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ON MINIMALIST CREDIT PROGRAMS

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ABSTRACT

Minimalist credit programs were implemented in some developing countries recently to lend to the poor and landless small amounts of money as financial assistance. This paper examines three small loan programs -- the Grameen Bank in Bangladesh, the Badan Kredit Kecamatan (BKK) in Central Java, Indonesia, and the General Rural Credit (KUPEDES) also in Indonesia -- to determine the success and replicability of these programs.

All three programs have had a positive impact on rural poverty. Grameen and BKK have done this by accelerating asset accumulation and generating higher incomes. They are successful in that they have payment schedules calling for frequent, small payments; no collateral requirements; a willingness to lend for a variety of activities (nonagricultural); and the ability to lend in cash rather than in kind. However, these programs are difficult to sustain without subsidies and to replicate in other environments. KUPEDES has had a larger effect than Grameen and BKK, with a lending rate fifteen times that of Grameen or BKK, because it serves a wider range of borrowers aimed at the middle and upper parts of the rural income distribution. The KUPEDES program, designed on the premise that extends a banking system outward from towns to the countryside, is the easiest program to replicate. The negative in a KUPEDES-like program is that it leaves the poorest rural households still relying on traditional, informal credit sources.

The authors conclude that credit schemes -- such as Grameen, BKK, and KUPEDES -- should try in the future to raise the amount of domestic credit channelled to rural areas and attempt to gain the widest participation in greater credit flows consistent with cost-effectiveness.

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This note was written in response to a request from the Bureau of Program and Policy Coordination (PPC) of the United States Agency for International Development to make an input into USAID's current thinking about the class of small-scale lending programs known as "minimalist" credit. It would not have been possible, within the scope of this exercise, to review comprehensively the numerous programs in this class which have appeared, in varying forms, throughout the developing world. Rather, we sought to scrutinize the basic underlying assumptions, objectives, and characteristics common to all minimalist credit programs with an eye toward assessing their usefulness as an instrument of development policy.

We began by setting out our understanding of the basic objectives and assumptions underpinning minimalist lending efforts, together with the constraints lenders face in effectively implementing such programs. Next, we examined two minimalist credit schemes which have often been cited as exemplars of such programs and thus worthy of replication in other developing countries, and pointed out the lessons that can be learned from them. To this comparison we added a third small-loan program which could not be considered "minimalist" but which provides some instructive contrasts with the other two programs. We concluded with brief comments on possible

alternatives to the currently fashionable minimalist credit model.

**Minimalist Lending to the Poor: What are the
Underlying Assumptions and Objectives?**

Minimalist credit programs, as defined by the USAID memorandum "Replicability of the Grameen Bank Experience" (1989), are a "subset of small credit assistance programs ... where the predominance of attention is nearly exclusively on small amounts of money lent to poor and landless people." Put simply, then, the central stated objective of such lending schemes is to reach down and offer credit assistance to those segments of the poor untouched by other small-scale credit programs, such as credit to small farmers or business persons.

A fundamental assumption underlying all minimalist credit is that the poorest 10% to 20% of the population in developing countries do not constitute a burden, requiring welfare services; rather they are a resource whose productivity can be enhanced. This assumption is backed up by a good deal of field research, which Michael Lipton has comprehensively reviewed in recent years under World Bank sponsorship (Lipton, 1983a, 1983b, 1983c, 1985, 1988).

Although the poor in low-income countries are generally productive, their real wages and productivity have frequently stagnated, despite substantial increases in real GNP per person. Those mainly dependent on wages from unskilled labor have done

much worse than those who have other income sources. Casual unskilled laborers are heavily concentrated in the lowest deciles of the income distribution. Advocates of minimalist credit often argue that this stagnation makes targeted interventions aimed at the poor necessary and desirable.

A related argument for intervention is that the poorest groups often have characteristics, such as nutritional deficiencies and health problems, which limit their capacity to perform in the labor market. This reduces their links with the rest of the economy and often isolates them from the potential benefits of growth-generating development efforts. For these reasons, it is argued, productivity-enhancing programs must be aimed directly at disadvantaged groups.

Minimalist credit advocates also argue that credit programs do more than just give the poor additional assets which they can use to increase their incomes. They cite program learning externalities, whereby the poor learn to deal with the market and economic institutions, making them more self-sufficient. This is particularly true where women are concerned, because historically, in many countries, women have not had much chance on their own to participate in the market.

A final important assumption of minimalist lending programs is that formal or quasi-formal financial institutions can reach and lend to the very poor cost-effectively by imitating some of the important features of informal lenders: that is, by being

community-based and by substituting social collateral requirements (group loans) for money collateral requirements.

Lending to the Poor: What are the Constraints?

From the lender's perspective the poor are often difficult and costly to reach. Because the loans are very small, the delivery costs of each loan -- the so-called transaction costs of screening, processing, and monitoring a loan -- are unusually high, especially considering the fact that the lender must seek out the poorest borrowers where they live. Added to these high transaction costs is the exorbitant cost of foreclosure on a very small loan gone bad. On top of transaction and foreclosure costs, management effort can rise disproportionately when the lending institution is forced to expand its far-flung network in response to political demands for a bigger program.

An important question is whether very poor borrowers can make effective use of credit obtained at market interest rates (i.e., rates which would cover all the costs of lending). Many lending programs assume that technical assistance is required along with the loan to raise the marginal return on capital. Technical assistance, of course, raises lending costs further, putting additional burdens on either borrowers or the government (depending on who is expected to pay for the technical assistance). Can technical assistance to the very poor really be effective in raising the marginal returns on capital? And can it

be done in a cost-effective way so that loan costs will not be exorbitant? Will the costs of such additional services decline as the volume of lending increases? It may be that as a lender reaches farther down the income scale for borrowers, the cost of lending rises and the marginal efficiency of capital declines. Particular characteristics of the poorest (the nutrition and health problems that limit their labor-market capacity mentioned above) may condition this negative relationship between lending costs to the poorest borrowers and returns on capital.

One wonders, given such potential constraints, whether it is possible to run a minimalist lending program that is cost-effective and, as the advocates of minimalist credit would have it, produces a surplus with which to expand and replicate the effort.

Three Credit Programs Aimed at the Poor

To establish a basis for some conclusions about how small-scale credit programs work and what they can achieve, we reviewed three well-known credit schemes aimed at the poor. Two of these programs, the Grameen Bank in Bangladesh and the Badan Kredit Kecamatan program in Indonesia, fit neatly under the "minimalist" label, in that they lend exclusively to the lowest two or three deciles of the income distribution. The third program, KUPEDES in Indonesia, is intended for all classes of rural borrowers but in practice lends mainly to people in the

upper deciles of the rural income distribution. The discussion which follows is based on the schematic comparison of the three programs which appears as an appendix to this note.

Grameen Bank of Bangladesh and the BKK (Badan Kredit Kecamatan) program of the province of Central Java in Indonesia are frequently cited as examples of successful minimalist credit programs which could be emulated in other developing country settings. Many small loan programmers regard these two programs as attractive models for emulation because they have been able to achieve much greater lending volumes than other small loan programs while still maintaining acceptable repayment rates. Most other programs are tiny, with less than one million dollars of credit outstanding.

Our review of these two programs is intended to address two main questions: Do the programs work? (That is, are they successful in channelling credit to the poor?) And do they impact significantly on the welfare, income, and employment of their target populations?

We begin with a brief description of these two programs. Grameen is a village bank founded in 1983, which is owned jointly by the government and its borrower-shareholders and currently has about 300 branches. It makes small loans (up to \$165) to members of households which own less than 0.5 acre of land or total assets worth less than the value of one acre of land. Borrowers must become members of borrower groups, which are responsible for ensuring that the loan is repaid. Grameen operates in five of

Bangladesh's 21 (old) provinces, has maintained an excellent repayment rate on its loans, and lent out \$18 million in 1986.

BKK, which began in 1970, operates in Central Java, just one of Indonesia's 27 provinces -- albeit a large one, with a population of about 30 million. It consists of some 500 autonomous units operating at the subdistrict level under the supervision of the Provincial Development Bank of Central Java. It makes very small loans (90% are below \$60) to poor rural borrowers. Borrowers are selected initially on the basis of character references and then permitted to take out subsequent loans for larger amounts if they repay satisfactorily. BKK has also maintained an excellent repayment rate and lent out nearly \$22 million in 1987.

Both of these two programs have succeeded in reaching their target groups. The great majority of Grameen's borrowers fit the desired profile; nearly three-quarters of them are women, a severely disadvantaged group in rural Bangladesh. Moreover, Grameen credit allows for an unusually large fraction of the total borrowing from all sources of its target population. BKK borrowers fit the poverty profile for rural Java in terms of characteristics such as income, occupation, and land ownership; 60% of them are women. Both programs reach some of the poor (defined by Michael Lipton as those at risk of hunger) and even some of the ultra-poor (those at risk of nutrition-related disease). They thus have some success in reaching 10% to 15% of the population that are likely to be ultra-poor in a typical

developing country (somewhat more in a very poor country like Bangladesh.)

Moreover, both programs succeed not only in lending to the poor and ultra-poor but also in collecting repayments from them. About 97% of the credit is repaid in both cases. Although some admirers of Grameen Bank attribute its high repayment rate to the bank's insistence that its customers join borrower groups, BKK has achieved comparable repayment rates without the use of such groups. The experience of both programs, as well as others, suggests that the single most important inducement to repayment is the availability of funds for subsequent, often larger, loans once the current loan is repaid.

To satisfy this criterion, the lending institution needs to have a steady and reliable flow of financing. In principle, this could come from either internal or external sources. Often, however, flows of external funding, whether from domestic or foreign sources, are subject to interruption, leaving internally generated earnings as the most reliable source of finance for a small-loan bank. The two programs differ sharply in this regard. Grameen lends at 16% per annum. No small loan program could cover its costs at this interest rate unless it received its own funding on highly subsidized terms. Moreover, Grameen's costs are high -- 27.4% of loans and advances outstanding in 1986, according to Hossain's calculation (Hossain, 1988, p. 75). Grameen does break even, but only by obtaining excess funding

from its supporters and then placing these funds in interest-earning accounts at other banks.

By contrast, BKK lends at 2.0-3.5% per month, has lower operating costs -- e.g., 12.9% of loans outstanding in 1986, versus 27.4% for Grameen -- and has made a long string of annual profits on its activities. Over time, these profits have been steadily reinvested and have become the main source of financing for BKK's lending activities. The sustainability of Grameen Bank lending thus depends on a continued flow of low-interest loans from its supporters (IFAD and the Bangladesh Bank), while BKK is sustainable in a more autonomous sense.

BKK shows that bank-like institutions can make a profit while lending to poor people. Doing so requires that they keep their operating costs -- necessarily much higher than those of banks catering to larger borrowers -- under control. It is significant that most of BKK's staff are not civil servants, while Grameen suffered a sharp cost increase as a result of a hike in civil service salaries in 1985.

BKK thus follows the currently popular injunction to lend at "market" (cost-covering) interest rates, while Grameen does not. BKK's interest rates were designed to cover the higher cost of serving small borrowers, yet be well below the rates charged by many informal lenders. BKK loans are thus intended to be attractive both to the borrower and to the lender. Grameen's interest rate was apparently set (for political reasons) to be equal to rates charged by other banks on rural loans, taking no

account of the higher cost to the lender of serving small borrowers. In Central Java, the marginal return to (working) capital in the hands of rural producers appears to be high enough for borrowers to earn a positive net return despite the high interest rate paid. We do not know whether the same would be true in Bangladesh or other low-income countries.

The two programs share some other characteristics which are probably important for achieving success in minimalist lending:

- Both prefer repayment schedules that call for frequent small payments. This promotes borrower discipline.
- Neither imposes a collateral requirement. This makes the programs accessible to borrowers who lack collateral or who would find it difficult or expensive to document their assets. Collateral requirements in small loan programs make little sense anyway, since the cost of foreclosing is likely to exceed the value of the collateral. Both Grameen and BKK use compensating balances as a partial substitute for collateral.
- Both lend for a wide range of (mostly nonagricultural) activities and make little or no effort to supervise the borrowers' use of the loan. Such efforts are seldom cost-effective.
- Both programs lend in cash, not in kind; lending in kind appeals to those who wish to control the use to which the loan is put, but it usually lowers the value of the loan to the borrower (or raises the implicit interest rate

which must be paid) because the goods provided are often not of the type or quality desired by the borrower, are not available when needed, or can be obtained only with additional payments.

To summarize the argument so far, these two programs have achieved considerable success at the operational level and have incorporated elements that appear transferable to other programs and settings. But could they really be replicated in other settings? This is an important question for AID, since the Congressional mandate to lend at least \$50 million to the poor in FY90 and at least \$75 million in FY91 amounts to an instruction to create several new Grameens or BKKs over the next two years.

Unfortunately, experience so far suggests that these programs are not easily replicated. The strongest indication that this is the case lies in their limited spread within their own countries. Although Grameen is growing and has several imitators in Bangladesh, it still covers only about one-quarter of the country. In Indonesia, several other provinces started credit programs with features similar to BKK but none achieved the same degree of success. This record calls attention to the unique and non-replicable features of these programs, especially their reliance on charismatic leaders.

Although not easy, replicability of many features of these programs is possible, at least within similar environments. Indonesia has shown this by successfully instituting a national system of rural credit which embodies many of the features of

BKK. KUPEDES (General Rural Credit) began in 1984. It is administered by the Indonesian Peoples' Bank (BRI), a large government-owned commercial bank. Like BKK, KUPEDES lends at interest rates that are acceptable to borrowers when coupled with assured credit availability and high enough to earn profits for the bank. Building on a strong preexisting institutional base, KUPEDES was able to expand rapidly, achieving profitability within 18 months and growing to more than \$300 million of credit outstanding by the end of 1988.

Unlike BKK, KUPEDES has a collateral requirement. While this might be thought to make it difficult for poor borrowers to gain access to credit, a 1989 survey indicated that more than 70% of KUPEDES borrowers owned less than half an acre of rice land and were thus relatively poor by rural Indonesian standards (Bank Rakyat Indonesia, 1990). Over 60% of borrowers were able to meet the collateral requirement by pledging homes and/or house lots. (This is significant because even villagers who own no agricultural land often possess small house plots.) Most KUPEDES loans outstanding in 1989 were in the \$150-500 range. Although the original intention was that the program would make loans as small as \$25, BRI has shied away from such tiny loans because of their relatively high handling costs.

The experience of KUPEDES and its relationship to BKK tells a lot about what is needed to replicate a successful small loan program and especially to achieve a larger impact by operating successfully on a national level. There must be a strong

institutional foundation, in this case the 300 branches and 3,000 village units of BRI. The institutional structure must combine firm rules and a system-wide set of incentives to induce staff members at all levels to further the aims of the program with the decentralization of loan-making authority to the local level. There must be an accounting system which makes it possible to monitor the performance of branch and unit managers, who must be held responsible for effective use of the autonomy that has been delegated to them. With respect to loan terms and conditions, lending criteria, and the like, KUPEDES incorporated the proven features of BKK. It is interesting to note, moreover, that BKK has recently been modified to include two successful aspects of KUPEDES, a prompt repayment incentive and a voluntary savings program (Patten and Rosengard, 1989, pp. 35-38). These innovations demonstrate the importance of building the lessons of experience into the design of small loan programs.

So much for the first question posed above: Do these programs work? The second question -- Do they impact significantly on their target populations? -- is much harder to answer. Socio-economic impact evaluations were carried out for BKK in 1982 (Goldmark and Rosengard, 1983, pp. 65-94; Patten and Rosengard, 1989, pp. 48-49), for Grameen Bank in 1984/85 (Hossain, 1988, pp. 65-79), and for KUPEDES in 1989 (partial results in Bank Rakyat Indonesia, 1990; full results not yet published). In each case, impact was inferred from a "before and after" comparison of borrowers' business activities. The Grameen

Bank evaluation also included a "with/without" comparison of areas served by the bank with otherwise similar areas which were not served. All these evaluations found signs of positive impact, but precise measurement of the effects is rendered impossible by the basic unknowability of the counterfactual -- what would have happened in the absence of the program -- and the fact that fungibility of financial resources makes it hard to know how the money was actually used. In Bangladesh, it did appear that credit from Grameen Bank promoted ownership of livestock and encouraged a significant number of women to enter the labor force by establishing small businesses.

Whatever the impact of Grameen, BKK, and similar programs on the welfare of their particular clients, their impact on society as a whole is limited by the fact that they operate on a small scale. Besides restricting the number of beneficiaries, their small scale also limits their impact on the development of rural financial markets, which is believed by many economists to be a promising road to rural economic development and improvement in the welfare of the rural poor (e.g., Von Pischke, Adams, and Donald, 1983).

While KUPEDDES does not satisfy the Congressional mandate to lend to the poorest of the poor, its impact on the rural poor may actually be greater than that of the more sharply targeted programs. Programs like KUPEDDES extend the banking system outward from the towns to the countryside by the natural method of beginning with those borrowers who are most efficiently served

by banks. Although this may leave poorer rural households and smaller rural firms to rely longer on traditional informal sources of credit, the market impact of a successful national credit program like KUPEDDES can improve loan terms in the informal market as well. It is important to realize that informal credit systems are not necessarily exploitative and in fact have important efficiency advantages when it comes to serving small borrowers. The question, therefore, is whether the well-intentioned promoters and supporters of the Congressional mandate have really come up with the most effective means of achieving the objectives that they had in mind.

Conclusions

1. Grameen and BKK show that it is possible to lend to the very poor. Both programs have been successful in extending credit to the lowest two or three deciles of the income distribution and have managed to accrue exceedingly high rates of repayment while doing so.

2. The two programs show, however, that it is hard to sustain a minimalist lending program without a subsidy. According to the data available for 1987, the Grameen Bank is clearly not sustainable at its present loan rate without generous concessional funding from outside. One reason for this is the Bank's high staffing intensity. In this respect, Grameen is anything but "minimalist." BKK has proven sustainable, in large

part because it has relied on low-cost staff recruited locally and not accorded civil service status. Whether, in Bangladesh's current economic environment, it would be possible to develop a minimalist lending program (reaching down the income scale as far as Grameen) that is not highly staff-intensive is not clear from our review. If Grameen's loan interest rate was raised to cover all costs (perhaps to around 30%), would many of the Bank's borrowers be rationed out of the market because of the infeasibility of their projects? For example, would animal husbandry and certain kinds of petty trading be profitable? Considering the size of loan that might be needed at these higher interest rates in order to turn a profit, how would one handle the increased risk that poor borrowers assume, specially allowing for Bangladesh's highly uncertain rural environment? Similar questions would arise in many sub-Saharan African countries.

BKK seems to show that minimalist credit schemes can extend loans at cost-covering interest rates. However, one wonders how much of this success is attributable to conditions unique to Central Java. It has proven difficult to duplicate its success even in other parts of Indonesia.

In contrast to BKK and Grameen, KUPEDES has been able, in a relatively short period, to reach a large countrywide group of borrowers at cost-covering lending rates. It did so by making somewhat larger loans to a wider range of borrowers, who nevertheless included substantial numbers of poor rural residents.

3. All three programs have reportedly had a positive influence on rural poverty. Grameen and BKK are cited as having had a direct positive impact on the economic well-being of their clients by accelerating asset accumulation and generating higher incomes. KUPEDDES, however, has had a much larger aggregate economic impact than the other two programs because it has reached a much greater number of borrowers and financed somewhat larger investments. Moreover, KUPEDDES generates a significant indirect impact on poverty through its effects on the demand for unskilled labor, the supply of wage-goods, and the development of rural financial markets. In the end, implementing a bigger program, which can significantly increase the supply of domestic credit to the rural community, can potentially have a larger impact on rural poverty.

4. It is obvious that credit schemes such as KUPEDDES, which serve a wider range of borrowers, including those above the lowest two or three deciles of the income distribution as well as those in those deciles, are much easier to implement and to replicate. Because this is true, more funds can be deployed to greater impact on the rural poor.

Although Grameen has had some success in extending its outreach to the rural poor in different regions of Bangladesh, it has been able to cover only 6% of Bangladesh's villages after several years of operation.

5. One much-discussed aspect of minimalist credit is incorporation of successful techniques of informal lenders.

Grameen, for example, uses group loans to reduce default costs in the absence of financial collateral. This imitates the longstanding practice of informal lenders who often extend credit without tangible assets as collateral, relying instead on social capital (the borrower's communal identity and social relations) as a collateral-substitute. To the extent that minimalist programs incorporate and build upon elements of informal finance, they may be able to enhance their success in some locations.

6. However, the experience of BKK, as well as other programs, suggests that the most important inducement to repayment is the availability of funds for subsequent loans once the current loan is repaid. The ability to provide continuity in lending is a more basic criterion for success than the use of borrower groups or other specific features of loan programs. BKK has succeeded without borrower groups because it has been able to maintain the flow of loan funds.

Alternatives to Minimalist Credit Programs

The fact that minimalist credit schemes may not deliver all that is advertised, either because they need a subsidy or because their designs cannot easily be replicated elsewhere, does not mean that they should be abandoned. A place should be reserved for programs aimed directly at the lower tail of the income distribution, as part of a wider development effort. We believe, however, that the first priority in any effort to improve the

livelihoods of the rural poor through credit schemes should be to raise the total amount of domestic credit channelled to rural areas. The second priority should be to achieve the widest participation in the augmented credit flows that is consistent with cost-effectiveness.

Profitable programs such as KUPEDES, aimed at the middle and upper parts of the rural income distribution rather than at the poorest of the poor, can be implemented and replicated more quickly and easily and thus can ultimately deliver a much larger share of domestic credit to the rural community. The fungibility of financial resources, which is known to be quite high in all countries, will ensure that the growing share of domestic credit has an enhancing effect on rural credit markets and investment, given that distortions in current economic policies are not facilitating an excessive extraction of resources from rural areas. In time this approach will have a significant effect on the cost of capital, the demand for unskilled labor and the availability of wage goods, all of which will have a positive impact on rural poverty.

If the fundamental concern is to improve the economic position of the poor and ultra-poor, even more distant substitutes for minimalist credit programs merit serious consideration, at least as complements if not as substitutes. Staying with Bangladesh as an example, the extraordinary development of the garment industry over the past several years has demonstrated anew the job-creating potential of

labor-intensive export industries, even in a relatively unpromising environment such as Bangladesh (Rhee, 1989). The emergence of the garment industry has impacted significantly on the market for unskilled labor and has drawn thousands of women into the work force for the first time. The creation of a single industry of this kind can generate as much additional work and income for the poor as many thousands of small self-employment activities.

APPENDIX

GRAMEEN BANK, BKK, AND KUPEDES: A SCHEMATIC COMPARISON

PROGRAM OBJECTIVE

GRAMEEN: To provide credit to the rural poor for the purpose of improving their economic condition. Grameen means village.

BKK: To provide credit conveniently to the rural poor of Central Java for off-farm, income-generating activities. BKK stands for the Indonesian words meaning Kecamatan [Sub-District] Financial Board.

KUPEDES: To provide credit to all types of rural producer as part of a broader and longer-term effort to create a network of full-service banks serving the financial needs of rural Indonesia, which previously had little access to banks. KUPEDES is an acronym derived from the Indonesian words for General Rural Credit.

HISTORY

GRAMEEN: Established by the Bangladesh government in 1983 as an outgrowth of an action research project begun by Chittagong University in 1976. Charismatic founder and leader: Mohamed Yunus. Heavy foreign aid involvement. Financial support from IFAD and the Bangladesh Bank.

BKK: Inaugurated by the provincial government of Central Java in 1970. Many units ran into trouble and had to be rehabilitated in the early 1980s in cooperation with AID's Provincial Development Program.

KUPEDES: Grew out of earlier (1970-83) effort to provide subsidized credit targeted to intensifying rice farmers. Used existing network of 3,500 village units. Started by Indonesian Peoples Bank (BRI), a government-owned commercial bank intended to serve small and rural producers. BRI used the authority to set interest rates granted to individual banks by 1983 banking reform, sought cooperation of Ministry of Finance and Central Bank. Lending began in January, 1984. No foreign aid involvement initially, but the World Bank lent \$100 million in 1987 to support KUPEDES.

ORGANIZATION AND INFRASTRUCTURE

GRAMEEN: A bank owned 75% by borrower/shareholders and 25% by the Bangladesh government. Had 298 branches by February 1987. A branch typically covers 15-20 villages. Branches are charged 10% for their capital and are expected to make a profit on a six-point spread.

BKK: Loans made by 497 (June 1988) locally administered, financially autonomous boards operating at the kecamatan level. The boards operate under guidelines laid down by the provincial government and are supervised by the Provincial Development Bank of Central Java. Boards are staffed by locally hired people with primary or secondary education, most of whom are paid out of BKK earnings.

KUPEDES: Administered by BRI through its central and regional offices and its 300 branches. Loans made by about 3,000 village units located at the kecamatan level. The typical village unit has a staff of four male high school graduates, who are employees of BRI but do not receive full civil service salaries and benefits.

LOAN PROGRAM CHARACTERISTICS

1. GEOGRAPHIC RANGE

GRAMEEN: Operates in five out of 21 (old) districts in Bangladesh. In February 1987 its estimated coverage was 25% of target households in two of the districts served and 8-12% in the other three districts.

BKK: Rural areas of one large province (population about 30 million) out of 27 in Indonesia.

KUPEDES: In principle, all rural areas in Indonesia. Coverage is most effective in villages where village posts are located and nearby villages. Introduction to urban areas began recently.

2. ELIGIBLE BORROWERS

GRAMEEN: One member of a household which owns less than 0.5 acre of land or assets worth less than 1.0 acre of land may become a member of a borrower group and borrow from GRAMEEN. Grameen has been especially successful in reaching women, a severely disadvantaged group in rural Bangladesh. Female participation in the program has increased steadily. Women were 74% of borrowers and held 69% of credit outstanding at the end of 1986.

BKK: Poor rural residents of Central Java who operate nonagricultural enterprises. Approval of a first-time borrower is based on a character reference from a local official; there is no collateral requirement (BKKs are not banks and are therefore exempted from the collateral requirement in Indonesian banking law) and no significant staff analysis of a proposed enterprise's feasibility. Subsequent loans are based on the borrower's repayment record.

KUPEDES: In principle, any rural resident who has a business of any kind. However, as a bank BRI is bound by the collateral requirement in Indonesian banking law. In practice, BRI usually insists that collateral take the form of proof of land ownership. This imposes an extra transaction cost on borrowers (land titling can be difficult, time-consuming, and expensive) and effectively limits borrowing to the upper strata of the rural population, especially in areas where land pressure is severe. Eligibility for second and subsequent loans and the amounts that may be borrowed are determined by the borrower's prior repayment history.

3. ELIGIBLE PURPOSES FOR BORROWING

GRAMEEN: Intended primarily for working capital loans for non-crop uses. In 1986 nearly 45% of loans were for livestock and poultry raising, 25% for processing and manufacturing, and 23% for trading and shopkeeping.

BKK: All nonagricultural income-earning enterprises. Apparently agricultural lending was allowed in the 1970s. Several BKKs went bankrupt during that period, in many cases because of overexposure to agricultural loans which defaulted.

KUPEDES: Productive uses, including both fixed and working capital. In practice, 97% of loans have been for working capital. Reasons include the low loan limit relative to the cost of most capital equipment items, BRI's preference for monthly repayments and extra information requirements imposed on fixed capital borrowers. Grace periods and single-payment loans are possible but discouraged by BRI because loans with these features are thought to have lower repayment rates.

4. LOAN SIZE RANGE

GRAMEEN: Maximum individual loan is Tk. 5,000, about \$165 at the official exchange rate. Loans of Tk. 50,000-100,000, and in a few cases up to Tk. 500,000, have been made for collective enterprises, but repayment experience has been bad and collective enterprise loans were only 1.4% of GRAMEEN's portfolio in 1986.

BKK: Loans have remained very small, with 90% still below Rp. 100,000 (about \$60). The average balance outstanding (not to be

confused with original loan size) was Rp. 36,000 (\$22) in June, 1988. BKKs are grouped into five classes based on their equity; the richer units are allowed to make larger loans.

KUPEDES: The original upper limit was Rp. 1 million, then worth about \$975. Subsequently, the limit was raised twice while the rupiah depreciated relative to the dollar. The present limit is Rp. 3 million (\$1,760) in most cases and Rp. 5 million (\$2,940) in exceptional ones. Although a lower limit of Rp. 25,000 (\$24) was specified, in practice BRI has been strongly averse to very small loans. The average balance outstanding has risen steadily and was Rp 429,000 (\$252) in March, 1989.

5. INTEREST RATE AND LOAN TERMS

GRAMEEN: Interest 16% per annum, the same rate charged by other banks on agricultural loans. There is no collateral requirement, but borrowers must be members of borrower groups. Loan proceeds are to be invested within seven days and repaid in 50 weekly installments. Alternative sources of credit: according to Hossain, bank lending in rural areas expanded rapidly in the early 1980s but reached only medium and large enterprises; small enterprises were excluded because they could not meet collateral requirements, found complex forms confusing and were discouraged by the banks, which preferred larger loans. Informal sources provided nearly all the credit received by the rural poor, either free of [explicit] interest or at an average rate of 125% p.a.

BKK: Several different loan plans are offered, with terms ranging from 22 days to one year (but only to six months before 1988). Effective monthly rates now range from 2 to 3.5%; formerly they were even higher. A prompt repayment similar to that of KUPEDES was introduced in 1988.

KUPEDES: Defined as 1.5% simple interest (i.e., calculated on the original loan size, not the outstanding balance) for working capital loans and 1% for fixed capital loans (the lower rate on fixed capital lending was imposed by Central Bank as a matter of national policy). An additional 0.5% is charged initially and then returned to the borrower upon repayment of the loan if all payments are made fully and on time. The average effective interest rate works out to about 30% per annum. This is much higher than the 12% typically charged in subsidized government-sponsored credit programs in Indonesia but much lower than rates charged by informal lenders, which often exceed 10% per month. Commercial banks often lend to the larger rural enterprises from their in-town branches; the typical interest rate charged is 20-25% p.a. Government-subsidized loans at 12% p.a. have been made for various special purposes, but these programs have been marked by periodic interruptions in the availability of funds. KUPEDES has been attractive to borrowers because it avoids this problem.

6. GROUP VS. INDIVIDUAL LENDING

GRAMEEN: Borrowers are required to form groups of about five like-minded individuals. Purpose is to economize on supervisory time of bank staff. Groups of ten or more have been found too large to develop the necessary sense of mutual responsibility. No relatives are allowed in the same group. When a group is formed, loans are made initially to only two of its members; their performance becomes the basis for deciding whether other members of the group will receive credit.

BKK: All loans are to individuals. No use is made of borrower groups.

KUPEDES: Same as BKK.

7. BORROWER SUPERVISION; TECHNICAL ASSISTANCE

GRAMEEN: A broad rural development program called "Sixteen Decisions" was introduced in 1984. It encourages members to be disciplined, work hard, and carry out a number of community development tasks. However, the IFPRI study does not make clear whether, how, or how much GRAMEEN intervenes in the economic activities of its borrowers.

BKK: None in the general program. During the 1970s the good performance of the BKKs caused the Governor to assign them responsibility for the "special" subsidized directed lending programs in which various government departments were involved. While repayment experience in "general" lending remained good, the "special" programs had poor repayment records. The failure of the "special" programs placed many BKKs in financial difficulty and in need of rehabilitation, which they received through AID's Provincial Development Program in 1979-81.

KUPEDES: One of the four village unit staff members works mainly outside the office on loan processing and collection. No technical assistance accompanies the loan.

PERFORMANCE

1. GROWTH IN LOAN VOLUME

GRAMEEN: Loan disbursements grew from Tk. 304 million in 1984 to Tk. 542 million (equivalent to about \$18 million) in 1986. The main constraints on growth appear to be staff training and the need to institutionalize policies and procedures to substitute for the activities of the charismatic founder.

BKK: The capital of the system was increased in 1972 through a loan of Rp 200 million (\$482,000) from the provincial government. Annual lending rose from Rp. 442 million (\$1.1 million lent to 120,000 people) in 1972 to Rp. 36 billion (\$21.9 million lent to 592,000 people) in 1987.

KUPEDES: The initial capital of KUPEDES was Rp. 100 billion (then about \$100 million) of credit extended under two earlier low-interest loan programs. As these loans were repaid, they were replaced by KUPEDES loans at higher interest rates. The volume of credit outstanding rose from zero at the beginning of 1984 to Rp. 540 billion (\$318 million) at the end of 1988. Since BRI, as a state-owned enterprise, was permitted to retain only a small share of its profits, the main means of increasing BRI equity is by attracting savings.

2. REPAYMENT HISTORY

GRAMEEN: Excellent. IFPRI study says that in 1985 only 0.5% of loans had arrears longer than one year, while payments more than one week overdue represented only 3.3% of outstanding credit. Borrowers often repay early to become eligible for larger loans. The need to provide capital for dowries is regarded as the greatest threat to loan repayment. When a borrower fails to repay, other members of the borrower group usually repay for him/her, then deal with the defaulter on a personal basis.

BKK: About 98% repayment in 1980s after somewhat weaker record (93-97%) in 1970s. There has been some deterioration in repayments recently; the percentage of outstanding payments that is more than six months overdue rose from 4% in 1984 to 8% in mid-1988.

KUPEDES: Very good, with some deterioration recently. The long-term loss ratio (cumulative payments missed as a percentage of payments due) was 3.3% in December 1988.

3. COST OF LENDING; PROFITABILITY

GRAMEEN: GRAMEEN is heavily subsidized and has lost money on its loan operations since 1984, even in private terms. At the end of 1986, 65% of the bank's assets consisted of borrowings from IFAD and an additional 14% of borrowings from the Bangladesh Bank and other sources. Deposits accounted for 16% of assets and paid-up capital and reserves only 4%. The average cost of borrowed funds was 5.9% in 1985 and only 3.3% in 1986. Despite this heavy reliance on subsidized borrowing, GRAMEEN fails to cover its operating cost. According to the IFPRI study, this was 21.7% of credit outstanding in 1986 and would have been 26.5% if GRAMEEN had had to borrow at the interest rate paid by other banks in Bangladesh. IFPRI estimates the implicit rate of subsidy as 39% at the actual cost of funds and 51% at the opportunity cost.

Operating costs were 8.6% of loan volume in 1984 but rose to 18.1% by 1986, mainly because of a rise in civil service salaries in 1985. Hossain shows that operating costs were much lower in older branches in 1984/85 than in newly-established branches; he infers that as much as half the operating cost through 1986 represented start-up costs associated with expansion of the branch network.

Overall, GRAMEEN recorded small profits in 1984 and 1985 and a small loss in 1986. It did this by offsetting losses on loan operations with interest income from deposits in other banks, which earned either 14.5% (fixed-term deposits) or 8.5% (short-term deposits) on funds borrowed at much lower rates. Hossain (1988, p. 78) suggests that GRAMEEN could improve the profitability of its lending by charging a higher interest rate, providing larger loans (for example, collective enterprise loans), moving into agricultural credit and/or seeking larger deposits. [Comment: All these suggestions except the first may be non sequiturs. Collective enterprise loans have been unsuccessful so far; increasing agricultural lending could cause the repayment rate to go down because of natural disruptions of agricultural production; and the need to pay high enough interest rates to attract deposits would surely raise the cost of funds.]

BKK: Makes a profit every year. We did not obtain information on detailed cost data, but most of the capital being lent now is BKK equity, which has grown very fast. In 1981, according to Goldmark and Rosengard (1983, p. 63), if all subsidies were removed, the return on capital would have been 7%.

KUPEDES: Before the introduction of KUPEDES, the village unit system of BRI made large losses (as much as 50% of its expenses), which were covered by direct and indirect subsidies. It reached the breakeven point 18 months after the start of KUPEDES and has earned a growing profit each year since. The high loan interest rate permits a profit to be made, even though funds are borrowed at market interest rates and intermediation costs are high. In March, 1988 the cost of funds was 9.1% and intermediation cost 13.7%, of which 12.4% was labor cost.

4. EVIDENCE ON SOCIO-ECONOMIC IMPACT

GRAMEEN: According to Hossain (IFPRI), most borrowers had little alternative access to credit. Very few had borrowed from institutions only about 20% from informal lenders. A 1984/85 sample survey showed that GRAMEEN provided 78% of total credit in the areas it served and reached almost 2/3 of the households in the target group. Ownership of livestock and working capital increased rapidly among members over a three-year period. About 50% of woman borrowers had been outside the labor force and became self-employed after receiving loans. Comparisons of borrowers with non-borrowers and project villages with

non-project villages indicate significant income-raising effects, which are strongest for the poorest households.

BKK: A small sample survey of borrowers in 1982 showed that more than half of all borrowers listed petty trading as their primary occupation, 60% were female and half owned land, averaging 0.8 hectare in extent (about average for Central Java). Most clients had borrowed frequently over a period of years, using the credit to expand their activities and in many cases to enter new lines of business. A "positive but modest" effect on employment was found. BKK fell far short of meeting the entire need for rural credit in the province. The clearest linkage was backwards to suppliers: 90% of borrowers had increased their purchases from suppliers. Patten and Rosengard say that these findings for 1982 would still apply in 1988.

KUPEDES: Initial formal evaluation carried out in 1989; final results not yet published. Preliminary survey results plus extensive field observation suggest that most loans are used by the borrowers for working capital, but not necessarily for the purpose stated in the loan application. Most borrowers have multiple enterprises and borrow for whichever is regarded as most creditworthy. According to borrower statements, 65% of the credit is used for trade (1989) and only 14% for agriculture. However, some borrowers borrow for trade and divert the funds to agriculture or other uses (e.g., many farmers' wives trade). There is anecdotal evidence that the growth of the program has lowered the interest rates charged by informal lenders. We do not know how much of the borrowed money is relent. While KUPEDES does not meet AID's criterion of lending exclusively to the poorest of the poor, it does reach some members of that group and may have as favorable an overall impact on the poor as programs that lend directly to them. Indirect benefits to the poor include demand expansion, employment creation, and improvement in rural financial markets. The single most favorable aspect of KUPEDES is its scale, which is much larger than those of nearly all comparable programs. Operating nationally on a large scale makes it possible to have an impact on rural financial markets.

SAVINGS

GRAMEEN: Members are required to save Tk. 1/week plus 5% of any loan received into a Group Fund. If they leave the group, they forfeit the 5% contribution. The bank pays 8.5% interest on these savings. There is also a small Emergency Fund, from which members can borrow for consumption purposes at times of sickness or social ceremony. This feature is believed to make GRAMEEN more competitive with informal lenders, who lend for consumption purposes in emergencies.

BKK: Borrowers are required to deposit a proportion of their loan proceeds in the BKK. This is intended to provide the BKK with cheap capital and teach the borrowers the virtues of saving. Since BKKs are not banks, they were not permitted to accept voluntary savings under Indonesian banking law until special permission to do so was granted to them in 1984. The provincial development bank did not feel that the BKKs were ready to implement a voluntary savings scheme until November 1987, when the TAMADES program was introduced. TAMADES pays interest at 1.25% per month, offers unlimited access to savings and includes an annual prize lottery. By June 1988 the BKKs held Rp 3.2 billion (\$1.9 million) in savings.

KUPEDES: No compensatory savings requirement. An important benefit of KUPEDES was the fact that the introduction of high-interest loans made it profitable for BRI to promote voluntary savings. SIMPEDES (Rural Savings) was introduced on a national basis in 1986. It pays interest of 9% per annum on accounts of Rp. 25,000-200,000 and 12% on larger balances, and offers unlimited withdrawal privileges and lottery prizes. SIMPEDES balances grew rapidly, reaching Rp. 334 billion (\$190 million) in December 1988.

REPLICABILITY

GRAMEEN: Hossain says that the replicable aspects of GRAMEEN are the formation of small homogeneous groups for group guarantee of loans and supervision of loan utilization, recovery of loans in small regular installments and development of collective savings institutions for the mutual benefit of members. He comments that GRAMEEN's extensive branch network and close interaction with borrowers would be impossible or too expensive in sparsely populated areas with underdeveloped transportation systems [Sub-Saharan Africa?]

BKK: According to Patten and Rosengard, the BKK can offer credit effectively and profitably to its rural clientele if it: (1) charges interest rates high enough to cover operating expenses, including the cost of funds; (2) relies on character references from local officials for loan eligibility, rather than the availability of collateral or staff analyses of enterprise feasibility; (3) reduces risk by making small initial loans to particular customers, then gradually increasing the amount lent if repayment is satisfactory; (4) uses repeat loans as the borrower's main incentive for full and timely repayment; and (5) blends local autonomy with overall program quality control. These seem like perfectly general principles, which should be applicable to credit programs anywhere, yet it has not proven possible to duplicate fully the success of BKK, even in other provinces of Indonesia and even in some cases with the personal

involvement of Dick Patten. Why? It would be interesting to hear Patten's answer.

KUPEDES: Several of the principles on which KUPEDES is built appear to have wide applicability: lending at interest rates (not necessarily "market rates") that are profitable for the bank despite high lending costs; general availability of credit to rural and small-scale producers; the prompt repayment incentive. In this case, a government-owned bank implemented the program and the central problem was to devise incentives to induce key actors at various levels of the bank to act like profit-seekers. Something similar could be done with a private bank as the implementer through the use of time-limited subsidies based on infant industry principles.

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