cooperatives to build up slowly and benefit from borrowers' previous experience with joint responsibility and savings. Developments along this line could help avoid one of the most frequent causes of failure in credit cooperatives, namely hasty establishment before their members understand them.

Many of the credit cooperatives which have failed suffered from one of two major weaknesses: inadequate preparation and participation of their members, and lack of adequate management. Top-down imposition of cooperatives has often resulted in the exclusion of active membership participation. This is especially true where governments promoted the cooperative movement without paying attention to the fundamentals of the movement, and essential decisions and actions are carried out by government workers rather than cooperative managers and members. In this situation members at the primary level have failed to develop a sense of ownership and did not view the cooperative as more than a supplier of cheap services. Top-down management has often prevented the development of a personal relationship between the leadership and cooperative members. As a result, the potential advantages of familiarity could not be exploited in relation with credit allocation or loan collection. These problems have often been exacerbated by insufficiently trained managers and staff. Training of personnel has frequently been concentrated at the national level, while education of local leaders and cooperative members was neglected. Cooperatives which have focussed on well trained managers, bottom-up institutional development and training at the grass roots level have, however, yielded good results and proven the importance of these aspects. Much of the success of the agricultural cooperatives in Taiwan and South Korea goes back to strong and committed management at the top and intensive training of administrators and cooperative members at the local level.

Apex institutions play an important role in assisting their local member associations with training programs. In some countries apex institutions have also provided auditing services to their member associations. This aspect is of crucial importance because it can help prevent illegal behavior of hired local personnel where the local leadership does not have the capacity to do so. As with group lending programs, inadequate accountability and record keeping have often been partially responsible for failures of credit cooperatives.

Some apex organizations have also successfully assisted their member associations with portfolio and liquidity management. Regional or national organizations often have a comparative advantage in these activities because they can benefit from scale economies, more diverse cashflows and risk diversification. Care must, however, be taken that the division of responsibilities between the apex institution and its members be well defined and that financial inter-reliance not become too heavy. The apex institutions must exercise caution because local organizations tend to overborrow in such a relationship.

Where cheap outside funds have been continuously available, credit cooperatives have neglected to engage in savings mobilization and failed to become self-reliant. Examples in various countries have, however, shown that rural credit unions can successfully draw on untapped resources through savings mobilization. Although the supply of deposits may initially be more service than interest elastic, higher interest rates, coupled with savings mobilization campaigns have been successful in raising memberships and deposits whenever they were introduced. Thanks to innovative offers of deposits, adapted to the condition of the local rural population, membership, savings and concurrently loans of credit unions have grown above the national average in many countries. Credit cooperatives (in fact most frequently pure credit unions) which have relied on members' deposits rather than external sources for funds have experienced far fewer liquidity problems and generally achieved better repayment records. Thanks to their efficient and innovative approaches these organizations have been able to bring savings and lending services to groups neglected by other institutions.

Cooperative which have expanded their activities beyond the finance area before the institution was organizationally and financially viable have often run into serious problems. While multipurpose cooperatives may under certain circumstances facilitate loan collection and savings mobilization, rural financial cooperatives should not be linked with other services before the institutional and financial prerequisites have been achieved, unless particularly beneficial circumstances for linkage exist. Most successful credit cooperatives have, however, restricted their activities to the provision of lending and savings services.

Government or international donor intervention in cooperative affairs has frequently had a detrimental effect. It has provoked top-down imposition of the organization and strained the institutions' managerial and financial capacities by using them for purposes other than financial intermediation. It also tended to cause deviation from prudent and viable lending practices. Positive experiences have shown that government or donor support should focus on institution building, management training, introduction of and training in improved accounting systems, loan evaluation procedures, recovery practices and training at the grass roots level, rather than the provision of cheap funds for credit.

Most of the unsuccessful experiences with group lending and credit cooperatives are due to shortcomings in their implementation and complementary activities rather than inadequacy of the approaches themselves. This suggests that these lending arrangements do hold potential to reach small farmers with credit while allowing financial intermediaries to function as viable institutions. Documented experiences have shown that rural financial cooperatives can very successfully mobilize savings if properly organized.

Lending groups and credit cooperatives exist in many World Bank client countries. The Bank rarely interacts directly with these organizations, but they figure frequently among its subloan beneficiaries. Therefore, Bank projects should put more emphasis on recommending how credit cooperatives and lending groups can be used most effectively in individual client countries. As experience has shown, credit cooperatives are most effectively assisted in institution building and training of managers at the apex and possibly even at the local level. Most staff appraisal reports of agricultural credit projects mention credit cooperatives and lending groups as possible subborrowers but fall short of explaining how these arrangements actually work in the country concerned or whether they need to be reformed. As highlighted in this paper, certain design attributes are crucial for the successful functioning of lending groups and credit cooperatives. It is equally true that the economic and political environment, implementation and complementary activities are critical aspects. Therefore, the Bank should put more emphasis on analyzing the role and performance of these arrangements in credit systems it supports through its projects. Where they exist among beneficiaries but perform poorly, the Bank should insist on structural changes. But these can only be demanded if the strengths and weaknesses as well as the potential these arrangements hold in the particular country environment are known. These issues can be addressed in sector work on rural credit issues or by studies in the context of credit or agricultural projects.

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