

Micro Leasing: The Grameen Bank Experience*

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1. Introduction

In 1992 Grameen Bank started its experimental leasing program by leasing power looms to weavers in the Ariahazar area of Dhaka Zone. Later in the Zonal Manager's conference of 1994, decision was adopted to expand leasing to all Zones. At the end of year 1997, Grameen Bank leased 8,411 items in 111 different categories. The program has enabled 96 male and 1118 female members to complete the leasing contract and own assets in the process. It has created huge excitement among the Grameen Bank members, and is quite popular among the member as revealed by the rapid expansion of the outreach of the program. As of December 1997, the leasing program has booked Tk. 237.67 million worth of leases, or an average of Tk 28,000 (\cong US \$ 623) per lease. The leasing program is in operation in all Areas of the bank, however, not all branch have a leasing program.¹ The total disbursement of Grameen Bank is Tk 6240.70 million at the end of December 1997. This makes the share of leasing close to 4 percent of total portfolio of the Bank.

The objective of this paper is to critically examine the leasing program. Since the program is relatively new the exercise will entail a preliminary evaluation of the program. Instead of a full-fledged impact assessment study, we will examine the terms and condition of the leasing program, evaluate its success in terms of outreach, repayment rate and asset ownership.

The plan of the paper is as follows. In section 2 we will examine some studies that deals with the types of activities funded by the leasing program. The operational aspect of the Grameen Bank's micro leasing will be discussed in section 3. Section 4 reports the experience of a Grameen borrower with leasing. In section 5, we will examine the leasing program and evaluate its success and failures. Section 6 concludes the paper along with suggestions to improve the efficacy of the leasing program.

2. The Financial Landscape of Leasing

"Financial leasing is a contractual arrangement between two parties, which allows one party (the lessee) to use an asset owned by the other (the lessor) in exchange for specified periodic payments. The lessee uses the asset and pays rental to the lessor, who legally owns it" (Gallardo, 1997). The owner of the leased item expects the lessee to make lease payments by generating sufficient cash flow. This feature of leasing enables borrowers without credit history and collateral to access the use of capital equipment or other items. Leasing can be of three types, financial leasing, hire purchase and operating lease. Grameen Banks use the financial leasing (see section 3).

¹ Leasing is only available for centers that do not have any problem loanee. So, if a branch has many centers with problem loanee, it is unlikely that leasing will be introduced there. Moreover, leasing is unlikely to be introduced in branches that are relatively young (only few years in existence) as these units are dealing with learning and getting comfortable with the well-established product of the Bank.

Most of the activities funded by the leasing program are related to small rural manufacturing and service industry. There were two major studies that explored the workings of small manufacturing and service industry. The first one was the Rural Industrialization Survey Project (RISP) by Bangladesh Institute of Development Studies (BIDS) and the other one is a book, Small Firms Informally Financed edited by Rizwanul Islam, Von Pischke and de Waard. The later source deals mostly with urban-based small manufacturing and service industry. The findings of this study, however, are relevant for the micro leasing industry. Both the studies show that small firms, especially in the rural areas, face tremendous hurdles in setting up businesses and to finance their working capital needs. The study by Islam et al. (1995) shows that business in this sector rarely borrows from the formal banking sector. Many of the entrepreneurs surveyed are aware of credit facilities from the commercial banks, but few try to obtain it. Most of their source of fund is the informal sector such as friends and relatives or the moneylenders. Depending on the source, the cost of capital to the producers vary from 10 to 120 per cent per annum simple interest rate for initial investment, and up to 240 per cent for working capital financing. The interest rate charged by moneylenders is in the range of 60 to 120 per cent per annum. The study further show that even friends and relatives may charge interest on informal loans (30 to 96 per cent interest per annum).

The BIDS study shows that, with a few exceptions, for majority of units personal savings contributed between 50 to 100 per cent of the funds needed for establishing a Small Cottage Industry (SCI). Some of the units used external source for financing initial capital and among them slightly less than 80 per cent borrowed from non-institutional sources. One of the investigators (Ahmed 1984) examined the problems encountered by microentrepreneurs in raising funds from the formal credit market. The main problem was the stringent collateral requirement. The value of security offered in terms of items like land, buildings and other fixed assets by the borrowers as a proportion of loan was quite high (275 per cent). For a loan from commercial banks, this figure rose above 400 per cent.

The next obstacle was the cumbersome documentation requirements to obtain formal credit. Through a special survey, Ahmed (1984) found that borrowers have to meet as many as ten different types of paper requirements, e.g., submission of nationality certificate, solvency certificate, personal guarantee, business registration and license, plant lay-out, and balance sheet statement to receive a loan. The author notes, "given that nearly 60 percent of the owners of SCI's are illiterate, 95 percent of them self-managed and a mere 6 to 7 percent of them keep records of their operations, these excessive documentation requirements are likely to pose almost insurmountable difficulties to the small borrowers in getting an institutional loan."

Moreover, he found that the transaction costs of borrowings from institutional source is quite high as well. These costs include official fees, unofficial payments and bribes, and miscellaneous expenses incurred by the borrowers in taking loans. These

later costs constitute on average 3.45 percent of the amount borrowed, rising up to nearly 6 percent of the loan taken from government lending agencies. Longer waiting time as well as considerable number of working days lost in getting an institutional loan further exacerbates these costs. On average it takes slightly less than three months to get a loan and about 12 working days are lost to get the loan approved.

These studies, however, failed to expose the gendered nature of the problem. Women have a negligible presence in the rural industry. RISP study shows that 32.3 percent of the workers are female in rural industries whereas only 3.3 percent of the proprietors are female. Women entrepreneurs face even worse problems in getting a loan from the formal sector. The credit constraint faced by women entrepreneurs is even more binding; they may not get any loan at all. Islam et al. reports a rate of from 120 percent to 240 percent per annum simple interest rate on loans to women's tailoring trade. These studies, however, suggest that there is a huge demand for credit to finance these activities. However, due to lack of funds or because of the stringent conditions that have to be met to obtain funds, many potential enterprises never take off. This results in jobs not being created and lost opportunity to achieve economic upliftment for significant number of people.

These studies show that the financial landscape faced by firms in small manufacturing and service industry is bleak. They have to borrow from informal market at an exorbitant interest rate or deplete personal savings to start a business. For expansion of business, they have to rely on internal financing through reinvestment of profits. However, the majority of the sample SCI consumes a significant portion of profit, to the tune of 85 percent on average. Ahmed argues, "...with insignificant retained earnings resulting from higher consumption of profits, considerable credit selling, and the consequent repayment delays and lack of facilities for private financing through hire-purchase arrangements and subcontracting systems, is bound to make the growth and expansion of these industries extremely difficult in the country unless suitable arrangements are made to ensure adequate flow of formal credit to them." Grameen Bank's micro leasing program has to be evaluated against this backdrop of ground realities faced by microentrepreneurs outlined above.

3. Procedures for GB Leasing Program

A. Terms and Conditions

The leasing fee (interest rate) is set at 20 per cent per annum. The principle for calculating the interest includes the purchase price of the item plus transportation and other expenses. The maximum time for paying off the lease contract is three years. However, in case of animals, the maximum is set at two years. The lessee has to payoff the contract amount through weekly installments. A member has to start the installment payment within a month (in case of animal's 15 days) of receiving the leased item. The lessee could either payoff the amount by making equal installment payments or after consulting with the branch manager, he or she can pay no less than Tk. 100 during the off-peak period and more than the installment amount during peak-

period. However, the time limit for off-peak period is three months. The lessee could also payoff the full or partial amount of the lease value anytime. The lessee is liable to keep the leased item in good working conditions and to fix the mechanical defects.

The bank will repossess the leased item if the lessee fails to make the full amount during the stipulated time. If necessary, the repossessed item could be released to another member. The area manager/program officer and the branch manager, in consultation with the new lessee and the defaulting lessee or his or her representative, will reassess the value of the leased item. If the reassessed value is greater than the remaining payment on the leased item, the surplus will be first used to payoff any remaining lease payment. If there is still money left that will be given to the defaulting lessee as cash. If the reassessed value is less than the remaining rent on the leased item, the defaulting lessee will be liable to meet the shortfall. The lessee carries the risk of obsolescence, and has to insure the item and bear the costs of maintaining the asset in good working condition.

B. Selection of Leasing

- A member will be given a lease on an individual basis. A group or a center cannot get a lease on the basis of a collective ownership.
- There will be no prior list for leasing items. The Zonal Manager by his or her own discretion can give any item for leasing. However, the item should be such that it could be transferred later, if necessary, without any major wear and tear.
- Leasing will not be given for any business where there is daily sale and purchase, e.g., grocery shops, variety shops and pharmacy.²
- Livestock could be leased under the leasing regulation. However goods that could be financed under the ceiling of general/seasonal loan would not be leased. However, same items such as milching cow, sewing machine could be leased more than once.

C. Qualification

To be eligible for lease contract, members and centers have to fulfill the following criteria. Branches do not have to meet any specific condition to initiate a leasing program.

² These types of activities are excluded because they cannot be released in intact condition. Suppose the bank leased out a pharmacy and the lessee defaulted on the lease contract. By regulation the bank will have to repossess the item and try to release to another member. However, when the bank repossess the pharmacy, the inventory of medicine might be less than the amount at the time of the lease.

Members

- A member must be at least three-time loanee.
- A member must have an additional source of income so that installment can be paid.
- Lessee or a member of the family must have prior experience in managing the leased item, and the member of the family must oversee the item.
- In the case of transport items lessee or a member of the family must be an experienced and licensed driver.
- Leased item must be used properly and the repayment rate must be satisfactory.
- A member must have a space or will create an appropriate space to store the leased item.

Center

- A center must be at least two years old.
- A center should not have any trouble loanee. The zonal manager could initiate a leasing program with good members of an irregular center if he or she thinks that by adopting such program the overall performance of the center could be improved. However, this can not be done indiscriminately.

D. Lease proposal and approval

The Bank Assistant as well as the branch manager will provisionally select members' and centers' to initiate a leasing program provided they meet the conditions mentioned in section C. Once the selection is completed the branch manager will invite area manager/program officer to visit the center. He or she will visit the center during the regular weekly meeting or a special meeting and evaluate the lessee's income, prior experience in managing the leased item and the potential of the venture. He or she will further appraise the member about the risk involved in the venture and method of payment and visit the members' house. Once the visiting team is convinced that everything is satisfactory they will finally choose the member for leasing contract. According to the current practice, the branch manager will forward the leasing proposal to the area manager. After examining the proposal, the area manager can approve leasing with a ceiling of Tk. 50,000. All proposals exceeding the ceiling of Tk. 50,000 requires the zonal manager's approval. Zonal manager can approve proposals up to Tk. 300,000. If the proposal is for more than Tk. 300,000 it would need the approval of the Technology and Development unit housed at the Headquarters.³

³ For lease contract worth up to Tk. 50,000 the processing time would be a week to ten days. Lease proposal with value exceeding Tk. 50,000 may need two weeks processing time.

E. Buying of the lease item

Depending on the value of the lease item, Bank staffs⁴ will be involved in the purchase of the lease item. The bank will monitor the buying and usage of the leased item. Whenever appropriate, the staff will take spot quote from at least three vendors and will buy the item from the vendor with the lowest price.

Even though Leasing is a relatively new product in Grameen's portfolio, it is different from other loan products in many ways. Firstly, there is no group tax in leasing. Group tax is a contentious issue with Grameen borrowers, and many of them perceived it as hidden levy that effectively increases the cost of borrowing. Secondly, loan for leasing is not fungible. The members are given a product instead of cash. For example, in the case of general loan, members will borrow money in the name of paddy husking, however, they will use it to lease land (Helen Todd, 1996). This is not possible in case of leasing as the item is bought in the presence of Bank workers through a competitive bidding process. This ensures that the item is used strictly for productive purposes and thus reduces the probability of default of the lease contract. Thirdly, the candidates for lease are chosen such that they have other source of income and have the ability to store the leased item. These conditions are not used, at least formally, for many other loan products. Fourthly, except for housing loan and types of seasonal loan, all other loans are given for a short-term, i.e., one year whereas leasing term is for more than a year. Fifthly, the grace period for a lease item is one month (in case of livestock lease the grace period is 15 days), for other loan products the installment payment has to start in the second week after the disbursement of the loan. Sixthly, a lessee could payoff the loan amount prior to the expiry of the loan contract, and the installments could be fixed as well as variable depending on the season. Since the installment is calculated on a declining balance, prepayment will entail them to a rebate on interest payments. Seventhly, unlike other products some leased item can be insured which protects both the lessee and the lessor from undue risk.

4. Case Study

Laila Khatoon was born on 21 March 1957 in the village of Taburkhill under Raozan thana in Chittagong District. She had a rough childhood and due to poverty her parents could not afford to send her to school. At the mere age of 15 she was married to an older man who already had a wife. Her husband married her hoping that she could give birth to a child as the previous wife was unable to bear any child. Laila was born into poverty and even after the marriage her fate did not change much. Before long she found out that her husband is an ordinary seaman with limited income. Soon after the marriage she gave birth to her first son, Mohammad Shafi. Subsequently she

⁴ For items worth up to Tk. 50,000, branch manager will be present at the time of the purchase. Items that are worth more than Tk. 50,000, in addition to the branch manager, area manager or program officer from the area office will be present at the time of the purchase. In all cases, the lessee or a representative of the lessee and a Co-signor from the Center will be present.

became mother of two more sons and two daughters. To make things worse, her husband became ill. He could not walk as half of his body was paralyzed. Initially she tried to treat him with a traditional healer (Kobiraj). That obviously did not work and she was forced to sell 20 decimal of land to pay for the fees of a regular doctor. Even that was not enough; she had to borrow from relatives to pay for his treatment. Her husband died leaving behind five young children and a mountain of debt. She was at a loss, as she could not meet the basic needs of her five children. She took a job as a housemaid in one of the rich households in the village. In between her work and raising the children she had little time left for herself. Whatever little time she could muster out of her busy schedule, she used to spend it to make handicrafts out of cane and bamboo with borrowed capital from a relative. Soon that capital ran out and she was forced to eke out a living of bare subsistence. The only resource she had left was the homestead and a two roofed thatched house.

One day on her way to work she overheard a group of women talking about forming a group to borrow money from a bank. Soon she joined the group and became a member of the Grameen Bank. Her first loan was for 500 Taka and it was used for bamboo and cane work--something that she used to do to meet the ends. The following is a description of loan use by Laila Khaton.

Type of loan: General

Number of the loan	purpose of the loan	amount of the loan
1	Bamboo and cane works	500
2	-----	800
3	-----	1,000
4	Cow fattening	1,500
5	-----	2,000
6	Bamboo and cane works	2,500
7	-----	3,500
8	Bamboo and cane work/ cow fattening	4,500
9	Purchase cow	6,000
10	purchase bullock	8,000

11	Mat making/ calf purchase	9,000
12	purchase cow/cane works	10,000
13	-----	9,000

Type of loan: Seasonal

Number of loan	purpose of loan	amount of loan
1	farming	4,000
2	-----	5,000
3	-----	6,000

Laila Khatoon became interested in leasing after hearing about it in the one-day workshop for Center Chiefs. She learned that if some member of the family had experience and skill to manage large-scale activities, the bank will provide the required amount of financing for buying the item through a lease contract. She was further encouraged by the fact that the lessee will own the item after the full payment of the loan. At that time her eldest son was a licensed baby taxi driver and he used to operate someone else's baby taxi. Since her son had prior experience, she qualified to lease a baby taxi. Thereafter in a special meeting of the Center her leasing proposal was approved unanimously.

Laila Khatoon's eldest son drives the baby taxi and per the regulation the mother and the son are responsible for maintaining the taxi in good working condition. The following is a description of income-expenditure and net profit from leasing the baby taxi

<u>Description</u>	<u>Daily</u>	<u>Weekly</u>	<u>Monthly</u>
Total income	350	2450	10,500
Total expenditure	100	700	3,000
<u>Bank's installment</u>	<u>172</u>	<u>1200</u>	<u>4,800</u>
Net profit	78	550	2,700

As evident from above, leasing program has provided Laila Khatoon and her family with a stable source of income. The leasing program is self financed, i.e., the lessee is able to pay the installments from the income streams generated by the leased item. As

of 25-9-97, Laila Khatoon has repaid 95,000 Taka out of a total loan of 1,17,101 Taka with a balance of 22,101 remaining. At this rate she should be a proud owner of a baby taxi.

So far the mother and the son team have not encountered any major problem with the lease contract. They have not missed any payments to the bank. However, during a strike the son is unable to operate the taxi and they have to withdraw money from the savings account to make payment to the bank. Sometimes her son has to pay money to the toll takers (chandabaz). If there is any mechanical problem with the taxi, the driver tries to fix it first and if that fails he takes it to a mechanic. The baby taxi is in good physical condition and the engine is in good condition as well.

Laila Khatoon achieved many milestones for her family after joining Grameen Bank. She was a good customer for the bank and she followed all the rules and regulation of the bank faithfully. The family could lift itself by the bootstraps, thanks in part to the credit from the bank. Her eldest son used to drive someone else's taxi and soon they will own the taxi leased from the bank. The middle son is a farmer and he is able to produce enough food grain for the yearly consumption of the family. Moreover, they own a rice-husking machine that is used to supplement family income by husking neighbor's rice on a contractual basis. The two daughters' work with bamboo and cane and the youngest son will appear in Secondary School Certificate examination this year. She spent 7,000 Taka to bring electricity to the house and spent another 35,000 to build a tin shed house without any credit. She made some jewelry for the daughters and even bought a cassette recorder. Her future plans include sending the middle son to the Middle East and getting her daughters married. She plans to borrow larger amount to buy a pick up truck once she fully repays the current loan.

Laila Khatoon, who used to live like a draught animal is among the few privileged people in her village. Her rags to riches story have raised eyebrows among the upper class member of the society. They cannot understand how a landless women who used to be a housemaid and did not own any asset to be used as a collateral can become the proud owner of a baby taxi.

Based on a report in Bangali by Ms Saleha Begum, Senior Officer, Jobra Branch (the Mother Branch), Grameen Bank, Hathazari, Chittagong.

5. Evaluation of the leasing program:

In a short period, leasing has become a very popular program with Grameen borrowers. The following two Tables provide Zonewise annual disbursement of leasing along with gender of the lessee. Table 1 shows the number of lease contracts and Table 2 shows the value of lease contract respectively.

Insert Table 1 and 2 here

Table 1 illustrates the remarkable growth achieved by the leasing program. Since its inception in 1994, leasing has grown exponentially. The cumulative growth rate for male leaseholder is 580%, female leaseholder is 1370% and the overall growth rate is an impressive 1297%. Last year (1997) saw the biggest annual growth rate with male lease holding growing by 447%, female lease holding by 666% and the overall lease holding increasing by 656%. Leasing is not available in all branches of Grameen Bank. This means that the current trend of increasing growth will continue in the future. The same trend is captured in Table 2. Both Tables show that majority of leaseholders are women--95% in terms of numbers and 91% in terms of values. We have already shown that leasing is very popular with Grameen borrowers. By the sheer growth rate and the amount and number of lending, the leasing program is highly successful.

However, one of the most important indicators of success is the repayment rate. The following Table shows the repayment rate of the leasing program across Zones and by the gender of the borrower at the end each year.

Insert Table 3 here

In some of the Zones, the repayment rate declined over time from a perfect repayment record. Even though some of the Zone has more than 100% repayment rate⁵, the slight declining trend in repayment performance is carried over to the overall repayment rate. The overall repayment rate is still very high-- 98% in terms of value and 97.6% (203 leases out of 8411) in terms of number of lease contracts. These figures are well within the repayment rates of other products of Grameen Bank. In terms of repayment, Rajshahi Zone is the most successful Zone in the overall operation of the Grameen Bank. This success is even more remarkable when one consider the fact that this Zone has distributed the largest number of items.

Another indicator of success is to determine how many borrowers have fully repaid the lease contract and in the process attained full ownership of assets. The following two Tables show the status of asset ownership through the leasing program. Table 4 demonstrates the distribution of asset ownership across gender and Zones. Out of the 383 items leased to male members, they own 96 of them after full repayment. This makes the ownership ratio an impressive 25%; out of the 4 item leased to male members so far, one of the items is already owned by the member. The female ownership ratio is 14% (1118 out of 8028 items leased). The overall ownership ratio is 14.5% (1214 out of 8411 total items leased)⁶. The lower female ownership ratio can be explained by the recent nature of the female lease contracts. In 1997 (the last year for which data is available) female lease contracts increased by 640% whereas male lease contracts increased by 447%. Table 5

⁵ If the borrowers make advance payments, repayment rate can be more than 100%.

⁶ These measures the proportion of leases that are already owned as a proportion of total number of lease contract signed to date. The actual ownership ration is close to hundred percent—lease contracts that matured were fully repaid and the lessee owned the asset.

shows asset ownership by male and female borrowers in the top fifteen activities funded by the leasing program.

Women face credit constraints in obtaining loans from institutional sources. Banks don't maintain records on the gender of the loanee, however, a review of the types of activities financed and the nature of collateral requirements would reveal the gender bias of the loans by formal sources. Grameen Bank was a pioneer in opening up women's access to credit. Through the leasing program, the Bank is continuing that tradition. In this case the leasing program is enabling poor women to have access to medium term loans. A review of the leasing program shows that women are given lease contracts for activities that are not considered as typical female type of activities. It is true that women may end up using a man to run many of these activities. But it is highly unlikely that any commercial bank in Bangladesh will ever approve a loan to a poor woman for dairy farms, welding machines, mini garments, washing machines, dish antenna, computers and cellular phone. Through the leasing program the bank is trying to break the gendered nature of activities financed by a financial institution (Hossain and Afsar 1989).

The success of the leasing program achieved over such a short period of time is remarkable. The introduction and the successful implementation of the leasing program shows that Grameen is still in the forefront of innovation and in devising product that will enhance the supply of credit to the poor. It also shows that Grameen is responding to the ground realities that ask for flexibility, constant improvements and innovations in product design. The success of the leasing program can be attributed to the flexibility of its design. As we mentioned earlier, a lessee could make partial or full payment of the leased amount any time without any penalty. This allows the borrowers to take advantage of an improved market conditions. If they have a windfall they could easily pay off the balance on the contract and in the process become owners of an asset much quickly than the stipulated time.

The introduction of installment payment for peak and off-peak period is also an excellent innovation and this further adds to the flexibility. For example, the most sought after item in the leasing program is the power tiller. As we all know power tillers are in peak demand during the early part of each crop season as it is required to prepare the land, and after that the tiller is most likely to stay idle. During the monsoon season the roads can be unapproachable and as a result income from many of the transportation items, e.g., baby taxi, bullock carts, rickshaw van could be low. The ability to make variable installments enhances the debt capacity of the borrower because it allows them to synchronize payment with income flow. Unlike the credit sale of solar pack by Grameen Shakti⁷, leasing is less demanding on the members. They don't have to pay any down payment and the income from the item pay for the installment amounts.

⁷ One of the Sister Organization of Grameen Bank that sell solar energy pack to members and non-members

In many of Grameen's other loan products there is no grace period and repayment have to start almost immediately. Because of this many borrower are known to withhold a part of the their loan to cover for early repayments. This would mean that return form the investment has to be substantial to pay off the principle and the interest payments. The less than full use of the loan could adversely affect the return form investment and the eventual repayment. In leasing there is a grace period of one month and as the loan is given in kind rather than cash there is a little possibility of less than full investment of the approved amount. Besides the lessee is chose such that they have other source of income.

Leasing appears to be more conducive to enhance borrower's sustainability. It could solve the problem of graduation of successful borrowers. In group lending, different members of the group differ in ability and entrepreneurship. In these situations, it is difficult for a creditor to separate entrepreneurial borrowers from ordinary borrowers and reward them with large scale and flexible loans. The lessee is self-selected and comes from the relatively well off borrowers as implied by the rules of the program. Through the leasing program the Bank is able to reward members who are capable and have a good repayment record and leasing can be used to reward successful Centers. Recent developments in group lending theory suggest that, if the limited liability constraint binds and borrowers are risk averse, the relatively wealthier among the poor borrower may prefer loans based on individual incentives (Madajewicz 97). This is because as the wealth of the borrower increases, their incentive to monitor others in the group decreases.

Introducing leasing as a separate product instead of opening a new company for leasing has also been useful. Grameen Bank could take advantage of its vast network and existing infrastructures to expand the leasing program. Unlike the commercial leasing companies, Grameen could market and expand the program easily and cheaply. Besides, through the leasing program the Bank is able to take advantage of the economies of scope—the ability to provide many products at the same cost. “In economic terms, financial intermediaries enjoy economies of scope. These arise from providing a large numbers of products that can be produced jointly, such as checking accounts and savings accounts and loans. By offering clients a broader array of services they can economize on overhead costs and increase profits.” (Von Pischke, 1991, p 230). As mentioned earlier there is no pre-set list of activities that can be funded through the leasing program. The area office in consultation with the branch can approve any item for lease. This type of decentralized decision-making based on staff's knowledge of their borrowers operation and local market condition also increases the debt capacity of the borrowers.

Earlier we have seen that leasing program has maintained an impeccable repayment record. What is not clear is the incentive mechanism that keeps the repayment rate so high? One explanation is that the possibility of further lease contract as well as access to other Grameen loan products induces the lessee to make timely payments. It is a fair to assume that subsequent lease would be larger than the current

lease amount. An indirect way of finding that out is by examining at the average size of the lease over time (Table 6). Table 6 shows that the average size of the lease for male members is increasing over time. For female members, however, the average size of the lease is declining over time. There are several tentative explanations for this trend. First, male members usually lease big-ticket item as they have access to market and greater social mobility compared to a female borrower. Second, many of the male members are repeat lessee and it is likely that the size of repeat lease would be bigger which would explain the increasing size of their average lease. Most of the female lessees' are relatively new to the program and they are numerous in numbers and this could explain the smaller average size of their lease contract. Third, even though female lessee could and do use a male relative for the operation of the leased item they might not feel secure about borrowing money for big items. Whereas male borrower can tolerate more risk than female borrowers and do not feel inhibited by borrowing larger amount.

Rahman (1998) argues that the success of microenterprise depends on the presence of complementary inputs such as homestead land, family labor and significant to moderate asset base. Micro leasing is structured such that the lessee possesses these complementary inputs. To avail the leasing facilities the members have to be three time loanee, they have to have family members who have experience in the type of activities funded by the leased item, and they have to have a place to store the product. Study by Pitt and Khandker (1995) show that credit program participation by women increase the value of their non-land asset holdings, while male participation does not. Mahbub Hossain in his famous study on Grameen Bank noted, "The most direct effect of the Grameen Bank has been on the accumulation of capital by the poor. The amount of working capital employed by members' enterprises increased by an average of three times within a period of 27 months. The investment in fixed asset is about 2.5 times higher for borrowers with more than three years' membership than for those who joined during the year of the survey." Dwight Haase (1995) , based on a survey of Grameen Bank members, reports that the borrowers doubled the value of their homes and household assets, tripled the value of their livestock and most added tubewells and/or latrines to their premises and they have greatly increased their access to cultivable land. It is likely that several rounds of borrowing from the Grameen Bank has enabled the members to accumulate the asset and complementary input necessary to be successful. The initial conditions of the lessee are in favor of ensuring the success of the leasing program.

Anecdotal evidence suggests that many members of MFIs borrow from multiple organizations. There is even talk of overlapping within a branch of an organization, and within sister organizations. The MFIs find overlapping as problematic as it could lead to a loan-pyramiding scheme that could collapse. However, another way to view overlapping is that it implies credit rationing, i.e., the amount supplied is less than the amount demanded. Since multiple membership entails costs, overlapping could also imply that the borrowers are looking for products that meet their special and diverse needs. Leasing being a much more flexible product would likely to reduce the problem of overlapping. Leasing will allow the bank to retain good borrower who takes larger loans on which the cost per unit is very

low. Since giving larger loan is more profitable these clients will allow the banks to cross subsidize poorer borrowers.

Despite the remarkable success, the program is facing certain problems. Most of these problems originate from the failure of the Bank workers to follow the rules and procedures of the program as outlined in the official circulars of the Bank. The standard problem faced by the program is default. However, this is a problem not unique to leasing only. Some of the leased transportation items were involved in accidents. In many instances the Bank was unable to collect insurance money as the vehicles lacked necessary papers such as a valid driving license of the operator, up to date insurance certificate, road permit and fitness certificate. In some cases the leased item were sold prior to the full payment of lease value. In some cases the lessee used non-family members to operate the leased item instead of a family members or self. In some Zones several items were leased that can not be repossessed and released to other member, e.g., poultry farm, pharmacy, sweetmeat shop and grocery shop.

The lessee is chosen such that he/she is expected to have prior experience in the chosen activity and as such the bank does not feel any need for training the clients. The bank usually do not provide much training as to how to operate and effectively used the leased item other than the usual training they receive as Grameen Bank members. However, an analysis of the problem cases reveal that the lessee could use some training on how to do market analysis and how to operate the item safely. In one case the lessee fell from the power tiller and hurt himself and this kept him out of operation. This caused some missed payment by the lessee. There was another interesting case in the Rangpur Zone. A women member was given a lease of a pipe roller machine worth Tk. 36,000. After paying TK 6,570 through installments, she refused to continue the installment payment. This type of machine is used to roll steel plates into steel pipes. The lessee soon found out that her product could not compete with cheap substitutes such as plastic pipes. The relevant branch repossessed the item and is thinking about selling it as a scrap. The assessment is that the scrap value of the machine will be around Tk. 8,000-Tk. 10,000. This means that the branch will lose around Tk. 25,000 on principle alone. This case illustrates that before approving the item the branch manager should have inquired about the demand for the product and the existence of other cheaper substitutes.

6. Conclusion

In this paper, we have tried to evaluate the leasing program of the Grameen Bank. We have not attempted a full-fledged impact assessment of the leasing program. It is not clear whether a complete impact assessment of leasing can be done. It will be difficult to isolate the effect of leasing from Grameen's other product. Analysis of program level data and a case study show that the program is successful in terms of outreach and repayment performance. The program has grown thirteen folds within three years. Through the program, poor man and woman have become owners of

power tiller, power loom, shallow machine and even computers. The program is facing some problem, mostly caused by not abiding by the official conditions.

The success of leasing suggests some important lessons for MFIs. It shows that poor people have diverse credit needs. To help the poor borrowers to graduate out of poverty, MFIs have to provide different and flexible products. The success of leasing show that if a MFI have a good institutional set-up in place and it can carefully design a product that is flexible, members will use the product to their advantage. Despite the success of the group lending methodology of credit delivery, members within a group vary in entrepreneurial ability. New products such as leasing can be used to reward a good member within a group. Grameen Bank has plans to introduce leasing to rehabilitate problem centers.

Some of the commercial leasing programs in Bangladesh is having repayment problems. Most of these programs have leased items to business houses and the average size of their lease contract is much higher than Grameen's lease contract. Compared to Grameen, however, they are in a disadvantage--they don't have access to a pool of borrowers with detailed credit history. Von Pischke notes, "Experience accumulated through lending on different terms provides information that makes it possible for the lender to have greater confidence in borrowers and more information about their use of finances." (Von Pischke, 1991, p. 309). In addition the commercial leasing programs have to incur cost to market their products. The success of Grameen leasing program, however, show that it is possible to issue medium term loans without large down payment to small borrowers. The key to success is constant supervision, monitoring and knowing one's clients well.

As of December 97, the Bank has leased 111 items. The bank should gradually increase the pool of leasable items. However, before allowing a new item for leasing, the Bank worker should do a quick market analysis of the activity to be funded. This analysis should entail gathering information about the price of the item, price of the substitute items, the nature of the current and future demand for the product. Given the current status of electric supply in the country, the obvious item that could be included is solar pack. Out of the 85,600 villages in Bangladesh, only 20,000 villages have electric connection through the Rural Electrification Board. Grameen Bank could buy these units from Grameen Shakti and lease them to the members.

RISP surveyed the proprietors of cottage industries and asked them to rank the top three things they need for developing the enterprise. 85 per cent of the proprietors ranked credit for working capital as the top priority. Grameen Bank might think of up scaling some of the leasing activities by introducing working capital finance through a "sale and leaseback", by which the client sells an existing asset to the bank and then leases it back from them, thus releasing the funds for working capital. In future, the Bank might want to consider leasing complementary items, for example, a trolley along with a power tiller. This will enable the power tiller owner to use it throughout the year and reduce the variability of income from this item.

The Bank could use leasing to initiate a pilot project for fishermen in coastal areas. Through the project, the Bank could lease boats to the fisherman. Research (Alamgir, 1997) show that lack of a boat force coastal fishermen into the clutches of exploitative relationship. Fishermen who do not own any boat (Pawnaas) form partnership with boat owners (Bahaddar system). Alamgir (97) mentions four different terms of partnership. First, if a Bahaddar sets 4 nets, other fishermen will set only 2 nets. Second, Bahaddar gets 2/3 of the catch and 1/3 goes to the fishermen without a boat. Third, because of the monopoly position, a Bahaddar can afford not to go to the sea, but still get his share of the catch. Fourth, the Pawnaas have to pay Taka 2,000 to Tk. 3,000 for repair of boat. Through a leasing program, the Bank could save the Pawnaas from these abusive terms.

By increasing the size of the lease amount, Grameen could foster rural industrialization. A strong and effective rural industrial base will be an effective tool to alleviate poverty. Rural industry will create stable source of employment and stem out-migration of population to the urban areas. Experience from China show that rural industrialization can be an effective engine of growth. It can even be used to help the hardcore poor (Rahman, 98).

Table 1: Annual number of lease contracts across Zones and according to the gender of the borrower*

Zones	1994			1995			1996			1997			Cumulative total as of December 1997		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Chittagong	0	46	46	34	129	163	8	47	55	17	81	98	59	303	362
Tangail	5	0	5	4	3	7	11	4	15	83	172	255	103	179	282
Rangpur	35	158	193	19	57	76	5	33	38	24	70	94	83	318	401
Dhaka	16	117	133	4	19	23	0	5	5	38	286	324	58	427	485
Patuakhali	0	9	9	1	1	2	3	5	8	22	269	291	26	284	310
Bogra	0	15	15	4	31	35	1	2	3	4	84	88	9	132	141
Sylhet	0	0	0	2	19	21	0	4	4	0	14	14	2	37	39
Rajshahi	0	6	6	0	84	84	1	203	204	5	764	769	6	1057	1063
Dinajpur	0	186	186	13	458	471	3	106	109	4	199	203	20	949	969
Faridpur	0	5	5	0	40	40	2	15	17	2	299	301	4	359	363
Comilla	0	4	4	0	9	9	0	1	1	0	1563	1563	0	1577	1577
Mymensingh	0	0	0	0	19	19	0	62	62	5	1672	1677	5	1753	1758
Naraynganj	0	0	0	0	0	0	4	173	177	3	87	90	7	260	267
Khulna	0	0	0	0	0	0	0	103	103	1	290	291	1	393	394
Total	56	546	602	81	869	950	38	763	801	208	5850	6058	383	8028	8411

*M= Male, F=Female and T=Total

Source: Monitoring and Evaluation Department of Grameen Bank.

Table 2: Annual amount (in million takas) of lease distribution across Zones and according to the gender of the borrower*

Zones	1994			1995			1996			1997			Cumulative total as of December 1997		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Chittagong	0.00	2.50	2.50	2.0	7.48	9.48	0.59	2.55	3.14	0.67	3.02	3.69	3.26	15.57	18.83
Tangail	0.31	0.00	0.31	0.39	0.3	0.69	0.72	0.11	0.84	5.18	10.07	15.25	6.61	10.49	17.10
Rangpur	1.0	3.97	4.97	0.59	1.99	2.58	0.55	0.39	0.94	5.61	2.92	8.54	3.43	9.29	12.72
Dhaka	0.72	5.08	5.80	0.31	1.91	2.22	0.00	0.39	0.39	3.39	23.65	27.04	5.42	33.39	38.81
Patuakhali	0.00	0.32	0.32	0.08	0.04	0.12	0.10	0.13	0.23	0.89	11.98	12.87	1.07	13.48	14.55
Bogra	0.00	0.85	0.85	0.15	0.55	0.70	0.02	0.03	0.05	0.20	2.53	2.73	0.37	3.97	4.34
Sylhet	0.00	0.00	0.00	0.12	1.42	1.54	0.00	0.41	0.41	0.00	0.80	0.80	0.11	2.64	2.76
Rajshahi	0.00	0.21	0.21	0.00	1.53	1.53	0.09	4.71	4.80	0.07	11.76	11.83	0.16	18.20	18.36
Dinajpur	0.00	4.21	4.21	0.25	7.29	7.54	0.08	1.94	2.02	0.06	4.23	4.29	0.39	17.68	18.07
Faridpur	0.00	0.22	0.22	0.00	2.01	2.01	0.11	0.81	0.92	0.12	8.88	9.00	.23	11.93	12.16
Comilla	0.00	0.19	0.19	0.00	0.53	0.53	0.00	0.05	0.05	0.00	28.54	28.54	0.00	29.32	29.32
Mymensingh	0.00	0.00	0.00	0.00	0.95	0.95	0.00	0.81	0.81	0.15	21.40	21.55	0.15	23.16	23.32
Narayanganj	0.00	0.00	0.00	0.00	0.00	0.00	0.49	8.96	9.45	0.55	4.24	4.79	1.04	13.21	14.25
Khulna	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.28	3.28	0.06	9.69	9.75	0.06	12.98	13.04
Total	2.03	17.56	19.59	3.89	26.05	29.95	2.76	24.62	27.38	16.97	143.76	160.74	22.34	215.33	237.67

*M= Male, F=Female and T=Total

Source: Monitoring and Evaluation Department of Grameen Bank.

Table 3: Annual (at the end of each year) repayment rates across Zones and according to the gender of the borrower^{a, b}

Zones	Repayment Rates											
	Up to Dec 94			Up to Dec 95			Up to Dec 96			Up to Dec 97		
	M	F	T	M	F	T	M	F	T	M	F	T
Chittagong	---	100	100	---	100	100	99	100	100	98	99	99
										(5)	(8)	(13)
Tangail	100	100	100	98	100	100	97	100	97	102	101	102
							(2)					
Rangpur	100	100	100	98	99	99	85	90	89	85	87	86
							(19)	(58)	(77)	(19)	(56)	(75)
Dhaka	100	100	100	97	98	95	72	73	73	95	95	95
							(1)		(1)	(1)	(15)	(16)
Patuakhali	100	100	100	100	90	84	100	88	89	100	98	99
								(3)	(3)		(3)	(3)
Bogra	100	100	10	100	100	100	101	98	99	100	99	99
							(1)	(4)	(5)		(5)	(5)
Sylhet	100	100	100	100	98	98	100	97	97	100	98	98
											(4)	(4)
Rajshahi	---	100	100	---	103	103	100	101	101	100	100	100
Dinajpur	100	100	100	100	97	97	100	98	98	100	96	96
								(24)	(24)		(69)	(69)
Faridpur	---	100	100	---	100	98	100	98	98	100	103	103
								(3)	(3)		(2)	(2)
Comilla	---	100	100	---	100	100	---	100	100	---	102	102
Mymensingh	---	100	100	---	99	99	---	82	82	41	98	98
										(1)	(8)	(9)
Naraynganj	---	---	---	---	---	---	82	101	100	75	100	99
								(7)	(7)	(1)	(5)	(6)
Khulna	---	---	---	---	---	---	---	100	100	---	101	101
											(1)	(1)
Total	100	100	100	98	98	98	92	96	96	95	98	98
							(23)	(99)	(122)	(27)	(176)	(203)

^aFigures in parenthesis represents the number of defaulting lessee. No lease was repaid in 1994 and no information was available on default in 1995.

^bBecause of prepayment, repayment rate could be more than 100 per cent.

Source: Monitoring and Evaluation Department of Grameen Bank.

Table 4: Distribution of asset ownership across Zone and according to the gender of the borrower

Zones	Cumulative total as of December 1997		
	M	F	T
Chittagong	26	127	153
Tangail	13	17	30
Rangpur	33	140	173
Dhaka	0	4	4
Patuakhali	0	12	12
Bogra	4	34	38
Sylhet	2	14	16
Rajshahi	1	118	119
Dinajpur	13	476	489
Faridpur	2	23	25
Comilla	0	13	13
Mymensingh	0	38	38
Naraynganj	0	64	64
Khulna	0	25	25
Total	96	1118	1214

*M= Male, F=Female and T=Total

Source: Monitoring and Evaluation Department of Grameen Bank.

Table 5: Ownership of asset as of December 97 according to the gender of the borrower in top fifteen activities funded by the leasing program

Leased Item	Number of borrowers		
	M		
Shallow machine	35 (4.9)	687 (95.1)	722
Power Tiller	19 (12.6)	132 (87.4)	151
Power loom	0 (0.0)	58 (100.0)	58
Cow	4 (12.2)	45 (91.8)	49
Rice Mill	4 (13.8)	25 (86.2)	29
Baby Taxi	9 (42.9)	12 (57.1)	21
Dairy Farm	3 (15.0)	17 (85.0)	20
Power Pump	5 (26.3)	14 (73.7)	19
Buffalo cart	0 (0.0)	19 (100.0)	19
Poultry Farm	3 (16.7)	15 (83.3)	18
Nursery	0 (0.0)	16 (100.0)	16
Fridge	2 (22.2)	7 (77.3)	9
Tempo	2 (25.0)	6 (75.0)	8
Shallow boat	1 (14.3)	6 (85.7)	7
Fish Farms	0 (0.0)	5 (100.0)	5

*M= Male, F=Female and T=Total; figures in parenthesis are percentage of the total number of item in each activity (column 4)

Source: Monitoring and Evaluation Department of Grameen Bank.

Table 6: Size of the Average Lease across years and according to the gender of the borrower

Gender	1994	1995	1996	1997	Cumulative as of December 1997
Female	32,161 (\$ 715)	29,985 (\$ 666)	32,276 (\$ 717)	24,375 (\$ 542)	26,822 (\$ 596)
Male	36,285 (\$ 806)	48,123 (\$ 1,069)	72,684 (\$ 1,615)	81,625 (\$ 1,814)	58,345 (\$ 1,289)
Total	32,544 (\$ 723)	31,531 (\$ 701)	34,193 (\$ 760)	26,534 (\$ 590)	28,257 (\$ 628)

*Figures in parenthesis represent approximate US \$ value at the rate of
1 US \$= Tk 45.00

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