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THE ROLE OF GROUPS AND CREDIT COOPERATIVES IN RURAL LENDING

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Lending groups and credit cooperatives have the potential to provide affordable credit to small-scale farmers because they can reduce transaction costs and lower the risk of default. In developing countries these two kinds of lending arrangements have a mixed record, although their difficulties reflect shortcomings in implementation rather than in the lending arrangements themselves.

The article indicates that successful group lending schemes work well with groups that are homogeneous and jointly liable for defaults. The practice of denying credit to all group members in case of default is the most effective and least costly way of enforcing joint liability. Another way to encourage members to repay is to require mandatory deposits that are reimbursed only when all borrowers repay their loans.

The article points out that credit cooperatives that mobilize savings deposits are less dependent on external sources and increase the borrowers' incentive to repay. The success of credit cooperatives requires training of members as well as management. Experience suggests that credit cooperatives should not expand their activities beyond financial intermediation until they develop strong institutional and managerial capabilities.

The design of traditional agricultural credit projects reflects the concern of policymakers that a shortage of affordable credit constrains growth in this sector and prevents the small farmer's integration into the market economy. This has encouraged governments—often supported by international donors—to establish specialized credit institutions to channel cheap credit to rural areas. But expectations that these institutions would provide

The World Bank Research Observer, vol. 5, no. 2 (July 1990), pp. 187–204
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small farmers with easier access to credit have often proved to be unfounded. Funds from government-owned or -sponsored rural financial institutions have frequently been skewed in favor of wealthier and more influential farmers (see Adams, Graham, and Von Pischke 1984; Von Pischke and Rouse 1983). Not only are large farmers perceived as lower risk because they can offer more collateral, but administrative costs per unit on large loans are significantly lower than those on the modest sums lent to small farmers. Formal rural lenders have thus been encouraged to lend their limited funds to larger borrowers, especially when regulated interest rates barely cover the handling costs of the loan.

The failure of agricultural development banks and other rural lenders to reach low-income producers with affordable credit has led to a search for other arrangements (Braverman and Guasch 1989a, 1989b). Lending groups and credit cooperatives are popular alternatives. Both entities have the potential to reach small farmers with affordable credit because processing one large loan rather than numerous small loans cuts administrative costs. Since credit cooperatives and group lending arrangements entail some form of joint liability, they are also expected to reduce the risk of default. For these reasons it is frequently argued that agricultural development banks and commercial banks could continue to serve medium-sized and large farmers directly, while serving small farmers indirectly through lending groups or credit cooperatives. Credit cooperatives and lending groups also have the potential to reach groups that do not otherwise have access to the formal financial system.

Despite their apparent advantages, credit cooperatives and lending groups have had mixed results. For example, Deschamps (1989) describes successful credit union projects in Cameroon and Malawi and unsuccessful results in Kenya and Lesotho. Rochin and Solomon (1983) and Rochin and Nyborg (1989) discuss problems with credit and other cooperatives in Egypt, India, and Venezuela but point to success in Bangladesh, the Republic of Korea, Taiwan, and other economies. Yongjohns (1980) highlights the potential of credit cooperatives but questions their suitability for agricultural credit.

This article reviews group lending and credit cooperatives in rural areas of developing countries to determine whether these arrangements have unrealized potential. The evaluation is based on a review of the literature and assesses those factors that affect the success of rural lending groups and credit cooperatives.

Characteristics of Group Lending and Credit Cooperatives

Two main categories of cooperatives support financial activities: financial cooperatives and agricultural cooperatives. The former primarily handle funds intermediation, and the latter concentrate on agricultural services or joint production but may also offer credit. This discussion covers all cooperatives

providing financial services to farmers, including relatively small, savings-funded credit unions, government-sponsored credit cooperatives, and cooperative banks, but it highlights the differences when these are pertinent.

Credit cooperatives as formal financial institutions originated in nineteenth-century Germany. These associations operate democratically; each member has one vote. Leadership is voluntary and unpaid, although professionals may be hired for day-to-day operations. Members contribute equity in the form of an initiation fee and regular capital contributions. The amount a member can borrow is based on his or her capital contributions. Profits are distributed to members in the form of dividends based on their equity contribution or retained to increase the organization's capital. This ensures that benefits go to members rather than to external intermediaries and their shareholders.

Although credit cooperatives typically derive much of their funding from capital contributions, they may also take deposits. Most pure credit unions are very active in this area, and the lion's share of their funds comes from members' deposits and share capital. Self-financing is a source of strength because it reinforces the perception that members have a stake in the institution and thus contributes to good repayment performance. Other cooperatives also frequently depend on external funds. These can come from such commercial sources as private banks, but more often they are supplied by apex institutions (that is, national or regional umbrella organizations) or development banks, which in turn obtain them from the government or from international donor agencies.

Lending groups are less rigorously organized than credit cooperatives and are usually created to receive a loan from an outside source. A lender may provide funds to the group as a whole, which then disburses the loan to individual members according to agreed criteria. In such a case the group is jointly liable for the entire amount of the loan. Alternatively, funds may be lent to members individually, in which case the group jointly guarantees all loans or simply furnishes information about individual participants.

The principal advantages and disadvantages of lending groups and credit cooperatives are summarized in the following.

Economies of scale. Both group lending and credit cooperatives have the potential to produce significant, albeit different, economies of scale. Group loans save the lender transaction costs, although these may to some extent be reallocated to the group, which has to distribute, monitor, and collect the loan. Economies of scale are most significant for lenders that are not responsible for the formation of the group. Similarly, the lender's costs of mobilizing funds may be reduced by focusing on the cooperative as a whole rather than on its individual members. In the case of credit cooperatives a significant share of the economies of scale accrue to borrowing members, who would otherwise have to travel to bank branches in urban or regional centers.

Enhanced information about borrowers. The bulk of a lender's transaction cost is related to the assessment of creditworthiness and the viability of loan recovery. Farmers who have some social and economic ties can enhance their

prospects as borrowers by forming a group that can provide external lenders with valuable information about its members. Social and economic links also give group or cooperative members the option of applying sanctions to pressure their peers to perform. In the case of cooperatives, close ties among members improve the incentive to repay debts, because potential delinquents feel responsible toward their neighbors whose funds are at stake. Generally, familiarity and links among group members are negatively correlated with group size. Large groups are too diluted to take advantage of the informational or kinship advantages that make such arrangements worthwhile for lenders and borrowers. From this point of view, lending groups are more advantageous than credit cooperatives. Nonetheless, cooperatives benefit from the familiarity that binds management, staff, and potential members. Management is able to base lending decisions on more accurate information than is available to other institutional lenders.

Risk pooling through joint liability. Joint liability can improve repayment in two ways. First, group or cooperative members can put pressure on potential defaulters when their own interests are at stake. Second, the risk that the whole group will default diminishes with increased membership, unless all of the members' activities are highly correlated. The forms of joint liability are discussed in the next section, but the key issue is always the extent to which an outside lender is willing to bear the cost of loan collection. This willingness depends on the penalties that can be imposed on delinquent borrowers and on whether legal and social practice makes enforcement possible. Experience suggests that the use of legal procedures to obtain repayment is in most instances as difficult and costly when dealing with a group as with an individual. Thus a lender's ability to deny credit to groups or cooperatives if any members default is often the most effective and least costly way to encourage loan repayment. This may not be as simple as it seems, however, especially if lenders are dependent on external sources of funds that mandate lending to particular target groups.

Improved bargaining. Reduced transaction costs and a lower risk of default increase the attraction of lending to groups and cooperatives. Participating members improve their access to credit and obtain better terms than they would qualify for as individuals. In many cases group or cooperative arrangements provide financial services to individuals who would otherwise have no access to credit.

Credit cooperatives and lending groups also have potential weaknesses. The two most common are moral hazard and concentration of the loan portfolio.

Moral hazard. Under a system of joint liability, all members are liable for the costs of default by any member. This implies that the risk is borne by the group, whereas the benefit is reaped by the individual. Since the social cost of individual default exceeds its private cost, joint liability may increase the risk if group cohesiveness is limited and mechanisms for enforcement and penalization fail to operate effectively. Group members have little incentive to repay if

the majority of their peers default. This behavior may be eliminated if group cohesiveness is strong and members feel responsible for the effect of their actions on others. In smaller cooperatives in which management and borrowers may also be linked through kinship or political affiliation, management's reluctance to penalize defaulters can constitute another source of moral hazard.

Concentration of the loan portfolio. The liquidity and income of individuals who live near each other and engage in similar economic activities are often highly correlated. Thus if the members of a rural credit cooperative are engaged in similar agricultural activities, their loan portfolio is likely to suffer from inadequate diversification. In addition, deposits and demands for cash are synchronized, which may lead to liquidity bottlenecks at the beginning of the agricultural production cycle. These arguments would suggest establishing larger, community-based credit cooperatives with a mix of membership.

Homogeneity is not necessarily a desirable attribute for rural credit cooperatives. This distinguishes them quite clearly from lending groups, in which homogeneity is essential for success because it reinforces peer pressure and a sense of joint responsibility. Group lending arrangements are less subject to the dangers of portfolio concentration because the institutions that lend to groups can diversify by serving a varied clientele in different areas. An institutional solution to the cooperatives' problem of synchronized cash flows and limited diversification of risk is to establish a national or regional apex organization that can diversify risk and act as a lender of last resort.

Experience with Group Lending

The most important elements of group lending are the precise form of joint liability and the extent to which the ultimate lender interacts with the group as a whole or with individual members. Such factors as who formed the group and what activities other than credit the group pursues also affect performance.

Formation of the Group

In many countries government organizations such as extension agencies have borne the cost of group formation and technical assistance. This has freed lenders from the expense of creating groups. In Bangladesh, the Dominican Republic, Ghana, and Thailand, group formation—and the related costs—has been left to the borrowers (Desai 1983b, Tohtong 1988, Hossain 1988). Only rarely have lenders themselves assumed the administrative cost of forming borrowing groups. Where this has been the case (in Nepal, for example), an attempt has been made to keep costs low by making loans through village organizations or other traditional groups. These same channels have been used in Malawi, where extension agents have helped establish borrowing groups.

Malawi's low default rates are also believed to reflect the communal and kinship makeup of the groups (Schaefer-Kehnert 1983).

The size of the group is a crucial feature for adequate performance. Small groups foster closer ties among members and can reduce the cost of information. Loan supervision is easier, and the group is better able to impose accountability on its members. Practice has shown that group size is directly related to delinquency rates. In Ghana, the performance of large groups with close to 100 members was markedly worse than that of groups with ten to twenty members (Owusu and Tetteh 1982). Similarly, in the Dominican Republic, loan recovery rates dropped significantly as group size increased (Desai 1983b). In Zimbabwe, groups with more than twenty members proved more susceptible to default than smaller groups (Bratton 1986). A successful program of the Thai Bank for Agriculture and Agricultural Cooperatives (BAAC) limited group membership to thirty, but typically groups had twelve to fifteen members (Tohtong 1988). The Bangladesh Grameen Bank, with a loan recovery rate of more than 98 percent, found that even groups of ten were too large to guarantee cohesiveness and joint accountability; its customers are organized into five-person groups (Hossain 1988). It is obviously questionable whether very small groups allow for effective economies of scale and cut down transaction costs. Still, joint liability is more easily imposed on small groups, and with higher repayment rates, overall lending costs are significantly reduced.

Increasing group size is often a result of deteriorating credit services. If the intermediary's financial situation does not allow it to serve a large number of groups, and the demand for credit is strong, the size of the group inevitably increases. This in turn affects rates of loan repayment and 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 (that is, charging interest rates high enough to cover all costs and providing effective loan collection procedures).

Homogeneity is also important for effective group guarantees and loan supervision. In Malawi and some areas of Bangladesh, where group lending has performed exceptionally well, loans are made only to relatively homogeneous groups. In Malawi groups are always from the same village and often affiliated through kinship (Schaefer-Kehnert 1983). The Grameen Bank lends only to groups from the same village whose members are of the same sex and have a similar economic background (Hossain 1988). In Thailand the BAAC lends only to homogeneous groups producing the same crops (Tohtong 1988). The smallholder lending program in Madagascar is an example of how loans to large groups based on administrative definition rather than social cohesion have failed. In this program loans were channeled 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 percent. It was soon found that the guarantee was meaningless and unenforceable. Loan delinquencies exceeded

the allowed quota, and after a few years the bulk of the program had to be abandoned (World Bank internal report).

Well-functioning group lending schemes require effective management. Self-managed groups usually perform better than groups whose activities are managed by outsiders such as extension agents or employees of the financial intermediary. Self-management encourages group cohesiveness and may thus make it easier to exert pressure on potential defaulters. To the extent that groups have qualified members, they can recruit volunteers to gather information, supervise and collect loans, and handle treasury functions. This also reduces the lenders' processing costs, although it adds to the borrowers' transaction costs. Adequate training is important if a borrowing group is expected to assume managerial responsibilities. The Grameen Bank provides each new group with seven days of continuous training by the bank's staff. Weekly meetings are held in a local center to process loan applications and handle other administrative duties. Bank staff supervise the groups until all loans are recovered. As a result transaction costs are relatively high, but such measures seem to be essential for the bank's success.[1] If the same group borrows repeatedly, transaction costs should decline. Although no quantitative information on the borrowers' transaction costs is available, the Grameen Bank's administrative costs (including provision for bad debt) amounted to 18.1 percent of outstanding loans in 1986, with total operating costs (administrative costs plus borrowing costs) recorded at 21.7 percent (Hossain 1988).[2]

Previous experience with group activities in general and with group lending in particular also has a positive effect on the group's performance. To the extent that groups are formed by members, it is likely that previous experience allows the group to identify members with good repayment records and exclude others. In Zimbabwe, for example, groups that had been formed for purposes other than credit and borrowing groups that had already been operating for a time performed better than newly formed credit groups (Bratton 1986). In Malawi, where credit groups are newly formed every year, farmers had experience with another form of group activity—obtaining agricultural inputs—before the credit program was launched (Von Pischke and Rouse 1983).

Liability and Loan Recovery

If a loan is made to individual members rather than to the group as a whole, liability can take one of three forms: individual liability, joint voluntary liability, and mandatory joint liability. Individual liability schemes require each member to repay his or her own loan. The group acts as a conduit to provide the lender with information about its members or to assist borrowers with loan applications. In the case of joint voluntary liability, individuals are responsible for their own loans, but all members are denied access to future loans if a member fails to repay. In the case of mandatory joint liability, each member is responsible for the repayment of all loans made to the group, and no new loans

are provided until all outstanding loans have been repaid. Mandatory joint liability normally prevails if the loan is made to the group as a whole. The literature does not indicate whether lending to a group or to individual members yields better results. Practice, however, has shown that joint liability has a positive effect on loan repayments under certain conditions. In Bangladesh and Malawi, where loan recovery rates are 98.6 percent and 97.4 percent, loans are made to and repaid by the individual (Hossain 1988, Schaefer-Kehnert 1983). The group is jointly liable, however, if any member defaults, and all members are denied future access to credit until the loan is repaid. The same scheme has recorded repayment rates of 82 percent for the BAAC program in Thailand (in contrast to an average rate of 66 percent for comparable loans with individual liability). The BAAC's experience has shown that lending to groups collectively results in higher default rates because no one accepts responsibility (Tohtong 1988). In Zimbabwe recovery rates on loans made to groups as a whole were as much as 40 percent higher than those on individual loans (92 percent as opposed to 53 percent) in normal years, and as much as 20 percent higher than those on individual loans based on joint liability (Bratton 1986). This trend was completely reversed, however, after a failed harvest. This suggests that where liability is unlimited, borrowers are likely to repay only if they believe that other members will also repay.

The threat of losing access to credit works only as long as the lender is in a position to continue to provide favorable and timely credit services. In Bolivia, the Dominican Republic, and the Philippines, for example, loan delinquencies increased rapidly as lenders' services deteriorated (Desai 1983b). In contrast, when access to future credit has been assured, groups have often put significant pressure on members who are in default. In some cases intragroup lending has been used to assure timely repayment. This has often been the case in the Grameen Bank program, in which funds are disbursed in stages. The first borrowers in a group must have begun repaying before other members of the group can borrow. Phased disbursement thus allows loan officers to assess the group's cohesiveness, and at the same time motivates group members who have not yet received their loans to pressure their peers to repay.

Group members have a further incentive to repay 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 gaining access to credit. In Bangladesh, Malawi, and Nepal the lender establishes a common interest among group members by retaining between 5 percent and 10 percent of the group's loan as a deposit. Although this capitalization increases effective interest rates on the loan, the deposits earn interest and can be used to cover shortfalls in repayment. In Malawi and Nepal the entire deposit plus accrued interest is returned to the group when the debt is repaid. In the case of Bangladesh's Grameen Bank only part of these funds is returned. In times of need, members can borrow up to 50 percent of this deposit as an interest-free loan for specific purposes. This can protect the quality of the loan by pre-

venting members from liquidating their capital or going to informal lenders. Holding back some part of the loans thus lowers the probability of default. To judge from the relatively high repayment rates in these countries, the common interest created by this forced savings practice effectively induces repayment discipline. A group lending program for grain farmers in the Philippines requires members to pledge their crop against the group's loan. Although the program is still new, its repayment rates to date have been outstanding (World Bank internal memorandum).

Finally, the performance of the Grameen Bank's loans suggests that small and regular—even weekly—repayments are best suited to the circumstances of the rural poor. This approach may have to be adapted to the constraints imposed by production cycles. It is also likely to increase transaction costs, but the advantages of significantly higher recovery rates are considerable.

Reducing Transaction Costs

Although improved rates of loan recovery are the crucial factor in cutting down lenders' costs and risks, reduced administrative costs arising from economies of scale are also important. A review of the transaction costs of fifteen group lending projects concludes that lenders in Bolivia, the Dominican Republic, India, Nepal, and the Philippines benefited from economies of scale when making loans to groups. In most cases this was so only because lenders were not required to carry the cost of forming groups (Desai 1983b). In the Dominican Republic this cost was borne by the refinancing agency; in Bangladesh, Bolivia, Ghana, Malawi, Nepal, and Thailand the government provided technical services. In Zimbabwe the Agricultural Finance Corporation (AFC) lends only to established groups that were formerly involved in another group lending program based on limited liability. Thus its administrative costs are a minuscule 1 percent of loan capital, compared with the 12 percent recorded by groups that are newly formed and the 11 percent of loans to individuals. In fact, the administrative costs of lending to groups of small farmers compare favorably with the costs of loans to large-scale commercial farmers (Bratton 1986). AFC's record suggests that once the startup costs associated with group formation have been met, group lending programs become much more advantageous because of decreased administrative costs.

Studies of group lending report that, except in India and the Philippines, the cost of borrowing is lower when funds are lent to the group rather than to the individual. In the Dominican Republic, for example, the effective rate of the cost of borrowing was 15 percent a year for groups and 18 percent a year for individuals (Adams and Romero 1981). Generally, group borrowers saved on fees for registration of collateral, expenses on loan applications, and the time and transportation costs of visits to lenders. Still, group leaders may incur administrative costs that are not accounted for in monetary terms. In addition, the cost to individual members may outweigh the cost of individual borrowing

if any members default and the others are held liable for their share. None of the studies provide data on these costs.

Experience with Credit Cooperatives in Developing Countries

Like group lending schemes, credit cooperatives are expected to increase repayment rates and lower the transaction costs of borrowers and lenders. Unfortunately, the literature provides scant information on these topics. Overall, credit cooperatives have a mixed record in the supply of rural finance. High delinquency rates have been the primary reason for failure, but they should be viewed as a symptom rather than as the underlying cause.[3] Areas of particular importance for successful credit cooperatives include planning adequately and educating members; resolving organizational and structural problems; ensuring adequate infrastructure, management, and oversight; and avoiding government interference. Each of these points is examined in light of the experience of various countries.

Planning and Education

Participation is a cornerstone of self-help organizations. The active involvement of members is required to build institutions at the local level and to promote members' economic self-sufficiency. If members are to understand the principle of self-help and the rationale behind credit cooperatives, they must comprehend that they can benefit from organization and collective action. Cohesion is easier to achieve with limited membership, a restricted field of action, and the active involvement of the members.

In many developing countries farmers' cooperatives have been organized at the government's initiative. But rather than starting out with a single-purpose cooperative, such as a credit union, officials have frequently launched a multipurpose cooperative, which provides inputs as well as marketing and financial services. These ambitious arrangements frequently involve a top-down approach, with top-down decisionmaking and little participation by members. Often, in fact, these large enterprises were managed with minimal direct contact between the staff and the members, although good staff-member relations are crucial for the smooth functioning of a credit cooperative. The members' confidence is reflected in the cooperative's ability to mobilize savings and encourage loan repayment, and management's knowledge of the members is essential in appraising creditworthiness. Furthermore, if credit is provided in conjunction with other benefits, such as subsidized agricultural inputs, farmers often fail to understand that they are beneficiaries of a loan rather than a grant. This has a detrimental effect on repayment rates and can undermine the financial viability of the cooperative. Many government-established cooperatives have been able to survive only with the help of outside funds. Because the mem-

bers' own capital was not at stake, this subsidy in turn has often precluded the sense of joint ownership that could serve as a driving force behind loan repayments.

Reports of malfunctioning cooperatives that were undercut by top-down organization are numerous. A study by the Food and Agriculture Organization of cooperatives in Southeast Asia, for example, claims that insufficient preparation of the members, especially in the absence of a sense of ownership, has been one of the main reasons cooperatives have failed in India, the Philippines, and Thailand (cited by Yun 1987). In Jordan and Pakistan, cooperative members have little sense of ownership and responsibility because government officials appraise and collect loans (World Bank internal memorandum).

This does not imply that government support for the development of the cooperative movement is unnecessary. Most of the failures of government-promoted cooperatives have occurred because governments were not prepared to accept the long gestation period necessary for the cooperative to develop. In the Republic of Korea, top-down organization and effective government support have produced excellent results, but Korea has a long tradition of group organization for savings, credit, and other purposes. Furthermore, war and land reform had eliminated significant differences in wealth in the rural population. To promote the cooperative movement, the government launched a campaign to educate members as well as managers. At the same time a parallel bottom-up credit union movement developed independently. As these bottom-up organizations grew and began to lend and mobilize savings, the government-launched cooperatives eventually adopted similar methods (personal communication with World Council of Credit Unions).

Confusion about the principles of the cooperative system is not limited to members; even governments and international donors often fail to understand that credit cooperatives must be profitable to be viable. Although the profits of the cooperative are redistributed to members rather than to outside stockholders, the institution should nonetheless aim for adequate profitability. The confusion is compounded when the rhetoric promoting the cooperative movement ignores the effect of individual self-interest that motivates membership in a credit cooperative. Thus it has been widely believed that a sense of community responsibility would prompt members to work for the cooperative voluntarily—without pay or compensation. On occasion the desire to keep costs low has also made it difficult for cooperatives to pay adequate salaries to secure and retain skilled managers.

In some countries this rhetoric may have discouraged cooperatives from charging adequate interest rates. In Peru and Togo, interest rates on loans from cooperatives were at least 10 percent below the levels required to cover operating costs and pay competitive rates on members' savings deposits (Vogel 1988). As a result, credit schemes in Peru which could not obtain enough savings to satisfy the demand for cheap credit had to ration loans to members. This led to a decline in membership and an increase in defaults, since

members saw no point in repaying old loans when the prospects for new credit were bleak. The high rate of inflation at the time was another factor in these delinquency rates.

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 serving members at the bottom. Regional or national umbrella organizations have good potential because they can benefit from larger economies of scale and reduce risk by diversifying their portfolios. In many countries apex institutions have successfully assisted primary organizations with managerial, auditing, and educational tasks. In numerous countries the apex institution also acts as financial intermediary, providing liquidity management and intermediary services to members. In Korea the national association assists primary organizations with investments outside the agricultural sector and also provides excellent auditing services. In some cases, however, when the umbrella organization has provided direct financial services to customers, problems have surfaced because the roles of the primary and secondary organization were not clear. In Bolivia, for example, the national organization, FENACRE, made loans to individuals with funds from an international agency. It also mobilized deposits in direct competition with its primary associations (Gadway 1988). In Honduras and Niger blurred responsibilities between local associations and umbrella organizations affected repayments because it was unclear which organization was responsible for loan allocation and collection (Cuevas and Graham 1988, Vogel 1988).

Heavy financial dependence between these two tiers can also exacerbate moral hazard when lower-level associations overborrow and take bigger risks than they would if they could not count on outside funds. This was the case in Israel, where loans from regional organizations were the single most important liability of numerous primary cooperatives. Because many local organizations had overborrowed, the financial health of the regional organizations mirrored the economic performance of their members. This became clear when funds became scarce at the macro level and real interest rates skyrocketed in 1985 in response to the government's anti-inflationary policies. As outside funds became scarce, the regional organizations collapsed one by one, leaving their member associations without credit (Kislev, Lerman, and Zusman 1988).

The fact that credit cooperatives are owned and operated by their own clients subjects them to an inherent conflict of interest between depositors and borrowers. Since each party wants to enhance its interest, policies on loan collection, moral hazard, and interest rates are likely to reflect the interest of the dominant group. Although credit cooperatives were designed to serve as comprehensive financial intermediaries offering credit and deposit services, they

have often pursued cheap credit policies at the expense of the depositors. Such policies, which reflect low interest rates based on access to subsidized external credit, have prompted members to join to gain access to cheap loans rather than to use the organization's savings services. This strategy has stunted the mobilization of savings, increased the cooperatives' financial dependence on (sometimes uncertain) external sources, and led to organizations dominated by borrowers and 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 reserves.

MOBILIZING SAVINGS. Members' savings and capital contributions are an important element in successful credit cooperatives, as shown by studies on Bangladesh, Cameroon, Guatemala, the Republic of Korea, Rwanda, Taiwan, Togo, and other economies (World Council of Credit Unions 1986, Yun 1987, Almeyda de Stemper 1987, Cuevas 1988, Vogel 1988, Wieland 1988). Savings mobilization campaigns and innovative offers for deposits adapted to local conditions have helped credit unions increase their funds and attain near self-sufficiency in many countries. In Rwanda, where credit unions were created specifically to mobilize rural savings, membership grew 47 percent between 1977 and 1986, with real savings deposits rising an average annual 34.8 percent and outstanding loans growing 54.4 percent. In Cameroon and Togo savings grew by 25 percent and 14.5 percent annually, whereas loans made by credit unions grew by more than 30 percent. In all three countries loans and savings at credit unions grew at significantly higher rates than the national average (Cuevas 1988).[4]

Credit cooperatives that rely heavily on share capital and members' savings deposits to fund their loans usually achieve higher repayment rates because members realize that their own funds are at stake. This has been confirmed by experience in Cameroon, the Dominican Republic, Honduras, Korea, and Taiwan (Vogel 1988; Poyo 1983; Yun 1987; Adera 1987; Lee, Kim, and Adams 1983). In Honduras, a survey of eighteen credit cooperatives showed that the financial health of these organizations was directly related to policies on interest rates. Credit cooperatives with higher rates attracted higher deposits and had lower rates of loan delinquencies (Poyo 1983). In the mid-1960s, a campaign to reform interest rates and mobilize voluntary savings boosted the level of savings deposits in Korea. The proportion of total savings deposits held by rural cooperatives rose from 9 percent to 16 percent within a year. Korea's rural cooperative credit system has expanded enormously over the past fifteen years and now satisfies about 80 percent of short-term requirements for rural credit (Yun 1987). Local cooperatives have grown vigorously, thanks to extensive campaigns to mobilize savings and a range of 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 an important factor in the cooperative's success

(Yun 1987). Although repayment rates in Korea are generally high, low-interest loans accounted for more than 98 percent of the National Agricultural Cooperative Federation's (NACF's) overdue loans in 1979 (Lee 1984).

COOPERATIVE STRUCTURE. A further question is whether credit cooperatives fare better as single-purpose or multipurpose organizations. In rural areas, multipurpose cooperatives theoretically have several advantages: customers can satisfy diverse needs at the same place; the lender has more complete information about loan applicants; savings deposits and loan repayments can be linked to revenues from crop sales; and production credit can be granted at the same time as inputs are delivered. For example, under Kenya's Cooperative Savings Scheme, receipts from the coffee crop are credited directly to the members' interest-bearing accounts. This system has successfully increased the funds available for rural credit (Von Pischke 1983). Some of this success, however, is because coffee is an export crop and the cooperative is virtually the farmers' only outlet. Whether the scheme would have worked as successfully for crops that can be marketed domestically is questionable.

Incorporating credit facilities into multipurpose associations also entails problems. Promoting numerous services at the same time strains the organization's financial and managerial resources. Multipurpose cooperatives are also more likely to be subject to government interference because they can be used to promote a number of policies. Carrying out government policies, however, implies an increased need for external funds, which affects the cooperatives' autonomy and self-sustainability. Multipurpose activities can also endanger credit operations if the surpluses are used to finance other programs. In Taiwan, for example, the Farmers' Associations were undermined when other activities drained resources from profitable credit operations (Sheu 1980).

Across developing countries, the most successful credit cooperatives have been single-purpose organizations that rely on internally generated funds. It seems fair to conclude that credit cooperatives should not be expanded or linked to other activities unless particularly conducive circumstances and adequate management exist. In Korea, for example, credit was not linked to other services at the local level until a sound managerial network had been established. Extensive training at the local and national level preceded the step-by-step development of a national cooperative finance system. Local associations did not get involved in lending until they had extensive experience in other cooperative activities and the NACF's credit and banking business was financially and organizationally strong (Yun 1987).

Infrastructure, Management, and Oversight

Credit cooperatives have often suffered from incompetent leadership, ill-defined managerial responsibilities, and insufficient accounting and controlling. The ability to track financial performance is a prerequisite in the sound man-

agement of any credit institution. Yet instances of inaccurate or nonexistent records of loan collection are not uncommon. In Niger, less than half of the managers of local credit cooperatives had records showing who was eligible for a loan, and less than a quarter kept accounts to show the amounts received by each farmer. It is believed that such information was kept in memorized form by most lenders (Cuevas and Graham 1988).

Ineffective management of cooperatives may reflect a lack of adequate training or a focus on the national rather than the local level—especially when the cooperative is directed from the top down. Thus in Nigeria, when training was provided only to officials of government cooperatives, conflicts among management, local staff, and members seriously affected the cooperative's performance (Rochin and Nyborg 1989). This is not to say that training and strong management at the regional or national level are not essential if the organization is to assist member associations with auditing, training, and financial management. Accounting systems and external supervision are essential if the local population does not have the necessary skills to check on the performance of local managers. The Korean agricultural cooperatives and the Comilla Projects in Bangladesh both drew initial strength from sound planning and management at the top. In both cases, however, the umbrella organization played a vital role in training local leaders and individual members.

Although efficiency and organization are undoubtedly important, social development at the grass-roots level should also be emphasized. In Nigeria credit cooperatives that built on preexisting informal groups fared significantly better than newly formed groups (Seibel and Marx 1984). Excellent results were recorded in a project in Cameroon that trained farmers and local managers and encouraged borrowers to participate in the cooperative's activities. Members' savings grew two to three times faster than those of members of other cooperatives, and rates of loan delinquency fell from 10 percent to 0.5 percent (Von Pischke and Rouse 1983).

Government Interference

Governments and international donor agencies have used credit cooperatives to promote social objectives. In some cases these organizations were used because they were the only well-functioning and effective structures that served rural areas. Often, cooperatives were required to lend at artificially low interest rates and provide financing for activities that would otherwise have been considered too risky. In many countries low prices on loans and other services attracted excess demand for the cooperatives' programs and resulted in low profits and capitalization. Thus weakened, these cooperatives were highly vulnerable to external shocks or poor internal management. Continued reliance on government resources creates the impression that the government will bail out indebted farmers and their cooperative if the need arises. If group lending and credit cooperatives are to make a contribution to development,

governments and sponsors should focus on institution building, training, and management at all levels of the cooperative system rather than on supplying cheap credit.

Conclusion

Despite their mixed performance, lending groups and credit cooperatives have the potential to provide credit to small farmers while allowing financial intermediaries to function as viable institutions. Most unfavorable experiences with group lending and credit cooperatives arise from shortcomings in implementation rather than defects in the concepts.

The success of group lending ventures depends on:

- Participation by homogeneous borrowing groups that are jointly liable and that assume some managerial and supervisory responsibilities. But mandatory joint liability is effective only if borrowers have strong reason to believe that their peers will also repay.
- Ability to deny access to future credit to all group members in case of default by any member. (But this threat works only as long as the lender is able to provide favorable and timely credit services in the future.)
- Previous experience with group activities and a common bond other than credit. Group lending arrangements requiring group deposits that are reimbursed only when the group loan is repaid are particularly successful.

Important factors in the success of credit cooperatives include:

- Bottom-up institutional development and training at the grass-roots and management levels.
- Reliance on members' deposits rather than on outside sources for funds.
- The limiting of activities to financial intermediation (unless strong institutional and management capabilities exist).

Notes

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1. In comparison, the administrative costs of loans to small-scale farmers in the Philippines were between 3 percent and 10 percent of the loan. The same costs were estimated at 11.5 percent for the Jamaican Development Bank and 26.8 percent for the National Agricultural Development Bank in Honduras (Cuevas amd Graham 1984). It is not clear whether these comparative figures include depreciation costs and provision for bad debts. Operating costs as a share of total funds (total liabilities) of the Grameen Bank were 6.5 percent in 1985 and 6.7 percent in 1986, or 6.2 percent and 6.4 percent when depreciation and provision for bad debts are netted out. A study of other Bangladesh banks making loans to small farmers showed between 0.9 percent and 3.9 percent in 1985 (net of depreciation and provision for bad debts). All of these banks, however, faced severe problems with recovery of loans; total recovery five years after due date

was only 60 percent on average, compared with 98.6 percent after two years for the Grameen Bank (Srinivasan and Meyer 1987).

2. The costs are relatively high in part because of the rapid expansion of the Grameen Bank during this time. Hossain (1988) estimates that nearly half of the existing administrative costs may have arisen from start-up costs.

3. In Thailand, more than 50 percent of the loans from credit cooperatives were in arrears between 1981 and 1986, whereas the rate on loans to individual farmers in arrears has been from 10 percent to 30 percent (BAAC 1986). Similarly, in India, the recovery rates of credit cooperatives have been around 50 percent (World Bank 1986).

4. Although these figures are a national average of all credit unions, it can be concluded that savings and loans grew significantly in rural areas because rural credit unions outnumber urban credit unions.

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