

The Grameen Bank
Rural Credit in Bangladesh
 by Erin Scrapek*

There are 1.3 billion people on this planet who earn the equivalent of one American dollar or less per day and live in total poverty. Although attempts have been made through government and development organizations to resolve this persistent problem of lack of capital, success has been elusive. The Grameen Bank of Bangladesh is an amazing and inspiring exception to this scenario. Grameen ("village" in Bengali) and its founder, Mohammed Yunus, have received worldwide recognition for the bank's 98 percent recovery rate. The bank's focus on poor rural women, and its innovative group lending scheme, have also received attention. Grameen is perhaps the only bank in the world that encourages birth control, sanitation, education and physical exercise as part of its lending program. (Kamaluddin, 1993, p.38) Bill Clinton has said that Yunus deserves a Nobel Peace Prize, and cited his experiment in Bangladesh as a model for rebuilding the inner cities of America. (Kamaluddin, p.38)

Difficulties in obtaining capital in the rural sector are widespread in Bangladesh and other developing nations. Traditional money-lenders charge ridiculous interest rates and commercial banks refuse to lend to the poor for fear of default. The Grameen Bank's effectiveness in providing credit for the rural poor and ensuring its most efficient usage is innovative and unparalleled. Analysis of the Grameen Bank suggests that the bank's credit policies, and in particular the emphasis on women as borrowers and on peer monitoring, have been successful in alleviating poverty in rural Bangladesh. Bangladesh is often described as the "largest poorest" nation in the world, indeed, a developmental "basket case." (Counts, 1996, p.5) It is the most densely populated state in the world, with a population of over 128 million in an area of 144 000 square kilometres. At the same density, Canada could hold more than the entire population of the world! Although the population growth rate is down to 1.6 percent - from over 2.2 percent ten years ago, this growth rate would still double the population in 40 years. Urbanization has been very slow in Bangladesh, with only 15 percent of the population living in cities. This makes for an extremely crowded rural countryside. Although the bulk of the population is employed in the rural sector, a high concentration of land in the hands of a small group of landowners has created a widespread land shortage. In a predominantly agrarian society, the landless poor have little opportunity to improve their social and economic status.

In addition to the problem of rapid population growth, the nation is constantly plagued by natural disasters. Located in the delta of two of the world's major river systems, the Ganges and the Brahmaputra, Bangladesh is home to a system of

* An earlier version of this paper was prepared for Econ 270 for Professor Shelley Coggins at the University of Saskatchewan.

interlacing streams which offer both a blessing and a curse to the country's economic situation. The rivers are subject to annual flooding, which replenishes the soil through rich silt deposits, but they can also cause great damage to the country's already sparse infrastructure and crops. Consequently, underdeveloped infrastructure and lack of transportation facilities (also a result of flooding) have limited expansion of large-scale rural production. Also a victim of severe cyclones and torrential rainfall, Bangladesh sees all aspects of its people's lives constantly threatened by natural disasters.

The nation's lack of resources is a hindrance to its economic situation. Jute is the major cash crop, but the market for this fibre is deteriorating because it is being replaced by plastic. Although the country is basically self-sufficient in rice production, it is a major food importer for its undernourished population. In 1992, it was estimated that the average Bangladeshi consumed only 1956 calories per day. (Baxter et al, 1998, 234) Population growth, accompanied by an unfortunate geographical location, as well as their relationship to food production and industrial development, continue to be problems for Bangladesh.

Born in the port city of Chittagong, Bangladesh, Mohammed Yunus studied economics at Vanderbilt University in Tennessee before becoming head of the Economics Department at Chittagong University. Confronted with the devastation of the 1974 famine, in which over one million people died, Yunus was deeply affected and turned his attention to the plight of the rural poor. As he explains,

While people were dying of hunger...I was teaching elegant theories of economics...I felt as if I knew everything, that I had all the solutions. But then I would walk out of the classroom and see skeletons all around me, people waiting to die...It made me realize that whatever I had learned, whatever I was teaching, was all make-believe; it had no meaning for people's lives...I decided that the poor themselves would be my teachers. (Yunus, 1997, p.25)

It was one particular incident that led Yunus to his destined lesson. When interviewing a woman who made bamboo stools, he discovered that because she had no capital of her own, she had to borrow twenty cents to buy the bamboo. After repaying her trader, she had made only 1.5 cents profit. (Yunus, p.25) In traveling around her village, Yunus found that he could meet the entire credit needs of 42 people with a mere 27 dollars. Yunus realized that poverty "was not a personal problem due to laziness or lack of intelligence, but a structural one: lack of capital." (Jolis, 1996, p.17)

Availability of credit could help the poor accumulate their own capital, as a summary of the Baker-Hopkin model of the relationship between equity capital and credit illustrates.

In this model there lies the formula:

$$\Delta E/E = [(D/E)(r-1) + r] (1-c)$$

where D = the amount of the loan;

E = amount of equity capital, i.e. the difference between the value of assets and loan;

r = rate of return on asset;

I = interest paid on loan;

c = rate of consumption out of the income from assets;

According to this formula, as long as return on assets (r) was larger than the interest paid on loan (I), credit would increase the income of the borrower who received the loan. The larger the share of loan to total capital ($D+E$), the higher the growth of the borrower's income would be. MPC being less than 1, the higher the borrower's income, the larger the borrower's capital accumulation would be. (Wahid, 1993, p.17)

How, then, to obtain this cheap credit? Aside from loan sharks and commercial banks, which refused to lend to the poor due to lack of collateral, who were the poor to turn to? Yunus' answer was to channel loans from the banks to more affluent intermediaries such as himself. In turn, these borrowers could assume the risks that the bank would not, and lend to the poor themselves. After personally experimenting as a guarantor for loans, and experiencing an extremely high repayment rate, Yunus decided to start his own bank. Thus, in 1983, Grameen Bank - a formal, independent financial institution was formed.

The Grameen Bank uses an innovative group lending technique which requires borrowers to form groups of five in order to apply for a loan. A woman who wants to borrow from the bank must find four other women who are not blood relations and who are not poor. These five women must agree to help each other succeed in their prospective employment projects and, in the event of default, the others must work to repay that woman's loan or risk losing their line of credit. (Counts, p.xii) After the women have formed a group, they must undergo a week of "group training," in which they learn the rules of the bank and the bank's social contract. This contract, known as the Sixteen Decisions, includes vows to keep families small, shun child marriage and wedding dowries, build and use sanitary pit-latrines, educate children, grow vegetables, drink clean water, take part in physical exercise and to follow the four basic principles of Grameen Bank, discipline, unity, courage and hard work, in all aspects of life. (Wahid, p.12)

To become recognized by the bank, the group members must pass an oral examination that tests their understanding of these rules and decisions, in order to avoid any mis-communication or confusion. After recognition, the two poorest members of the group may submit proposals for loan projects, as loans are granted sequentially and not simultaneously. A typical loan would amount to 1000 to 3000 taka (US \$25 to \$75) and would be repaid in fifty weekly installments over the course of one year. After the first two borrowers pay five installments, two other group members become eligible for loans, followed by the last member. After making her fifty installments, the borrower pays her interest, 20 percent simple interest charged on a declining balance and makes a small contribution into a group emergency (or, life insurance) fund. When repayment is

completed, the borrower is eligible to apply for a larger loan, and so the cycle continues. (Counts, p.xiii)

Rather than requiring borrowers to come to the bank, Grameen Bank sends its workers to the villages. Loan payments are made during weekly meetings at the village centre, which consists of six to eight borrower groups of five women each. All decisions and transactions concerning the loans are taken up at these meetings, under scrutiny by the other members. Approval of loan proposals and delayed or unpaid accounts are announced and discussed openly with all groups. Meetings are conducted with a sense of solemnity and discipline, with members sitting in rows corresponding to their groups and speaking only when invited to by a bank worker or group leader. The meetings are opened and closed with rituals such as physical exercise, chanting of the Sixteen Decisions, and parades, which are meant to strengthen the unity and discipline of the groups. Following these meetings, the visiting bank worker will go to borrowers' homes to observe their progress, inspect their businesses - such as weaving, rice husking, the raising of cattle, goats and livestock, food processing, and shopkeeping - and to discuss any problems the borrower may have. (Bernasek & Stanfield, 1997, p.363) Centre meeting practices are meant to develop a culture following routine repetition of Grameen rules and norms.

Approximately 15 to 20 villages are covered by a Grameen branch, which is headed by a branch manager well-acquainted with the area in question. This manager, along with other bank officials, will walk to each village in order to set up centres and hold weekly meetings. (Wahid, p.12) Branches are supervised by area offices who each cover three branches. All branches and area offices are responsible to the head office, which provides support and guidance to the field operations. Today, Grameen has more than 1000 branches conducting operations in about half of Bangladesh's 68 000 villages. (Kamaluddin, p.40) It has been observed that Grameen employees follow an efficient organizational culture similar to that of the borrowers in the closely supervised tasks and degree of professional integrity demanded of them. (Pankaj, 1996, p.87)

The Grameen Bank's policy of replacing traditional financial collateral with social collateral, by making a group of five borrowers responsible for the repayment of each other's loans, is an important reason for the bank's success. (Pankaj, p.79) This highly interdependent system of peer monitoring has created an environment in which it is in the self-interest of each borrower to monitor the others and ensure the success of their projects. The benefit of peer monitoring can be explained through a theoretical construct developed by economist Joseph E. Stiglitz.

Assume that the lender provides loans to two neighbours (A and B) whose projects are independent in their success. In this contract, the borrowers agree to pay qL (q is the co-signee's payment rate and L is the scale of loan) in addition to their payments in the case that one's project succeeds and the other one's defaults. A borrower therefore faces three situations: (1) both projects succeed, (2) A's project succeeds but B's defaults, or (3) A's project defaults but B's succeeds. The respective utilities of A in this case are:

$$\begin{aligned}
 U_i &= U[Y_i(L) - (1+r)L] \\
 U_{iq} &= U[Y_i(L) - (1+r)L - qL] \\
 U(0) &= 0
 \end{aligned}$$

where r is the rate of interest. In a setting of symmetric equilibrium in which both A and B choose the same project - risky (R) or safe (S) - the expected utility is:

$$V = U_i p_i^2 + U_{iq} p_i (1-p_i) = V_i(r, L, q).$$

where p_i is the probability of the success of project i . Assuming that market equilibrium is characterized by credit rationing, the lender chooses a contract (r, L, q) that ensures the borrower will undertake the safe project. The lender's zero-profit condition is:

$$p_s(1+r) + p_s(1-p_s)q = c$$

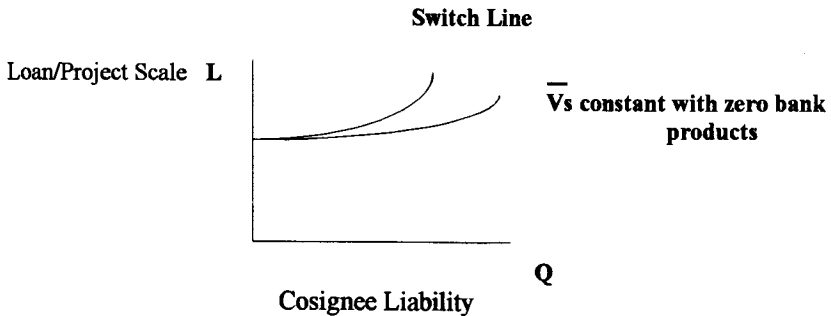
where c is the cost of capital. From this equation the following is obtained:

$$dr/dq = [1-p_s].$$

This suggests that at a low level of q , the reduction in the competitive interest rate exactly indemnifies the borrower for the additional risk imposed on him by co-signing. The switch line in Figure 1 shows the maximum L at which the borrower undertakes the safe project at each q . The switch line indicates that:

$$dL/dq \quad \Big| \quad \text{switch line at } q = 0$$

FIGURE 1 - Relationship between Loan Size and Co-signee's Liability at a Fixed Level of Expected Utility



Note: V_s = fixed level of utility from safe project (S). The switch line is the maximum loan size, for each q , which induces individuals to undertake the safe project.

This implies that at a low level of q , the maximum L and q are positively related and the increase in L is greater than that required to indemnify the borrower (A) for the additional risk imposed on him by cosigning with his neighbour (B). Thus, peer monitoring enhances the welfare of borrowers. Stiglitz states that "...at low levels of q , the increase in gains from the peer monitoring more than offsets the expected decrease in utility from the increased risk bearing." (Stiglitz, 1993, p.79)

Stiglitz's analysis of peer monitoring suggests that some contents of a successful peer monitoring system are as follows. First, that credit be provided to a group of borrowers rather than to individuals. Second, group members are provided with incentives to monitor the actions of peers. And third, the use of small groups to facilitate monitoring. (Stiglitz, 79) The Grameen Bank utilizes all these components and thus is a successful model of peer monitoring in rural banking.

Another important characteristic of the Grameen Bank. and one that definitely contributes to its success, is that 94 percent of its borrowers are women. This is significant in a primarily Islamic country which places little value on female influence and ability to earn income. Several factors constrain income-earning opportunities for Bangladeshi women. One is the Islamic ideal of *purdah*, or "the veil". This involves the woman staying within the confines of her homestead, never to be seen by males outside of her close family. (Bernasek & Stanfield, p.360) This clearly restricts a woman's ability to participate in the public labour force, although she may engage in "small income-generating 'respectable' work that can be done at home." (Bernasek & Stanfield, p.360) Another challenge to women's employment in Bangladesh is the importance of gender roles, in that men are seen as providers and protectors of women. Without following strict *purdah*, a woman will not be able to find a good husband, and so the "ideology of status" limits the ways that women can accept economic opportunities. (Bernasek & Stanfield, p.360) Women suffer constant humiliations at the hands of their husbands. Women prepare meals but they, and their children, may only eat the leftovers after the men are finished. They see their family's meager income being gambled away or spent on second wives. They cannot initiate a divorce, although their husbands need only say "I divorce you" to end their marriage. They are constant victims of abuse and sexual harassment, and are even blamed for floods, droughts and disappointing harvests (Counts,32).

A third constraint on economic opportunities for women is their lack of access to credit. This is limited by their poor economic condition and lack of collateral. It is also limited through explicit gender discrimination from lenders, who generally do not consider women in Bangladesh to be creditworthy. Therefore, women often turn to moneylenders who set interest rates much too high for the women to ever make a profit.

"If being poor is tough," observes Yunus, "being a poor woman is toughest."(Kamaluddin, p.40)

Although the Grameen Bank initially provided loans in equal numbers to men and women, a shift towards lending to women has developed. The bank targets women because it considers them to be more reliable than men. Children keep a woman's priorities in order, making her less likely to waste income and more likely to use money for household or capital improvements.(Kamaluddin, p.40) It has become evident that benefits to the family, and in particular the children, are greater from the income earned by women than by men.(Bernasek & Stanfield, p.362) Indeed, the women also benefit from bank membership on a personal level. Changes in gender relations within member families are surfacing, as women are no longer suffering in silence. Anything that affects a borrower personally also affects her fellow group members, it is more difficult to keep household problems, and in particular those involving a spouse, a secret.(Bernasek & Stanfield, p.364)

Bernasek and Stanfield, observed the element of women's solidarity within bank membership adds additional incentives for selection and repayment monitoring in that women are given a chance to prove their worth and independence in a society within which they have little opportunity to do so. Also, "shared experience of socially structured inequality is a proven step along the path to liberation."(Bernasek & Stanfield, p.364) In keeping with this notion of self-confidence building, Yunus recognized that,

By the time the loans are paid off, the women are completely different people. They have explored themselves, found themselves. Others may have told them they were no good, but on the day a loan is paid off, the women feel as though they can take care of themselves and their families.(Yunus, p.27)

As a credit institution for the rural poor, the primary objective of the Grameen Bank is to "extend credit facilities to poor men and women to create opportunities for self-employment for the vast unutilized and under-utilized manpower resources." Thus, reaching its target market, efficient loan recovery, and making an impact on the employment, productivity, income and nutritional status of its target group are vital to the bank's success. Grameen has proven itself to be quite efficient at reaching the poor of Bangladesh, and in particular the country's rural women. In 1988, 92 percent of its members were within the target group, meaning households owning less than half an acre of cultivable land and assets below the value of 1.0 acre of land.(Wahid, p.54) This is in comparison to 78 percent and 87 percent in two other lending organizations, Bangladesh Rural Advancement Committee (BRAC) and Proshika. Notwithstanding, Grameen's female membership is 20 to 50 percent higher than in the other lending organizations studied (Wahid, p.56). Grameen has therefore been reaching its target market effectively, mostly due to its principle that the poor are creditworthy, its

initiative in going into the villages to recruit borrowers, and the criteria for membership being a situation of absolute poverty.

The loan recovery performance of the Grameen Bank - a vital determinant of the success of a credit institution is second to none. Grameen's default rate is a mere 2 percent, compared with 70 percent for agricultural loans and 90 percent for industrial loans in Bangladesh's commercial banks. (Kamaluddin, p.38) The peer pressure and group solidarity provided through Grameen's peer monitoring system has a major influence on loan repayment. A second contribution to success, is the type of projects for which the bank will provide loans. The projects of its borrowers are evaluated before lending in order to ensure that they will generate regular income for the borrower, and the implementation of these activities are carefully monitored by Grameen staff and fellow group members. Thirdly, loans are repaid in smaller installments than in other lending facilities, so the borrowers do not feel the economic burden as heavily as with traditional lending schemes.

The Grameen Bank has made a major impact on the employment, level of income, productivity and nutrition of its borrowers. Studies have shown that the bank has generated new employment for about one-third of its members. This is primarily for women, as nearly one half reported having no occupation before joining the bank. (Wahid, p.59) The bank has also succeeded at creating additional employment for under-employed workers. An average worker in Grameen's target market was employed about six days per month, as compared to 18 days per month after joining the bank. (Wahid, p.59) The level of income is a factor of the level of employment. Studies by the Canadian International Development Agency (CIDA) show that as much as 98 percent of Grameen Bank members perceive that their income has increased because of greater employment opportunities due to borrowing (Wahid, p.61).

The Grameen Bank's credit program has also succeeded in increasing productivity of its members, an important measure of economic development. Grameen borrowers can afford to use High Yielding Variety (HYV) in crop production, which therefore leads to greater productivity. They also own a greater proportion of land than non-borrowers which in turn increases productivity even more. Greater productivity in agricultural production inevitably leads to a positive impact on nutritional status. Also, with an increase in income comes higher education and health investment, which lead to greater nutritional awareness and food intake by the poor. It has been observed that a Grameen member consumes approximately 2771 calories per day, as opposed to about 1975 calories by a poor non-member. (Wahid, p.63) Grameen Bank borrowers also consume more non-grain food items such as meat, fish, milk and vegetables than non-borrowers, and their children practice better nutritional habits than those of non-members.

A major indicator of Grameen's success has been its ability to pull its members out of poverty. This has been presented in a 1993 study in which it was shown that among women who had been borrowing from the Grameen Bank for 8 or more years, 46 percent had crossed above the poverty line and 34 percent were close to

coming out of poverty. This is compared to non-Grameen families, where only 4 percent had come out of poverty over the same period of time. (Counts, p.xiv) Similarly, the World Bank reports that one-third of Grameen's borrowers have clearly risen above the poverty line, another third are a matter of months away from this achievement, and the remaining third are at different levels below that (Yunus, p.28). From over 2 million borrowers, one-third rising above poverty is a great feat indeed.

Despite all of its successes, criticisms of the Grameen Bank abound. Islamic fundamentalists and village elders argue that Grameen is anti-Islamic in its use of interest rates. Yunus, a Muslim himself, counters this by saying that religion should take into account the reality of people's lives and religious leaders should strive harder to improve people's lives here on Earth. (Counts, p.xiv) Yunus' capitalist approach to development has also been criticized by advocates of "softer" development strategies involving welfare programs, subsidies, and protectionism. Yunus does not apologize, however, as he believes in a more humanist, but no less competitive, economic system in which obstacles preventing the poor from competing effectively, such as lack of credit, are removed (Counts, p.309). Many critics say that Grameen's micro-lending takes place on too small a scale to promote economic growth, and does little to teach skills. Yunus' answer to this is, "I say, if you can run a bank, lend money, get your money back, cover all your costs, make a profit, and get people out of poverty, what else do you want?" (Yunus, p.28)

The success of the Grameen Bank has led to replicas in over 50 countries in America, Asia, Europe and Africa. The bank's system is adapted to suit specific conditions in locations such as Chicago, Nepal, Vietnam, Bosnia and India. What remains the same, however, is the fostering of empowerment and progress among individuals provided with their own capital. Group solidarity and a focus on women are important aspects of the system, which are carried over to the Grameen clones.

The Grameen Bank began its operation by providing 27 dollars in loans to 42 people. Today, the bank works in 36 000 villages, has over 2 million borrowers, 94 percent of them women, and employs 12 000 people. Grameen has completed over 2 billion dollars in loans. This great success is owing to the concept that poverty is not created by people, but by the institutions surrounding them, and thus it is the institutions that must be criticized and not the people. Yunus' vision for Grameen does not end here, however. "My fondest dream," he has confided, "is that some day our next generations, our children and grandchildren, will have to go to a museum to see what poverty was like." (Yunus, p.28).

REFERENCES

- Baxter, Craig et.al. (1998). *Government and Politics in South Asia*, United States: Westview Press.
- Bernasek, Alexandra and Stanfield, James Ronald. "The Grameen Bank as Progressive Institutional Adjustment," *Journal of Economic Issues* vol. 31, June 1997, p.359-366.
- Counts, Alex. (1996). *Give us Credit*, United States: Random House.
- Hashemi, Syed M. et al. "Rural Credit Programs and Women's Empowerment in Bangladesh," *World Development* vol.24, April 1996, p.635-653.
- Hoff, Karla, et.al. eds. (1993). *The Economics of Rural Organization*, United States: World Bank and Oxford University Press.
- Jain, Pankaj S. "Managing Credit for the Rural Poor: Lessons from the Grameen Bank," *World Development* vol. 24, January 1996, p.79-89.
- Jolis, Alan. "A Bank for the Down and Out," *World Press Review* vol. 43, September 1996, p.16-18.
- Kamaluddin, S. "Lender with a Mission," *Far Eastern Economic Review* vol. 156, March 1993, p. 38-40.
- Padmanabhan, K.P. (1988). *Rural Credit*, New York: St. Martins Press.
- Todd, Helen ed. (1996). *Cloning Grameen Bank*, London: Intermediate Technology Publications Ltd.
- Wahid, Abu N.M. ed. (1993). *The Grameen Bank: Poverty Relief in Bangladesh*, United States: Westview Press.
- Yunus, Mohammed. "Empowerment of the Poor," *The Humanist* vol. 57, July/August 1997, p.25-28.