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UNCLASSIFIED

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DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C 20523

PROJECT PAPER

Proposal and Recommendation

388-025

BANGLADESH: RURAL FINANCE EXPERIMENTAL PROJECT

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE)

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2. DOCUMENT CODE: 3

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4. DOCUMENT REVISION NUMBER:

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7. PROJECT TITLE (Maximum 40 characters): Rural Finance Experimental Project

8. ESTIMATED FY OF PROJECT COMPLETION: FY 80

9. ESTIMATED DATE OF OBLIGATION: A. INITIAL FY 77; B. QUARTER 4; C. FINAL FY 77 (Enter 1, 2, 3, or 4)

10. ESTIMATED COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL	2110	4890	7000	2110	4890	7000
(GRANT)	(2110)	(4890)	(7000)	(2110)	(4890)	(7000)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST COUNTRY	–	440	440		440	440
OTHER DONOR(S)						
TOTALS	2110	5330	7440	2110	5330	7440

11. PROPOSED BUDGET APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 77 F. GRANT	E. 1ST FY 77 G. LOAN	H. 2ND FY 78 I. GRANT	H. 2ND FY 78 J. LOAN	K. 3RD FY 79 L. GRANT	K. 3RD FY 79 M. LOAN
(1) FN	252	043	–	7000					
(2)									
(3)									
(4)									
TOTALS				7000					

A. APPROPRIATION	N. 4TH FY O. GRANT	N. 4TH FY P. LOAN	Q. 5TH FY R. GRANT	Q. 5TH FY S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1)					7000	
(2)						
(3)						
(4)						
TOTALS					7000	

12. IN-DEPTH EVALUATION SCHEDULED: MM 12 YY 78

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2 (1 = NO, 2 = YES)

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE

TITLE: David M. Wilson
Director (Acting)
USAID/Bangaldesh

DATE SIGNED: MM 07 DD 11 YY 77

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

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BANGLADESH
RURAL FINANCE EXPERIMENTAL PROJECT
FY 1977 PROJECT PAPER

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RURAL FINANCE EXPERIMENTAL PROJECT
Definitions of Rates, Weights and Terms

Currency

U.S. Dollar $1.00 = Taka 15.00
Taka 1.00 = $0.07

1 Lakh = Tk 100,000 (Usually written Tk 1,00,000)
1 Crore = Tk 10,000,000 (Usually written Tk 1,00,00,000)

Weights

One Maund = 40 Seers = 82.2 Pounds
Metric Ton (MT) = 2,204.6 Pounds (26.82 Maunds)
One Seer = 2.06 Pounds

Rice Seasons - Approximate

Aus (about one-third of the total paddy acreage). Aus seeding is done between mid-March and beginning May; the crop is harvested between beginning July and mid-August.

Aman (nearly 60 percent of the total paddy acreage). Seedlings are raised in June-July; the crop is harvested between mid-November and end-December.

Boro (winter crop). Seeds are planted from November on; the crop is harvested in April and May.

Government and Social Units

Divisions	- Four nationwide
Districts	- 19 (20 Agricultural)
Thanas	- 420; size about 10-15 square miles
Unions	- 4,000 (plus); about 10 per thana
Villages	- Approximately 15 per union; 65,000 nationwide

A thana is roughly the equivalent to a county in the United States; however, it is much smaller in area (10-15 square miles). The terms "thana" and "police station" are interchangeable. A union, under an elected council, is the smallest unit of government.

Land

Bigha - A unit of land. The size of a bigha varies over Bangladesh from about one-third acre to one-half acre. In this paper one bigha is used as one-third acre (.135 hectare).

Organizations

Bangladesh Agricultural Development Corporation (BADC) - Government corporation responsible for supplying all agricultural inputs.

Integrated Rural Development Program (IRDP) - Government agency charged with rural development through a two-tier cooperative organization.

Thana Central Cooperative Associations (TCCAs) - The second tier of the IRDP cooperative network. Village level cooperatives, or "primary societies", may acquire membership in the TCCAs in their respective thanas. The TCCAs provide loan capital, technical assistance, and in some cases, agricultural inputs to primary societies. TCCAs have been established in 200 of the 420 thanas in Bangladesh. IRDP plans TCCAs in an additional 50 thanas by 1977-78.

Primary Societies: "Krishak Samabaya Samity", or KSSs. Village level cooperatives. Approximately 18,000 are associated with TCCAs.

Terms

Godown	- Warehouse
Paddy	- Rice which is either growing, or cut or unmilled.
Crop Year	- From July 1 to June 30.

RURAL FINANCE EXPERIMENTAL PROJECT

PART I Project Summary and Recommendation

A. Recommendation

Grant in FY 1977 $7,000,000

Waiver of the requirement that Bangladesh contribute 25 percent of project resources.

B. Description of the Project

A large portion of credit demand in rural Bangladesh is not reached by the existing institutions under current terms of credit. Consequently productive potential, in terms of general rural economic growth as well as of foodgrain self sufficiency, is not fully achieved. The prospective borrowers embodying this demand are excluded systematically because of the high costs and high risks associated by credit institutions with doing business with them. As a result they must turn from institutional to non-institutional sources, whose exceedingly high charges reflect the fact that the borrowers have nowhere else to turn. That moneylenders do not hesitate to deal with these borrowers suggests that a major credit market exists which could be exploited by institutional sources to the benefit of both borrowers and lenders.

This unexploited market constitutes the target group of this project. By definition, any prospective borrower unable to get a loan for a legitimate productive purpose is included. As a general rule such borrowers own little or no land, have irregular and meager sources of income, are poor. Recent data suggest they comprise the majority of the rural population of Bangladesh.

The target group for this project is defined as rural dwellers over age 18 (the legal age for signing contracts), male or female, earning less than Tk 3,000 ($200) per year from all sources (farming, day laboring, rickshaw driving, fishing, retail marketing, rice processing, handicrafts, etc.), having a net worth (excluding the value of cultivable land) of less than Tk 5,000 ($333) and cultivating six bighas of land (two acres) or less, irrespective of whether such land is owned, rented or sharecropped. This definition may be further refined during the course of project implementation.

From agricultural, social and economic standpoints the definition may be less than ideal. Six bighas of highly fertile land owned in Comilla is far more valuable than ten bighas of sharecropped land in, say, Patuakhali. However, the definition is simple and practical from the standpoint of project implementation and evaluation. The purpose of the definition is not to exclude any needy borrowers, but to enable measurement of the project's achievements in reaching the poor. The definition may be refined during project implementation. A more complex and probably more realistic definition of small farmers, developed by the banking community of Bangladesh, is included as Annex B.1.

The project will provide the opportunity to Bangladesh credit institutions to experiment with various systems for extending credit to the target group, and for recovering the resources lent, on time and with interest. The principal objective of the project will be to identify at least one credit model which is successful at both extending credit to, and recovering it from, the target group. Corollary objectives will be that the successful credit system identified be self-financing and capable of attracting capital for expanded lending through rural savings programs.

The experiments will be undertaken by the Bangladesh Krishi Bank, the six commercial banks, the Jatiya Samabaya (cooperative) Bank and the Integrated Rural Development Program; other participants may be designated as well. Each has designed, in consultation with AID, an experimental credit model to achieve the objectives just mentioned. Some of the models entail continuous technical supervision of the borrowers' activities; others emphasize local initiative and borrower groups; still others offer credit in kind, in the form of complete agricultural inputs packages (including seed, fertilizer and pesticides in proper quantities for very small parcels of land). All models test variations in interest rates between 12 and 36 percent per annum.

The project represents a new approach in two respects. First, and most important, the Bangladesh Bank and the Government have agreed to lift the standard banking regulations governing interest rates and loan security in order to permit broad experimentation in these critical areas. It is expected that if a successful system is identified which requires high interest rates to function properly, and if these rates do not unduly burden target group borrowers, the Government and banking community will adjust banking and credit regulations to accommodate the new system on a broad scale. It should be emphasized that whole-sale changes affecting the entire credit sector are not contemplated under the project. Instead, regulatory changes would be introduced which would permit the addition of new credit facilities with principal focus on the target group. Presently serviced credit markets would continue to be serviced while significantly different procedures, structures and credit terms would be introduced to address the new market.

The second significant aspect of this project concerns the method by which credit extended to the target group will be financed. Because the project is a high-risk experiment, all losses incurred through defaults or through failure of interest payments to cover operating expenses will be eligible for AID financing. The removal of financial risk in this manner enables all participating credit institutions to experiment boldly to find a workable way to reach the target group. Furthermore, in order to reinforce the two principal objectives of a successful rural credit system, i.e., both extending credit to the target group and then recovering it, AID funds for financing lending capital will be provided to participating credit institutions as follows:

-- For each loan extended to a target group borrower, a sum equivalent to one-third the value of the loan will be released to the lender on a grant basis.

-- For each such loan fully repaid by the borrower to the lender, an additional one-third will be released to the lender on a grant basis.

Funds for this purpose will be advanced by AID to the Bangladesh Bank, and a project account established. The Bangladesh Bank, which is the central banking institution in Bangladesh and the principal implementing agency of this project, will transfer funds as outlined above to the credit institutions engaged in making and recovering project loans.

If cases arise where the transfers do not cover lenders' losses due to defaults or high operational costs, special releases from the project account may be arranged as needed. Thus all risks to participating credit institutions are covered, and yet the incentives to succeed are very attractive.

AID funds for this component of the project are estimated at $4.0 million. An additional $2.43 million is budgeted for technical assistance and evaluation and $0.42 million is planned for in-country and third-country training.

It is expected that by the expiry of the project at least one participating credit institution will have found a workable way to extend credit to and recover it from the target group. If this happens, a major follow-on grant-financed AID project will assist in establishing the system nationwide.

C. Summary Findings

Considering that the project is an experiment intended to test a series of credit systems for effectiveness in reaching the target group, a high incidence of failure should be expected. The project will be a success even if only one effective credit model is identified. The technical, economic, financial and social feasibility of a functioning and effective rural credit system remains to be demonstrated by the project. Valid conclusions will be drawn in each of these areas for each credit model tested during the course of project evaluation.

The project meets all applicable statutory criteria; the statutory checklist is attached hereto at Annex E.

D. Project Issues

The principal issues to be addressed during the course of this project are:

1. Whether a self-financing credit system can be devised to deal with the target group without more resourceful and influential borrowers pre-empting the program;

2. Whether the target group will be able to afford a self-financing credit system;

3. If the answer to 2. proves to be negative, whether any workable subsidized alternative is possible in Bangladesh.

Virtually all institutional rural credit in Bangladesh is heavily subsidized when all cost factors, including defaults, inflation, opportunity costs and others, are considered. All has been uniformly unsuccessful in reaching the target group. Target group borrowers presently have no alternative to extremely high-cost non-institutional credit. It is therefore believed that a workable midpoint system can be found which has the best features of both institutional and non-institutional credit: less expensive and less eager to foreclose than the moneylenders and yet retaining their responsiveness, flexibility and informality; more energetic in reaching prospective borrowers than present institutional credit while remaining production and development oriented.

E. Project Committees

USAID Project Committee:

Robert W. Nachtrieb, PDD, Chairman
Edward P. Rhatigan, PRO
Emory M. Howard, AGR
Gordon H. West, PDD
Gene C. McCoy, CONT
Douglas D. Robertson, RLA

<u>AID/W Project Committee</u>:

ASIA/PD: Rufus Long, Chairman

ASIA/TR: Calvin Martin

GC/ASIA: Peter Bloom

ASIA/DP: Robert Meehan

ASIA/BIS: Joan Coe

TA/RD: Clifton Barton

PART II Project Background and Detailed Description

A. Background

A major constraint to rural development, encompassing economic growth in broad terms as well as increased agricultural production, has been the absence of reliable, reasonably priced credit for the majority of productive rural dwellers. While acknowledging that many other factors also operate to constrain development -- among them the adequacy of transportation facilities, the availability of high-yielding agricultural technology and the inputs needed to practice it, an economy structured to provide incentives for productivity, and the ready availability of markets for goods and services -- nevertheless it is clear that immediate benefits could be achieved through the introduction of adequate credit. Its absence is a characteristic of rural Bangladesh notwithstanding major credit initiatives recently undertaken by the Government. See Annex B.2 for a summary description of the Government's Tk 100 crcre ($ 67 million) agricultural credit program and Annex B.3 for a report of a survey undertaken to assess its impact. The fact that major efforts have not succeeded in reaching the majority of the rural population underscores the need to experiment.

B. Detailed Description

1. Sector Goal

The sector goal to which this project will attempt to contribute is the establishment of an effective nationwide institutional credit system which provides reliable credit and savings facilities to small farmers and other small rural producers. Assuming that such a system is devised or identified during the course of the project, the goal will be achieved through a follow-on project which will finance the system's nationwide installation.

2. Project Purpose

The project purpose is the devising or identification of one or more replicable model rural financial systems able to meet the financial needs of the productive and potentially productive rural poor. The condition indicating that the project purpose has been achieved will be the identification of at least one rural finance system which has demonstrated the ability to extend credit as needed to the project target group; to recover fully the resources lent, on time and with interest; to cover all its operational costs through interest or finance charges levied equitably; to finance expanded operations through mobilization of rural savings.

3. Outputs

The project purpose will be addressed through the undertaking of a series of experiments, each testing a proposed method for extending credit to and recovering it from the project's target group. The proposals have been planned by Bangladeshi credit institutions after discussions with AID. Their major features are described in Annex B.4 and summarized briefly below. The proposals may be changed or further refined as project planning advances, and new proposals may be added as they arise. The operation and complete testing and evaluation of each credit experiment constitute the project outputs.

The proposals presently under discussion include the following.

1. Budgeted line of credit, or "permanent number" system. Most institutional rural credit is restricted to directly productive purposes such as the purchase of seed and fertilizer. When other unavoidable household maintenance expenses arise, borrowers must either divert funds without permission or go to the moneylender. This proposal, advanced by the Bangladesh Krishi Bank, proceeds from the premise that all legitimate expenses including consumption should be eligible for credit. A prospective borrower will have a permanent file at the bank designated by an account number ("permanent number"). His file will include an estimated budget and cash-flow forecast for an entire year, including such expense items as weddings, feasts, etc. The periods where current income may not cover current costs could be covered by the line of credit. The objective will be to encourage small borrowers to look to the credit institution for all credit needs, and to build a permanent, positive, long term relationship where good repayment performance is rewarded by timely and adequate credit whenever needed.

2. Krishi Shakha, or agricultural sub-branch. Sonali Bank has already initiated an experiment involving the establishment of very small, village-based sub-branches of full size branches. The sub-

branches would deal exclusively in small farmer agricultural credit and each would be staffed with only one or two locally recruited bank officers and ancillary staff. The sub-branch would be open only on market days. Sub-branch staff would spend the other days organizing group loans, promoting HYV crops and the use of credit, and referring other banking business such as commercial and industrial credit and savings to the parent branch. Sonali's experiment will be included and expanded under the AID project.

3. Area development approach. Under this proposal the Janata Bank will attempt to address comprehensive development needs in an area encompassing a large village or a cluster of smaller villages. A social and economic survey of the area will be prepared and will form the basis for allocating credit resources in the target area. Areas designated for this experiment will be within a half mile radius of an existing branch of Janata Bank. This will ensure ready access of borrowers to the bank and will encourage the local familiarity essential to good repayment performance.

4. Small farmer service center. The Agrani Bank will assist in the establishment of local commercial enterprises specializing in one-stop availability of all agricultural inputs requirements, with supplier credit being extended to local purchasers when necessary. The experimental service centers will offer input combinations in recommended dosages for very small plots of land. Also center personnel will be prepared to provide technical assistance in cropping, application of fertilizer and pesticides, and other areas. Some of the centers will be prepared to receive loan repayments in kind. Storage facilities and crop dryers and scales will be available for this purpose.

5. Banker as ombudsman. In this experiment Pubali Bank will train branch lending officers to serve not only as credit officers but also as referral agents capable of arranging services from local agricultural extension agents, rural health centers, etc. By so doing it is expected to establish and maintain positive relationships between participating bank branches and their target group clients. More importantly, borrowers will be assisted in meeting their needs and thus at least indirectly in successfully growing the crops for which they borrow.

6. Village agent model. Rupali Bank plans to participate in the experiment at the village level by commissioning a knowledgeable and respected villager as its agent in each of several villages. The agent will identify small farmers capable of utilizing and repaying loans, assist them in completing simplified applications, refer them to the Rupali branch for loan processing, approval and disbursement, and help to ensure that repayment is made as scheduled. The village agent will receive a basic salary plus a commission for each loan referral.

7. Village level group lending. Uttara Bank has developed and placed in limited operation a small farmer, group lending program in one village. The program extends loans to individual members of voluntarily formed groups, with each loan jointly and severally guaranteed by all members. A five-member group is specified, comprising landless cultivators as well as land owners. Interest rebates are offered as an incentive to timely repayment. Participation in the AID project will permit the bank to test its proposed method on a broader scale with a number of branches.

8. Cooperatives for landless, sharecroppers, women. The Integrated Rural Development Program (IRDP) and the Jatiya Samabaya Bank (JSB) will experiment with cooperative credit models with special emphasis on target group borrowers. Cooperatives will be accessible to rural landless, sharecroppers, artisans and entrepreneurs irrespective of sex. Credit will be available for cooperative members for any productive purpose, such as purchase and rehabilitation of derelict tanks, rental of godowns for purchase and resale of paddy, rice processing, animal raising, handicrafts, etc.

Other possible credit models are currently under discussion and may be included for experimentation. Also, the proposals just described may be modified during project implementation in order to improve performance or test new variables.

4. <u>Inputs</u>

A. Bangladesh Government inputs include major contributions already made to the initial design of each model, and policy directives permitting experimentation to go beyond the standard limits set by banking and credit regulations. Also, local currency totalling approximately \$ 440,000 will be contributed for project vehicle operation and maintenance, training and establishment (overhead).

B. AID inputs include technical assistance, evaluation, project vehicles, training, the underwriting of all risk and financing for each loan extended to and recovered from a target group borrower. The magnitude planned for each component is set forth in some detail in the project financial analysis in Part III.B. below. Total AID funding of $7.0 million is planned.

That these inputs will lead to the project outputs specified and thence to the project purpose assumes that the Government's commitment to this experiment as the most likely vehicle for achieving a breakthrough will continue until such a breakthrough is in fact achieved. It also assumes that the target group, although poor, nonetheless will prove capable of repaying loans and of continuing a positive financial relationship with credit institutions.

PART III Project Analyses

A. Technical Analysis and Environmental Assessment

To assess the project's technical feasibility it must be viewed in the context of the body of experience in rural credit not only in East Bengal but in developing countries all over the world. Well motivated, major efforts to reach the rural poor are underway in Bangladesh now, initiated by the Government. In addition development projects financed by the World Bank, the Asian Development Bank, the Danish International Development Agency and AID already include rural credit components. Prior to Bangladesh independence new organizations were established, most notably the Integrated Rural Development Program (IRDP) and the Agricultural Development Corporation, to deliver agricultural inputs and services, including credit, to the agricultural sector of the economy.

The goods and services are in fact being delivered, but predominantly to the upper strata of the rural population*. A major portion of the rural economy is still to be reached, notwithstanding Government efforts. This is not a phenomenon unique to Bangladesh, but has been experienced throughout the world. This fact is amply documented in the 20 volumes published as a result of AID's 1973 Spring Review on Small Farmer Credit. The immediate inclination of almost any government intent upon including the poorer portions of its citizens in economic development is to lower prices of input goods and services (in the belief that this makes them more affordable and accessible) and to redouble delivery efforts. While perhaps successful initially, these efforts generally fail over time. Virtually no public delivery system has yet been devised which can continue to provide subsidized goods and services to an underprivileged section of a demand market without supply ultimately being diverted to the stronger demand components, either through unofficial price mechanisms or political and social influence or both. Artificially low priced goods and services historically do not reach the weak demand components to which they have been targeted in any market economy, developed or not.

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* Recent data suggest that fertilizer is most widely available to all farmers regardless of size. The distribution of other agricultural goods and services, however, appears to be skewed in favor of larger farmers.

However, once a subsidized delivery system has been established, it is exceedingly difficult for a government to move to a full cost system, for several reasons.

First, even though it may be acknowledged that subsidized goods and services are not reaching targeted demand groups, nevertheless it often appears that fully priced supplies would likewise be beyond reach by being too expensive. No government wants to be in a position of outpricing its poorest consumers, particularly when they constitute a major portion of the population.

Second, it may appear that full pricing may not be the only way to solve the problem. Stronger administrative controls, tighter discipline and government directivesoften appear to policy makers to be a better way to accomplish the same thing, without the political risks associated with raising prices and with the promise of political dividends for having delivered the goods, if successful. The attractions of this course of action are strong, but worldwide experience, and experience in Bangladesh so far, show it to be unsuccessful.

Third, the political liabilities of raising the prices the poor will have to pay are far more immediately apparent than are the prospects of success in reaching them at all by such a move.

Faced with the need to improve delivery of credit or any other commodity, a well intentioned and politically responsive government would be understandably reluctant to abandon subsidies. The value of the AID project is that it provides an opportunity to experiment under controlled conditions with both administrative and pricing variables. In the event of failure of an experiment the political liabilities will be manageable; in the event of success of one or more experiments in reaching the poor, there is an immediate prospect of economic, agricultural and political dividends.

It is therefore important that the experiments be very carefully designed, implemented and evaluated, and that all reasonable variations be tested. In order to maximize the chances of success of at least one experiment, the AID grant will finance a heavy component of technical expertise to assist in the conduct of all of them.

Adjustments or refinements in design, procedures, staffing or other factors will be permitted during the course of experimentation to improve performance. Also, training of credit personnel, both in Bangladesh and through observation of successful credit programs in other developing countries, will be financed. The project will be flexible in its funding components in order to meet needs as they become apparent. The project represents an effort to find a way to make a credit delivery system work in Bangladesh.

The project will have no direct impact upon the environment. As an experimental pilot it will be implemented in areas totalling a very small portion of Bangladesh. Moreover the project is strictly institutional, with no construction, introduction of chemical substances, mineral extraction or water or air pollution involved. If the project is successful and a workable credit system identified, a follow-on project will finance its nationwide installation. This should in turn broaden the use of fertilizer, pesticides and high yielding varieties of rice and wheat as well as increase the scope and intensity of productive activities generally. As with all economic growth, both positive and negative effects upon the environment will result. The net result will, however, be improved economic well-being of the population of Bangladesh.

Bearing in mind the experimental character of the models to be tested in this project, the design and level of funding of the project is considered sufficient to address the project purpose adequately while being manageable from the standpoint of project implementation. Accordingly the project meets the criteria of FAA Section 611(a).

B. Financial Analysis and Plan

1. Financial Viability

a. Target Group Borrowers

A major project issue to be resolved during the course of project implementation is whether and to what extent target group borrowers are financially capable of supporting a full cost credit system. For small farmers, the issue is linked directly with the cost of agricultural inputs and the income returned from the sale of outputs. For other rural producers the same relationship of the costs of inputs and outputs applies, but because of the wide variety of activities which could be financed (handicrafts, food processing, rickshaws, etc.), no meaningful analysis of financial viability can be attempted. For agriculture, where input-output relationships are relatively more predictable, analyses can be made at various input and output prices. The tables at Annex B.5 attempt to show relationships between various crop prices and interest costs. Depending on the crop, details of the sharecropping arrangement and quantities of fertilizer used, low crop prices or high interest costs or both may make credit too costly. A one bigha sharecropper can be considered to be a "worst-case" model for such analysis. Larger cultivable holdings and other forms of land possession can only mean improved financial status and increased capability to afford a full cost credit system. At best the Annex B.5 figures are theoretical, and their accuracy will be field tested during implementation of the project.

Briefly, the analyses suggest that a one-bigha sharecropper can make a profit only by growing HYV crops and sharing input costs with the landowner, if wheat and paddy prices are down to Tk 50 per maund, and with interest costs as high as 50 percent. If he must pay all input costs himself, or if he grows local varieties, he cannot make a profit at Tk 50 per maund when required to give half his yield to his landowner and if he consumes half of the balance. If prices rise to Tk 80 or 90 per maund, all crops become profitable. Jute is also a profitable crop under our assumptions primarily because all that remains after the landowner's share is assumed to be sold for income, and none consumed.

In all cases, the income earned by the one bigha sharecropper is pitifully small. At a sale price of Tk 50 per maund, after surrendering half of the yield to the landowner, consuming half of the remainder, and paying off a 12 percent loan, the farmer's net profit will be only Tk 55, or about $3.60. At a sale price of Tk 100 per maund and all other assumptions the same, his profit is Tk 242, or $16.

The analyses also suggest that application of recommended dosages of fertilizer does not always result in a greater profit. Note that HYV Aman/Aus, with costs shared and prevalent dosages applied, yields a better return than the same crop with recommended dosages. See Tables 1-B and 1-C below.

Summary profit/(deficit) tables for all crops analyzed, at interest rates between 12 and 100 percent and output prices between Tk 50 and Tk 100 per maund for rice and wheat, are extracted from Annex B.5 below. The tables are ranked according to amount of profit made at the lowest output prices shown: thus irrigated wheat with input costs shared is first, HYV Aman or Aus is second, and HYV Boro with input costs borne entirely by the farmer is last. The ranking varies somewhat if based on higher output prices, but generally the HYV crops with input costs shared appear to be the most profitable for one bigha borga farmers. Refer to the Annex for full details, including assumptions, input costs and arithmetic.

Table 1

Summary Profit/(Loss) Statements for Various Crops Cultivated by One Bigha Borga Farmer (Sharecropper), Assuming Various Loan Interest Rates and Farmgate Output Prices.

Source: Annex B.5

Table 1-A

Irrigated Wheat Input Costs Shared Recommended Dosages	Loan Interest Rate						
	12%	18%	24%	30%	36%	50%	100%
1. Wheat: Tk 50/md	55	52	48	44	40	32	-
2. Wheat: Tk 60/md	92	89	85	81	77	69	37
3. Wheat: Tk 70/md	130	127	123	119	115	107	75
4. Wheat: Tk 80/md	167	164	160	156	152	144	112
5. Wheat: Tk 90/md	205	202	198	194	190	182	150
6. Wheat: Tk 100/md	242	239	235	231	227	219	187

Table 1-B

HYV Aman/Aus Input Costs Shared Prevalent Dosages	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	51	49	46	43	40	34	10
2. Paddy: Tk 60/md	81	79	76	73	70	64	40
3. Paddy: Tk 70/md	111	109	106	103	100	94	70
4. Paddy: Tk 80/md	141	139	136	133	130	124	100
5. Paddy: Tk 90/md	171	169	166	163	160	154	130
6. Paddy: Tk 100/md	201	199	196	193	190	184	160

Table 1-C

HYV Aman/Aus Input Costs Shared Recommended Dosages	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	39	35	32	28	25	16	(13)
2. Paddy: Tk 60/md	71	67	64	60	57	48	19
3. Paddy: Tk 70/md	104	100	97	93	90	81	52
4. Paddy: Tk 80/md	136	132	129	125	122	113	84
5. Paddy: Tk 90/md	169	165	162	158	155	146	117
6. Paddy: Tk 100/md	201	197	194	190	187	178	149

Table 1-D

Jute Farmer Pays Costs Recommended Dosages	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
1. Jute: Tk 70/md	31	26	21	16	11	(2)	(44)
2. Jute: Tk 80/md	61	56	51	46	41	28	(14)
3. Jute: Tk 90/md	91	86	81	76	71	58	16
4. JuteLTk 100/md	121	116	111	106	101	88	46
5. Jute: Tk 110/md	151	146	141	136	131	118	76
6. Jute: Tk 120/md	181	176	171	166	161	148	106

Table 1-E

HYV Aman/Aus Farmer Pays Costs Prevalent Dosages	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	13	9	6	2	(2)	(11)	(44)
2. Paddy: Tk 60/md	43	39	36	32	28	19	(14)
3. Paddy: Tk 70/md	73	69	66	62	58	49	16
4. Paddy: Tk 80/md	103	99	96	92	88	79	46
5. Paddy: Tk 90/md	133	129	126	122	118	109	76
6. Paddy: Tk 100/md	163	159	156	152	148	139	106

Table 1-F

HYV Boro Input Costs Shared Prevalent Dosages	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	10	5	-	(5)	(10)	(22)	(64)
2. Paddy: Tk 60/md	47	42	37	32	27	15	(27)
3. Paddy: Tk 70/md	85	80	75	70	65	53	11
4. Paddy: Tk 80/md	122	117	112	107	102	90	48
5. Paddy: Tk 90/md	160	155	150	145	140	128	86
6. Paddy: Tk 100/md	197	192	187	182	177	165	123

Table 1-G

Irrigated Wheat Input Costs Shared Prevalent Dosages	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
1. Wheat: Tk 50/md	7	4	1	(3)	(6)	(14)	(42)
2. Wheat: Tk 60/md	32	29	26	22	19	11	(17)
3. Wheat: Tk 70/md	57	54	51	47	44	36	8
4. Wheat: Tk 80/md	82	79	76	72	69	61	33
5. Wheat: Tk 90/md	107	104	101	97	94	86	58
6. Wheat: Tk 100/md	132	129	126	122	119	111	83

Table 1-H

HYV Boro Input Costs Shared Recommended Dosages	Loan Interest Rate						
	12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	(5)	(12)	(18)	(24)	(30)	(45)	(96)
2. Paddy: Tk 60/md	37	30	24	18	12	(3)	(54)
3. Paddy: Tk 70/md	80	73	67	61	55	40	(11)
4. Paddy: Tk 80/md	122	115	109	103	97	82	31
5. Paddy: Tk 90/md	165	158	152	146	140	125	74
6. Paddy: Tk 100/md	207	200	194	188	182	167	116

Table 1-I

Non-Irrigated Wheat Farmer Pays Costs Recommended Dosages	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
1. Wheat: Tk 50/md	(11)	(13)	(16)	(18)	(21)	(26)	(47)
2. Wheat: Tk 60/md	4	2	(1)	(3)	(6)	(11)	(32)
3. Wheat: Tk 70/md	19	17	14	12	9	4	(17)
4. Wheat: Tk 80/md	34	32	29	27	24	19	(2)
5. Wheat: Tk 90/md	49	47	44	42	39	34	13
6. Wheat: Tk 100/md	64	62	59	57	54	49	28

Table 1-J

HYV Aman/Aus Farmer Pays Costs Recommended Dosages	Loan Interest Rates 12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	(26)	(31)	(36)	(42)	(47)	(60)	(104)
2. Paddy: Tk 60/md	6	1	(4)	(10)	(15)	(28)	(72)
3. Paddy: Tk 70/md	36	34	29	23	18	5	(39)
4. Paddy: Tk 80/md	71	66	61	55	50	37	(7)
5. Paddy: Tk 90/md	104	99	94	88	83	70	26
6. Paddy: Tk 100/md	136	131	126	120	115	102	58

Table 1-K

Local Aus Farmer Pays Costs Recommended Dosages	Loan Interest Rates 12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	(33)	(36)	(39)	(42)	(44)	(51)	(74)
2. Paddy: Tk 60/md	(21)	(24)	(27)	(30)	(32)	(39)	(62)
3. Paddy: Tk 70/md	(8)	(11)	(14)	(17)	(19)	(76)	(49)
4. Paddy: Tk 80/md	4	(1)	(2)	(5)	(7)	(14)	(37)
5. Paddy: Tk 90/md	17	14	11	8	6	(1)	(24)
6. Paddy: Tk 100/md	29	26	23	20	18	11	(12)

Table 1-L

Local Aman/Boro Farmer Pays Costs Recommended Dosages	Loan Interest Rates 12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	(35)	(38)	(42)	(45)	(49)	(57)	(86)
2. Paddy: Tk 60/md	(18)	(21)	(25)	(28)	(32)	(40)	(69)
3. Paddy: Tk 70/md	-	(3)	(7)	(10)	(14)	(22)	(51)
4. Paddy: Tk 80/md	17	14	10	7	3	(5)	(34)
5. Paddy: Tk 90/md	35	32	28	25	21	13	(16)
6. Paddy: Tk 100/md	52	49	45	42	38	30	1

Table 1-M

Irrigated Wheat Farmer Pays Costs Recommended Dosages	Loan Interest Rates 12%	18%	24%	30%	36%	50%	100%
1. Wheat: Tk 50/md	(45)	(52)	(58)	(65)	(71)	(87)	(142)
2. Wheat: Tk 60/md	(8)	(15)	(21)	(28)	(34)	(50)	(105)
3. Wheat: Tk 70/md	30	23	17	10	4	(12)	(67)
4. Wheat: Tk 80/md	67	60	54	47	41	25	(30)
5. Wheat:Tk 90/md	105	98	92	85	79	63	8
6. Wheat: Tk 100/md	142	135	129	122	116	100	45

Table 1-N

Irrigated Wheat Farmer Pays Costs Prevalent Dosages	Loan Interest Rates 12%	18%	24%	30%	36%	50%	100%
1. Wheat:Tk 50/md	(80)	(85)	(91)	(97)	(103)	(116)	(165)
2. Wheat:Tk 60/md	(55)	(60)	(66)	(72)	(78)	(91)	(140)
3. Wheat:Tk 70/md	(30)	(35)	(41)	(47)	(53)	(66)	(115)
4. Wheat:Tk 80/md	(5)	(10)	(16)	(22)	(28)	(41)	(90)
5. Wheat:Tk 90/md	20	15	9	3	(3)	(16)	(65)
6. Wheat:Tk 100/md	45	40	34	28	22	9	(40)

Table 1-O

HYV Boro Farmer Pays Costs Prevalent Dosages	Loan Interest Rates 12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	(108)	(116)	(124)	(133)	(141)	(161)	(231)
2. Paddy: Tk 60/md	(71)	(79)	(87)	(96)	(104)	(124)	(194)
3. Paddy: Tk 70/md	(33)	(41)	(49)	(58)	(66)	(86)	(156)
4. Paddy: Tk 80/md	4	(4)	(12)	(21)	(29)	(49)	(119)
5. Paddy: Tk 90/md	42	34	26	17	9	(11)	(81)
6. Paddy: Tk 100/md	79	71	63	54	46	26	(44)

Table 1-P

HYV Boro Farmer Pays Costs Recommended Dosages	Loan Interest Rates 12%	18%	24%	30%	36%	50%	100%
1. Paddy: Tk 50/md	(150)	(160)	(170)	(180)	(191)	(215)	(300)
2. Paddy: Tk 60/md	(108)	(118)	(128)	(138)	(149)	(173)	(258)
3. Paddy: Tk 70/md	(65)	(75)	(85)	(95)	(106)	(130)	(215)
4. Paddy: Tk 80/md	(23)	(33)	(43)	(53)	(64)	(88)	(173)
5. Paddy: Tk 90/md	20	10	-	(10)	(21)	(45)	(130)
6. Paddy: Tk 100/md	62	52	42	32	21	(3)	(88)

It is clear from the above tables that net profit for each crop is far more sensitive to changes in output prices than to variations in interest rate; an interest change from 12 to 36% reduces overall profit for irrigated wheat (Table I-A) by only Tk 15, while a change in price of Tk 10 per maund results in a Tk 37 change in overall profit.

While the amount of profit possible for a one bigha sharecropper may not be sufficient incentive for growing any of these crops, it is clear that for at least some crops, at low prices and for farmers in the worst of circumstances, institutional credit is financially workable.

The figures assume that a portion of output is consumed and the remainder sold for income. Most likely farmers of this size sell little or none of their output, but rather keep all of it (net of landowner's share) for consumption. Most of these farmers have off-farm income sources. The crops represent not a net inflow of resources, but rather a cheaper source of food than the market-place. Viewed in this context, the profit/(deficit) analyses would show an even more favorable return for the one bigha sharecropper as well as all farmers in better circumstances.

Regardless of these preliminary conclusions, for most of the target group credit is simply not available at any of the rates shown. Most credit needs for the target group are met by non-institutional sources, including non-official "windows" of some banks. These sources almost always charge over 100 percent per annum. To a target group borrower even 36 percent would represent a much lower cost.

b. Participating Credit Institutions

A major project objective is to find a system which not only reaches the target group but also is self-financing. Achievement of these two capabilities requires the striking of a balance between finance charges high enough to cover operational costs and discourage large borrowers with access to more favorable terms elsewhere, yet low enough to be affordable to target group borrowers. This will require continuing review of operating costs, assessment of capabilities to increase loan volume and thus the possibilities for reducing prorata costs per loan, as well as testing of the marketability of credit to the target group at various prices. If the experiments demonstrate that the target group can afford a self-financing system, then the feasibility of a credit system both to the target group and to the credit institutions will be established.

2. Recurrent Budget Analysis of Implementing Agencies

The budgetary requirements of each of the experimental models and its sponsoring institution will be assessed during the continuous project monitoring and evaluation process. A start-up budget for each model is included as part of the model descriptions included in Annex B.4. Subsequent year budgets will be prepared during the initial year of operation and are expected to show reduced costs per loan as operations become more efficient.

3. Financial Plan and Budget Tables

The total project will cost $7.44 million, of which $7.00 million will be provided by AID on a grant basis. Project inputs will be financed as follows:

Table2: Summary Cost Estimate and Financial Plan
(US $ 000)

	AID			Bangladesh			Total		
Inputs	FX	LC	Total	FX	LC	Total	FX	LC	Total
1. Funds for credit & losses	-	4,000	4,000	-	-	-	-	4,000	4,000
2. Consultant	1,940	490	2,430	-	-	-	1,940	490	2,430
3. Project Vehicles	50	-	50	-	20	20	50	20	70
4. Training	20	400	420	-	20	20	20	420	440
5. Establishment a/	-	-	-	-	400	400	-	400	400
6. Contingency	100	-	100	-	-	-	100	-	100
7. Total	2,110	4,890	7,000	-	440	440	2,110	5,330	7,440

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a/ The level of funding for establishment costs (staff salaries, building rental, supplies, etc.) shown represents approximately ten percent of total loan volume planned. This is an estimate of establishment costs covered through finance charges, which, if collected, become part of the Bangladesh contribution to the project. The figure of ten percent of loan volume is admittedly low considering the wide range of interest rates to be tested. However, in the absence of actual project performance data, it represents a conservative estimate of interest expected to be collected.

Table 3: Schedule of Project Expenditures
Over Life of Project
(U.S. $ 000)

Inputs	FY 1977	FY 1978	FY 1979	FY 1980	Total
A. AID					
1. Funds for credit, losses	-	600	1,200	2,200	4,000
2. Consultants	-	850	850	730	2,430
3. Project vehicles	-	50	-	-	50
4. Training	-	200	220	-	420
5. Establishment	-	-	-	-	-
6. Contingency	-	15	30	55	100
7. Total	-	1,715	2,300	2,985	7,000
B. BANGLADESH					
1. Funds for credit, losses	-	-	-	-	-
2. Consultants	- -	-	-	-	-
3. Project vehicles	-	3	6	11	20
4. Training	-	-	20	-	20
5. Establishment	-	60	120	220	400
6. Contingency	-	-	-	-	-
7. Total	-	63	146	231	440
TOTAL PROJECT					
1. Funds for credit, losses	-	600	1,200	2,200	4,000
2. Consultants	-	850	850	730	2,430
3. Project vehicles	-	53	6	11	70
4. Training	-	200	240	-	440
5. Establishment	-	60	120	220	400
6. Contingency	-	15	30	55	100
7. Total	-	1,778	2,446	3,216	7,440

The project has only one output to which all inputs will contribute, i.e., the operation and complete testing and evaluation of each of the experimental systems proposed.

The level of funding and the timing of expenditures for each of the inputs in Tables 2 and 3 above are discussed in detail in Part IV, Implementation Arrangements.

C. Social Analysis

1. Social Cultural Feasibility

a. The Social Landscape

The present population of Bangladesh is approximately 80 million with 90 per cent living in rural areas and substantially dependent on agriculture and agro-related industries for their livelihood. In addition, many upper and middle class urban dwellers retain title to agricultural land and receive income from agricultural production. Although agriculture accounts for 61 per cent of Bangladesh's gross domestic product, yields per acre and per capita food production are among the lowest in Asia.

The key to the social and economic (and often political) hierarchy in rural Bangladesh is the land tenure system. Land is considered the most secure form of investment and a primary determinant of social status in rural Bangladesh. In a situation where institutions are weak, resources scarce and population expanding rapidly, land ownership is the firmest guarantee that one can provide the necessary subsistence for one's family. Further, title to land is usually necessary for a farmer to obtain institutional credit. Credit from moneylenders is extremely costly, i.e., 50 per cent interest per crop or at least 100 per cent per year. Instances of up to 300 per cent per crop have been noted. On the other hand, institutional credit is quite cheap, between 13 and 15 per cent per year, with interest rates being established by the Government rather than the market. This accentuates the difference between land-owners and non-land owners.

Since Moslem inheritence laws ban primogeniture, all sons are legally entitled to equal shares of their father's land while daughters receive lesser shares. This leads to a perceived need to pass on to one's sons sufficient land to ensure their survival and that of their families. Thus the pressure to hold on to the land one has or, if possible, acquire new land is enormous. Given these pressures, profits derived from agricultural production are very likely to be invested in procuring additional land. Conversely, agricultural production losses, over a period of time, are apt to result in the loss of land.

Accordingly, land-ownership is extremely important in the socio-economic setting of rural Bangladesh. Previous research into the land tenure situation has cast most Bangladeshi farmers as a small yeomanry. That is, most farmers own small holdings which they till with their own and family labor. The Mission's present Land Occupancy Study, although not complete, has collected sufficient data to indicate this is not the case and, in fact, the owner-cultivator, as defined above, is more the exception than the rule. Present proportions are not yet defined but it seems reasonable to assume that at least a plurality, if not a majority, of farmers till the soil on either a sharecrop or lease arrangement. An equal amount of land is estimated to be cultivated by agricultural laborers supervised by owner-managers.

Moslem inheritance laws lead to intense fragmentation by sub-dividing land holdings, almost infinitesimally, among five or six children per generation. Further, a daughter's inheritance is passed to her husband on marriage. The result is that most cultivators till less than two acres, fragmented into as many as 10 different plots and scattered over two or more villages.

b. Motivation

The primary motivating factor to adopt HYV technology use will be economic, i.e., income maximization. This, in turn, is highly dependent on retail input prices and output prices at the farmgate.

The sharecropper, as usual, is trapped in a very tight squeeze. On the one hand, he usually has to bear all of the costs of the inputs (fertilizer, seed, animal power, water, etc.) while paying exorbitant interest rates to non-institutional sources of credit to obtain these inputs. These rates tend to be a deterrent to the adoption of HYVs and agricultural inputs. On the other hand because half (or more) of his production goes to the land owner, traditional varieties may not produce enough to feed his family and, therefore, he may need credit from non-institutional sources for consumption purposes. Further, if the land-owner does not believe he is receiving a sufficient return from his land, he may displace the sharecropper either by giving the land to someone else to sharecrop or by taking over as an owner-manager.

If the farmgate prices are high enough and if the sharecropper is able to meet his family's consumption requirements and have a marketable surplus more than sufficient to cover his production costs, then he is financially justified in making the investment in the package of inputs traditionally associated with HYVs. But if his return is any lower than that, he would be just as well off if he spent his money (or borrowed) for consumption rather than inputs.

2. Definition and Characteristics of the target group :

The target group for this project is defined as rural dwellers over age 18 (the legal age for signing contracts), male or female, earning less than Tk. 3,000($200 per year)from all sources (farming, day laboring, rickshaw driving, fishing, retail marketing, rice processing,handicrafts, etc), having a net worth (excluding the value of cultivable land) of less than Tk. 5,000 ($333), and cultivating six bighas of land (two acres) or less, irrespective of whether such land is owned, rented or sharecropped. This definition may be further refined during the course of project implementation.

This definition includes not only small farmers but also any other relatively poor borrowers in need of credit for productive purposes.

This definition recognizes that for many members of the target group off-farm or sideline enterprises are extremely important sources of income. In some cases, non-agricultural activities may merely supplement the income of a family that has sufficient land to provide for its sustenance; in other cases, off-farm employment may provide the major source of support. However, in almost all cases, non-agricultural enterprises of various sorts are critical to the survival and economic advancement of this group, and provide a vital supplement to agricultural pursuits.

Although there is presently little evidence available to indicate the importance of various sources of income for small rural producers in Bangladesh, data from other countries at similar levels of development indicate that non-agricultural employment frequently provides 30-70% of total household income for this stratum of the population. Off-farm activities, inc' ding rural trade, small-scale or cottage industries, transport, construction, wage labor, etc., are often highly profitable and yield returns to capital that are frequently much higher than investments in agriculture.

Moreover, employment in off-farm activities is frequently the means through which income disparities between small producers and larger farmers can be reduced.

If institutional credit is to be made available to target group borrowers for agricultural as well as non-agricultural uses, then land ownership must be eliminated as a prerequisite. Most prospective target group borrowers own no land. Instead, the ability to use capital productively and the willingness and ability to repay are far more important than the ability to provide tangible security.

The requirement for emphasizing both agricultural and non-agricultural enterprises arises from the limited access that members of the target group have to land. Preliminary findings of the Mission's Land Occupancy Study indicate that landless and near landless, including families who own less than two acres of land, comprise nearly 75% of the rural population of Bangladesh, which in turn accounts for 90% of the total population of the country.

Significant opportunities exist for members of the target group to make] :ofitable use of institutional credit under the terms being proposed in this project. What is needed is to determine the most effective ways of delivering credit to the target group.

3. <u>Present sources of credit and borrowing practices of the target group.</u>

In spite of extensive efforts of government and international agencies to provide institutional credit to small scale rural producers in Bangladesh, at present only a very small percentage of the credit requirement of this group is being met by the institutional sector. It is estimated that credit needs in rural Bangladesh are addressed by various sources in approximately the following proportions :

	Source of credit	% of total requirements from this source
a.	Friends and Relatives	20%
b.	Larger landowners	40-50%
c.	Goldsmiths, silversmiths & Brasssmiths	20-30%
d.	Merchants-product purchasers/ Input dealers/general merchandise dealers	5%
e.	Institutional sources Banks Coops.	5-10%

Quite frequently these categories overlap. For example, large land-owners are also friends and relatives, goldsmiths and merchants. But by far the major part of the credit needs of poor rural borrowers in Bangladesh is being met by non-institutional sources.

Overall, there are wide variations in the terms and conditions under which credit from informal sources is made available to the rural poor in Bangladesh. Terms and conditions vary depending on the relationship between borrower and lender, the nature of security offered, the urgency of need, the availability of alternative sources, the size of the loan,etc.

a. Friends and relatives are generally the first source that a small producer will try when in need of credit for either consumption or production purposes. In some cases such loans, when they can be obtained, are given without interest. Interest free loans are generally for small amounts and for short periods of time. Since the number of persons with whom one has relations that are close enough to invoke the obligation of mutual assistance is generally limited, and since the friends and relations of small scale producers are themselves apt to be poor, it cannot be expected that interest-free loans from friends and relatives provide a major source of financial assistance and liquidity for poor families.

Friends and relatives, when they have the means to provide credit, typically make loans with the same terms and conditions that are charged by other categories of money lenders. Even in cases where loans are made without explicit interest charges, receiving a loan from a wealthy friend or relative will involve obligations to provide certain types of services in lieu of interest in the form of money or produce.

b. Larger Landowners or the rural "Well-to-do", including some of the persons who are frequently included in the category of friends and relatives, are the most important source of credit for poor rural producers in Bangladesh. They provide loans for both consumption and production, although often the only difference between credit for consumption or production is the time of the year it is obtained.

i. Paddy loans are one of the most frequent types of credit that small farmers receive from larger landowners. They are given for small amounts, for one or two maunds of paddy, at cultivation time to provide the small cultivator with seed. Frequently they are also required before the harvest to meet the small farmer's consumption needs.

Loans of this type are generally given on an unsecured basis, but when they exceed several maunds of paddy, a land mortgage will often be required if the lender has land to mortgage.

Typical terms are as follows :

For every maund of paddy loaned at cultivation time, one and a half to three maunds will be required at the harvest months later, with two or two and a half maunds the most common amount. Assuming constant prices for paddy, this would be equivalent to monthly interest rates of 8 to 33% or 100-400% per year. In fact, farmgate paddy prices at the harvest period are often only half what they are at their peak at the beginning of the cultivation period for the main crop. If we were to assume that this price relationship were constant each year, we would have to conclude that the effective interest rate, in monetary terms, for this type of loan is actually quite reasonable. For example, a loan of one maund of paddy at cultivation time when the price was Tk. 100 per maund might be repaid with two maunds at harvest time when the farmgate price was Tk. 50/ maund. In effect, this would be equivalent to an interest free loan for six months. If the farmer had to repay two and a half maunds for every one maund borrowed at cultivation, his effective rate of interest would still only be 50% per year or approximately 4% per month.

This suggests that effective rates of interest for this type of loan are actually quite different for farmers who are operating in the monetized economy and those whose economic transactions are mainly in the non-monetized sphere. Unfortunately, most small farmers participate only marginally in the monetized economy, and for these farmers the effective rate of interest for loans in kind must be considered as 100-400% per annum.

The available data suggest that 50-60% of small farmers receive loans from land owners for seed.

Farmers who borrow paddy for consumption purposes borrow for shorter periods, generally for one to three months. For loans of this type typical terms are repayment of one and a half to two maunds of paddy for every one maund borrowed. Again, the actual monetary interest rate would depend on the prices prevailing at the time of the loan and at the harvest period. The non-monetary interest rate for these loans would be roughly 25-50% per month or 300-600% per year. The available data suggest that 50-60% of small farmers also require loans of this type during the growing season to tide them over until harvest.

ii. Cash Loans :

In addition to loans in kind, larger land owners also provide cash loans to small cultivators. Small loans of Tk 100-200 are given on an unsecured basis with rates of interest ranging from 15%-200% year. Repayment of principal and interest normally is in kind but in some cases will be paid by cash or a combination or cash and produce (for example, repayment of the principal in cash, with interest paid in paddy). For loans above Tk 400 land is usually required as security. For one bigha of land, a small farmer can borrow Tk 400 - Tk 500. Several systems of secured loans are common. In one form, the lender gains use of the land until the borrower repays. The interest is the use of the land. Considering that the lender could lease the land back to the owner or to someone else on a borga(sharecropping) basis, in which he would get 50% of the annual output, the interest on this type of loan could be calculated by dividing the value of the crop that the lender received by the amount of the loan. Assuming that one bigha of land could produce four maunds of paddy, the lender's share would be two maunds. With a price of Tk. 50/ maund and assuming the amount of the loan were Tk 400, this would be equivalent to an interest rate of 25%/year.

In a variation of this form, a contract is drawn up for a certain period of time and the lender obtains the use of the land for this period, with use of the land constituting repayment of both interest and principal.

In still another variation the borrower retains use of the land, but a contract is drawn up stipulating the amount of loan, the rate of interest, the amount of security offered, with the provision that if the loan is not repaid with interest on the agreed date, the land will pass into the possession of the lender.

Whatever the rate of interest, the main objective of land owners making loans of this sort is to acquire land, since the value of land - approximately Tk 12,000 to 20,000 per acre - is far more significant to him than the returns in the form of interest.

c. Goldsmiths, Silversmiths and Brasssmiths are still another source of credit for small producers. Goldsmiths are mainly Hindus, the remnants of the professional money lending class which has become much more covert since independence.

Goldsmiths typically lend money with gold ornaments as security. For one tola or vari of gold (approximately .4 troy oz.) worth Tk 1250, the goldsmith will lend Tk 200-500. A contract is drawn up for a specific period of time, normally six to twelve months, specifying the terms of the loan and the repayment date. If the borrower fails to repay the original amount with interest at the due date, he forfeits the gold deposited as security. Interest rates for these types of loans vary considerably, ranging from no interest up to 20% per month. Ten percent per month seems to be most common. In any event, the objective of the goldsmiths is to acquire gold in addition to whatever profit he can make on interest charges. Farmers frequently complain that contracts with goldsmiths always call for repayment when they are least likely to have money. They avoid borrowing from this source except when they have no other alternatives.

Goldsmiths also accept land titles as security in the manner previously described for the large landowners. Once again, their objective seems to be to acquire land in addition to earning profits through interest payments.

d. Loans from Merchants and Shopkeepers :

A final source of credit to small borrowers from non-institutional sources comes from merchants and shopkeepers, including input dealers, product purchasers, general goods merchants, and small grocery dealers. Since marketing and processsng of most of the major cash crops (jute, sugarcane, and tobacco) is controlled by the government, private traders are currently not an important source of credit to small producers. Nevertheless in many areas merchants will make cash loans and loans of merchandise, with repayment collected in kind, either in paddy or cash crops. Interest charges are usually concealed in the purchase price paid for the produce. For cash loans the most common rates are between 5-10% per month.

e. Institutional Sources of Credit :

Up to now, the members of the target group for this project have relied almost entirely on informal lenders; institutional credit has only rarely been available. Although very little data is available, surveys conducted by the Mission and former studies by the University of Dacca and the Pakistan Academy for Rural Development suggest that not more than 10% of the credit needs of the target group are met by institutional sources. Moreover, only those who own over one acre of land presently have even a slight chance of qualifying for credit from banks, government corporations or cooperatives. These persons constitute 15% of the population or roughly 20% of the target group.

Institutional credit sources include cooperatives, the Agricultural Development Bank (BKB), the commercial banks, and state run corporations such as the Bangladesh Tobacco Corporation, Sugar Mills Corporation and the Jute Corporation.

Although official rates of interest from institutional sources currently range from 11 to 17.5%, the actual costs of borrowing are much higher for small borrowers.

The actual or effective costs of borrowing include the official interest charges plus applications fees, bribes, entertainment expenses, transportation and food costs when journeying to the town where the nearest bank is located to process the necessary paperwork, and the opportunity cost of the time lost from work while applying for the loan.

For loans from the Agricultural Development Bank, our data suggest the following expenses are common for small farmers - those with one to five acres - for a Tk 1000 loan for one year.

Interest charges at 13%	Tk 130
Entertainment and application fees	Tk. 200 - 400
Transportation to bank and food (trip generally requires full day) Tk 8 to 10 per day depending on distance. 2 to 8 trips per loan.	Tk 16 - 80
Time lost from work (calculated at rate for day laborers - Tk 8/day x 2 to 8 days	Tk 16 - 64
Total	Tk 362 - 674

Farmers seldom obtain these loans when they need them; instead of getting them at the cultivation time, they complain that they usually do not receive them until the harvest. Consequently, they have to borrow for a full year when actually they may only need the loan for six months. Based on these figures, the effective interest rate for a Tk 1000 loan would be roughly 36 to 67% per annum. For a smaller loan, for Tk 500-750 the effective interest rates would be higher since the extra costs of processing the loan would be only slightly less than for the Tk 1000 loan. In fact, for loans of this size there would appear to be little advantage over borrowing from money lenders, except that the borrower would run less risk losing his land in the event of non-payment.

For larger loans, the informal costs of borrowing become a much smaller percentage of total borrowing costs. For example, for a Tk 2000 loan, the non-interest costs of borrowing are typically only Tk 300 to 500. For a Tk 10,000 loan the non-interest costs appear to increase only Tk 500 to 800. The entertainment portion of these expenses increases, but the processing time and "application fees" decrease. For a Tk 2000 loan, the effective interest rates appear to be in the range of 23 to 38%; for loans of Tk 10,000, the range appears to be roughly 18 to 21%. These figures are only slightly higher than those reported by Shahjahan in a study conducted in East Pakistan in the mid-1960's.*

Aside from increasing the effective costs of borrowing, these non-interest charges also adversely affect the repayment rate.

Small borrowers, who have experienced such difficulties and extra expenses in obtaining a bank loan, prefer to make only the interest payments rather than paying off the loan, clearing their account, and reborrowing. To renew the loan after repayment would certainly require additional paperwork and expenses, so it is better for the borrower merely to pay the interest to prevent the loss of his land and to continue to use the money from his loan year after year without repaying and reborrowing.

The data suggest there is considerable scope for banking institutions to raise their formal interest charges, which would allow them to service small borrowers and still maintain viable banking operations. Provided the non-interest charges could be reduced or eliminated, this would lower the effective interest rates for small loans and make it possible for small borrowers to gain access to institutional credit at rates considerably below what they have to pay presently to institutional sources when they can get such loans. But even at the high effective rates that are currently available from the Agricultural Development Bank, members of the target group still have very limited access. Even a doubling of the formal interest charges, if this would make it feasible for institutions to lend to small producers and they could do so without exacting high non-interest charges, would still lower the effective costs of borrowing to small farmers by at least 50%.

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* D.W. Adams and G.Z. Newman, "Borrowing Costs and Agricultural Loan Demand in Low Income Countries", 1976.

4. Lessons from the Money Lenders

Acknowledging that money lenders and other members of the informal lending sector are the only lenders currently effective in extending credit to the target group, this project intends to take their lending practices as the starting point and apply whatever lessons can be learned from their operations to the various institutional models that will be tested in this project. It is believed that for institutional lenders to be successful in reaching poor borrowers in rural areas it is essential that they incorporate some of the techniques and methods of informal lenders into their own rural lending operations.

There are a number of aspects of informal lenders' operations that could usefully be applied to the rural lending operations of institutional credit agencies. These positive aspects of money lenders' operations include the following :

a. The lender is a part of rural society; he is approachable, convenient, familiar and close by.

b. The lender has a personal knowledge of borrowers. This allows him to make better loans and lowers his risk premium. It also decreases his costs of doing business since much less time is required to investigate the backgrounds and repayment potential of borrowers.

c. The lender's overhead costs are minimal. He needs no office, staff, uniforms, elaborate records system. Fixed costs and operating expenses are kept low, decreasing costs of lending and increasing profits.

d. The lender's terms are flexible. They can be adjusted to individual borrowers and their requirements.

e. Disbursement procedures are simple and quick. No formalities or red tape. Borrowers can receive loans immediately when needed, and not several months later after the need has passed.

f. Since the lender is a part of the society, he can keep in contact with borrowers, remind them of their obligations, and bring informal sanctions such as community pressure to bear on recalcitrant borrowers.

g. The lender provides a continuous, reliable source of financial services. He can be counted on to provide support in time of need; in many cases,he also functions as advisor or village elder.

The various models proposed in this project will test the effectiveness of institutional credit sources in developing lending operations that successfully incorporate these positive aspects of the money lender's techniques.

5. Potential Constraints on Project Success

There are a number of social and political factors which pose potential obstacles to the successful implementation of this project.

a. Political sensitivity to higher interest rates

In discussions with representatives of the central bank and various commercial banks to lay the groundwork for the development of this project, concern was voiced many times by various bank representatives regarding the desirability or feasibility of testing higher interest rates in conjunction with various models for delivering rural financial services. Part of the concern over higher interest rates related to the economics of credit use by small-scale producers: with the proposed interest rates (2-3% per month), would it be profitable for them to borrow? This issue has been discussed in the Financial Analysis and need not be further discussed here. The major concerns of bank officials regarding higher interest rates, however, clearly were related to the political feasibility of such a policy. Would the banks, by charging higher rates to rural customers through the models being tested in this project, open themselves up to public criticism and thereby expose themselves to restrictions on their operations by the government? And similarly, would bank officials who supported such innovative policies be exposing themselves and their careers to an excessively high degree of risk?

The concerns of bank officials clearly are important factors that need to be taken into account during the subsequent development and implementation of this project. The Government itself is attempting to build popular support and is not likely to look with great favor on activities that appear to be undermining its image in the eyes of the public. Although approval has been granted to permit the testing of higher interest rates on an experimental basis, it is clear that this will continue to be a sensitive issue during the life of the project.

To minimize any possible adverse public reaction, care should be exercised during the implementation of the project to avoid the question of interest rates in any public announcements that may be issued about the project. The project should be implemented with as little fanfare as possible, recognizing that the development of a successful system for delivering rural financial services and not publicity is the objective. If fanfare is avoided, it seems very unlikely that the higher interest rates to be tested as part of this experimental project will produce any adverse political repercussions. On the contrary, the policies that will be followed under this project should produce a favorable reaction among the target group and help the government to achieve a more positive image among the rural poor.

In interviews conducted with groups of rural producers in twenty market areas, the question of how they would react to banks charging 2-3% interest per month was discussed extensively. While some respondents felt this rate was a bit high for loans for one year, the consensus of every group interviewed was that a program that could provide them with loans when they needed them and allow them to borrow for the 2-6 month periods that they require for production purposes would be highly desireable and that even a 3% monthly interest charge for these types of loans would be very attractive.

Providing the banks actually provide loans at this rate, and can eliminate or substantially reduce the non-interest costs of borrowing, the political impact of this project will almost certainly be favorable. Moreover, it would help to counteract the negative impressions of government activities that the high non-interest charges and red-tape of current government credit programs produce.

b. "Red-tapeism" and loan processing costs

Rural credit programs in Bangladesh -- as well as in most other LDCs -- typically experience serious difficulties because of the amount of red tape that the loan giving institutions develop and the consequent high non-interest costs that this produces for the small borrower. There are a number of reasons for this. Several are related directly to the fact that interest rates have typically been highly subsidized. This has produced a high demand for such credit and the loan officers who have been given the authority to ration the scarce supplies of credit have had considerable opportunity to choose customers who were most willing and able to provide them with a suitable return for the special consideration they give to any customer fortunate enough to be selected for a loan. These types of transactions, while they are an out of pocket expense to the customer, provide no return to the credit institution but only personal benefits to the loan officers.

Since subsidized rates leave financial institutions with no margin for risk, they face pressure to loan only to customers who have tangible assets they can offer for security, preferably a clear land title. These requirements are passed down the line to loan officers as lending criteria. The loan offieers have a choice of either complying with them, in which case loans are only made to a small number of customers who have clear titles -- and most small borrowers in Bangladesh seldom have clear title even when they do in fact own land -- or else the loan officer can help the customer to circumvent the regulations. In any event, because lending criteria are complicated, loan officers have considerable scope to require additional fees of customers to help them in meeting the institution's formal requirements. Sophisticated customers might be able to meet the formal borrowing requirements without a bribe. For small customers, bribes are almost certainly required, since their land titles are seldom in order and they require more personal assistance from the loan officer, who himself runs a certain degree of risk in fixing up marginal cases to comply with the formal requirements. If the customer is reluctant to pay to have such services performed, he ends up having to put in more time himself to process the application and his costs for transportation to the bank, meals in town, and time lost from work increase. Still, to obtain the loan, he eventually has to pay something to win the approbation of the loan officer.

This project will test a number of measures for reducing loan processing costs and the non-interest costs of borrowing.

In the first place, an attempt will be made to keep lending criteria simple. Land titles generally will not be required. Loans will be made on an unsecured basis with the emphasis being placed on the credit worthiness of the borrower, his willingness and ability to repay as determined by his reputation and the history of transactions he will develop with a local bank outlet. Simple lending criteria will make it easier for both lender and borrower to transact a loan quickly. By reducing the requirements the loan officer faces in making loans, it makes it possible for him to charge the customers less for extra services.

Second, interest rates will not be subsidized. The bank will have more incentive to seek customers actively. Since loans will be more profitable, they can afford to seek out customers and reduce or eliminate their requirements for collateral. The extra revenues will go to the bank, not into the pockets of the loan officers.

Third, since the lending operations will be carried out in the village and union-level bazars, the transportation and food component of the non-interest borrowing costs for small customers will be reduced. With simple procedures and one day decisions, the cost of time lost from work will be reduced.

Moreover, since the loan officer will be operating on the small borrower's home ground, he will have less latitude for exacting extra charges. There was a high degree of consensus on this point in the interviews conducted as part of the project design. Respondents emphasized that it is only when they have to go far away to the Thana or District towns to borrow that they have to pay large bribes. The costs of obtaining personal favors from someone far away are far greater than when dealing with someone in one's own area.

And finally, since the banks will have a larger margin to work with, it will be possible for them to build controls and incentives into their operations for local representatives to develop business and carry out their activities more efficiently and honestly.

It is believed that the commercial banks, in particular, will be able to structure their programs so as to eliminate red tape and reduce the non-interest costs of borrowing. The Agricultural Development Bank will have to effect significant changes in its current lending practices to achieve this objective.

c. Influence from local power holders

A final potential obstacle to project success is the influence that local power holders might exert. This could take at least two forms. Firstly, members of the local power elite in an area where a local banking operation being tested under this project was being established could conceivably attempt to use their influence to control loan disbursements, either by trying to obtain them for their own use through proxies or by using their personal influence to see that loans are granted mainly to their friends, relatives, and allies. Secondly, in cases where the local power holders are also money lenders -- a frequent situation -- they might attempt to undermine the operations of the rural banking outlet being tested in order to protect their own lending operations from competition.

We would expect that local power holders would attempt to influence loan disbursements to the extent that such loans constituted scarce goods worth controlling. There are a number of questions that need to be considered. First, under the terms that loans will be offered under the various models to be tested in this project, is it likely that the more powerful and more wealthy villagers will attempt to control them for their own use and thus deprive poorer villagers of access to the credit facilities they might need? The answer to this question appears to depend on the terms on which financial services are available for different types of borrowers from different sources. Currently, larger landowners have relatively good access to credit from various types of credit programs and bank outlets at moderate rates of interest. As we noted previously, landowners who receive a loan of Tk 10,000 typically pay an effective interest rate of 18-21%. For smaller loans the effective rates appear to be higher, ranging from 23-38% for loans of Tk 2,000 to 36-67% for Tk 1000 loans. From this data, we could conclude that an interest rate of at least 2% per month would be necessary to discourage larger borrowers from attempting to control all of the available funds and acquire them for their own use. However, for smaller borrowers, even loans with interest rates of up to 3% would still be attractive, providing non-interest costs of borrowing could be eliminated, and at this rate even fewer larger borrowers would be interested in trying to control the available credit supplies for their own use.

The rate of interest is only one of the factors which makes loans attractive or unattractive. The profitability of borrowing is another factor. However, we might add to the previous discussion a perhaps obvious but often overlooked aspect of the profitability of borrowing: namely, that if you can avoid repaying a loan, no matter how low the returns that are realized on the money borrowed, such loans would still be attractive to a large number of people. This project will attempt to deal with the repayment problem by closer local supervision of lending decisions and collection procedures. Establishing a repayment discipline and educating rural customers to understand the value of a good credit rating and a good relationship with the local bank will be an important aspect of this project. A successful local banking operation will be one that is able to accomplish this goal, in addition to providing other financial services demanded by low income rural customers. It should be noted that the evidence from small farmer credit programs to date seems to indicate that smaller borrowers generally have a better repayment record than larger customers, who often use their political influence to avoid repayment.

The higher interest rates being tested under this project and the more rigorous collection policies may not be sufficient, in themselves, to eliminate large borrower interest in the supply of credit that banks will provide under this project. It may be necessary for banks to limit the size of loans that loan officers operating at the village or bazar level can approve in order to assure that small borrowers have equal access to the available supply of loan funds. Under these circumstances, the smaller customers would have access to financial services from banking outlets at the local level, while larger customers who already have relationships with Thana Bank branches and have easier access to credit from other credit programs would continue to have access to institutional financial services at the types of outlets that they require for their scale of operations. This does not mean that larger borrowers could not use the local banking facilities, but it would provide safeguards against the local financial services being geared entirely to their needs at the expense of the smaller customer.

Even if the terms and conditions on which financial services were offered at the local level under this project were not attractive enough so that members of the rural elite would be tempted to try to control them for their own direct use, they might still attempt to influence the process of loan disbursements in ways that were consistent with their own interests, such as influencing loan officers to provide loans to their friends, relatives, and allies. Influence of this sort, if it were successful, would not only work against the interests of the small producer who might be able to use credit productively but who lacks the proper connections, but it would also work against the interests of the bank involved in that particular local area. Pressure from local power holders might result in loans being granted to persons with the proper political connections but without the means or inclination to repay. Thus, the bank concerned would find it more difficult to run a financially viable operation in that area.

A partial solution to this problem might lie in the higher interest rates that will be tested. The higher rates may make it easier for loan officers to avoid local political pressures since with higher rates these loans would not be the attractive resource that subsidized loans are from current programs (particularly since loan repayment discipline under existing programs is usually very lax), and thus local power holders would have less incentive to attempt to control loan disbursements for their own purposes. At higher, more realistic rates, the banks would also have an incentive to provide financial services in rural areas, and could afford the expenses incurred from disbursing and collecting such loans. And finally, higher interest rates should have some effect on savings mobilization. Banks that are allowed to charge higher rates on loans should also be permitted to offer higher rates on savings deposits. This, coupled with aggressive savings campaigns conducted by the local banking outlets could result in a sizeable increase in the amount of loanable funds available and permit the local banking outlets to meet the demands for credit from their smaller rural customers more effectively.

If the banks involved in this project do succeed in developing successful models for delivering rural financial services to low income customers, there is still the possibility that they may have to overcome resistence from local money lenders who resent the incursion of outside institutions into what was previously their exclusive domain. The strength of this opposition will vary from area to area. There appear to be some areas in rural Bangladesh where landholdings are highly concentrated and the money lending activities of powerful landlords are an integral and profitable part of their relations with tenants. There are other areas where land holdings are more equally distributed and a wider variety of informal lenders are found, including smaller landlords, goldsmiths, and various types of traders who also lend money. In the former areas, the landlords might exert sufficient control over their tenants that they could threaten to terminate their tenancy status or withhold future supplies of emergency credit if the tenant turned to the bank for his credit needs. However, it should be kept in mind that not all informal lenders are avaricious exploiters of poor peasants. Quite frequently, landlords lend money as part of a social obligation they have to their tenants or poorer friends and relatives. In many cases, they would prefer not to have to lend money but they are forced by social pressure to comply. If they did not, their reputations and support would be in jeopardy. Merchants face similar pressures to extend credit in order to secure and keep customers. Many of these lenders, who are criticised because they charge what appear to many outside observers to be excessively high interest charges, might actually prefer if their tenants, poorer friends and relatives, and customers looked elsewhere for their credit requirements. And even though there are some money lenders who use their financial strength to obtain land, maintain control over tenants, to obtain high rates of profit by lending to needy customers, many of these are in no position to interfere with the operations of a well organized banking program. This is certainly the case with goldsmiths, a good proportion of whom are Hindus and lack a secure enough standing within the society to bring organized resistance to bear against new rural banking programs of the type to be tested in this project.

A determination of the type of opposition that a bank participating in this project might encounter in a particular area should be made as part of the market survey of the bank that it conducts prior to locating a new outlet in a given locality. There are certainly enough areas in need of improved financial areas where a demand for their services exists and competition or opposition from local money lenders is not likely to be so severe as to prevent the success of a thoughtfully conceived and well managed local banking operation. The most likely obstacle that money lenders might pose for banks participating in this project would be their ability to provide the financial services to small-scale rural producers more effectively than the banks. To be successful, the banks will have to develop well organized, aggressive programs that enable them to attract and hold their rural customers in spite of competition or opposition from informal lenders.

Since the development of rural institutional financial services should help to stimulate investment opportunities in local areas, the money lenders may find that more attractive returns on their money can be gained by investing in areas other than lending to low income borrowers. One way of decreasing the resistance from money lenders and the rural elite would be to develop alternative investment opportunities in which this group could participate.

D. Economic Analysis

The principal benefit of a functioning institutional credit system which provides access to all prospective borrowers at a reasonable price is that the opportunity to participate in economic development is made generally available. The extent to which such a credit system mobilizes savings for investment and enables a greater proportion of the population to engage in productive activities depends upon its effectiveness in reaching all prospective borrowers, its costs, and many independent or partially independent factors such as availability of inputs, foodgrain prices, stability of currency, incidence of storms and floods, etc. Thus while it is not possible at this stage to quantify the economic benefits of a functioning credit system, nevertheless it is clear the net effects would be positive. Furthermore, if a self-financing system mobilizing rural savings can be devised through this project for installation throughout Bangladesh, these benefits would accrue at very little cost to the Government. The most significant investments include this experimental project, intended to point the way toward a functioning system, and initial costs of installation when the system has been found. Thereafter, if permitted to remain self-financing, it will maintain itself at no cost to the Government and should be able to expand its operations through increased savings mobilizations, also at no cost to the Government. Concomitant economic benefits would include the attraction of rural resources into the institutional economy and thus greater confidence in the institutions managing it.

This project reflects the fact that the formula for a workable rural financial system for Bangladesh is not yet known. There are many theories, some of which have attracted sizable investments over the last two decades. None has as yet succeeded. The project will enable the testing of credit models covering a range of variations. If a workable formula exists, this project poses a good chance of finding it. The costs are relatively high, reflecting the difficulty of the task.

The trend in land tenure and productive capability among the rural poor in Bangladesh is toward increasing fragmentation of assets , increasing landlessness, spreading destitution. Many social and economic agents contribute to this trend, but a major factor is the absence of credit. If the trend is to be checked and reversed, a workable credit system must be found as soon as possible.

Bangladesh Balance of Payments Position

The following assessment of balance of payments for 1976/77 is excerpted from IBRD's "Bangladesh: Current Economic Situation and Development Policy Issues" (1469-BD), May 19, 1977.

1. The impact of the extremely good foodgrain harvests and the stabilization policies instituted in 1975/76 were reflected in Bangladesh's 1976/77 balance of payments (Table 4). The restrictive monetary and fiscal policies of 1975/76 were continued in 1976/77, and they continued to depress demand. This, plus reduced requirements for food imports and lower import prices reduced the value of total imports by 27 percent. Export earnings showed an increase of 5 percent. Exports benefited from a favorable climate for non-traditional exports, which, in addition, were stimulated by a package of incentives. New items were added to the list of export products eligible for export performance licences, the income tax rebate on earnings derived from non-traditional exports was doubled, exporters were qualified for preferential credit and interest rates, and priority was accorded them in the issuance of import licenses for the purchase of raw material and machinery. These incentives are expected to contribute substantially to a projected large expansion (36 percent) in the value of non-jute exports. Consequently the trade deficit is expected to decline from $909 million in 1975/76 to $537 million. The current account deficit in the balance of payments is expected to total $512 million. However, since external aid disbursements in 1976/77 are expected to reach $572 million (inclusive of a cash grant of $50 million), Bangladesh's international reserves are expected to rise by $72 million to $285 million at the end of June, 1977. This would be equivalent in value to about three months anticipated imports in 1977/78.

Table 4: BALANCE OF PAYMENTS
(million US$)

	1975/76 (Actual)	1976/77 (Estimate)	1977/78 (Projection)
Merchandise Imports (c.i.f.)	-1290/a	-937	-1274
Merchandise Exports (f.o.b.)	381	400	425
Trade Balance	- 909	-537	- 849
Other Current Account	1	25	15
Current Account Balance	- 908	-512	- 834
Other Receipts and Payments (net)	122	46	50
Amortization: Long-term debt)			
Short term capital movements (net))	- 78	- 21/b	- 13
(including IMF))		- 13/c	- 51
Changes in Reserves (- = increase)	50	- 72	32
External Capital Disbursements	814	572	816
of which:			
Food	307	128	286
Commodity	378	220	300
Project	129	174	230
Cash	-	50	-

/a Includes an estimated settlement of $24 million of outstanding letters of credit carried over from 1974/75.

/b Including repayment of $6 million on USSR Wheat Account.

/c Including refund of a deposit of $21 million made by the Kuwait Central Bank.

Source: Planning Commission and IBRD.

2. The economic outlook for Bangladesh in 1977/78 will depend very substantially on the performance of the agricultural sector. Favorable weather conditions and the availability of agricultural inputs would determine the extent to which the output targets for foodgrains (15.2 million tons), and raw jute (5.0-5.5 million bales), are realized. Industrial output is likely to maintain its momentum. The government has indicated its intention to continue prudent monetary and fiscal policies, and it is therefore expected that price increases will be kept within manageable limits. The terms of trade may show a decline of 6 percent in 1977/78. While export prices are not expected to

change markedly as compared with 1976/77, import prices for a few key commodities are likely to rise. It is hoped that almost all foodgrain requirements in 1977/78 could be obtained through foreign aid, so that Bangladesh's scarce foreign exchange resources do not have to be utilized for purchases of foodgrains. Other commodities which are likely to show cost increases are petroleum (18 percent), crude petroleum (10 percent), fertilizer (30 percent) and cement (11 percent). No large development projects are expected to come on stream in 1977/78, but it is expected that as a result of improved policy planning, the rate of implementation of projects on stream would show significant improvement.

3. The improvement in international demand for raw jute in 1976/77, led to a substantial increase in the domestic price of raw jute and consequently in the jute/rice price ratio. It is therefore expected that the area under jute and the volume of production would increase substantially in 1977/78 and that, despite a lower opening stock, exports would rise. Export receipts from raw jute are expected to increase by about $11 million to $125 million. The volume of jute goods exports is expected to increase marginally, and the average price may rise by about 2 percent, leading to an increase of about $6 million in earnings to $186 million. The high level of tea exports in 1976/77 depleted stocks and since production of tea cannot be expanded rapidly in the short run, the quantity of exports in 1977/78 is expected to be 65 million lbs. and export earnings about $33 million. Non-traditional exports should continue to benefit from a substantial array of export incentives, and are expected to increase in value by 11 percent to about $81 million in 1977/78. Total exports are therefore projected at $425 million -- about $25 million (6 percent) higher than in 1976/77.

4. The projected export and import levels would yield a trade deficit of about $850 million. A surplus of approximately $65 million is projected for other current receipts and payments and a $64 million deficit on capital account. The use of international reserves may amount to $32 million. This would leave a gap of $816 million to be financed from foreign assistance.

This assessment by the World Bank supports the recommendation that this project be financed on a Grant basis.

Moreover, in view of the inclusion of Bangladesh on the UNCTAD list of "Relatively Least Developed Countries" and considering the high cost and high degree of risks associated with this project, it is recommended that the requirement set forth in Section 110 (a) of the Foreign Assistance Act, as amended, that the country provide at least 25 percent of the costs of the project, be waived. See Annex H.

E. Role of Women

The potential for rural productivity includes that of women as well as of men. The principal focus of this project is on small farmer credit because of the predominant role of agriculture in the Bangladesh economy and the majority component of small farmers among the farming population. Women participate significantly in the rural Bangladesh economy, in the agricultural as well as other sectors.

The women's busiest time is at the harvest and post-harvest season, as it is for all family members. Women have primary responsibility for winnowing and sieving newly threshed paddy, and parboiling, drying, husking and home milling of all rice used in home consumption. In addition women perform some of these processes for the paddy sold in the market. Women also assist with the threshing in many families. If there are not enough female members to perform these processing functions, women day laborers are hired to assist the family members and are paid in cash or kind (often a portion of the processed paddy).

Also, the planting and maintenance of kitchen gardens located within or close to the bari (household compound) are the primary responsibility of female family members. For very poor and landless families, the surplus produce from these gardens which is not needed for family consumption is often sold for much needed cash. To the extent that credit from this project is available to women engaged in such horticulture it may help increase the yield of kitchen gardens and, as a result, also improve the nutritional and economic status of poor families.

In the realization of higher farm incomes, women and men will, of course, benefit equally from this project. Moreover, rural women could utilize part of the incremental household earnings for investments in further development of cottage industries, which provide sustenance to many a rural household, and thereby further improve the well-being of their families.

One credit model specifically addressing the credit needs of women is included for testing in this project, sponsored by the Jatiya Samabaya Bank. The Integrated Rural Development Program is currently implementing an independent project involving women's cooperatives which, although not a part of this project, is expected to yield data on the credit needs and economic potential of rural Bangladeshi women.

The project's remaining experimental models, while not directed specifically to the needs of women, nevertheless are not in any sense meant to exclude them. If a workable credit system is found, it will be equally applicable to all borrowers irrespective of sex. If social conditions dictate the establishment of separate credit outlets catering exclusively to women, such outlets can be designed on the basis of the experience gained in this project.

PART IV. Implementing Planning

A. Administrative Arrangements

1. Bangladeshi Organizations

Overall project responsibility will be assumed by the Bangladesh Bank, the central and regulatory banking institution responsible for monetary policy in Bangladesh. Individual experimental models will be implemented by each of the existing credit institutions presently active in rural credit. A summary discussion of the activities and capabilities of each, prepared for this project by Resources Development Associates, is included at Annex B.6.

Day to day project monitoring and evaluation responsibilities will be met on behalf of the Bangladesh Bank by the Technical Consultant, whose client the Bangladesh Bank will be. (See Part B.1.b. below and Annex B.8.)

2. AID

Because of the highly experimental nature of the project, it will require heavy AID monitoring in addition to that provided by the Technical Consultant.

A minimum of six work-months per year of U.S. direct hire monitoring will be required plus 24 work-months of Bangladeshi direct hire staff per year. The major responsibility of the Bangladeshi staff members will involve monitoring of performance through systematic and selective field visits. U.S. direct hire resources will be committed principally to day-to-day implementation matters such as liaison with implementing agencies and consultants (approximately two work-months per year) and regular project evaluation (approximately four work-months per year).

B. Implementation Plan

1. Administrative and financial arrangements of each of the major project components are discussed in this section, followed by a schedule of project actions.

a. Funds for Credit and Losses

The major cost component of this project is the financing of capital for lending to target group borrowers. $4.00 million in AID resources will be allocated to this item. The project objective of finding a system capable of getting credit to the target group and then recovering it with interest from the target group will be reinforced by the method by which AID-financed resources for this project component will be provided. The method provides strong incentives to participating institutions to make the loan work; at the same time, all of the risk inherent in experimentation is covered, thereby enabling the institutions to experiment freely. At the beginning of the project AID will finance the purchase of local currency equivalent in value to $500,000. The local currency will be used by the Bangladesh Bank to establish a Project Account for retroactive financing of loans made under this project as follows.

For each loan made to a member of the target group by a designated experimental outlet and verified by the consultant through selective monitoring, the Bangladesh Bank will release to the participating bank on a grant basis a sum equivalent to one-third of the value of the loan. This sum will be disbursed from the Project Account through a pay order or some other standard banking channel, and will become part of the recipient's wholly owned assets. Then, for each target group loan fully recovered from the borrower with interest, the Bangladesh Bank will release a sum equivalent to an additional one-third of the value of the loan.

For example, if 100 loans each of Tk 100 are extended to target group borrowers, a total of Tk 10,000 would be extended, for which the Bangladesh Bank would pay to the concerned bank Tk 3,333 from the AID-financed Project Account. If the entire Tk 10,000 is then recovered from the borrowers on time and with interest, the bank would receive an additional Tk 3,333 from the Bangladesh Bank on a grant basis. The bank would thus have its original Tk 10,000 plus interest, plus Tk 6,666; a substantial reward for achieving full recovery.

On the other hand if Tk 10,000 were extended and only half recovered, the bank would receive Tk 3,333 for the total amount extended and one-third of the amount recovered; i.e., one-third of Tk 5,000, or Tk 1,667. The result would be that the bank would recover Tk 5,000 (plus interest) of its original Tk 10,000 and in addition would receive Tk 3,333 plus Tk 1, 667 through the AID project, for a total sum of Tk 10,000. This amounts to an effective 100 percent guarantee for all losses incurred at an overall default rate of 50 percent.

Lending and recovery performance will be monitored continuously. Banks or agencies sponsoring models which incur losses even after compensation from the Project Account will be accorded special attention by the project Consultant in attempts to improve performance. If these efforts prove unsuccessful and losses are not fully recovered, the poorly performing models may be substantially modified or terminated with the agreement of the sponsoring credit institution and project related losses paid in full from the Project Account. Thus under the AID experimental project all risks are covered and the incentives to participating credit institutions to succeed are high. Part of the experimentation in which participating credit agencies will engage will involve ways to extend to their field personnel parallel incentives to make and recover target group loans. This may include performance-based bonuses or commissions for loans made and recovered, prizes, etc. Credit personnel must be sufficiently motivated to do their jobs so that the situations described in the social analysis, above with delays, bribes, fees for obtaining "out-of-stock" loan forms, etc. are minimized. Credit agencies will develop such incentives with the assistance of the Consultant.

The Bangladesh Bank's AID-financed Project Account will be replenished on a regular basis as needed with AID-financed local currency, up to a total equivalent to $4.00 million.

Loan disbursement and recovery will trigger disbursements from the Project Account until the end of the project or the depletion of the AID funds, whichever comes first. It is expected that by the time AID funding ceases a credit system will have been identified which can continue indefinitely, without outside resources.

The quantum of funds to be released to each participating credit institution will be determined, at least initially, as follows.

A bank sponsoring, say, ten individual experimental credit outlets will prepare on a quarterly basis a report on the number and amounts of loans made by each experimental outlet to target group borrowers. The number of loans made during the reporting period and the amount of each will be shown for each outlet; also principal and interest payments received against outstanding project loans will be reported for each outlet. This report will be submitted to the Bangladesh Bank. (A suggested format is included at Annex B.7) The Bangladesh Bank, through the Consultant, will verify the reports through field monitoring of a representative sample of loan portfolios at each outlet. For example, assume that 1,000 loans are reported, with a total amount extended of Tk 650,000. If 70 out of 100 loans field monitored by the Consultant are found to have been extended to borrowers who meet the target group definition, and of those, 63 were fully repaid on time, then the Bangladesh Bank could authorize Project Account releases as follows:

A.	Total amount of loans reported:	Tk	650,000
B.	Amount of Project Account release for loans extended if all were to target group: Tk 650,000 ÷ 3 =		216,667
C.	Adjustment on basis of proportion of target group borrowers in Consultant's sample Tk 216,667 x .70 =		151,667
D.	Amount of Project Account release for loans recovered if all were to target group Tk 650,000 ÷ 3 =		216,667
E.	Adjustment on basis of proportion of timely recoveries from target group borrowers (63 = 90% of 70) Tk 151,667 x .90 =		136,500
F.	Total amount of Grant release from Project Account From C above Tk 151,667 From E above Tk 136,500		
	Total		288,167

This sum would become part of the wholly owned assets of the participating credit institution. In addition, the institution would recover, in this example, 90 percent of the funds lent in the first instance, or Tk 585,000 plus interest of, say, Tk 58,500. An initial investment of Tk 650,000 in the experimental project would yield in this example a total return as follows.

Total principal recovered	Tk	585,000
Interest earned and recovered		58,500
Releases from revolving fund		288,167
Total returns	Tk	931,667

Moreover, reinvesting this sum in a new round of target group loans will result in a similar release of AID-financed resources from the Project Account. The more successful the model in extending and recovering target group credit, the more substantial will be the Project Account releases. The result will be a workable system capable of sustaining itself without external assistance.

Table 5 indicates projected lending performance under each of the models planned, with resultant project funding requirements.

TABLE 5

SUMMARY OF PROJECTED CREDIT ACTIVITY

	Year	Outlets	Ave. loan Amount	No. of Loans per Outlet/yr	Total Value Loans/yr (Tk)	Dollar Equivalent	Project Account Reimb. (2/3)
BKB	1	10	1,000	600	6,000,000	400,000	266,700
	2	15	1,000	800	12,000,000	800,000	533,300
	3	20	1,000	1,000	20,000,000	1,333,300	888,900
	Total				38,000,000	2,533,300	1,688,900
Sonali	1	10	500	200	1,000,000	66,700	44,400
	2	15	750	250	2,812,500	187,500	125,000
	3	20	1,000	300	6,000,000	400,000	266,700
	Total				9,812,500	654,200	436,100
Agrani	1	10	500	200	1,000,000	66,700	44,400
	2	15	750	250	2,812,500	187,500	125,000
	3	20	1,000	300	6,000,000	400,000	266,700
	Total				9,812,500	654,200	436,100
Janata	1	5	500	200	500,000	33,300	22,200
	2	10	750	300	2,250,000	150,000	100,000
	3	15	1,000	400	6,000,000	400,000	266,700
	Total				8,750,000	583,300	388,900

Rupali	1	3	500	400	600,000	40,000	26,700
	2	6	750	500	2,250,000	150,000	100,000
	3	9	1,000	600	5,400,000	360,000	240,000
	Total				8,250,000	550,000	366,700
Pubali	1	3	750	300	675,000	45,000	30,000
	2	6	1,000	350	2,100,000	140,000	93,300
	3	9	1,000	400	3,600,000	240,000	160,000
	Total				6,375,000	425,000	283,300
Uttara	1	4	850	300	1,020,000	68,000	45,300
	2	8	1,000	350	2,800,000	186,700	124,400
	3	12	1,000	400	4,800,000	320,000	213,300
	Total				8,620,000	574,700	383,000
JSB	1	10	500	50	250,000	16,700	11,100
	2	15	750	50	562,500	37,500	25,000
	3	20	1,000	50	1,000,000	66,700	44,400
	Total				1,812,500	120,900	80,500
IRDP	1	10	500	50	250,000	16,700	11,100
	2	15	750	50	562,500	37,500	25,000
	3	20	1,000	50	1,000,000	66,700	44,400
	Total				1,812,500	120,900	80,500
OTHER	1	1	500	50	25,000	1,700	1,100
	2	2	750	50	75,000	5,000	3,300
	3	3	1,000	50	150,000	10,000	6,700
	Total				250,000	16,700	11,100
TOTAL	1	66			11,320,000	754,800	503,000
	2	107			28,225,000	1,881,700	1,254,300
	3	148			53,950,000	3,596,700	2,397,800
	All Years				93,495,000	6,233,200	4,155,100

b. Technical Consultant

Evaluation will be part of a continuous process in which the Technical Consultant will be engaged. His principal responsibilities will be to determine which models function most effectively, what modifications would improve the performance of individual models, whether operating costs could be reduced without loss of effectiveness, whether and to what extent the target group is being reached, how credit models are accepted in rural areas, how their status or approachability with regard to the target group could be improved.

The Consultant will be responsible to the Bangladesh Bank under a contract through which all of the Consultant's costs, local currency as well as foreign exchange, will be financed directly by AID. The Consultant will have full access to all experimental models undertaken under project auspices, as well as to all pertinent records at the field outlets, intermediate level branches and offices, and central headquarters of all participating banks and organizations.

The Consultant should be prepared to provide specialist assistance approximately as follows:

Position	Work-months
Project Manager; Senior Credit Specialist	36
Field Credit Specialist	36
Credit Training Specialist	36
Rural Savings Specialist	36
Evaluation Analyst	36
Anthropologist/Sociologist	24
Data Processing Specialist	6
Accountant	9
Other, as required	24
TOTAL	243

NOTE: The positions and numbers of work-months shown are illustrative. The Consultant will be responsible for providing specialist assistance of the types and in the quantities required to achieve project objectives.

Based on recent AID and other donor experience in Bangladesh for expatriate contract personnel, an order-of- magnitude cost per work-month, including all support costs, of $10,000 is used for budget purposes. Accordingly $2,430,000 is earmarked under the grant for technical assistance.

This relatively large commitment of resources to technical assistance is appropriate because of the experimental nature of the project and the difficulties associated with rural credit schemes. It is important that the Consultant be prepared to assign qualified personnel as technical needs become apparent. For example if a model is malfunctioning because of overly complex procedures or opposition within a village by moneylenders, the Consultant must be in a position to provide the technical resources needed to address the problem. An anthropologist familiar with rural Bangladesh society may be able to recommend ways to neutralize local opposition or even to enlist the support and resources of informal credit sources. The Consultant should have the capability to bring in a specialist, perhaps from a nearby third country, to introduce new approaches found to be successful elsewhere. See Annex B. 8., and Part C, "Evaluation Arrangements", below.

In order to maximize his flexibility, all of the Consultant's support costs will be financed directly by AID, including housing, local office space and transportation. Six heavy duty project vehicles will be provided. These will be ordered from the U.S. by the Bangladesh Bank, with assistance provided by USAID, immediately after execution of the project agreement so that they will be available for use upon the arrival of the Consultant's personnel.

Annex B.8 contains a scope of work which can be used by the Bangladesh Bank in contracting with the Technical Consultant.

c. Training

It is expected that a continuous program of in-country training will be required for lending officers assigned to each of the experimental credit outlets. Initial orientation sessions will be directed to explaining the objectives of the experiment and will include basic agricultural information, defifnition of the target group, interview techniques and specific procedural requirements. Such sessions are expected to take four to six weeks and will be arranged through the Bangladesh Institute of Bank Management as well as the training institutes attached to the Bangladesh Krishi Bank and the larger commercial banks. Initially each participating organization will be principally responsible for the orientation training of its own personnel assigned to the experimental program, although some joint sessions may be held on common subjects such as agriculture. The Consultant's training specialist will assist with these training efforts.

Follow-on training will focus on specific problem areas identified during evaluation of the performance of each model. If, for example, loan recovery appears to be a widespread problem, seminars covering recovery techniques will be held. Principal responsibility for planning this type of training will rest with the Consultant on behalf of the Bangladesh Bank.

All such training will be held in Bangladesh to maximize the participation of field-level operational personnel. The Consultant will engage local national instructors to conduct training sessions in Bengali where appropriate.

A total of $400,000, sufficient to finance at least 1200 man-months of in-country training, is provided under the AID grant.

In addition, a limited amount of travel to third countries will be provided to senior level personnel to observe functioning rural credit programs. It is expected such observation training will occur during the first year of project implementation. A total of $20,000 in AID grant funds is programmed for this activity; the Government will contribute toward this activity by financing international travel as far as possible on Bangladesh Biman and by covering the participants' normal salaries during their trips. This is expected to cost the equivalent of an additional $20,000.

d. Establishment

Each participating credit institution will be responsible for arranging and financing all start-up costs associated with the experimental outlets, including building rental, staff salaries, overhead, local transport costs and others. It is expected that such costs will be financed in full from interest generated after the program is operational. However, any costs incurred in excess of interest income may be covered by AID Grant resources.

The Bangladesh Bank, through the Consultant, shall monitor all such costs for project evaluation purposes.

SCHEDULE OF PROJECT ACTIONS

The following schedule shows both target dates for project actions and critical dates for project performance tracking. The latter are dates beyond which individual delays would significantly delay implementation of the full project.

		Target	PPT
1.	Execution of project agreement	8/31/77	9/30/77
2.	Establishment of Project Account	9/30/77	
3.	Commissioning of first batch of model credit outlets	10/31/77	4/30/77
4.	Execution of contract for technical consultant	11/30/77	
5.	Arrival of technical consultants	3/31/78	4/30/77
6.	First quarterly evaluation, including measurement of target group credit activity	6/30/78	
7.	Implementation of recommended design adjustments	7/31/78	
8.	Design of in-country training courses arising from evaluation	8/31/78	
9.	Second quarterly evaluation	9/30/78	
10.	Begin continuous in-country training for field credit personnel	10/31/78	
11.	Implementation of recommended design adjustments, including modifications to training program	10/31/78	

12.	Commissioning of second batch of model credit outlets	10/31/78
13.	Third quarterly evaluation	12/31/78
14.	Implementation of recommended design adjustments, including modifications to training program	1/31/79
15.	Fourth quarterly evaluation	3/31/79
16.	Implementation of recommendations	4/30/79
17.	Senior credit officials depart for observation training	5/30/79
18.	Fifth quarterly evaluation	6/30/79
19.	Implementation of recommendations	7/31/79

C. Evaluation Arrangements

The objective of this experimental project is to find at least one credit model which is successful (1) in extending credit to the target group when and in the quantities needed, (2) in recovering the resources lent on time and with interest, (3) in covering all operating costs through charges levied on the target group borrowers, and (4) in raising capital through local savings programs for expanded target group lending. Each model will be evaluated in each of these four areas. Evaluations will be conducted at least quarterly throughout the project life. This will permit modifications to be made to poorly performing models while the project is underway, patterned after the design of successful models. Evaluations will be planned and conducted by the Technical Consultants, using locally available talent for data collection and analysis where feasible. A suggested format for data collection and evaluation is included in Annex B.9 . The format may be revised by the Technical Consultant as necessary at any time during project implementation, after discussion with and concurrence by the Bangladesh Bank and USAID.

In addition to collection and tabulation of data along these lines, the Consultant will prepare on a quarterly basis a narrative assessment of the strengths and weaknesses and potential for successful long term operation of each model. The Consultant will recommend modifications to each model to correct weaknesses or improve upon strong points, and will report on the success or failure of modifications recommended and made in earlier reports. In total, the Consultant's quarterly evaluation reports should record the course of implementation of each experimental model, highlight significant strengths and weaknesses which have become apparent, and provide specific guidance concerning structure, procedures, personnel, training needs and other factors for functioning and effective rural credit systems for the target group. Considering that the FY 1979 $20 million grant follow-on project is contingent upon one or more workable models being found through this project, the Consultant's evaluation reports will be of critical importance in planning the follow-on project.

The Consultant's quarterly reports will be submitted within three weeks after the expiry of each quarter. Copies of the reports will be provided to the Ministries of Planning and Finance, the Bangladesh Bank, the participating credit organizations and AID. They will serve as discussion papers for quarterly evaluation and planning sessions involving Planning and Finance, the Bangladesh Bank, the Consultant, AID and others as appropriate.

During each evaluation and planning session recommendations will be considered on the basis of project experience for changes in credit policy, adjustments to models, termination of complete failures and their replacement with outlets patterned after successful models, etc. Because of the experimental and collaborative nature of the project it is not proposed to make grant disbursements contingent upon implementation of recommendations. Rather, any recommendations mutually developed during such sessions will form the basis for the follow-on project scheduled for FY 1979.

D. Conditions, Covenants and Negotiating Status

1. Conditions Precedent to Initial Disbursement

a. Legal opinion as to the binding character of the Project Agreement.

b. Designation of authorized representatives of the Government.

c. Issuance of directives waiving regulations governing interest rates for loans and deposits, security requirements, etc., to permit experimentation as described in the Project Paper.

2. Covenants

a. The Government will consult with AID from time to time at the request of either with respect to the obligations accepted by the Government under this project and any question related thereto.

b. The Government will cause the project to be carried out with diligence and efficiency and in accordance with sound administrative and financial practices, and shall not take nor permit any action which would interfere with the effective implementation of the project.

3. Terminal Dates for Conditions Precedent and Disbursement

a. Conditions precedent shall be met within one month from the date of signing of the Project Agreement.

b. The terminal date for requests for issuance of letters of commitment will be 12 months from the date of signing of the Project Agreement.

c. The terminal date for disbursements will be 18 months from the date of signing of the Project Agreement.

4. Status of Negotiations

The Project Paper represents essentially a joint effort by Government, banking, cooperative and AID personnel. The experimental models set forth in Annex B.4 were jointly developed in a series of meetings and follow-up correspondence. Although the Government has questioned the likelihood of success of full-cost institutional credit, agreement has been reached to proceed on an experimental basis. Concern has also been voiced regarding possible conflict between this project and the Government's existing agricultural credit efforts, notably the 100 Crore Program. It has been agreed, however, that experimentation should proceed and that current efforts to provide institutional credit should also not be delayed.

Accordingly no major issues regarding this project remain to be resolved.

AID/W PRP Approval Message

09 Feb 77
FM Secstate WASHDC
TO Amembassy DACCA

UNCLAS STATE 029467

SUBJECT: RURAL CREDIT - 388-0025

1. The Asia Project Advisory Committee in a meeting November 18, 1976 approved including the project in the 78 Congressional Presentation (CP), with initial funding to commence in FY 77. Subsequent budget adjustments in preparing CP have resulted in recommended life-of-project planning figure of Dols. 8.0 million. More detailed comments follow below:

2. The definition of the target group, while primarily small farmers, could logically include all rural workers with income less than a specified amount and borrowing for productive purposes. Thus, suggest changing project title to Rural Credit. However, for test purposes, target group except for one or two models should be limited to small farmers including sharecroppers and landless laborers. Also, project should be designed to facilitate evaluation of the ultimate beneficiaries of credit extended to small farmers. Proposed Januzzi study may provide insights on this aspect of project.

3. The Project Paper (PP) should describe services of extension and other Government agencies available to small farmers and might well include at least one or two credit models using supervised credit. A logical tie in this regard might be with existing or proposed integrated rural development programs where technical assistance as well as physical production inputs could be linked with credit availability. This suggestion should not, however, be taken as a presumption on AID/W's part that on-site follow through is a prerequisite for agricultural credit.

4. We are concerned that complex project involving institutions inexperienced in managing small farmer credit programs will over tax the current staff resources of agencies involved. The PP should address the managerial capability of the Bangladesh Bank

(and the Bangladeshi project committee) to administer the program and also the institutional capability of the training institute to supply the required training of personnel for both current staff and new recruits to support the project.

5. The proposed 123 outlets appear too large a number to adequately control for test purposes and in any event are probably inconsistent with reduced amount of pilot now proposed. PP should include rationale for number of test units, measures proposed to assure validity and later verification of tests (i.e. the test methodology). Also, insofar as possible the PP should include description of tests and what approaches will be tried. PP should also describe measurement indicators which will permit evaluation of development changes occurring as various credit systems evolve during project, thereby, providing a feedback system for improving project design.

6. The Project Paper should describe measures contemplated to assure an equitable distribution of funds among the participating institutions. One way to help achieve this objective and ensure that each scheme gets a full test is to limit total advances to the Bengali bank of not over fifty percent of the AID Grant based upon loans extended. There may be other means as well. The advance of AID Funds to the BDG based on loans and collections is not tied specifically to advances of funds by the BDG to the lending institutions. While it may not be feasible to tie the AID advances to specific loans by participating institutions, failure to do so reduces the discipline inherent in such a procedure and also may reduce the effectiveness and contribution of the AID financed advisors. To mitigate possibility inadvertent or intentional undue bias in favor one or two pilot systems (institutions), we understand Bangladesh Bank will make allocations on annual basis. PP should demonstrate how AID's capital contribution would be organically linked to requirements of pilot schemes and not simply become a windfall to Bangladesh Bank.

7. The administrative and other costs of providing credit in small amounts to small farmers and others is known to vary considerably depending on degree of supervision and willingness to accept credit losses. In establishing models suggest accounting system and later evaluation program be designed to reflect trade-off between administrative costs and losses. PP in any case should describe cost targets or benchmarks against which actual costs can be compared.

8. Tentatively the suggested interest rate of 18 percent to small borrowers given present rates of inflation appears to represent a movement of attitudes in the right direction. Higher interest rates are almost certainly necessary if decapitalization is to be avoided and rural savings mobilized. The apparent willingness of the Government to be flexible as to interest rates is refreshing and a

prerequisite in tapping rural savings for a continuing rural credit program. We note, however, from recent Wilson memcon that at least some parts of BDG remain skeptical. We hardly need re-emphasize importance of BDG/USAID agreement on this point and could expect that the aspect of the pilot be pinned down with the BDG as one of the first priorities. We understand a recent ADB loan made available loans to small farmers at 17.5 percent and so in some sense this new, higher rate should be taken as a base beyond which further BDG movement on this question might well be demonstrated as justification for an AID project. The PP should further elaborate on proposed incentives including variation in interest rates in at least one or two models to attract local savings. We cannot emphasize too much the need for a parallel program to tap local savings in order to establish a self-sustaining credit system and concur in the Mission's view as outlined p. 7 of the PRP. As discussed with Brennan while in Washington, the services of Dale Adams could be very useful in exploring further this phase of the project.

9. The economics of small farmer production--the PP should describe the interaction of credit with other production factors potentially determining effective demand for credit, such as technological packages and the extension of these packages, input and output price policy, land distribution, and non-institutional credit sources. The PP should establish hypotheses regarding these factors and the viability of substantial expansion of Ag credit and lay out the research methodology to isolate insofar as possible the effect of these factors on borrowing and repayment and, ultimately, Ag production and net incomes.

VANCE

ANNEX B

PROJECT TECHNICAL DETAILS

B.1 Bangladesh Bank Working Paper:

To Suggest a Workable Definition of "Small Farmer".

B.2 Summary description of the Bangladesh Government's Tk 100 Crore Agricultural Credit Program.

B.3 USAID survey of the 100 Crore Agricultural Credit Program.

B.4 The Experimental Models

- A. Budgeted line of credit
- B. Krishi Shakha
- C. Area development approach
- D. Small farmer service center
- E. Banker as ombudsman
- F. Village agent model
- G. Village level group lending
- H. Cooperative approach

B.5 Analysis of Borga Farmers' Costs and Returns for Various Crops using Institutional Credit.

B.6 Resources Development Associates' Summary Discussion of Sources of Institutional Agricultural Credit.

- A. Bangladesh Krishi Bank (BKB)
- B. National Cooperative Bank (JSB)
- C. Integrated Rural Development Program (IRDP)
- D. Commercial Banks
  1. Sonali
  2. Janata
  3. Agrani
  4. Rupali
  5. Pubali
  6. Uttara

B.7 Suggested Format for Reporting Project Performance Data to the Bangladesh Bank and for Requesting Project Fund Releases.

B.8 Scope of Work for Technical Consultant.

B.9 Suggested Format for Quarterly Collection of Data for Evaluation of Performance of Models.

BANGLADESH BANK WORKING PAPER

To Suggest a Workable Definition of "Small Farmer"

When we say "Small Farmer" we mean a poor farmer whose farm size is small, who lives and operates at subsistence or below subsistence level. Financial condition is the main thing that is intended to be expressed. Financial solvency or otherwise of a farmer depends not on size but on income from the farm vis-a-vis the family expenses. Farm income depends on (1) quality of land, (2) intensity of crop, (3) presence or absence of irrigation facilities, (4) vulnerability or otherwise to natural calamities. So it is difficult to arrive at an accurate definition. As a matter of fact all economic laws are conditional. However, assuming that average family size in agricultural community is 6-7 and that irrigated land gives higher income than non-irrigated land (irrigation helps increase cropping intensity) we may say that farmers possessing cultivable land up to 2 1/2 acres in irrigated areas 3 1/2 acres in non-irrigated areas can be considered to be within the small farmer definition. Obviously in this group there will be landless share-croppers, holders of one bigha up to 2 1/2 or 3 1/2 acres. The financial condition of different farmers will be different. In this group there will be farmers who will have the capacity to repay loans; there will be some who have potential repaying capacity and others who are totally unviable farmers. Farmers who are unviable cannot be provided with credit from institutional sources. So when we consider small farmers for bank finance then the general definition has to be qualified. Here again it needs to be mentioned that size of farm is not always indicative of repaying capacity or credit-worthiness. The broad definition suggested hereunder is merely a starting point and it may have to be modified based on experience.

A farmer having in cultivating possession not more than two acres and a half of irrigated land or three acres and a half of non-irrigated land or three acres of irrigated and non-irrigated combined may be treated as a small farmer.

A small farmer to be eligible for credit from institutional sources must be in cultivating possession of at least one acre of irrigated land or two acres of non-irrigated land of which at least 0.25 acre must be owned by him. (N.B. Minimum ownership of land has been suggested to eliminate floating or migratory farm laborer).

It may be assumed that about 20 lakh (2,000,000) farm families will be in the small farmer category as per suggested definition.

Source: From a draft report circulated by the Bangladesh Bank to all Banks on May 26, 1976.

Summary Description of the Bangladesh Government's Tk 100 Crore Agricultural Credit Program

In February 1977 the Bangladesh Government (BDG) announced plans for the implementation and disbursement of a Tk 100 Crore Program (approximately U.S. $67.0 million) during calendar year 1977 for agricultural credit. The banking institutions designated to participate include the six nationalized commercial banks: Sonali, Janata, Pubali, Agrani, Uttara, and Rupali along with the Bangladesh Krishi Bank. Loans are to be disbursed to small farmers with a minimum of red tape and the interest rate to be charged is 12% per annum.

The loans to the farmers are made by crop, based upon the Government's annual plan for production of different crops. Listed below is a compilation of the credit norms established for different crops prepared by the Ministry of Agriculture for the 100 Crore Program.

Crop	Minimum Per Acre per borrower (Tk)	Maximum per borrower (Tk)
Aus	250	750
Aman	280	850
Boro	280	850
Jute	150	450
Potato	300	1,000

The credit allocations for each district are divided among all the local unions with the disbursements reviewed by a District level committee composed of banking and BDG officials. Each district has been assigned a "lead bank" responsible for the coordination and disbursement of credit. The "lead banks" are responsible for assuring that all Unions are served by a branch of one or another of the participating banks while avoiding duplicate coverage. All thanas are covered throughout Bangladesh with the exception of the seven thanas of the World Bank's "RD-1" Project.

Source: Prepared by USAID on the basis of various Government publications and reports and USAID field trips.

The 100 Crore Program includes both cash and in kind disbursements. The Bangladesh Agricultural Development Corporation (BADC) is responsible for providing the supplies of fertilizer, seeds, etc.

The disbursement of loans is made to farmers based on the personal sanction of Union Parishad Chairmen along with the Thana Agricultural Officers and other ward members.

The District Committee, including the District Deputy Commissioner, District Agricultural Officer, District Manager of BADC plus local banking officials, has the following responsibilities:

1) Determination of which unions are to be served by an existing bank branch or mobile unit.

2) Establishment of union-wide disbursement targets coordinated with crop seasons.

3) Promulgation of the 100 Crore Program to local authorities including Union Parishad Chairmen, Circle Officers and other local officials.

4) Arrangement of police escorts for mobile units.

5) Monitoring utilization of loans and timely recovery.

In terms of loan eligibility it was decided that a farmer cultivating his own land or others' land on a share cropping basis would be eligible for a loan for genuine productive purposes such as purchasing seeds and fertilizers, payment of labor cost, irrigation charges etc. A loan applicant owning land is required to produce an up-to-date land rent receipt which could be checked by a bank official. Loans to farmers listed as owner/cultivators are secured by a crop hypothecation. For sharecroppers, loans are likewise secured by a crop hypothecation along with one or two personal sureties, preferably by the owner of the land under cultivation and the Union Parishad Chairman.

Loan approval authorities have been delegated to participating branches to facilitate rapid loan approvals and disbursements. Simplified loan application forms have been devised. Lists of defaulters on previous loans and of farmers delinquent in paying property taxes are available to each branch. Applicants on these lists are denied further credit.

USAID Survey of the 100 Crore Agricultural Credit Program

The Bangladesh Government announced in February that Tk 100 crore (US $67 million) had been allocated for small farmer production credit for the year 1977. The program was described in some detail in supplemental inserts in each of the English language newspapers. The program was to depart from prior practices in that no landed security was to be required for the loans, and the loan amounts per borrower were to be limited to a relatively small amount for each of five specified crops. These amounts would in theory be sufficient for small farmers and insufficient and therefore unattractive for large farmers. Interest rate was to be 12% across the board. Loan applications would be completed on a simplified basis and loan officers would approve loans and authorize disbursements the same day. Village outlets and mobile banking branches, both functioning on Saturdays and Sundays, were to be established in order to bring banking facilities to small farmers. The intent of the program was stated as being to extend institutional credit to the small farmers who at present are not receiving it.

USAID Dacca sent three local staff members to the field in middle to late March 1977 to assess the workings of the 100 Crore Program to date. Visits were made to Chittagong, Comilla, Rangpur, Dinajpur, Kushtia and Jessore districts. A total of 50 bank outlets plus approximately 35 village level disbursing booths (temporary sub-branches) were visited and 121 loan applicants interviewed. Bank personnel were interviewed as well as loan applicants.

The data below represent responses obtained directly from interviewees and from observations made by the USAID staff of ongoing operations at individual bank branches. There was no opportunity to verify information received in the course of interviews. Figures obtained from farmers concerning sizes of their farms, estimated annual income, amounts of loans applied for and amounts received

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USAID: April 18, 1977

are therefore reported as received from the interviewees. Nonetheless the data suggest some interesting patterns concerning the use of the 100 Crore Program. Table 1 summarizes successful loan applicants interviewed by size of land holding ("Holding" includes in this instance land rented and sharecropped as well as land owned.)

Table 1. Loan Applicants Who Obtained Loans, by Size of Farm.

Farm size (Acres)/a	Number of Farmers	Percent
Under 1	0	0.00
1 - 2	5	4.13
2 - 3	13	10.74
3 - 4	12	9.92
4 - 5	28	23.14
5 - 6	14	11.57
6 - 7	12	9.92
7 - 8	12	9.92
8 - 9	13	10.74
9 - 10	4	3.31
10 and over	8	6.61
	121	100.00

/a Source: Interviewees. Figures not verified.

Of the total of 121 successful applicants interviewed, only 5 indicated that any portion of their landholdings were mortgaged, rented or sharecropped. All the others indicated they own their land completely free of any mortgage or encumbrances. This does not mean that only a few farmers have rented, sharecropped or mortgaged land, but rather that only a few of such farmers were able to obtain the surety required for a loan.

The program theoretically provided for sharecroppers by requiring a crop hypothecation deed attested by the landowner, and by a surety executed by the Union Parishad Chairman and ward member.

However a number of unsuccessful loan applicants, all share-croppers or owners of mortgaged land, said that except in a few cases involving relatives no guarantors or sureties were willing to sign if the risk to them were too great, i.e. without landed security. Thus while no mortgage is officially required under the 100 Crore Program, the requirement that land be owned free and clear nonetheless applies. The result is the same: only landowners get loans.

All of the 121 applicants interviewed stated that no bribe or unofficial payment was required in order to obtain a loan. In many instances bank personnel assisted in the preparation of loan application documents. Virtually no difficulty was faced in obtaining these loans. In fact, some said they had been asked to take loans even though they did not need them, evidently in order to help boost disbursement figures.

Table 1 taken at face value suggests that farmers holding three acres and above account for over 85% of all borrowers under this program. Assuming that some of the stated land holdings are understated it would appear that relatively large land holders are favored even more than Table 1 indicates, and that substantial work must still be done before farmers holding two acres or less, who constitute a majority of the farming population, have access to institutional credit.

This finding is substantiated by banks' field personnel, who were asked to state the most common reasons for rejecting loan applications. Some of the most frequently given responses are defective land title, ownership unclear or under dispute, and title mortgaged. Another stated reason, inability to obtain surety, also stems from unsure or non-existing landownership because guarantors are reluctant to expose themselves to risk without landed security. A number of respondents stated that farmers with less than one acre were automatically rejected. The fact that none of the farmers interviewed held less than one acre (Table 1) corroborates this.

Other reasons given for rejecting applications were failure to pay land tax and defaults on other loans. Evidently a system for cross checking with other banks and with the revenue office exists in many areas.

When asked to mention the problems encountered in implementing the 100 Crore Program, virtually all bank field personnel interviewed mentioned insufficient personnel, inadequate transport and lack of security, e.g., armed guards. Other frequently mentioned problems were lack of cooperation by local officials and inadequate or unclear instructions (particularly in the case of the commercial bankers for many of whom this project represents a first venture into agricultural credit).

The USAID staff members observed the amount of time required for a prospective borrower to prepare an application, get it approved and obtain his money and credit vouchers. In almost all cases the complete process required two days. One case was observed where a loan was obtained in two hours, and a handful in seven to eight hours. All the rest required a return the second day and a substantial wait before loan funds were made available. It should be noted that this is a substantial improvement over the three to four weeks usually required. However it still represents a significant cost to the applicant in lost time.

Monthly operating costs for the 50 bank branches and outlets visited ranged from a high of Tk 40,245 (a large branch in a district Headquarters town) to Tk 2,665 for a small village outlet. 29 had monthly operating costs ranging from Tk 7,000 to Tk 12,000.00.

Table 2. Monthly Operating Costs of 50 Bank Branches and Outlets Visited.

	Operating Costs	No. of Branches Reporting	Percent of all Branches Visited
Tk	2,000 - 3,000	1	2
	3,000 - 4,000	5	10
	4,000 - 5,000	1	2
	5,000 - 6,000	2	4
	6,000 - 7,000	2	4
	7,000 - 8,000	6	12
	8,000 - 9,000	7	14
	9,000 - 10,000	6	12
	10,000 - 11,000	4	8
	11,000 - 12,000	6	12
	12,000 - 13,000	3	6
	13,000 - 14,000	1	2
	14,000 - 15,000	0	0
	Over 15,000	6	12
	Total	50	100

Source: Interviews with bank field personnel.

Of the 50 branches and outlets visited only 20 had been implementing the 100 Crore Program for a month or more; the remaining 30 did not have sufficient experience with the program to have meaningful disbursement data. Almost all of the 20 which began the program in February were BKB branches.

Of the 20, operating expenses taken as a percentage of loan disbursements for the same period ranged from 2.5 percent to 13.0 percent with most between 3 and 8 percent. (A more accurate reading of the actual costs of the 100 Crore Program will be obtained after a year's operation, taking into account a full year's disbursement, operating expenses, loan recoveries and inflation).

Table 3. Monthly Branch Operating Costs as a Percent of Monthly Loan Disbursements.

Operating costs as percent of disbursement	No. of branches reporting	Percent
2% - 3%	1	5
3% - 4%	4	20
4% - 5%	1	5
5% - 6%	2	10
6% - 7%	1	5
7% - 8%	4	20
8% - 9%	0	0
9% -10%	0	0
10% -11%	1	5
11% -12%	1	5
12% -13%	2	10
Over 13%	3	15

In summary, the data collected suggest that farmers owning three to nine acres without mortgages are the major beneficiaries of the 100 Crore Program. Smaller landowners have obtained loans, but ways should be found to increase their share as well as that of renters and sharecroppers. The loan application procedure appears to have been greatly improved, with no instances of bribes or unofficial payments reported. The time required to get a loan has been reduced, but there remains more room for improvement. Almost all bankers said they needed additional personnel and transport facilities to handle the program properly; if provided, these additional resources may well lead to improvement in the access of small farmers to loan funds. Bank outlet operating costs appear to amount to between 3 and 8 percent of disbursements, disregarding defaults and other longer term costs. Any increase in staff and transport would raise these cost figures accordingly. A more accurate determination of operating costs will be obtained after a full year's data are available.

Model : Budgeted Line of Credit, or "Permanent Number" System

Sponsor: Bangladesh Krishi Bank

I. General Summary:

The use of almost all institutional rural credit is restricted to agricultural inputs: seed, fertilizer, a pump, a cow. In theory limiting the use of loan funds to directly productive commodities increases the likelihood of loan repayment. However, from the borrower's viewpoint there are a number of other expenditure requirements he faces which, although not directly related to production, are nevertheless legitimate and unavoidable. Examples are food, clothing, medicine, feasts, funerals, gifts. If a borrower is precluded from using loan proceeds on such necessities he will divert other resources to these needs, or resort again to the moneylender. The net effect will be the same as, or worse than if his institutional loan permitted such uses. The BKB model recognizes this and will attempt to meet all legitimate cash needs facing the borrower. Banker and borrower will prepare a total budget for the borrower incorporating all predictable cash loan needs and all income amounts. A line of credit will be established for each borrower based on his likely ability to repay. The line of credit may be used to cover lean periods before harvests or extraordinary expenses such as weddings and funerals. Concerted attempts will be made to maintain positive and businesslike credit relationships, so that borrowers can begin to regard the bank as a positive community force with valuable services to render, and a good credit rating as an asset worth keeping. The establishing of a permanent file or account for each borrower, including a line-of-credit and a savings account, will facilitate this process. The initial application process may involve interviews, credit checks, site visits, etc. after his file is opened, the borrower's "permanent number" will serve as his gate pass and will entitle him to the services of the bank without further lengthy applications, interviews, waiting, and approvals.

The Permanent Number System will be introduced initially in ten of BKB's 152 branches. An additional five will be introduced in the second project year and five more the third year, for a total of 20 by the completion of the experiment.

Each of the thana branches selected for participation will open and staff a union level sub-branch (office) to service a cluster of nearby villages. Each will be headed by an assistant manager responsible directly to the Thana branch manager. The assistant manager will function also as senior loan officer and supervise a staff of two to four loan officers and support personnel.

II. Specific Characteristics

A. Interest

As a control, one of the offices will offer loans at 12% and solicit deposits at 7%. To determine what lending rates will generate revenues sufficient to cover all costs, other participating offices will be assigned rates ranging, among offices, from 18 to 36%. Similarly, savings from 9 to 15% will be assigned to test their effect upon mobilization of savings.

B. Security

The primary "security" in all cases will be the loan officer's budgeted demonstration of the farmer's ability to repay his loan from income. In at least two of the participating offices all loans will be made on this basis; no formal security will be taken. The objective is to test the hypothesis that careful budgeting and close supervision can be substituted for security as a basis for loan approval and repayment. The other participating offices will be encouraged to make such "unsecured" loans but, at the loan officer's discretion, may also take either surety or crop hypothecation.

C. Selection of Borrowers

During the first off-season of operation, bank officers will prepare a listing of small farmers in the office's village cluster. Applicants will be identified against this list as bonafide farmers and their good reputation and honesty established through personal knowledge or appropriate investigation by the officer. Having met these criteria, selection will be based upon the loan officer's budgeted projection of ability to repay the loan.

D. Loan Application and Budget Preparation

Insofar as possible applications will be taken, necessary information gathered and recorded, and the applicant's annual budget prepared well in advance of planting time, before the need for credit is critical. The budget will be a projection, by months, of expected cash receipts from all sources on-farm, off-farm, and of cash disbursements required for all purposes: on-farm, off-farm, and consumption. Confirmation and comparison of the two cash streams indicates when and how much supplemental credit is required as well as when and in what amounts repayments can be scheduled and met. It thus is the basis for establishment of the total credit line, the schedule of disbursements and the repayment schedule.

Completion of the application and budget will be largely the loan officer's responsibility and, using conventional procedures, can be an extremely laborious, time-consuming and costly process. It is important that streamlined procedures be developed and officers trained in their application to permit this work to be done quickly and efficiently. A case load of 150 loans per officer per year should be attainable.

When the initial application is completed it should become a part of the borrower's permanent file, with only up-dating required for subsequent loans.

E. Loan Approval Authority

It is anticipated that many borrowers will require loans of Tk. 1,000 or less but that individual annual lines of credit to Tk. 2,000 and some to Tk. 3,000 will be required. Thus, authority levels for the experimental outlets will be sought as follows:

Branch Manager	Tk 3,000
Assistant (Office) Manager	Tk 2,000
Loan Officers	Tk 1,000

F. Venue and Staffing

Existing branches will be selected for this experimental project. Existing branch staff will be used after preparatory training at BKB's training institute.

G. Disbursement and Repayment

Both will be in cash in accordance with the budgeted schedule. The basis for disbursement will be the loan officer's confirmation, following a pre-disbursement inspection visit, that the requested advance is in accordance with the budgeted schedule. Various incentive schemes to enhance collections will be tested. These may include stipulation in the loan agreement that upon full repayment on schedule the borrower would receive an interest rebate, an award or prize, eligibility on subsequent loans for lower interest rate or higher amounts, or others.

H. Technical Advice/Supervision

The off-season planning and budgeting process will also be the chief vehicle for identifying critical technical problems and advising in their solution. Where problems are identified the borrower's budget and file will be flagged for supervision at and/or following the time of disbursement. The intent is to establish in advance the level of supervision that will be required.

I. Savings Mobilization

A savings account will be opened for each participating borrower at the time of loan approval. Experimental interest rates will determine requirements to attract deposits of surplus funds.

III. Estimated Costs for First Year of Operation

Assuming an average outstanding loan balance under the line of credit of Tk 1,000 for 12 months, BKB's cost per loan is estimated below:

	Time Required		
	Credit Staff	Clerical Staff	Cost
1. Interviewing and information collection	120		12.72
2. Budget preparation	60)		6.36
3. Field investigation and budget	)	30	1.44
review	90)		9.54
4. Preparing application	30		3.18
5. Approval	15		1.59
6. Loan closing:			
Agreement	20	20	3.08
Booking		20	.96
7. Disbursement (3)	45	45	6.92
8. Supervision 1/	270		28.55
9. Collection (3)		45	2.16
10. Archiving		10	.48
11. Supplies			2.00
Sub-Total	10.8 Hr	2.8 Hr	78.99
12. Overhead (50% of 1 - 11)			39.50
13. Cost of funds @ 7% 2/			70.00
14. Risk @ 5% of loan amount			50.00
Total Cost			238.49

15. Estimated loan profit (loss) at various interest rates for average loan size of Tk 1,000 for 12 months.

Interest	Profit (Loss)	As Percent of Loan Amount (12 Mos.)
12%	(Tk 118.49)	(11.85%)
18%	(Tk 58.49)	(5.85%)
24%	Tk 1.51	0.15%
30%	Tk 61.51	6.15%
36%	Tk 121.51	12.15%

1/ Assuming three pre-disbursement visits (90 minutes each) per year.
2/ Although savings deposits will be attracted at varying rates, most funds available for lending will come from other sources. Accordingly a relatively fixed overall cost of capital is assumed for this set of calculations.

IV. Lending Targets

Four loan officers per unit

A. Estimated Number of Loans:

	No. of Units	Per Unit	Total
Year 1	10	600	6,000
2	15	800	12,000
3	20	1000	20,000
Total		2400	38,000

B. Estimated Amount Loaned:

	Per Unit	Total
Year 1	600,000	6,000,000
2	800,000	12,000,000
3	1,000,000	20,000,000
Total	2,400,000	38,000,000

Model : Krishi Shakha

Sponsor: Sonali Bank

I. General Summary

Sonali Bank initiated an experimental series of five agricultural sub-branches (Krishi Shakha) for the exclusive use of small farmers. The initial five will be brought under the auspices of the AID project, and additional Krishi Shakha units will be added for a total of 20 by the end of the third year. Each Krishi Shakha will be staffed with one loan officer recruited locally who will open his office on village market days. On the other days of the week he will promote business by organizing groups of borrowers, discussing the problems and advantages of high-yielding varieties, and assisting in the acquisition of inputs.

II. Specific Characteristics

A. Interest

Interest rates will be charged at a rate sufficient to cover costs and a reasonable profit. This will be accomplished within the variable rates authorized for the experimental project (up to 36 percent) and with periodic updating of costs of making loans.

B. Security

Physical security will be in the form of surety and crop hypothecation. Primary security will be considered through level of supervision, knowledge of the borrower and correct assessment of credit needs.

C. Selection of Borrowers

Loans will be made strictly to the very small farmers, either individually or in groups. Assurance will be given that the crop is suitable and that the loan will increase production. A good past repayment performance will normally be required.

D. Loan Application Procedures

Simplified written procedures have been prepared for the Krishi Shakha. Paper work would be made minimal. Procedural functions will largely be incorporated into or built around the unique role defined for the "Barefoot Banker" who will head up the Krishi Shakha. His personal contact with and knowledge of the relatively small community will in considerable part provide an informal substitue for detailed written forms and procedures. This is with reference to the borrower; basic formalities will need to be followed for developing main branch records. But this also will require only a simple bookkeeping system.

Investigation needs would be minimized, particularly after the initial loans, because of the personal knowledge and continuing relationship between the Krishi Shakha and the villagers.

E. <u>Loan Approval Authority</u>

Loan approval authority would be given to the Krishi Shakha for up to Tk 990 for each farmer or group of farmers. This would permit rapid approval and subsequent disbursement.

F. <u>Venue and Staffing</u>

Krishi Shakha (sub-branches) would be located in rented quarters in village centers. Ultimately about 300 borrowers would be handled from each unit. Locations would initially be selected where good road communications were available. The unit manager would be present in the community full time and travel about by bicycle. He would likely live in part of the building rented for the Krishi Shakha.

The Krishi Shakha would normally be located some 5-7 miles from a main branch and have contact with the branch twice per week. At these times a cashier would travel to the village to exchange cash and to pick up pertinent loan documents.

A locally recruited person to be in charge of the Krishi Shakha would represent the major staffing. He would need to be trained in rural banking.

The "in-charge" would be assisted by a guard/messenger. Twice per week a cashier and guard would travel to the Krishi Shakha and return to the main branch. Some intermediate staff will be used to help supervise operations of the Krishi Shakha.

Initial recruitment action has involved contacting teachers, village elders, etc. to identify potential employees possessing desired characteristics of honesty, incentive, personality and knowledge of agriculture. Some 10-15 have been interviewed for each outlet and then one selected to undergo bank training. Two selected as of May 1977 had been teachers. Applicants are sought who are aged between 25 and 32 years. Initial training is planned through the Bangladesh Institute of Bank Management.

G. Disbursement and Repayment

Disbursement would normally be in kind both to assure proper use and to minimize cash needs at the Krishi Shakha. Preliminary planning is still underway regarding possible storage facilities at the Krishi Shakha or some tie-up with existing warehouse owners. This would permit repayment in kind and would assist borrowers in their marketing.

Loan extensions will be granted in deserving cases but bad debts will not be forgiven.

H. Technical Advice/Supervision

A major unique feature of the model will be the manner of local supervision from the person in charge at the Krishi Shakha. He will be a local person with knowledge of agriculture in the area. He would be given training in rural banking.

His visualized role in the community would be as banker, organizer, teacher and friendly contact. Besides direct supervision of loans, he would also provide assistance in lining up inputs, getting supplementary technical assistance and arranging marketing.

I. Savings Mobilization

Promotional efforts will be carried out through the Krishi Shakha incharge to encourage small farmers and others to save. Deposits of savings will be accepted at the Krishi Shakha. Plans for the initial five Krishi Shakha include deposits using interest rates ranging up to 17%.

III. Estimated Costs for First Year of Operation

Cost per loan for the bank based on an average loan size of Tk 500 and an average 9 month maturity are estimated as follows:

	Per Year	Per Loan
Krishi Shakha Direct Costs:		
Salary and Bonus	Tk 7,200	Tk 28.80
Rent	1,200	4.80
Supplies and misc.	1,000	4.00
Sub-Total:	Tk 9,400	Tk 37.60
Main branch services and overhead (35% of direct)		13.16
Cost of funds @ 5%		18.75
Risk at 5% of loan amount		25.00
Total Cost		Tk 94.51

Estimated loan profit (loss) at various interest rates for average loan size of Tk 500 for 9 months.

Interest	Profit(Loss)	As percent of loan amount (9 mos.)
12%	(49.51)	(9.9%)
18%	(27.01)	(5.4%)
24%	(4.51)	(0.9%)
30%	17.99	3.6
36%	40.49	8.1

The format for cost data is simpler than that used for other models because this model addresses the target group through the AID project exclusively. No other bank business is to be transacted. Thus establishment costs need not be apportioned because they are fully chargeable to this program.

IV. Lending Target

A. Proposed number of loans:

	No. of Units	Per Unit	All Unit
Year 1	10	200	2,000
2	15	250	3,750
3	20	300	6,000
Total		750	11,750

B. Estimated amount:

Year 1	10	Tk 100,000	Tk 1,000,000
2	15	187,500	2,812,500
3	20	300,000	6,000,000
Total		Tk 587,500	Tk 9,812,500

These estimates assume that 10 Krishi Shakha will be operative in the first year, 15 in the second, and 20 in the final project year. It further assumes a buildup from 200 to 250 to 300 loans per Krishi Shakha at an average size of Tk 500 each the first year, Tk 750 the second and Tk 1,000 the third.

Model : Area Development Approach

Sponsor: Janata Bank

I. General Summary

This model by the Janata Bank will test two particularly unique features. It will be an area approach consisting of a village or cluster of villages. And secondly it will aim to accommodate comprehensive credit needs of various strata and occupations of the local population. Its emphasis would be as a community development project.

Characteristics and needs for development of the village economy are identified by a social/economic survey. Base line records are established. Problems of the small farmers, landless and others are assessed. Actual credit requirements of villagers of different occupations are identified. This preliminary preparation has been nearly completed for one large village and would serve as the basis for this model.

One unique objective of this model will be to test the thesis that maximum coverage and constant supervision on an area approach is more effective than credit provided in a scattered manner.

The Janata Bank has independently carried out three other types of experiments in three areas, attempting to identify suitable delivery and recovery systems. Recovery has been generally good but also with some losses. Their tentative judgment is that the approach should encompass total economic activity, a thesis which will be further tested by this model. Efforts of the Janata Bank thus coincide directly with objectives of the AID Project.

II. Specific Characteristics

A. Interest

Rates tested will vary between 12% and 36% per annum. A different rate will be tested at each of five separate village clusters initially selected for this experiment. Additional clusters will be added for a total of 15 by the third year of project operation.

B. Security

Loans will not be security oriented. Some variation will exist according to purpose but the maximum would be hypothecation against growing crops or other chattels. Advances to landless laborers would be without collateral security. Security requirements for small farmers would also be as lenient as possible.

Security, other than physical collateral, will be enhanced by close supervision by the bank and pressures of the community or group. One objective of this model will be to test loan recovery under this area approach without major reliance upon physical security.

C. Selection of Borrowers

Borrowers will be selected largely on the basis of individual need, experience in carrying out the undertaking and the benefit that such a loan would have on the programmed economic development of the community.

Objectives of this pragmatic selection process will include identifying characteristics of specific beneficiaries and observing subsequent loan recovery experience.

D. Loan Application Procedures

A greatly simplified set of application forms will be developed with the assistance of the technical consultant. Much of the ground-work normally associated with investigating new applicants will have been done through the detailed social/economic survey of the village, and additional work will be minimized by the close proximity of the bank to its target population.

E. Loan Approval Authority

All loan approvals under this experimental program will be authorized at the bank branch, without reference to parent offices.

F. Venue and Staffing

Experiments will be conducted from existing branches located no more than one-half mile from target villages. One trained bank field officer will be posted at the branch with direct responsibility for implementation of the community development project. It is projected that he will be able to handle at least the initial loan volume for this first community model. Supplementary training would be given as required. Also an additional officer would be posted if the number of loans increased beyond the level initially projected.

G. Disbursement and Repayment

Loans will be disbursed both in cash and in kind. Cash disbursements will be directly administered under the active supervision of the field officer. Objectives will be to observe subsequent fund use, resultant changes in income and loan recovery.

H. Technical Advice/Supervision

A trained officer will be posted at the bank branch, about one-half mile from the village, to oversee implementation. He would establish close coordination and cooperation with the villager. Constant contact will be maintained during repayment to assure proper discipline. The officer will assist in preparing production plans and will be present when most inputs are acquired, assisting where necessary in their selection. It will constitute a medium to high level of technical assistance and supervision.

Objectives will include measurement of cost and the effectiveness of this form of assistance upon individual income, community development and loan recovery.

II. Savings Mobilization

It is assumed by Janata Bank that deposits by villagers will increase. The comprehensive planned community program is projected to increase income by at least 25%. The branch is readily accessible to the village. Instructions to the field officer will be to motivate villagers to increase their savings habits.

Increased interest rates for savings on an experimental basis would be offered on this or other experimental models for which higher lending rates were being charged.

III. Estimated Costs for First Year of Operation

Cost per loan for the bank based on an assumed average loan size of Tk 500 and an average nine month maturity have been tentatively estimated as follows:

		Time Required		Estimated
		Credit Staff	Clerical Staff	Cost
1.	Interviewing	15 min.		Tk 1.59
2.	Taking Application	20 min.		2.12
3.	Making Investigation	60 min.		6.35
4.	Approval	15 min.		1.59
5.	Loan Closing:			
	Agreement	20 min.	15 min.	2.84
	Booking		20 min.	.96
6.	Supervision	150 min.		15.87
7.	Collection		30 min.	1.44
8.	Archiving		10 min.	.48
9.	Stationery and Supplies			1.00
	Sub-Total	4.7 Hr.	1.3 Hr.	Tk 34.26
10.	Overhead (30% of 1 - 9)	-	-	10.28
11.	Cost of Funds @ 7% 1/	-	-	35.00
12.	Risk @ 5% of Loan Amount	-	-	25.00
	Total Cost			Tk 104.54

1/ Although savings deposits will be attracted at varying rates, most funds available for lending will come from other sources. Accordingly a relatively fixed overall cost of capital is assumed for purposes of this set of calculations.

13. Estimated loan profit (loss) at various interest rates for average loan size of Tk 500 for 9 months.

Interest	Profit (loss)	As Percent of Loan Amount (9 Mos.)
12%	(59.54)	(11.95%)
18%	(37.04)	(7.40%)
24%	(14.54)	(2.90%)
30%	7.96	1.59%
36%	30.46	6.09%

The above estimates assume a rate of Tk 13,200 per year for salary and prerequisites of the loan officer. A rate of Tk 6,000 per year was used for clerical staff. The level of performance could be somewhat lower, and costs per loan higher, if less experienced staff are used.

IV. Lending Targets

A. Number of Loans:

	No. of Units	Per Unit	Total
Year 1	5	200	1,000
2	10	300	3,000
3	15	400	6,000
Total		900	10,000

B. Estimated Amount:

Year 1	5	Tk 100,000	500,000
2	10	225,000	2,250,000
3	15	400,000	6,000,000
Total		725,000	8,750,000

Model : Small Farmer Service Center

Sponsor: Agrani Bank

I. General Summary

Agrani Bank will test a Small Farmer Service Center system for linking its extension of credit to small farmers with the provision of other essential agricultural inputs and services. Rural credit branches will be established at convenient locations initially in each of ten unions. This will be increased to 20 by the third year of project operations. To create the linkage with other agroservices the bank will encourage the formation of small private service groups which will provide inputs, marketing and storage facilities, and technical services to the bank's small farmer borrowers.

The bank will participate in selection of members of the service group, drawn to the extent possible from under or unemployed village talent; provide training; assist in arranging required licensing and leasing of a godown on or near bank premises; and make its banking and credit facilities available for deposits and financing of start-up and working capital.

Loans to and repayments by small farmers will be made in cash or kind, with the service group serving as the channel for in-kind disbursements and repayments.

II. Specific Characteristics

.. Interest

Testing of the model will be carried out under a range of interest rates. These will be 12%, 18%, 24% and 30% per annum. Only one rate will be charged at any given branch location, but all rates will be included in the model. Objectives, as with other models, will be to observe and compare effective performance at the various rate levels. A fundamental objective will be to identify some minimum rate at which loans will actually be made to the target group under this model, which is sufficient to cover all operating costs, risks, inflation and a reasonable profit.

B. Security

Crop hypothecation will be required, but not co-signers. Positive indication will be required that the borrower has rights to cultivate land. Existing practices of requiring some land ownership as evidence of such rights will be relaxed. Instead the personal observation and knowledge of a locally based bank officer will be considered as adequate indication. This will permit participation in the program by leaseholders and sharecroppers.

Objectives will include testing the effect of this level of physical security, along with technical guidance, upon loan recovery. Attempts will also be made to identify relationships between this reduced security requirement and the rate of interest borrowers are willing to pay.

C. Selection of Borrowers

Three major criteria will be applied in selection of a borrower. First will be his good reputation in his community. This will be determined largely by the locally based bank officer and supplemented by advice and guidance from the Union Chairman and the ward member. The second criterion will be the demonstrated and potential productive capacity of the applicant. Third, he must be engaged in cultivating one or more crops per year.

Once selected on the basis of the above criteria, the applicant may borrow either as an individual or as part of a group. The group variation may be tested as part of a separate model.

Objectives of this borrower selection process, in combination with the other specific characteristics of this model, will be to determine who will become the beneficiaries and the subsequent loan recovery experience.

D. Loan Application Procedures

Application forms will be simplified and investigatory requirements minimized by local level familiarities.

E. Loan Approval Authority

Approval authority for loans made under this project will reside at the union level branch, without reference to parent offices.

F. Venue and Staffing

Credit facilities would be available at the union level. Some seven villages would be served from each such location. Two variations would exist. In the first variation the bank loan officer would maintain an office within the building which houses the Small Farmer Service Center. Another model would provide for the credit officer being based in the branch office apart from the center. In either case the technical assistant and loan officer would travel into the villages from the union.

Objectives to be accomplished would include measurement of timely disbursement and the extent of small farmer acceptance of institutional credit when made available in direct proximity to other services.

Staffing of the Service Center will be distinct from bank staffing. However the bank will take a direct interest in their selection and training. The Service Center Group will be formed mainly from local unemployed who possess the capability to be trained. Each unit would have one individual who would be trained to provide technical assistance to the small farmer. Other staff would be trained in techniques of obtaining, storing and selling both inputs and outputs from the small farms, plus other services. Details have not generally been fixed. Especially pertinent will be the arrangement to be worked out for organizing, coordinating and managing the various activities of this initially inexperienced group.

Bank staff directly involved in the pilot model will consist of one credit officer and one clerk at each union location. The credit officer will be given special training in requirements and techniques related to carrying out the provisions of this model and in the yet to be defined responsibility in overseeing the Small Farmer Service Center.

G. <u>Disbursement and Repayment</u>

Disbursement and repayment may be in combinations of cash or kind. Operating in proximity with the Small Farmer Service Center will, however, provide an ideal arrangement for testing the relative effectiveness of these transactions in kind. Other objectives will include comparisons regarding fund use, income changes and loan recovery.

H. <u>Technical Advice/Supervision</u>

A medium level of technical assistance and loan supervision will be provided. This will come largely from this local "Small Farmer Service Center". One staff member will have knowledge of local conditions plus some special training. His supervision efforts will be supplemented by the locally based bank officer.

One objective will be to measure the effectiveness of this relatively low level and low cost supervision upon income and loan recovery.

I. <u>Savings Mobilization</u>

Expanded savings will be encouraged from small farmer borrowers. Toward this objective a range of deposit interest rates will be offered on an experimental basis.

These experimental rates will relate to the experimental rates charged on loans as follows:

Lending Rate	Savings Rate
12%	7%
18%	9%
24%	11%
30%	13%
36%	15%

Special savings promotional efforts will be carried out in connection with the marketing operations of the Service Center.

Increased savings will also be encouraged and publicized with reference to other elements of the rural population but not at the more favorable rate to be offered experimentally for small farmers.

Savings deposits will be accepted at any branch or Service Center location of the bank.

III. Estimated Costs for First Year of Operation

Costs of the Small Farmer Service Center will be accumulated separately from the credit function. The center will be operated as a commercial business undertaking. Trading income will be expected to cover operating costs. Credit will be extended by the bank for initial set-up and to meet periodic operating requirements.

Cost per loan for the bank in the first year of project operation based on an assumed average loan size of Tk 500 and an average 9 month maturity have been tentatively estimated as follows:

	Time require		Estimated
	Credit Staff	Clerical Staff	Cost
1. Interviewing	20 Min		Tk 2.12
2. Taking application	30 Min		3.17
3. Making investigation	90 Min		9.52
4. Approval	15 Min		1.59
5. Loan closing:			
Agreement	20 Min	20 Min	3.08
Booking		20 Min	.96
6. Supervision	90 Min		9.52
7. Collection		30 Min	1.44
8. Archiving		10 Min	.48
9. Stationery and Supplies			1.00
Sub-Total	4.4 Hr	1.3 Hr	32.88

	Time require: Credit Staff	Clerical Staff	Estimated Cost
10. Overhead (30% of 1-9)			9.86
11. Cost of funds @ 7%			26.25
12. Risk @ 5% of loan amount			25.00
Total Cost			Tk 93.99

13. Estimated loan profit (loss) at various rates for average loan size of Tk 500 for 9 months.

Interest	Profit(loss)	As percent of loan amount (9 months)	As percent of loan amount (12 months)
12%	(48.99)	(9.30%)	(13.07%)
18%	(26.49)	(5.30%)	(7.07%)
24%	(3.99)	(0.80%)	(1.07%)
30%	18.51	3.70%	4.93%
36%	41.08	8.20%	10.93%

IV. Targets

	No.of Units	Per Unit	All Units
A. Proposed Number of Loans			
Year 1	10	200	2000
2	15	250	3750
3	20	300	6000
Total		750	11750
B. Estimated Amount Loaned			
Year 1	10	Tk 100,000	Tk 1,000,000
2	15	187,500	2,812,500
3	20	300,000	6,000,000
Total		Tk 587,500	Tk 9,812,500

Model: Banker as Ombudsman

Sponsor: Pubali Bank

I. General Summary

In this experiment the Branch Lending Officer will serve not merely as a Credit Officer but also as a Referral Agent capable of arranging services from the local agricultural extension agent, rural health center, etc. Two principal objectives call for this role. First, by taking the initiative to assist borrowers in any possible way, the loan officer establishes a positive relationship with the borrower which can develop over time into bonds of loyalty and confidence, thereby increasing the prospects for repayment. Second, and more important, by arranging for needed services the loan officer will be assisting the borrower to succeed in this productive endeavors. Bonds of loyalty mean little if a farmer's crop has failed for want of pesticide.

II. Specific Characteristics

A. Interest

Interest rates will be tested at various rates between 12% and 36% per annum. Rebates of interest will be given for borrowers who repay their loans. For example, for loans fully repaid within five days of the due date, a cash rebate amounting to between one and ten percent of the amount of the loan (depending on the original interest rate on the loan) could be given. The amount of the rebate could be reduced by increments to zero for loans repaid up to 30 days after due date. For loans overdue by 30 days or more a penalty charge amounting to up to one percent per month might be levied in addition to the basic interest charge.

Use of branches with insufficient business and the need for further business development will be considered initially as a means of minimizing additional cash outlay.

B. Security

No physical security will be required. Reliance instead will be placed on the extent of loan supervision and basic characteristics of the borrower with respect to integrity and repayment habits.

Two variations will be tried regarding assets. One will require some evidence of owning something, be it land or other goods. The other would not have this requirement. In either case there would be no legal attachment on the assets.

C. Selection of Borrowers

Borrower selection would be based upon his reputation in the community, repayment practices and upon the purposes for which loans are needed. This would be determined by the branch manager who would be a local person familiar with the villagers. Borrowers could be either individuals or groups.

D. Loan Application Procedures

Forms and procedures will be simplified. Minimum time will be required in investigation and evaluation because of the branch manager's personal knowledge of people and borrowers in the community. A new borrower will be investigated in some detail but virtually no time would be required on repeat borrowers.

E. Loan Approval Authority

Investigation, evaluation and approval will all be by the branch manager. Time required specifically for approval would thus be at a minimum. A loan officer serving under the manager would be trained so as gradually to assume greater responsibility.

F. Venue and Staffing

Loan officers at the branches designated to participate in the experimental program will work within a two to three mile radius from the branch office. One additional loan officer will be assigned full time to the experimental program at each designated branch.

G. Disbursement and Repayment

Disbursement is proposed on the spot, timely and in cash. Collection will be scheduled within two or more months after harvest to permit sale or yield at the most favorable price. In addition some experimentation with collection in kind may be undertaken where storage facilities are available. Local publicity is proposed to make people bank-minded and to build up repayment discipline to assure a continuing supply of credit.

H. Technical Advice/Supervision

Regular contact with the borrower will be maintained through visits to the borrower. The banker will function in such visits as an ombudsman rather than as an agricultural or technical specialist. He should be prepared to provide on-the-spot financial advice, and to assist the borrower in obtaining needed services from the local agricultural extension agent, rural health center, thana training and development center and from other available government sources. The primary purpose served by the banker playing such a role is the protection of the bank's investment in the borrower.

I. Savings Mobilization

Pubali Bank has been carrying out special savings promotion campaigns, involving gifts and prizes such as pennants, caps, religious books and calendars. Such efforts will continue with project related borrowers as well. Also, higher savings rates will be offered on an experimental basis.

III. Estimated Costs for First Year of Operation

Cost per loan for the bank based on an estimated average size of Tk 750 (Tk 500-1000) and average maturity of 9 months (6-18 months range) are as follows:

		Time Required		Estimated
		Credit Staff	Clerical Staff	Cost
1.	Interviewing	5-10 Min.		Tk 0.48-0.96
2.	Taking application	20 Min.		1.92
3.	Making investigation	0.150 Min.		0 - 14.42
4.	Approval and disbursement	30 Min.		2.88
5.	Loan closing:			
	Agreement	15 Min		1.44
	Booking		25 Min	0.84
6.	Supervision	90 Min.		8.65
7.	Collection		15 Min.	0.50

		Time Required		Estimated
		Credit Staff	Clerical Staff	Cost
8.	Archiving		10 Min.	0.34
9.	Stationery and supplies	-	-	2.00
	Sub-Total	2.7 - 5.3 Hr.	0.6 Hr.	Tk 19.05 - 33.95
10.	Overhead @ 30% of 1-9	-	-	5.72 - 10.19
11.	Cost of funds @7% 1/	-	-	39.37
12.	Risk @ 10% of loan amount	-	-	75.00
	Total Cost			Tk 139.14 - 158.51

13. Estimated loan profit (loss) at various interest rates for average loan size of Tk 750 for 9 months:

Interest	Old Borrowers		New Borrowers	
Rate	Tk	%	Tk	%
12%	(71.64)	(9.55)	(91.01)	(12.13)
18	(37.89)	(5.05)	(57.26)	(7.63)
24	(4.14)	(0.55)	(23.51)	(3.13)
30	29.61	3.94	10.24	1.36
36	63.36	8.44	43.97	5.86

Note: The range in time and cost related to interviewing and investigation reflects differences between new borrowers and old borrowers.

1/ Although savings deposits will be attracted at varying rates, most funds available will come from other sources. Accordingly a relatively fixed overall cost of capital is assumed for purposes of these calculations.

IV. Lending Targets

A. Proposed number of loans

		No. of Units	Per Unit	All Units
Year	1	3	300	900
	2	6	350	2,100
	3	9	400	3,600
Total			1,050	6,600

B. Estimated Amount

		No. of Units	Per Unit	All Units
Year	1	3	Tk 225,000	Tk 675,000
	2	6	350,000	2,100,000
	3	9	400,000	3,600,000
Total			Tk 975,000	Tk 6,375,000

Model: Village Agent Model

Sponsor: Rupali Bank

I. General Summary

Rupali Bank intends to participate in the AID-supported experimental small farmer credit project at union or village level sites to be selected initially in Khulna, Tangail, and Noakhali districts. Additional sites will be added each project year. At each site the bank will attempt to bridge the gap between its branch and small farmers of the villages by commissioning a knowledgable and respected villager as its agent. Knowing and being known to the villagers, the agent will identify small farmers capable of utilizing and repaying loans, assist them in completing simplified applications, refer them to the Rupali branch for loan approval and disbursement, and see that repayments are made as scheduled.

II. Specific Characteristics

A. Interest Rates. A basic objective of the experimental program is to identify a lending system (model) which will reach large numbers of small, poor farmers yet (a) produce income to the lender sufficient to cover all risks and costs and (b) mobilize savings in amounts to make the system ultimately self-financing. Hence, a range of increased interest rates on loans and deposits will be tested, with a different rate for each set at each participating branch. Suggested rates are:

Branch	Loans (per month)	Deposits (per annum)
A	2%	11%
B	2-1/2%	13%
C	3%	15%

B. Security. Neither land mortgage nor deposit of title deed will be required. Major reliance will be placed on the village agent's personal knowledge and assessment of the borrower as credit-worthy. Either surety or crop hypothecation may be taken.

To encourage prompt and full repayment, incentives will be tested for effectiveness. These should include a promise to the borrower at the time of loan approval that when he repays the loan as scheduled he will receive one or a combination of the following:

- A rebate of a stated part of his interest payments.
- A deposit to his savings account.
- A prize or award.
- Eligibility for a larger second loan.
- Eligibility for a lower interest rate on a second loan.
- Others.

C. <u>Selection of Borrowers.</u> Selection will be made by the village agent who, using his own knowledge and sources of information, will determine that the borrower is of good character, that the loan will be repayable from increased income, and that collection when due will be possible. The agent's certification that these conditions are met will be accepted by the bank as sufficient basis for selection.

D. <u>Loan Application Procedures.</u> Simplified application forms specifically for use in the Village Agent model will be prepared and provided to the agent. After investigation and determination of the borrower's need he would with the borrower complete the necessary forms and affix his certification of creditworthiness. In normal operations he will accumulate, say, one week's applications; then accompany that group of borrowers to the branch bank and assist them in completion of procedures required for approval and disbursement of the loan. It is emphasized that procedures should be streamlined to permit borrowers to make the trip and receive approval and disbursement of their loans in one day. An alternative method, after the agent has accumulated a group of applications, would be for the loan officer to come to the village to complete processing and approval procedures.

E. <u>Loan Approval Authority.</u> Loan approvals will be made by existing branch loan personnel. While recommendations may be given by the Village Agents, final loan approval must reside with the Bank.

F. Venue and Staffing. In each village selected for participation the bank will identify and appoint a responsible villager as its agent. He will be directly responsible to the area's branch bank manager for promotion and operation of the bank's small farmer loan and savings mobilization programs in his village. His responsibilities will include selection of borrowers, completion of application procedures and collection of repayments. He will not have loan sanctioning authority which will remain vested with the branch manager or designated loan officers of the branch.

The agent will be an employee of the bank. Compensation will be a guaranteed base salary plus an incentive fee or commission on each loan fully recovered on schedule. His total income should be high enough to discourage acceptance of bribes, and a condition of his employment will be immediate termination upon evidence of unscrupulous practices. A base salary of Tk 100 per month is suggested, plus a commission of 3% of each loan fully repaid on schedule, up to a maximum of Tk 15 per loan.

G. Disbursement and Repayment. Disbursement may be either in cash or in kind, utilizing a supplier coupon system in the case of fertilizers or other inputs. Repayments would be in cash through the agent to the branch bank. Borrowers will be encouraged to repay portions of their loan balances as and when they can. To emphasize this, interest on the unpaid balance will be computed and charged monthly. Thus it will be to the borrower's advantage to repay at least some amount at regular intervals in order to minimize interest charges.

H. Technical Assistance/Supervision. No formal technical assistance program will be implemented. Supervision will be intense, through the regular scrutiny by the village agent of the borrower and his operations.

I. Savings Mobilization. On his first visit to the branch a savings account will be opened for the borrower. A responsibility of the village agent will be to encourage deposit of surplus funds. Additionally, incentive schemes including prizes, gifts, and lotteries may be tested.

III. Estimated Costs For First Year of Operation

Cost per loan for the bank based on an assumed initial average loan size of Tk 500, an average maturity of 9 months, and an annual volume of 400 loans per village agent are tentatively estimated below. These averages are expected to rise so that during the third year of operation each village agent will be responsible for 600 loans of an average size of Tk 1,000. Costs per loan at this level of activity will be estimated after the initial year of operation.

Estimated Cost, First Year of Operation

			Estimated Cost
A. Village Agent	(Interviewing, investigation, assisting in application process, supervision and collection)		
	1. Salary (Tk 1,200/400)		3.00
	2. Commission (Tk 500 x 3%)		15.00
		Sub-Total	18.00

B. Branch Bank	Time Required (Minutes)		Estimated Cost
	Credit Staff	Clerical Staff	
1. Interviewing	10		1.06
2. Reviewing application	15		1.59
3. Confirming agent's certification	20		2.12
4. Approval	15		1.59
5. Loan closing:			
Agreement	20	20	3.08
Booking		20	.96
6. Supervision	20		2.12
7. Collection		30	1.44
8. Archiving		10	.48
9. Supplies			1.00
10. Sub-Total			15.44
11. Overhead (30% x Al and B10)			5.53
12. Cost of funds @ 7%			35.00
13. Risk @ 5% of loan amount			25.00
Total Cost			98.97

14. Estimated loan profit (loss) at various interest rates for average loan size of Tk 500 for nine months, assuming a declining unpaid balance with full repayment at the end of nine months 1/

Interest (Monthly)	Profit (Loss)	As percent of loan amount 1/ (9 months)
2%	(35.97)	(10.27%)
2.5%	(20.22)	(5.77%)
3%	(4.47)	(1.27)

IV. Lending Targets

Lending Targets		No. of Units	Per Unit	All Units
A. Number of loans				
Year	1	3	400	1,200
	2	6	500	3,000
	3	9	600	5,400
Total			1,500	7,800
B. Estimated Amount (Tk)				
Year	1		200,000	600,000
	2		375,000	2,250,000
	3		600,000	5,400,000
Total:			1,175,000	8,250,000

1/ It is assumed that a portion of each loan will be repaid after each harvest occurring during the nine-month period of the loan. All figures in this analysis are therefore computed using an average unpaid balance for the entire nine month term of Tk 350 i.e., 70 percent of the initial loan amount.

Model : Village Level Group Lending

Sponsor: Uttara Bank

I. General Summary

Uttara Bank has developed and placed in limited operation a small farmer group lending program in one village, Kundalbagh, in Yearpur Union. Operated out of Uttara's Savar Branch, the program extends loans to individual members of voluntarily-formed groups, with each loan jointly and severally guaranteed by the other members. A five-member group is specified, to be comprised of landless cultivators as well as land owners, and interest rebates are offered as an incentive to schedule repayment.

Participation in the AID-supported project will permit the bank to expand the Kundalbagh village program, and test a series of variations of this model in three additional branches the first year, four more the second year and an additional four the third year, for a total of twelve.

II. Specific Characteristics

A. Interest

In the present Kundalbagh program the base lending rate is 15% with a 5% rebate upon full repayment on schedule. This schedule will be continued but higher lending rates, linked with higher incentive rebate rates, will be offered at each of the additional sites.

B. Security

Sharecroppers and laborers are eligible under the present program only if they are members of a group including landowners. Individual guarantees are required by all members, plus landowners' mortgage or deposit of the deed. This system would continue at Kundalbagh. However, with higher interest rates available to cover higher (presumed) risks, eligibility and security requirements at the other sites would be liberalized. Land mortgage or deposit of title deeds would not be required; individual guarantees and crop hypothecation would constitute acceptable security. At sites charging base lending rates of in excess of 30 percent landowner representation in the group would not be required.

In addition to rebates of interest for scheduled repayment, borrowers' eligibility for subsequent loans will be conditioned on full repayment. Such borrowers may also be offered lower rates or higher borrowing limits on future loans.

C. Selection of Borrowers

All individual borrowers would have to be accepted into five-member lending groups as described in B. above.

D. Loan Application Procedures

The branch loan officer (carrying the Uttara title of Accountant) will visit the village to take and assist in preparation of group loan applications and conduct investigations required to verify the credit-worthiness of the applicants. In his analysis he will (a) establish that the group members are bonafide small farmers of good reputation in the village; then (b) look primarily to the questions of whether the use of the loan proceeds will be profitable to the farmer and the loan repayable from income. With these criteria satisfied he will recommend the loans to the branch manager for sanction.

E. Loan Approval Authority

All necessary approval authority for individual loans would reside within the branch.

F. Venue and Staffing

Existing branches will each organize village-level borrower groups from among nearby villages. Existing branch personnel will be used during the experimental project.

G. Disbursement and Repayment

Disbursements will be made at the branch both in cash and kind; the latter through BADC seed and fertilizer dealers. Collections will be in cash, with interest rebates for full scheduled repayments deposited to the borrower's savings account.

H. Technical Assistance/Supervision

No structured technical assistance will be offered. However, frequent supervision visits will be made, mostly in conjunction with visits to take applications. Brief inspection reports describing the borrower's activities, crop being cultivated, if any, unusual signs of financial distress, major new purchases, and the like will be completed at each visit and become a part of the group's loan file.

I. Savings Mobilization

A savings account will be opened for each borrower at the time of loan approval and incentives offered to encourage its use. Prime among these will be a range of higher savings interest rates to participating borrowers.

Branches lending at net (of rebate) rates of 18, 22 and 26% would respectively offer saving rates of 9, 11 and 13%. Interest rebates on borrowings would also be deposited to their accounts.

III. Estimated Costs for First Year of Operation

A. Seasonal Production Loan

The total cost per loan is estimated below for an assumed loan of Tk 500 on the following terms:

- One post-harvest installment payment of Tk 200 at end of six months.

- Final payment of Tk 300 balance at end of twelfth month.

		Time Required (Minutes)		Estimated
		Credit Staff	Clerical Staff	Cost
1.	Interviewing	20		Tk 2.12
2.	Taking application	30		3.17
3.	Investigation	60		6.35
4.	Group report and recommendation	20	20	3.08
5.	Sanctioning	15		1.59
6.	Loan closing: Agreement	20	20	3.08

		Time Required (Minutes) Credit Staff	Clerical Staff		Estimated Cost
	Booking		20	Tk	.96
7.	Supervision	150			15.87
8.	Collection		60		2.88
9.	Archiving		20		.96
10.	Supplies				2.00
	Sub-Total	5.25 Hr.	2.33 Hr		42.06
11.	Overhead (30% of 1-10)				12.62
12.	Cost of funds @ 7%				28.00
13.	Risk @ 5% of loan amount				20.00
	Total Cost			Tk	107.68

14. Estimated loan profit (loss) at various interest rates (net of rebates) for average loan size of Tk 500 for 12 months, assuming payment of Tk 200 after six months and balance after 12 months 1/

Net Interest	Profit (loss)	As Percent of Loan Amount 1/ (12 months).
10%	(67.68)	(16.92%)
14%	(51.68)	(12.92%)
18%	(35.68)	(8.92%)
22%	(19.68)	(4.92%)
26%	(3.68)	(0.92%)
30%	12.32	3.08%
34%	28.32	7.08%

1/ Interest accrued on a balance declining according to this schedule is the same as for an average unpaid balance throughout the period of the loan of Tk 400. Thus all figures are computed on the basis of an average unpaid balance of Tk 400.

B. Combined Production and Capital Loan

Terms and conditions assumed are:

1. Principal amount: Tk 1,200
2. Purpose: Production inputs and consumption (Tk 500)

   Capital, e.g., bullock, (Tk 700)
3. Term (maturity): 2 years
4. Installment repayments of Tk 300 each at end of 6th, 12th, 18th and 24th months.

		Time Required (Minutes)		Estimated
		Credit Staff	Clerical Staff	Cost
1.	Interviewing	30		Tk 3.17
2.	Taking application	40		4.24
3.	Investigation	80		8.47
4.	Group report and recommendation	20	20	3.08
5.	Sanctioning	15		1.59
6.	Loan closing: Agreement	20	20	3.08
	Booking		20	.96
7.	Supervision	180		19.05
8.	Collection		120	5.76
9.	Archiving		20	.96
10.	Supplies			2.00
	Sub-Total			52.36
11.	Overhead (30% of 1-10) x 2			31.42
12.	Cost of funds @ 7%			105.00
13.	Risk @ 5% of loan amount x 2			120.00
	Total Cost			308.78

(Cost per year - Tk 154.39)

14. Estimated loan profit (loss) at various interest rates (net of rebate) for 24 average loan size of the Tk 1,200 for 24 months, assuming payments of Tk 300 each at end of 6th, 12th, 18th and 24th months.

Net Interest Per Annum	Profit (loss)	As Percent of Loan Amount [1/] (12 months)
10%	(79.39)	(10.58%)
14%	(49.39)	(6.58%)
18%	(19.39)	(2.58%)
22%	10.61	1.41%
26%	40.61	5.41%
30%	70.61	9.41%
34%	100.61	13.41%

IV. Targets

A. Proposed Number of Loans

Year	No. of Units	Per Unit	Total
1	4	300	1200
2	8	350	2800
3	12	400	4800
Total			8800

B. Estimated Amount

Year	No. of Units	Per Unit	Total
1	4	255,000	1,020,000
2	8	350,000	2,800,000
3	12	400,000	4,800,000
Total			8,620,000

1/ Interest accrued on a balance declining according to this schedule is the same as for an average unpaid balance throughout the period of the loan of Tk 750. Thus all figures are computed on the basis of an average unpaid balance of Tk 750.

Model : Cooperatives for Landless, Sharecroppers, Women.

Sponsors: Integrated Rural Development Program (IRDP and Jatiya Samabaya Bank (JSB)

I. General Summary:

Both IRDP and JSB will experiment with cooperative credit models with special emphasis on target group borrowers. Cooperatives will be accessible to rural landless, sharecroppers, and artisans and prospective enterpreneurs of both sexes. Credit will be available for cooperative members for any productive purpose. Some examples are:

- Purchase and rehabilitation of derelict tanks to establish commercial fisheries, sources of irrigation water, etc.;
- Rental of godowns and purchase of paddy from farmers at low harvest prices for drying, processing and resale when prices are higher. The profits from such a scheme could be split between farmers and the cooperative purchasers;
- Rice processing, goat or poultry raising or other enterprises in which rural Bengali women specialize.

IRDP and JSB will each sponsor a total of 20 cooperatives under this experimental project by the end of the project, beginning with ten each the first year and 15 the second.

II. Specific Characteristics

A. Interest

Interest rates ranging between 12 percent and 36 percent per annum will be tested, along with rebate incentives for timely repayment.

B. Security

Principal form of security for cooperative loans is ownership by borrowers of shares of the cooperative. This serves two functions. First, some amount of a borrower's assets remain under the control of the cooperative. Second, and more important, all cooperative members come to feel their own resources are being lent to fellow cooperative members. A default injures not only the credit institution but also every member. The result is spontaneous local social sanctions to reinforce and encourage good repayment performance.

C. Selection of Borrowers

All cooperative members will be eligible for loans. Membership will be limited as per the terms of individual cooperative charters. Sample copies are attached.

D. Loan Application Procedures

Applications for loans will be considered both from individual cooperative members or from groups of such members. Because cooperatives are village based, local familiarities will minimize the need for formalities.

E. Loan Approval Authority

The loan committee of each cooperative will have full authority over the investments into which cooperative resources can be put.

F. Venue and Staffing

All cooperatives will be village based. Between one and five villages will be served by individual cooperatives. Loan committee personnel are normally elected by the cooperative membership and serve on a part-time basis without pay. No additional staff resources are contemplated.

G. Disbursement and Repayment

All credit will be in cash, as will all repayments.

H. Technical Advice/Supervision

Aside from informal advice, no systematic supervision of borrowers is planned.

I. Savings Mobilization

While cooperatives will have access through IRDP and JSB to institutional credit for relending, a principal objective will be to maximize the mobilization of rural capital through attractive dividend rates on outstanding shares. Rates ranging between 7 and 15 percent will be tested.

III. Estimated Costs for First Year of Operations

Assuming an average loan size of Tk 500 and an average 9 month maturity, costs per loan are estimated as follows:

Direct Costs:

Loan processing	Tk 40.00
Cost of funds @ 10%	50.00
Risk, at 5% of loan amount	25.00
Total Cost	115.00

Estimated loan profit(loss) at various interest rates for average loan size of Tk 500 for 9 months.

Interest	Profit(Loss)	As percent of Loan Amount
12%	(70.00)	(14.00%)
18%	(47.50)	(9.50%)
24%	(25.00)	(5.00%)
30%	(2.50)	(0.50%)
36%	20.00	4.00%

IV. Lending Targets

A. Proposed number of loans:

Year	No. of Units	Per Unit	All Units
1	20	50	1,000
2	30	50	1,500
3	40	50	2,000
Total		150	4,500

B. Estimated Amount:

1	20	25,000	500,000
2	30	37,500	1,125,000
3	40	50,000	2,000,000
Total		112,500	3,625,000

Analysis of Borga Farmer's Costs and Returns for Various Crops using Institutional and Noninstitutional Credit

Separate analyses are presented in this annex for each of the following crops.

HYV Boro
HYV Aman and Aus
Local Aman and Boro
Local Aus
Irrigated and Non-irrigated wheat
Jute

The analyses for HYV rice and wheat are done both with recommended dosages and resultant yields as well as with prevalent average dosages and resultant yields. Also, because there is some evidence that many Borga Farmers growing HYV crops are able to share input costs with their landowners, separate analyses are presented for full cost and shared cost inputs as well.

In each analysis, a sharecropper (Borga) farmer cultivating one bigha (one-third acre) is assumed. Such a cultivator may be considered to be the "worst case"; if positive net returns are shown for a one-bigha borga farmer, the returns would almost certainly be even better for any other cultivator.

Figures are shown given six different prices for each crop and seven interest rates, ranging from 12 to 100 percent. The findings presented below are summarized in Part III. B. 1.

Annex B.5 Analyses

B.5.1 : HYV Boro; Input Costs Shared with Landowner; Recommended Dosages

B.5.2 : HYV Boro; Farmer Pays Input Costs; Recommended Dosages

B.5.3 : HYV Boro; Input Costs Shared; Prevalent Dosages

B.5.4 : HYV Boro; Farmer Pays Input Costs; Prevalent Dosages

B.5.5 : HYV Aman/Aus; Input Costs Shared; Recommended Dosages

B.5.6 : HYV Aman/Aus; Farmer Pays Input Costs; Recommended Dosages

B.5.7 : HYV Aman/Aus; Input Costs Shared; Prevalent Dosages

B.5.8 : HYV Aman/Aus; Farmer Pays Input Costs, Prevalent Dosages

B.5.9 : Irrigated Wheat; Input Costs Shared; Recommended Dosages

B.5.10 : Irrigated Wheat; Farmer Pays Input Costs; Recommended Dosages

B.5.11 : Irrigated Wheat; Input Costs Shared; Prevalent Dosages

B.5.12 : Irrigated Wheat; Farmer Pays Input Costs; Prevalent Dosages

B.5.13 : Local Aman/Boro; Farmer Pays Input Costs; Recommended Dosages

B.5.14 : Local Aus; Farmer Pays Input Costs; Recommended Dosages

B.5.15 : Non-Irrigated Wheat; Farmer Pays Input Costs; Recommended Dosages

B.5.16 : Jute; Farmer Pays Input Costs; Recommended Dosages

Costs and Returns for One Bigha Borga Farmer Cultivating
HYV Boro
Input Costs Shared with Landowner
Recommended Dosages

1. Assumptions:

a. One half of crop yield goes to landowner.

b. One half of remaining yield is consumed; the remaining half is sold for income.

c. Half of the total cost of inputs is borne by the landowner.

d. The farmer must borrow to cover all of his out-of-pocket production costs.

e. Seedlings will be grown by the farmer himself.

f. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

i. Yield is 51.0 maunds (4200 lbs) per acre (17 mds per bigha).

HYV Boro
Input Costs Shared
Recommended Dosages

2. Farmer's Out-Of-Pocket Costs:

a. Seed		
1/2 x 4 seers/bigha x Tk 4.00/sr		8.00
b. Fertilizer		
Urea 27 seers x Tk 1.50 =	40.50	
TSP 27 seers x Tk 1.20 =	32.50	
MP 13 seers x Tk 1.00 =	13.00	
	Tk 86.00	
1/2 of total fertilizer cost		43.00
c. Pesticides		
1/2 of total cost		10.00
d. Transplanting		28.00
e. Irrigation		
1/2 of total cost		75.00
f. Plowing		-
g. Harvesting		28.00
h. Threshing		14.00
i. Total out of pocket expenses		206.00

3. Yield available for sale for income:

a. Gross yield (mds)	17.00
b. Less landlord's share	8.50
c. Net yield to the borgadar	8.50
d. Less consumption	4.25
e. Available crop for sale	4.25

4. <u>Summary of costs and returns at various loan interest rates and output prices:</u>

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	206	206	206	206	206	206	206
b. Interest, 6 months	12	19	25	31	37	52	103
c. Total to be paid	218	225	231	237	243	258	309
d. Income from sale of available crop (4.25 mds)							
1. At Tk 50/md	213	213	213	213	213	213	213
2. At Tk 60/md	255	255	255	255	255	255	255
3. At Tk 70/md	298	298	298	298	298	298	298
4. At Tk 80/md	340	340	340	340	340	340	340
5. At Tk 90/md	383	383	383	383	383	383	383
6. At Tk 100/md	425	425	425	425	425	425	425
e. Profit/(Deficit) after loan payment (c minus d)							
1. Paddy: Tk 50/md	(5)	(12)	(18)	(24)	(30)	(45)	(96)
2. Paddy: Tk 60/md	37	30	24	18	12	(3)	(54)
3. Paddy: Tk 70/md	80	73	67	61	55	40	(11)
4. Paddy: Tk 80/md	122	115	109	103	97	82	31
5. Paddy: Tk 90/md	165	158	152	146	140	125	74
6. Paddy: Tk100/md	207	200	194	188	182	167	116

Costs and Returns for One Bigha Borga Farmer Cultivating
HYV Boro
All Input Costs Paid by Farmer
Recommended Dosages

1. <u>Assumptions:</u>

a. One half of crop yield goes to landowner.

b. One half [illegible] aining yield is consumed; the remaining half is sold for income.

c. The total cost of all inputs is borne by the Borga Farmer.

d. The farmer must borrow to cover all of his out-of-pocket production costs.

e. Seedlings will be grown by the farmer himself.

f. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

i. Yield is 51.0 maunds (4200 lbs) per acre (17 mds per bigha).

2. Farmer's Out-of-Pocket Costs:

a. Seed		
4 seers/bigha x Tk 4.00/sr		16.00
b. Fertilizer		
Urea 27 seers x Tk 1.50 =	40.50	
TSP 27 seers x Tk 1.20 =	32.50	
MP 13 seers x Tk 1.00 =	13.00	
Total fertilizer cost		86.00
c. Pesticides		20.00
d. Transplanting		28.00
e. Irrigation		150.00
f. Plowing		-
g. Harvesting		28.00
h. Threshing		14.00
i. Total out of pocket expenses		342.00

3. Yield available for sale for income:

a. Gross yield (mds)	17.00
b. Less landlord's share	8.50
c. Net yield to the borgadar	8.50
d. Less consumption	4.25
e. Available crop for sale	4.25

4. Summary of costs and returns at various loan interest rates and output prices:

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	342	342	342	342	342	342	342
b. Interest, 6 months	21	31	41	51	62	86	171
c. Total to be paid	363	373	383	393	404	428	513
d. Income from sale of available crop (4.25 mds)							
1. At Tk 50/md	213	213	213	213	213	213	213
2. At Tk 60/md	255	255	255	255	255	255	255
3. At Tk 70/md	298	298	298	298	298	298	298
4. At Tk 80/md	340	340	340	340	340	340	340
5. At Tk 90/md	383	383	383	383	383	383	383
6. At Tk 100/md	425	425	425	425	425	425	425
e. Profit/(Deficit) after loan payment (c minus d)							
1. Paddy: Tk 50/md	(150)	(160)	(170)	(180)	(191)	(215)	(300)
2. Paddy: Tk 60/md	(108)	(118)	(128)	(138)	(149)	(173)	(258)
3. Paddy: Tk 70/md	(65)	(75)	(85)	(95)	(106)	(130)	(215)
4. Paddy: Tk 80/md	(23)	(33)	(43)	(53)	(64)	(88)	(173)
5. Paddy: Tk 90/md	20	10	-	(10)	(21)	(45)	(130)
6. Paddy: Tk100/md	62	52	42	32	21	(3)	(88)

Costs and Returns for One Bigha Borga Farmer Cultivating HYV Boro
Input Costs Shared with Landowner
Prevalent Average Dosages

1. <u>Assumptions:</u>

a. One half of crop yield goes to landowner.

b. One half of remaining yield is consumed; the remaining half is sold for income.

c. Half of the total cost of inputs is borne by the landowner.

d. The farmer must borrow to cover all of his out-of-pocket production costs.

e. Seedlings will be grown by the farmer himself.

f. Fertilizer will be available at government fixed price and farmer will use half of the recommended dosages for urea and slightly lower than the half of the recommended dosage for TSP and MP.

g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

i. Yield is 45 maunds (3700 lbs) of paddy per acre (15 maunds per bigha).

2. Farmer's Out-Of-Pocket Costs:

a. Seed			
1/2 x 4 seers/bigha x Tk 4.00/sr			8.00
b. Fertilizer			
Urea	13.50 seers x 1.50 =	20.25	
TSP	10.00 seers x 1.20 =	12.00	
MP	5.00 seers x 1.00 =	5.00	
		37.25	
1/2 of total fertilizer cost			18.62
c. Pesticides 1/2 of total cost			10.00
d. Transplanting			28.00
e. Irrigation 1/2 of total cost			75.00
f. Plowing			-
g. Harvesting			14.00
h. Threshing			14.00
i. Total out of pocket expenses			167.62

3. Yield available for sale for income:

a. Gross yield (mds)	15.00
b. Less landlord's share	7.50
c. Net yield to the borgadar	7.50
d. Less consumption	3.75
e. Available crop for sale	3.75

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4. Summary of costs and returns at various loan interest rates and output prices:

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	168	168	168	168	168	168	168
b. Interest, 6 months	10	15	20	25	30	42	84
c. Total to be paid	178	183	188	193	198	210	252
d. Income from sale of available crop (4.25 mds)							
1. At Tk 50/md	188	188	188	188	188	188	188
2. At Tk 60/md	225	225	225	225	225	225	225
3. At Tk 70/md	263	263	263	263	263	263	263
4. At Tk 80/md	300	300	300	300	300	300	300
5. At Tk 90/md	338	338	338	338	338	338	338
6. At Tk 100/md	375	375	375	375	375	375	375
e. Profit/(Deficit) after loan payment (c minus d)							
1. Paddy: Tk 50/md	10	5	-	(5)	(10)	(22)	(64)
2. Paddy: Tk 60/md	47	42	37	32	27	15	(27)
3. Paddy: Tk 70/md	85	80	75	70	65	53	11
4. Paddy: Tk 80/md	122	117	112	107	102	90	48
5. Paddy: Tk 90/md	160	155	150	145	140	128	86
6. Paddy: Tk 100/md	197	192	187	182	177	165	123

Prevailing Costs and Returns for One Bigha Borga Farmer Cultivating
HYV Boro
All Input Costs Paid by Farmer
Prevalent Average Dosages

1. Assumptions:

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. The total cost of all inputs is borne by the borga farmer.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Seedlings will be grown by the farmer himself.

   f. Fertilizer will be available at government fixed price and farmer will use half of the recommended dosages for urea and slightly lower than the half of the recommended dosage for TSP and MP.

   g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

   i. Yield is 45 maunds (3700 lbs) of paddy per acre (15 maunds per bigha).

2. Farmer's Out-Of-Pocket Costs:

a. Seed		
4 seers/bigha x Tk 4.00/sr		16.00
b. Fertilizer		
Urea 13.50 seers x 1.50 =	20.25	
TSP 10.00 seers x 1.20 =	12.00	
MP 5.00 seers x 1.00 =	5.00	
Total fertilizer cost		37.25
c. Pesticides		20.00
d. Transplanting		28.00
e. Irrigation		150.00
f. Plowing		-
g. Harvesting		14.00
h. Threshing		14.00
i. Total out of pocket expenses		279.25

3. Yield available for sale for income:

a. Gross yield (mds)	15.00
b. Less landlord's share	7.50
c. Net yield to the borgadar	7.50
d. Less consumption	3.75
e. Available crop for sale	3.75

4. Summary of costs and returns at various loan interest rates and output prices:

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	279	279	279	279	279	279	279
b. Interest, 6 months	17	25	33	42	50	70	140
c. Total to be paid	296	304	312	321	329	349	419
d. Income from sale of available crop (3.75 mds)							
1. At Tk 50/md	188	188	188	188	188	188	188
2. At Tk 60/md	225	225	225	225	225	225	225
3. At Tk 70/md	263	263	263	263	263	263	263
4. At Tk 80/md	300	300	300	300	300	300	300
5. At Tk 90/md	338	338	338	338	338	338	338
6. At Tk 100/md	375	375	375	375	375	375	375
e. Profit/(Deficit) after loan payment (c minus d value)							
1. Paddy: Tk 50/md	(108)	(116)	(124)	(133)	(141)	(161)	(231)
2. Paddy: Tk 60/md	(71)	(79)	(87)	(96)	(104)	(124)	(194)
3. Paddy: Tk 70/md	(33)	(41)	(49)	(58)	(66)	(86)	(156)
4. Paddy: Tk 80/md	4	(4)	(12)	(21)	(29)	(49)	(119)
5. Paddy: Tk 90/md	42	34	26	17	9	(11)	(81)
6. Paddy: Tk 100/md	79	71	63	54	46	26	(44)

Costs and Returns for One Bigha Borga Farmer Cultivating
HYV Aman or Aus
Input Costs Shared with Landowner
Recommended Dosages

1. Assumptions:

a. One half of crop yield goes to landowner.

b. One half of remaining yield is consumed; the remaining half is sold for income.

c. Half of the total cost of inputs is borne by the landowner.

d. The farmer must borrow to cover all of his out-of-pocket production costs.

e. Seedlings will be grown by the farmer himself.

f. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

i. Yield is 39.0 maunds (3200 lbs) per acre (13 mds per bigha).

2. Farmer's Out-Of-Pocket Costs:

a. Seed		
1/2 x 4 seers/bigha x Tk 4.00/sr		8.00
b. Fertilizer		
Urea 27 srs x Tk 1.50 =	40.50	
TSP 27 srs x Tk 1.20 =	32.50	
MP 13 srs x Tk 1.00 =	13.00	
	Tk 86.00	
1/2 of total fertilizer cost		43.00
c. Pesticide		
1/2 of total cost		10.00
d. Transplanting		28.00
e. Plowing		-
f. Harvesting		14.00
g. Threshing		14.00
h. Total out of pocket expenses		117.00

3. Yield available for sale for income:

a. Gross yield (mds)	13.00
b. Less landlord's share	6.50
c. Net yield	6.50
d. Less consumption	3.25
e. Crop available for sale	3.25

4. Summary of costs and returns at various loan interest rates and output prices:

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	117	117	117	117	117	117	117
b. Interest, 6 months	7	11	14	18	21	30	59
c. Total to be paid	124	128	131	135	138	147	176
d. Income from sale of available crop (3.25 mds)							
1. At Tk 50/md	163	163	163	163	163	163	163
2. At Tk 60/md	195	195	195	195	195	195	195
3. At Tk 70/md	228	228	228	228	228	228	228
4. At Tk 80/md	260	260	260	260	260	260	260
5. At Tk 90/md	293	293	293	293	293	293	293
6. At Tk 100/md	325	325	325	325	325	325	325
e. Profit/(Deficit) after loan payment (c minus d value)							
1. Paddy: Tk 50/md	39	35	32	28	25	16	(13)
2. Paddy: Tk 60/md	71	67	64	60	57	48	19
3. Paddy: Tk 70/md	104	100	97	93	90	81	52
4. Paddy: Tk 80/md	136	132	129	125	122	113	84
5. Paddy: Tk 90/md	169	165	162	158	155	146	117
6. Paddy: Tk 100/md	201	197	194	190	187	178	149

Costs and Returns for One Bigha Borga Farmer Cultivating HYV Aman or Aus All Input Costs Paid by Farmer Recommended Dosages

1. Assumptions:

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. The total cost of all inputs is borne by the borga farmer.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Seedlings will be grown by the farmer himself.

   f. Fertilizer will be available at government fixed prices, and farmer will use recommended dosages.

   g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

   i. Yield is 39.0 maunds (3200 lbs) per acre (13 mds per bigha).

2. Farmer's Out-Of-Pocket Costs:

a. Seed		
4 seers/bigha x Tk 4.00/sr		16.00
b. Fertilizer		
Urea 27 srs x Tk 1.50 =	40.50	
TSP 27 srs x Tk 1.20 =	32.50	
MP 13 srs x Tk 1.00 =	13.00	
Total fertilizer cost		86.00
c. Pesticide		20.00
d. Transplanting		28.00
e. Plowing		-
f. Harvesting		14.00
g. Threshing		14.00
h. Total out of pocket expenses		178.00

3. Yield available for sale for income:

a. Gross yield (mds)	13.00
b. Less landlord's share	6.50
c. Net yield	6.50
d. Less consumption	3.25
e. Crop available for sale	3.25

4. Summary of costs and returns at various loan interest rates and output prices:

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	178	178	178	178	178	178	178
b. Interest, 6 months	11	16	21	27	32	45	89
c. Total to be paid	189	194	199	205	210	223	267
d. Income from sale of available crop (3.25 mds)							
1. At Tk 50/md	163	163	163	163	163	163	163
2. At Tk 60/md	195	195	195	195	195	195	195
3. At Tk 70/md	228	228	228	228	228	228	228
4. At Tk 80/md	260	260	260	260	260	260	260
5. At Tk 90/md	293	293	293	293	293	293	293
6. At Tk 100/md	325	325	325	325	325	325	325
e. Profit/(Deficit) after loan payment (c minus d value)							
1. Paddy: Tk 50/md	(26)	(31)	(36)	(42)	(47)	(60)	(104)
2. Paddy: Tk 60/md	6	1	(4)	(10)	(15)	(28)	(72)
3. Paddy: Tk 70/md	36	34	29	23	18	5	(39)
4. Paddy: Tk 80/md	71	66	61	55	50	37	(7)
5. Paddy: Tk 90/md	104	99	94	88	83	70	26
6. Paddy: Tk 100/md	136	131	126	120	115	102	58

Costs and Returns for One Bigha Borga Farmer Cultivating HYV Aman or Aus
Input Costs Shared with Landowner
Prevalent Average Dosages

1. Assumptions:

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. Half of the total cost of inputs is borne by the landowner.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Seedlings will be grown by the farmer himself.

   f. Fertilizer will be available at government fixed prices, and farmer will use half of the recommended doses for urea and slightly lower than half of the recommended dosage for TSP and MP.

   g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

   i. Yield is 36.0 maunds (2960 lbs) of paddy per acre (12 mds per bigha).

2. Farmer's Out-Of-Pocket Costs:

a. Seed		
1/2 x 4 seers/bigha x Tk 4.00/sr		8.00
b. Fertilizer		
Urea 13.5 srs x Tk 1.50 =	20.25	
TSP 10 seers x Tk 1.20 =	12.00	
MP 5 seers x Tk 1.00 =	5.00	
	Tk 37.25	
1/2 of total fertilizer cost		18.62
c. Pesticide		
1/2 of total cost		10.00
d. Transplanting		28.00
e. Plowing		-
f. Harvesting		14.00
g. Threshing		14.00
h. Total out of pocket expenses		92.62

3. Yield available for sale for income:

a. Gross yield (mds)	12.00
b. Less landlord's share	6.00
c. Net yield	6.00
d. Less consumption	3.00
e. Crop available for sale	3.00

4. Summary of Costs and Returns at various loan interest rates and output prices:

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	93	93	93	93	93	93	93
b. Interest, 6 months	6	8	11	14	17	23	47
c. Total to be paid	99	101	104	107	110	116	140
d. Income from sale of available crop (3.00 mds)							
1. At Tk 50/md	150	150	150	150	150	150	150
2. At Tk 60/md	180	180	180	180	180	180	180
3. At Tk 70/md	210	210	210	210	210	210	210
4. At Tk 80/md	240	240	240	240	240	240	240
5. At Tk 90/md	270	270	270	270	270	270	270
6. At Tk 100/md	300	300	300	300	300	300	300
e. Profit/(Deficit) after loan payment (c minus d)							
1. Paddy: Tk 50/md	51	49	46	43	40	34	10
2. Paddy: Tk 60/md	81	79	76	73	70	64	40
3. Paddy: Tk 70/md	111	109	106	103	100	94	70
4. Paddy: Tk 80/md	141	139	136	133	130	124	100
5. Paddy: Tk 90/md	171	169	166	163	160	154	130
6. Paddy: Tk 100/md	201	199	196	193	190	184	160

Costs and Returns for One Bigha Borga Farmer Cultivating
HYV Aman or Aus
All Input Costs Paid by Farmer
Prevalent Average Dosages

1. <u>Assumptions:</u>

a. One half of crop yield goes to landowner.

b. One half of remaining yield is consumed; the remaining half is sold for income.

c. The total cost of all inputs is borne by the borga farmer.

d. The farmer must borrow to cover all of his out-of-pocket production costs.

e. Seedlings will be grown by the farmer himself.

f. Fertilizer will be available at government fixed prices, and farmer will use half of the recommended doses for urea and slightly lower than half of the recommended dosage for TSP and MP.

g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day family members will undertake the remaining half.

i. Yield is 36.0 maunds (2962 lbs) of paddy per acre (12 mds per bigha).

2. Farmer's Out-Of-Pocket Costs:

a. Seed		
4 seers/bigha x Tk 4.00/sr		16.00
b. Fertilizer		
Urea 13.5 srs x Tk 1.50 =	20.25	
TSP 10 seers x Tk 1.20 =	12.00	
MP 5 seers x Tk 1.00 =	5.00	
Total fertilizer cost		37.25
c. Pesticide		20.00
d. Transplanting		28.00
e. Plowing		-
f. Harvesting		14.00
g. Threshing		14.00
h. Total out of pocket expenses		129.25

3. Yield available for sale for income:

a. Gross yield (mds)	12.00
b. Less landlord's share	6.00
c. Net yield	6.00
d. Less consumption	3.00
e. Crop available for sale	3.00

4. Summary of costs and returns at various loan interest rates and output prices:

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production cost (amount borrowed)	129	129	129	129	129	129	129
b. Interest, 6 months	8	12	15	19	23	32	65
c. Total to be paid	137	141	144	148	152	161	194
d. Income from sale of available crop (3.00 mds)							
1. At Tk 50/md	150	150	150	150	150	150	150
2. At Tk 60/md	180	180	180	180	180	180	180
3. At Tk 70/md	210	210	210	210	210	210	210
4. At Tk 80/md	240	240	240	240	240	240	240
5. At Tk 90/md	270	270	270	270	270	270	270
6. At Tk 100/md	300	300	300	300	300	300	300
e. Profit/(Deficit) after loan payment (c minus d)							
1. Paddy: Tk 50/md	13	9	6	2	(2)	(11)	(44)
2. Paddy: Tk 60/md	43	39	36	32	28	19	(14)
3. Paddy: Tk 70/md	73	69	66	62	58	49	16
4. Paddy: Tk 80/md	103	99	96	92	88	79	46
5. Paddy: Tk 90/md	133	129	126	122	118	109	76
6. Paddy: Tk 100/md	163	159	156	152	148	139	106

Costs and Returns for One Bigha Borga Farmer Cultivating Irrigated Wheat

Input Costs Shared with Landowner

Recommended Dosages

1. Assumptions:

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. Half of the total cost of inputs is borne by the landowner.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

   f. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   g. At the time of harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

   h. Yield is 45.0 maunds (3700 lbs) per acre (15 mds per bigha).

Irrigated Wheat
Input Costs Shared
Recommended Dosages

2. <u>Farmer's Out-of-Pocket Costs:</u>

a.	Seed		
	15 seers/bigha x Tk 5.00 =	75.00	
	1/2 of total cost		38.00
b.	Fertilizer		
	Urea - 20 srs/bigha x Tk 1.50/sr =	30.00	
	TSP - 15 srs/bigha x Tk 1.20/sr =	18.00	
	MP - 7/srs/bigha x Tk 1.00/sr =	7.00	
	(1/2 of total cost)		28.00
c.	Pesticides		
	1/2 of total cost		6.00
d.	Plowing		-
e.	Harvesting		14.00
f.	Threshing		14.00
g.	Irrigation		
	1/2 of the total cost		25.00
h.	Total out of Pocket Expenses =		125.00

3. <u>Yield Available for Sale for Income:</u>

a.	Gross yield (mds)	15.00
b.	Less land owner's share (mds)	7.50
c.	Net yield to borgadar	7.50
d.	Less consumption	3.75
e.	Crop available for sale	3.75

Irrigated Wheat
Input Costs Shared
Recommended Dosages

4. Summary of Costs and Returns at Various Loan Interest Rates and Output Prices

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production Cost (Amount borrowed)	125	125	125	125	125	125	125
b. Interest, 6 months	8	11	15	19	23	31	63
c. Total to be paid	133	136	140	144	148	156	188
d. Net crop income (3.75 mds)							
1. At Tk 50/md	188	188	188	188	188	188	188
2. At Tk 60/md	225	225	225	225	225	225	225
3. At Tk 70/md	263	263	263	263	263	263	263
4. At Tk 80/md	300	300	300	300	300	300	300
5. At Tk 90/md	338	338	338	338	338	338	338
6. At Tk 100/md	375	375	375	375	375	375	375
e. Profit/(Deficit) after loan payment (c minus d value)							
1. Wheat prices at Tk 50/md	55	52	48	44	40	32	-
2. " " " Tk 60/md	92	89	85	81	77	69	37
3. " " " Tk 70/md	30	127	123	119	115	107	75
4. " " " Tk 80/md	167	164	160	156	152	144	112
5. " " " Tk 90/md	205	202	198	194	190	182	150
6. " " " Tk 100/md	242	239	235	231	227	219	187

Costs and Returns for One Bigha Borga Farmer Cultivating Irrigated Wheat

All Input Costs Paid by Farmer
Recommended Dosages

1. Assumptions

a. One half of crop yield goes to landowner.

b. One half of remaining yield is consumed; the remaining half is sold for income.

c. The total cost of all inputs is borne by the farmer.

d. The farmer must borrow to cover all of his out-of-pocket production costs.

e. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

f. Plowing will be done through a neighborhood arrangement involving no cash outlay.

g. At the time of harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

h. Yield is 45.0 maunds (3700 lbs) per acre (15.00 mds per bigha).

Irrigated Wheat
Farmer Pays Costs
Recommended Dosages

2. <u>Farmer's Out-of-Pocket Costs</u>

a.	Seed	
	15 seers x Tk 5.00	75.00
b.	Fertilizer	55.00
	Urea 20 srs/bigha x Tk 1.50 = 30.00	
	TSP 15 srs/bigha x Tk 1.20 = 18.00	
	MP 7 srs/bigha x Tk 1.00 = 7.00	
c.	Pesticides	12.00
d.	Plowing	-
e.	Harvesting	14.00
f.	Threshing	14.00
g.	Irrigation	50.00
h.	Total out of pocket expenses	220.00

3. <u>Yield available for sale for income</u>

a.	Gross yield (mds)	15.00
b.	Less landowner's share	7.00
c.	Net yield	7.50
d.	Less consumption	3.75
e.	Crop available for sale	3.75

Irrigated Wheat
Farmer Pays Costs
Recommended Dosages

4. Summary of costs and Returns at Various Loan Interest Rates and Output Prices

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production costs (Amount borrowed)	220	220	220	220	220	220	220
b. Interest, 6 months	13	20	26	33	39	55	110
c. Total to be repaid	233	240	246	253	259	275	330
d. Net crop income (3.75 mds)							
1. At Tk 50/md	188	188	188	188	188	188	188
2. At Tk 60/md	225	225	225	225	225	225	225
3. At Tk 70/md	263	263	263	263	263	263	263
4. At Tk 80/md	300	300	300	300	300	300	300
5. At Tk 90/md	338	338	338	338	338	338	338
6. At Tk 100/md	375	375	375	375	375	375	375
e. Profit/ (Deficit) after loan payment (c minus d)							
1. Wheat prices Tk 50/md	(45)	(52)	(58)	(65)	(71)	(87)	(142)
2. " " Tk 60/md	(8)	(15)	(21)	(28)	(34)	(50)	(105)
3. " " Tk 70/md	30	23	17	10	4	(12)	(67)
4. " " Tk 80/md	67	60	54	47	41	25	(30)
5. " " Tk 90/md	105	98	92	85	79	63	8
6. " " Tk 100/md	142	135	129	122	116	100	45

Costs and Returns for One Bigha Borga Farmer Cultivating Irrigated Wheat Input Costs Shared with Landowner Prevalent Dosages

1. Assumptions:

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. Half of the total cost of Inputs is borne by the landowner.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Fertilizer will be available at Government fixed prices, and farmer will use half of the recommended dosages for urea and less than half of the recommended dosage for TSP and MP.

   f. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   g. At the time of harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

   h. Yield is 30.0 maunds (2468 lbs.) per acre (10 maunds per bigha).

			Irrigated Wheat Input Costs Shared Prevalent Dosages
2. Farmer's Out-of-Pocket Costs:			
a. Seed			
15 seers/bigha x Tk 5.00	=	75.00	
1/2 of total cost			38.00
b. Fertilizer			
Urea - 10 srs/bigha x Tk 1.50/sr	=	15.00	
TSP - 7 srs/bigha x Tk 1.20/sr	=	8.40	
MP - 5 srs/bigha x Tk 1.00/sr	=	5.00	
Total		28.40	
(1/2 of total cost)			14.00
c. Pesticides			
1/2 of total cost			6.00
d. Plowing			-
e. Harvesting			14.00
f. Threshing			14.00
g. Irrigation			
(1/2 of the total cost)			25.00
h. Total out-of-Pocket Expenses			111.00
3. Field Available for Sale for Income:			
a. Gross yield (mds.)			10.00
b. Less landowner's share (mds.)			5.00
c. Net yield to borgadar			5.00
d. Less consumption			2.50
e. Crop available for sale			2.50

Irrigated Wheat
Input Costs Shared
Prevalent Dosages

4. <u>Summary of Costs and Returns at Various Loan Interest Rates and Output Prices</u>

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production Cost (Amount borrowed)	111	111	111	111	111	111	111
b. Interest, 6 months	7	10	13	17	20	28	56
c. Total to be paid	118	121	124	128	131	139	167
d. Net crop income (2.50 mds)							
1. At Tk 50/md	125	125	125	125	125	125	125
2. At Tk 60/md	150	150	150	150	150	150	150
3. At Tk 70/md	175	175	175	175	175	175	175
4. At Tk 80/md	200	200	200	200	200	200	200
5. At Tk 90/md	225	225	225	225	225	225	225
6. At Tk 100/md	250	250	250	250	250	250	250
e. Profit/(Deficit) after loan payment (c minus d value)							
1. Wheat prices at Tk 50/md	7	4	1	(3)	(6)	(14)	(42)
2. " " Tk 60/md	32	29	26	22	19	11	(17)
3. " " Tk 70/md	57	54	51	47	44	36	8
4. " " Tk 80/md	82	79	76	72	69	61	33
5. " " Tk 90/md	107	104	101	97	94	86	58
6. " " Tk 100/md	132	129	126	122	119	111	83

Costs and Returns for One Bigha Borga Farmer Cultivating Irrigated Wheat

All Input Costs Paid by Farmer
Prevalent Dosages

1. Assumptions

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. The total cost of all Inputs is borne by the Borga Farmer.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Fertilizer will be available at Government fixed prices, and farmer will use half of the recommended dosages for urea and less than half of the recommended dosage for TSP and MP.

   f. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   g. At the time of harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

   h. Yield is 30.0 maunds (2468 lbs) per acre (10 mds. per bigha).

Irrigated Wheat
Farmer Pays Costs
Prevalent Dosages

2. <u>Farmer's Out-of-Pocket Costs</u>

a.	Seed		
	15 seers/bigha x Tk 5.00		75.00
b.	Fertilizer		
	Urea - 10 srs/bigha x Tk 1.50/sr =	15.00	
	TSP - 7 srs/bigha x Tk 1.20/sr =	8.40	
	MP - 5 srs/bigha x Tk 1.00/sr =	5.00	
	Total		28.40
c.	Pesticides		12.00
d.	Plowing		-
e.	Harvesting		14.00
f.	Threshing		14.00
g.	Irrigation		50.00
h.	Total out of Pocket Expenses		193.40

3. <u>Field Available for Sale for Income</u>

a.	Gross yield (mds)	10.00
b.	Less land owner's share (mds)	5.00
c.	Net yield to borgadar	5.00
d.	Less consumption	2.00
e.	Crop available for sale	2.50

Irrigated Wheat
Farmer Pays Costs
Prevalent Dosages

4. Summary of Costs and Returns at Various Loan Interest Rates and Output Prices

		Loan Interest Rates						
		12%	18%	24%	30%	36%	50%	100%
a.	Production Cost (Amount borrowed)	193	193	193	193	193	193	193
b.	Interest, 6 months	12	17	23	29	35	48	97
c.	Total to be paid	205	210	216	222	228	241	290
d.	Net crop income (2.5 mds)							
	1. At Tk 50/md	125	125	125	125	125	125	125
	2. At Tk 60/md	150	150	150	150	150	150	150
	3. At Tk 70/md	175	175	175	175	175	175	175
	4. At Tk 80/md	200	200	200	200	200	200	200
	5. At Tk 90/md	225	225	225	225	225	225	225
	6. At Tk 100/md	250	250	250	250	250	250	250
e.	Profit/ (Deficit) after loan payment (c minus d)							
	1. Wheat price Tk 50/md	(80)	(85)	(91)	(97)	(103)	(116)	(165)
	2. " " Tk 60/md	(55)	(60)	(66)	(72)	(78)	(91)	(140)
	3. " " Tk 70/md	(30)	(35)	(41)	(47)	(53)	(66)	(115)
	4. " " Tk 80/md	(5)	(10)	(16)	(22)	(28)	(41)	(90)
	5. " " Tk 90/md	20	15	9	3	(3)	(16)	(65)
	6. " " Tk 100/md	45	40	34	28	22	9	(40)

Costs and Returns for One Bigha Borga Farmer Cultivating Local Aman or Boro

1. Assumptions

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. The total cost of all inputs is borne by the borga farmer.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Seedlings will be grown by the farmer himself.

   f. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

   g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

   i. Yield is 21.0 maunds (1700 lbs) per acre 7 mds per bigha).

Local Aman/Boro

2. Farmer's Out-of-Pocket Costs

a.	Seed		
	8 seers/bigha x Tk 2.50		20.00
b.	Fertilizer		
	Urea - 15 srs x Tk 1.50 =	22.50	
	TSP - 15 srs x Tk 1.20 =	18.00	
	MP - 5 srs x Tk 1.00 =	5.00	
	Total		45.50
c.	Pesticides		8.00
d.	Transplanting		21.00
e.	Plowing		-
f.	Harvesting		14.00
g.	Threshing		7.00
h.	Total Out-of-Pocket Expenses		115.50

3. Yield Available for Sale for Income

a.	Gross Yield	7.00
b.	Less Landlord's share	3.50
c.	Net Yield	3.50
d.	Less consumption	1.75
e.	Crop available for sale	1.75

Local Aman/Boro

4. Summary of Costs and Returns at Various Loan Interest Rates and Output Prices

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production Cost (Amount borrowed)	116	116	116	116	116	116	116
b. Interest, 6 months	7	10	14	17	21	29	58
c. Total to be paid	123	126	130	133	137	145	174
d. Income from sale of available crop (1.75 mds)							
1. At Tk 50/md	88	88	88	88	88	88	88
2. At Tk 60/md	105	105	105	105	105	105	105
3. At Tk 70/md	123	123	123	123	123	123	123
4. At Tk 80/md	140	140	140	140	140	140	140
5. At Tk 90/md	158	158	158	158	158	158	158
6. At Tk 100/md	175	175	175	175	175	175	175
e. Profit/ (Deficit) after loan payment (c minus d)							
1. Paddy prices at Tk 50/md	(35)	(38)	(42)	(45)	(49)	(57)	(86)
2. " " " Tk 60/md	(18)	(21)	(25)	(28)	(32)	(40)	(69)
3. " " " Tk 70/md	-	(3)	(7)	(10)	(14)	(22)	(51)
4. " " " Tk 80/md	17	14	10	7	3	(5)	(34)
5. " " " Tk 90/md	35	32	28	25	21	13	(16)
6. " " " Tk 100/md	52	49	45	42	38	30	1

Costs and Returns for One Bigha Borga Farmer Cultivating Local Aus

1. Assumptions

    a. One half of crop yield goes to landowner.

    b. One half of remaining yield is consumed; the remaining half is sold for income.

    c. The total cost of all inputs is borne by the Borga Farmer.

    d. The farmer must borrow to cover all of his out-of-pocket production costs.

    e. Seedlings will be grown by the farmer himself.

    f. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

    g. Plowing will be done through a neighborhood arrangement involving no cash outlay.

    h. At the time of transplanting, harvesting and threshing half of the total labor requirement will be hired at Tk 7 per day and family members will undertake the remaining half.

    i. Yield is 15.0 maunds (1200 lbs) per acre (5 mds per bigha).

Local Aus

2. Farmer's Out-of-Pocket Costs

a.	Seed		
	8 seers x Tk 2.50		20.00
b.	Fertilizer		
	Urea - 15 srs/bigha x Tk 1.50 =	22.50	
	TSP - 15 srs/bigha x Tk 1.20 =	18.00	
	MP - 5 srs/bigha x Tk 1.00 =	5.00	
	Total		45.50
c.	Pesticides		8.00
d.	Plowing		-
e.	Harvesting		10.00
f.	Threshing		7.00
g.	Total out of pocket expenses		90.50

3. Yield available for sale for income

a.	Gross yield (mds)	5.00
b.	Less Landlord's share	2.50
c.	Net yield	2.50
d.	Less consumption	1.25
e.	Crop available for sale	1.25

Local Aus

4. <u>Summary of Costs and Returns at Various Loan Interest Rates and Output Prices</u>

		Loan Interest Rates						
		12%	18%	24%	30%	36%	50%	100%
a.	Production cost (Amount borrowed)	91	91	91	91	91	91	91
b.	Interest, 6 months	5	8	11	14	16	23	46
c.	Total to be paid	96	99	102	105	107	114	137
d.	Income from sale of available crop (1.25 mds)							
	1. At Tk 50/md	63	63	63	63	63	63	63
	2. At Tk 60/md	75	75	75	75	75	75	75
	3. At Tk 70/md	88	88	88	88	88	88	88
	4. At Tk 80/md	100	100	100	100	100	100	100
	5. At Tk 90/md	113	113	113	113	113	113	113
	6. At Tk 100/md	125	125	125	125	125	125	125
e.	Profit/ (Deficit) after loan payment (c minus d)							
	1. Paddy prices at Tk 50/md	(33)	(36)	(39)	(42)	(44)	(51)	(74)
	2. " " " Tk 60/md	(21)	(24)	(27)	(30)	(32)	(39)	(62)
	3. " " " Tk 70/md	(8)	(11)	(14)	(17)	(19)	(76)	(49)
	4. " " " Tk 80/md	4	(1)	(2)	(5)	(7)	(14)	(37)
	5. " " " Tk 90/md	17	14	11	8	6	(1)	(24)
	6. " " " Tk 100/md	29	26	23	20	18	11	(12)

Costs and Returns for One Bigha Borga Farmer
Cultivating Non-Irrigated Wheat

1. Assumptions

   a. One half of crop yield goes to landowner.

   b. One half of remaining yield is consumed; the remaining half is sold for income.

   c. The total cost of all inputs is borne by the farmer.

   d. The farmer must borrow to cover all of his out-of-pocket production costs.

   e. Fertilizer will be available at Government fixed prices, but farmer will use only a small amount of urea on non-irrigated crop.

   f. Plowing will be done through a neighborhood arrangement involving no cash outlay.

   g. All labor will be done by family members.

   h. Yield is 18 maunds (1500 lbs) per acre (6 mds per bigha).

Non-Irrigated Wheat

2. <u>Farmer's Out-of-Pocket Costs</u>

a.	Seed 12 seers x Tk	60.00
b.	Fertilizer	
	Urea - 10 srs/bigha x 1.50/sr.	15.00
	TSP	-
	MP	-
c.	Pesticides	6.00
d.	Plowing	-
e.	Harvesting	-
f.	Threshing	-
g.	Irrigation	-
h.	Total out of pocket expenses	81.00

3. <u>Yield available for sale for income</u>

a.	Gross yield (mds)	6.00
b.	Less land owner's share	3.00
c.	Net yield	3.00
d.	Less consumption	1.50
e.	Crop available for sale	1.50

Non-Irrigated Wheat

4. Summary of Costs and Returns at Various Loan Interest Rates and Output Prices

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production Cost (Amount borrowed)	81	81	81	81	81	81	81
b. Interest, 6 months	5	7	10	12	15	20	41
c. Total to be paid	86	88	91	93	96	101	122
d. Net crop income (1.5 mds)							
1. At Tk 50/md	75	75	75	75	75	75	75
2. At Tk 60/md	90	90	90	90	90	90	90
3. At Tk 70/md	105	105	105	105	105	105	105
4. At Tk 80/md	120	120	120	120	120	120	120
5. At Tk 90/md	135	135	135	135	135	135	135
6. At Tk 100/md	150	150	150	150	150	150	150
e. Profit/ (Deficit) after loan payment (c minus d)							
1. Wheat price Tk 50/md	(11)	(13)	(16)	(18)	(21)	(26)	(47)
2. " " Tk 60/md	4	2	(1)	(3)	(6)	(11)	(32)
3. " " Tk 70/md	19	17	14	12	9	4	(17)
4. " " Tk 80/md	34	32	29	27	24	19	(2)
5. " " Tk 90/md	49	47	44	42	39	34	13
6. " " Tk 100/md	64	62	59	57	54	49	28

Costs and Returns for One Bigha Borga Farmer Cultivating Jute

1. Assumptions:

   a. One-half of crop yield goes to landowner; the balance is available for sale for income.

   b. The total cost of all inputs is borne by the farmer.

   c. The farmer must borrow to cover all of his out-of-pocket production costs.

   d. Fertilizer will be available at Government fixed prices, and farmer will use recommended dosages.

   e. At the time of weeding 1/3 of the total labor will need to be hired and at the time of harvesting and stripping 1/2 of the labor will be hired. Cost of hired labor is Tk 7 per day.

   f. Yield is 18 maunds (1500 lbs) per acre (6 mds per bigha).

Jute

2. Farmer's Out-of-Pocket Costs

a.	Seed 1.5 seers x Tk 10.00	=	15.00
b.	Fertilizer	=	76.00
c.	Pesticides	=	8.00
d.	Plowing	=	-
e.	Weeding	=	35.00
f.	Harvesting	=	14.00
g.	Stripping (separating)	=	21.00
h.	Out of pocket expenses	=	169.00

3. Yield Available for Sale for Income

a.	Gross Yield (mds)	6.00
b.	Less Landlord's share	3.00
c.	Crop available for sale	3.00

Jute

4. Summary of Costs and Returns at Various Loan Interest Rates and Output Prices

	Loan Interest Rates						
	12%	18%	24%	30%	36%	50%	100%
a. Production costs (Amount borrowed)	169	169	169	169	169	169	169
b. Interest, 6 months	10	15	20	25	30	43	85
c. Total to be paid	179	184	189	194	199	212	254
d. Net crop income (3.0 mds)							
1. At Tk 70/md	210	210	210	210	210	210	210
2. At Tk 80/md	240	240	240	240	240	240	240
3. At Tk 90/md	270	270	270	270	270	270	270
4. At Tk 100/md	300	300	300	300	300	300	300
5. At Tk 110/md	330	330	330	330	330	330	330
6. At Tk 120/md	360	360	360	360	360	360	360
e. Profit/(Deficit) after loan payment (c minus d)							
1. Jute prices at Tk 70	31	26	21	16	11	(2)	(44)
2. " " Tk 80	61	56	51	46	41	28	(14)
3. " " Tk 90	91	86	81	76	71	58	16
4. " " Tk 100	121	116	111	106	101	88	46
5. " " Tk 110	151	146	141	136	131	118	76
6. " " Tk 120	181	176	171	166	161	148	106

Resources Development Associates' Summary Discussion of Sources of Institutional Agricultural Credit

A. Agricultural Development Bank (BKB)

Now operating 152 branches with some 800,000 agricultural loans outstanding (to an estimated 600,000 borrowers), this government bank stands as the primary financial institution specializing in agricultural loans. In many areas it may be the farmer's only source of institutional credit outside the various forms of cooperatives. To safeguard their loans, the BKB requires land titles as collateral and conducts investigations of the titles pledged for the loan. Formerly by charter it would make loans only on a secured basis. Currently it can make loans up to Tk 2000 ($133) with a surety. It has its own training institute and trains its own staff of agricultural loan investigators. Disbursements are partially in kind through supply orders for fertilizers, seed, etc., available at the local Bangladesh Agricultural Development Corporation (BADC) outlet.

The BKB is financed largely by loans from the government and the Bangladesh Bank. It obtains part of its funds from deposits. To assist the bank in attracting fixed and savings deposits, it is authorized to pay interest at a rate of 1% higher than the commercial banks.

The BKB relies heavily on land as security to back its loans but does not appear to supervise the actual purpose of which loan proceeds may have been used. For example, it is reported that in many instances a borrower may have given "purchase of bullocks - or plough cattle" as the purpose of a loan, while the funds were actually used for some other purpose. Even with over Tk 30 crore ($20 million) in past due loans, the bank appears to be reasonably comfortable because the loans are secured by land, or there is a surety with land. It is reported that foreclosure proceedings, to collect a loan through public auction, are a rarity. One bank officer said "it is never done."

Table 1: A SUMMARY OF INSTITUTIONAL CREDIT

Organization	Period	Loans Made (Disbursements)			Loans Outstanding			
		Number	Amount		Date	Number	Amount	
			Taka in Crores	Dollars in Millions			Taka in Crores	Dollars in Millions
Agricultural Development Bank (BKB)	12 months ended June 30, 1976	67 005	18.5	12.3	June 30, 1976	800,000 (to an estimated 600,000 farmers	74.2	49.5
National Cooperative Bank (BJSB) Loans and advances to membership	11 months ended May 31, 1976	1/	9.2	6.1	May 31, 1976	1/	34.4	22.9 3/
IRDP Cooperatives (through Sonali Bank)	9 months ended Sept. 30, 1976	142 000 farmers estimated	5.1	3.4	Sept. 30, 1976	1/	4.7	3.1
Commercial Banks	12 months ended June 30, 1976	1/	20.6 2/	13.7 2/		1/	1/	1/

1/ Not available

2/ Expected disbursements per paper of Bangladesh Bank. Includes the loans of the Sonali Bank to IRDP Cooperatives.

3/ Amount of realizable credit

The BKB, obviously understaffed as to field credit personnel, is seeking to improve its operations. Two consultants from the Asian Development Bank have been engaged to modernize accounting systems and loan procedures. Their recommendations include better handling of the large loans, and the employment and use of greater technical expertise. Further, the BKB has requested the Bangladesh Bank to engage three additional consultants in the following areas:

1. To develop a comprehensive manual for BKB
2. To study geological conditions for agriculture
3. To improve organizational and management systems.

A number of other means being adopted to improve operations include:

1. Creation of Thana (country) Agricultural credit Committees, consisting of the government's Thana Agricultural Officer and one local leader. Prime responsibilities of the Committees are to prepare lists of farmers and select farmers recommended for loans.

2. An increase in the appraisal staff from 152 to 450 for investigative purposes.

3. Plans to provide credit through cooperatives.

It is not clear that the question of improved loan collections is being addressed; or that there is a concern to provide services to the target group of the proposed Small Farmer Credit Program.

It should be noted that the October 1976 report of the four-man team that studied rural credit systems in Malaysia, Japan, Philippines and Thailand (Reference 1), of which the Deputy General Manager-Loans was a member, recommended that there should be at least one field officer for each 200 borrowers. This objective seems conservative; i.e., the need for field officers may be even greater.

For the year 1975-76 loans totalling Tk 28 crore (18.7 million) fell due. Recoveries totalled Tk 27.5 (18.3 million). From inception the percentage recovery is reported as 77%1/. Loans totalling Tk 74 crore ($49 million) were outstanding in late 1976, of which Tk 30 crore

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1/ 1975-76 Annual Report

($ 20 million) were considered to be overdue. Of this amount Tk 10 crore ($6.7 million) was considered to represent a serious problem; the rest was expected to be repaid, albeit late. A principal reason given for the high rate of delinquencies was that at independence the new government, to increase its popular support, suggested that all debts incurred during Pakistan days would be forgiven. As a result overdue loans rose from Tk 17 crore ($ 11.3 million) at Independence to Tk 30 crore ($20 million). It now has been made clear that no loans will be forgiven and loan recovery has improved dramatically since November 1975.

Figures on actual loss experience were not available. There appear to have been some substantial charge-offs as a result of destruction in the War of Liberation, and at times interest was not accrued. In October 1976, a study was reportedly in progress to determine what further charge-offs should be made. A suggestion was offered that any loan over five years past due should be charged off. Meanwhile, an amount equal to 2% of annual loan disbursements is being added to the reserve for losses. The banks in Bangladesh do not report the amount of their reserve for bad debts and charges against it, and the information is not readily available.

In 1975 there were two special ordinances, one of which was designed to help banks recover past-due loans. This provided for personal warrants through the sub Divisional Office, Deputy Commissioner, to be delivered by Thana Police Officer. This procedure has resulted in a willingness of some influential borrowers who had long overdue loans to take the initiative to come in and seek to arrange an amortization plan for their loans. The bank found, further, that frequently a few of the participants in group loans handled through a "head man" would fail to repay their share, thus creating a problem for the other members of the group. As a result, this bank has moved to individual loans rather than group loans.

Tables 2, 3 and 4 give a perspective on disbursements, size of loans, and distribution of loans according to size of land holdings. Less than 25% of funds loaned go to farmers holding under three acres. However, these loans represent nearly 60% of the total number made.

Table 2 : AMOUNT OF LOANS MADE (DISBURSEMENTS) - BKB

	Year 1974-75		Year 1975-76	
	Taka in Crores	Dollars in Millions	Taka in Crores	Dollars in Millions
Short Term (Up to 18 Months)	9.5	6.3	11.1	7.4
Medium Term (Up to 5 Years)	8.1	5.4	7.4	4.9
Long Term (Beyond 5 Years)	Nomilal		Nominal	
TOTAL	17.6	11.7	18.5	12.3

In 1974-75, 45.8% of the loans were for seasonal financing of tea, 33.0% were for medium term financing of plough cattle and 10.3% were for medium term financing of shallow tube wells.

In 1975-76, 51.1% of the loans were for seasonal financing of tea and 34.9% were for medium term financing of plough cattle.

Table 3 : SIZE OF LOANS MADE - BKB

	No. of Cases	Percentage	Amount: Taka in Crores	Amount: Dollars in Millions 3/	Percentage
In 1974-75					
Up to Tk 1000 ($67)	38,250	58.2	3.1	2.1	17.6
Tk 1001 to Tk 3000 ($67 to $200)	24,629	37.5	2.7	1.8	15.4
Other Larger Loans (1)	2,842	4.3	9.4	6.3	67.0
TOTAL	65,721	100.0	15.2	10.1	100.0
In 1975-1976					
Up to Tk 1000 ($67)	35,556	53.0	3.1	2.1	16.8
Tk 1001 to Tk 3000 ($67 to $200)	29,921	45.7	3.7	2.5	20.2
Other Larger Loans (2)	1,528	1.3	11.7	7.8	55.0
TOTAL	67,005	100.0	18.5	12.3	100.0

[1] 50.9% of the total loans made comprising 9.06% of the number were loans of over Tk 200,000 ($13.3 thousand) for cold storage, tea and tobacco crop.

[2] 57.1% of the total amount of loans made comprising 0.06% of the number were loans of over Tk 200,000 ($13.3 thousand) for cold storage, tea and tobacco crop.

[3] Approximate

Table 4 : DISTRIBUTIONS OF LOANS MADE ACCORDING TO SIZE OF LAND HOLDINGS (1975-76) - BKB

	No. of Cases	Percentage	Amount: Taka in Crores	Amount: Dollars in Millions	Percentage
Landless corporate bodies (cold storage)	12	0.02	0.7	0.4	3.9
Up to 3 acres	39;507	58.9	4.1	2.7	22.9
Over 3½ to 12½ acres	25,746	38.5	3.4	2.3	18.1
Over 12½ to 50 acres	1,656	2.5	0.3	0.2	1.4
Over 100 acres (tea and tobacco crop loans	34	0.05	9.9	6.7	53.7
TOTAL	67,005	100.0	18.5	12.3	100.0

Further details on the data in Tables 7,8 and 9 are included in the Bank's Annual Reports as of June 30, 1975 and June 30, 1976.

Two branches of the Agricultural Development Bank were visited. The first one had made about 3,000 loans to farmers within a 54 square mile area. It also takes deposits in fixed and demand savings accounts, and the manager estimated that 60% of his savings deposits are made by farmers. The manager has authority for approval of loans up to Tk 3,000 ($200) and sends applications for larger loans to a higher authority for approval. Several weeks are required to carry any loan application through to disbursement.

The second branch visited, the Chamrai-Savar branch, serves two thanas. It had outstanding loans of Tk. 1,945,000 ($130,000) to 1,400 loanees, or an average of Tk 1,389 ($93.00) per loan. It has overdue accounts of Tk 400,000 ($26,700). The overdue loans represent nearly 20% of funds loaned since the branch opened, many nine to ten years past due.

The village of Belishar, whose inhabitants are served by the Chamrai-Savar branch, was visited. This village is one of three - the other two are Nogan and Bathuli - involved in the Intensified Jute Cultivation Program financed by the Agricultural Development Bank with funds made available by the Bangladesh Bank. The Sub-divisional Agricultural Officer provided complete population statistics for these three villages, presented here in Table 5.

It is clear from the available data that the services of this bank are beyond the reach of the small farmers who are the target clients of the proposed Small Farmer Credit Program. Certainly the primary factors are the requirement for collateral, the complexity of the procedures which result in delays of several weeks before disbursements are made, and the lack of sufficient numbers of loan officers to supervise large numbers of small loans.

B. National Cooperative Bank (JSB)

The National Cooperative Bank was established in 1948, under the Bengal Cooperative Societies Act of 1940 as the East Pakistan Provincial Cooperative Bank. After the inception of Bangladesh in 1971, it was recognized under its present name. Under its by-laws,

Table 5 : THREE VILLAGES UNDER INTENSIFIED JUTE CULTIVATION PROGRAM

Some statistics BKB-Dhamrai-Savar Branch

	Belishar	Nogasn	Bathuli
Number of select farmers	391	880	262
Number of adults	1190	3500	920
Total population	4000	5700	2770
Acres of Land:			
That cultivated by select farmers	1630	4916	810
Average per select farmer	4.2	5.6	3.1
Total acres in cultivation in village	3500	9050	2900
Total cultivable land	5000	12000	3500
Number of women who are land holders	5	19	31
Number of near landless or landless farmers in village	59	101	31
Principal Crops	Paddy/Jute	Paddy/Jute	Paddy/Jute
Acreage of largest holder	17,16,15, 13,12,10 Total 96 Acres	15 holders of 10 or more acres Total of 204 acres ranging up to 24 acres	20,20,12,10 Total 62 Acres
If it is assumed that all large land holders were select farmers, the average acreage of the smaller holders would be	4.0	5.4	2.9

the bank has broad powers, including marketing. These broad powers are only used to a limited degree; its main function is loans. It operates on what is termed the three-tier basis. Under the JSB there are 62 Central Cooperative Banks (TCCB's). At the next level there are a number of Thana Central Cooperative Associates (TCCA's). However, since 1973 and with the establishment of the IRDP as discussed in the next section, JSB has not been permitted to make loans to the TCCA's. There are approximately 4,000 union level cooperatives, 17,000 village cooperatives (KSS's) 600 sugarcane and 600 fishermen's cooperatives under the JSB umbrella. A total of 2,982,783 farmers are claimed as cooperative members. These figures place in perspective the fole JSB claims in the lending field. JSB's own loan operations in 1975-76 are summarized in Table 6, its sources of funds in Table 7, and its 270 stockholders are summarized in Table 8.

It should be noted that the cooperative banks and societies engaged in agricultural credit in Bangladesh do not, in general, appear to be financially sound. This has been attributed to the "soft" scale of permissable interest charges, a lack of practical experience and knowledge in operating cooperative associations, and alleged "interference" by the government. A 12% interest rate is charged for short-term loans (6-8 months). Since 6% is paid to the Bangladesh Bank, this leaves a spread of 6%, of which JSB earns 1%, the Central Cooperative Banks 2%, and the primary societies 3%. Of the 4% collection charge on outstanding loans which is realized as a penalty, 1% accrues to the Central Cooperative Banks and 3% to the Bangladesh Government.

Financial data on the Tangail Cooperative Bank, one of the Central Cooperative Banks served by the JSB, are presented in Table 9. This bank may be regarded as typical of the TCCB's.

The annual report includes comments on an alleged surprise plan of the Bangladesh Bank for dissolution of the Central Cooperative Banks and reorganization of the National Cooperative Bank (JSB). It discusses proposed countermeasures resulting from a high level technical committee meeting in January 1976, and indicates that in the light of proposals by the JSB and the Bangladesh Bank, the subject matter for reorganization and improvement of the cooperative banks

Table 6 :

BANGLADESH NATIONAL COOPERATIVE BANK (JSB)
CREDIT DISTRIBUTED, REALIZATION AND OUTSTANDING CREDIT
ELEVEN MONTHS ENDED MAY 31, 1976

	Amount of Distributed Credit		Amount of Realized Credit		Amount of Realized Credit at End of Period	
	Taka (Crores)	Dollars (Millions)	Taka (Crores)	Dollars (Millions)	Taka (Crores)	Dollars (Millions)
Short term aus, broadcasting, aman, and jute credit	2.4	1.6	3.3	2.2	9.6	6.4
Short term planted aman credit	0.9	0.6	1.4	0.9	4.8	3.2
Short term boro credit	3.9	2.6	2.8	1.9	7.2	4.8
Middle term credit for bying ox	-	-	0.2	0.1	2.1	1.4
Convertible middle ;term credit	-	-	1.2	0.8	4.5	3.0
Short term sugarcane credit	1.0	0.6	1.2	0.8	3.2	2.1
Long term credit	-	-	(a)	(a)	1.1	0.7
Middle term credit-fish	-	-	0.2	0.2	0.3	0.2
Own credit, cash credit and overdraft	1.0	0.7	0.5	0.3	1.6	1.1
TOTAL	9.2	6.1	10.8	7.2	34.4	22.9

Source: 8th Annual Report, June 10, 1976

(a) Nominal

Table 7

BANGLADESH NATIONAL COOPERATIVE BANK
CAPITAL STRUCTURE AND SOURCES OF LOANABLE FUNDS
MAY 31, 1976

	Taka (Crores)	Dollars (Millions)
Paid up share capital:[1]		
Government of Bangladesh	0.4	0.3
Cooperative banks and societies	1.0	0.6
TOTAL SHARE CAPITAL	1.4	0.9
Various Reserves[2]	1.9	1.3
Deposits	2.2	1.5
Borrowings:		
From Bangladesh Bank (Federal Reserve)	14.3	9.5
From government	18.7	12.5
From other banks	0.2	0.1
TOTAL BORROWINGS	33.2	22.1
TOTAL OF FOREGOING	38.7	25.8

This compares with total assets of Tk. 48.4 crores ($32.3 million) and loans and advances of Tk. 34.6 crore ($23.7 million).

1 Detail of stock ownership is from June 30, 1975 report.

2 The various reserves other than the statutory reserve of Tk. 0.6 crore ($0.4 million) are not considered as capital.

Source: Unaudited statement included in provisional June 10, 1976 Annual Report.

Table 8

BANGLADESH NATIONAL COOPERATIVE BANK
STOCKHOLDERS BY CLASS
JUNE 30, 1976

		Number
1.	Central cooperative banks	62
2.	Thana central cooperative organizations	40
3.	Central Multipurpose cooperative societies	28
4.	Sugarcane cultivation cooperative societies	12
5.	Fishermen cooperative societies	2
6.	Land mortgage cooperative societies	15
7.	Municipal cooperative banks and societies	9
8.	Primary multipurpose cooperative societies	58
9.	Cooperative banks and societies declared bankrupt	14
10.	Other societies	32
11.	Bangladesh government	1
	TOTAL NUMBER OF STOCKHOLDERS	273

Source: June 10, 1976 Annual Report

Table 9

TANGAIL CENTRAL COOPERATIVE BANK
FEBRUARY 29, 1976

Selected Capital and Liabilities	Taka (Lakhs)	Dollars (Thousands)
Share capital	4.6	30.7
Reserve fund (gen)	3.0	20.0
	7.6	50.7
Other funds	6.3	42.0
Deposits:		
Members	5.1	34.0
Public	0.9	6.0
	6.0	40.0
Borrowings:		
From National Cooperative Bank (JSB)	58.0	386.7
From Bangladesh Government	2.1	14.0
From Commercial Bank (overdraft)	0.8	5.3
	60.9	406.0

Selected Assets	Taka (Lakhs)	Dollars (Thousands)
Total of deposit fund, deposits in banks and investments	11.9	79.3
Loans	52.3	348.7
Interest receivable and collection charges	29.9	199.3
TOTAL ASSETS	105.3	702.0

Source: Unaudited financial statement in current annual report.

The Bank was organized in 1913.

was under consideration by the Bangladesh Government. Among the measures designed to improve operations is a proposal for 27 staff members of the JSB and 54 from the Central Cooperative Banks to receive training at the Bangladesh Institute of Bank Management and at commercial banks.

Loans are made against land security put up by the borrower or a third party guarantor. Recently, security requirements have been reduced to 30%. To be eligible for a loan, the borrower must be a member of the cooperative and thus must own at least one share of stock. It seems to be generally understood that the bank has served primarily the larger landed farmers and land is generally required as security.

The loan recovery rate of the JSB has been 93%; that is bad debts have been 7%. This applies only to the JSB, not to the organizations under its umbrella in the aggregate. The burden of losses appears to have hit the intermediate level banks (TCCB, TCCA) the hardest. There is reportedly a procedure for sharing losses, but specifics were not available. In general, the small farmers, rickshaw pullers, etc., have better repayment records than large influential farmers.

JSB has recently issued a directive stating as a matter of policy that 25% of all loans shall be extended to small farmers. A small farmer by JSB definition holds a maximum of 1.5 acres of irrigated land or three acres without irrigation The Eighth Annual Report of JSB lists some of the special small farmer projects which have been undertaken. These include a loan to a workers cooperative society to arrange work on a cooperative basis for unemployed laborers, a loan to a cultivator's coop farm for the welfare of landless farmers, loans for marketing and for timely distribution of fertilizer, and a special type loan to a fishermen's cooperative society.

It can be concluded that the National Cooperative Bank and its affiliates serve primarily the larger and more affluent farmers, though efforts have been initiated toward a small farmer loan program, through its standard cooperative program. It is not clear that the target group of the proposed Small Farmer Credit Program can be served effectively through such arrangements, however, in that land is usually required as collateral and procedures are cumbersome and bureaucratic.

C. Integrated Rural Development Program (IRDP)

The development of this program, starting in 1973 in the so-called two-tier Comilla type pattern and bypassing the National Cooperative Bank, appears to have been the government's response to problems it saw in financing farmers. Under this plan, Thana Central Cooperative Associations (TCCA's) borrow from the Sonali Bank (one of the six commercial banks), rather than from the JSB. There also has been an aggressive policy in establishing village primary societies (new KSS's). Training of farmers is a key feature. Each week, the manager of the KSS and designated "model farmers" in a village visit the Thana Training and Development Center (TTDC), which is operated by the government's Thana Project Officer (TPO). Problems of the farmers are presented. Expert advice is obtained and solutions provided. Technology is disseminated. Farming programs and loan needs are consolidated and sent to the Thana Project Officer for review, then to the Project Director, and in turn to the head office in Dacca, then to the Sonali Bank. The much-revised figures work their way back through the same channels, where the distribution of the loan funds to individual farmers is made. An overview of the structure and process flow of the IRDP is shown in Chart 1.

Shares of cooperative stock, savings deposits by farmers, and land are used as security in the program. Tk 800 ($53) is the maximum loan permitted per farmer per crop, and various other limits are established. Each member's borrowing is limited to five times the amount of his shares plus his savings, or as an alternative, ten times his shares. In practice, each borrowing farmer appears to have enough shares and savings to qualify for the maximum permissable loan for the particular crop.

The loans to farmers through the program for the years 1973, 1974, 1975, and the first nine months of 1976 are shown in Table 10. This would indicate that no losses are expected by the Sonali Bank. However, it does not mean that the farmers involved have made or will make full repayment; the borrowing TCCA's may have to provide some of the funds. The Sonali Bank has a 30% guarantee from the government.

Chart 1
COOPERATIVES UNDER IRDP UMBRELLA
ORGANIZATION AND LOAN PROCEDURE

	ORGANIZATION		PRODUCTION PLANS AND LOAN PROCEDURE (EACH GROUP)
	Head Office IRDP Dacca		Plans are reviewed and consolidated and sent to Sonali Bank - Bank reviews, amends and approves (sanctions) loans.
		IRDP Project Director Responsible for a group of TCCAs just as Commercial Bank Regional Manager is responsible for a group of branch offices - (There are 13 project directors for the 30 districts) responsible for timely availability of loan funds, timely recovery, extension activities, liaison between other government agencies	Project Director reviews, consolidates and sends to head office.
Each Thana has a Thana Training and Development Center (TTDC)	Thana (county) Central Cooperative Associations (TCCAs) Each has a managing committee (each KSS sends its representative)	Thana Project Officer (TPO) "Head" of the Thana - responsible for training (TTDC) land production plans	Plans for all KSSs are consolidated and sent to IRDP Project Director (formal loan application is made by TCCA to Sonali branch office).
	Village Primary Societies (new KSSs) Managing Committee, Manager[1] Model farmers[1]		Individual farmers give plans to KSS - consolidated plans are sent to TCCA Loan funds are received under group responsibility plan

1 Go each [illegible] to TTDC for training and to deposit savings and shares with TCCA for all farmers in the villages

Table 10

LOANS TO FARMERS THROUGH IRDP-TCCAs

Year	Number of TCCAs	Amount of Loans Made Taka (Crores)	Amount of Loans Made Dollars (Millions)	Number of Farmers	Average Loan Per Farmer Taka	Average Loan Per Farmer Dollars	Losses or Probable Losses (if any)	Percent Outstanding Sept.30,1976
1973	82	1.5	1.0	87,000	166.8	11.1	Nil	2%
1974	140	2.7	1.8	128,000	208.5	13.9	Nil	6%
1975	128	1.3	0.9	150,000	85.8	5.7	Nil	20%
1976 (Up to Sept.)	116	5.1	3.4	142,000*	359.9	24.0	Nil	84%

* Estimated.

Source: Adapted from table prepared by Sonali Bank, Rural Credit Department

The branch of the Sonali Bank visited in Mysipur provided loans to 44 Primary Societies out of 188 in the thana, and 1,342 individuals obtained loans out of a total membership of 10,000. This branch has been open only six months and all loans so far have been made to the "Primary Societies" (new KSS's) of the Integrated Rural Development Program.

With 18,500 "Primary Societies" organized around 84 central thana federations, the IRDP program has an enviable record of organizing ability; it may be part of the reason for the success achieved in increasing overall agricultural production, particularly in the past three years. Nevertheless, it is clear that at the local level this is an organization of landowning farmers, who have savings to invest and who gain the most by access to inputs. When fertilizer was in short supply over the past two years and access to new pumps and fuel was controlled through this organization, there were considerable advantages to membership and to excluding smaller, less affluent farmers from the group. The impression was gained through the interviews that the overall operation is quite bureaucratic and centralized.

There is reportedly a mixed record of repayment of loans made through the Primary Societies. Because of high default rates, a ruling was made in 1975 that Primary Societies with defaults would not be considered for additional loans in the next crop season. Unfortunately, this served to penalize smaller farmers who had repaid their loans along with the few larger farmers who were the major defaulters. Several times in the course of interviews and discussions, the opinion was expressed that "large farmers are large defaulters." This is the subject of a research project by the Bangladesh Academy for Agricultural Development.

An excellent review of IRDP activities is presented in Reference 2.

D. Commercial Banks

The commercial banks are assuming an important role in financing farmers. In the past, the banks have financed tea estates, potato storage, sugar mills and business financing related to agriculture. Their new direction, a most significant development, arises from government influence through the Bangladesh Bank.

Under the auspices of the Bangladesh Bank, there is an annual exercise for planning the supply of agricultural credit for the ensuing year. This meeting involves officials of the government, the Bangladesh Bank, the six commercial banks, the Agricultural Development Bank (BKB), the Integrated Rural Development Program the Cooperative Department, and the National Cooperative Bank (JSB). Progress is reviewed against previous targets, and new targets are set. An assessment of the 1975-76 situation is provided in the minutes of the meeting on June 25, 1976 as follows:

> "Out of the total amount of Tk 20.61 crores ($13.7 million) expected to be disbursed by commercial banks their disbursement for financing production of paddy, sugarcane, and jute might constitute roughly 30% of the total. This major portion of their disbursements would be for financing fertilizer trade, tea, cold storage, etc. Sonali Bank has been financing the TCCA's (Thana Central Cooperative Associations) under IRDP (Integrated Rural Development Program). Janata Bank, apart from financing corporate bodies engaged in agricultural operations, appears to have made an attempt, though to a limited scale, for financing individual farmers (both big and small)."

The expected 1975-76 disbursements of 20.61 crores ($13.7 million) in relation to their targets are shown for individual banks in Table 11.

Comments regarding the agricultural credit activities of each of the commercial banks follow. Data are available only for the Sonali, Janata and Pubali Banks.

D.1 Sonali Bank

The Sonali Bank's entry into the field of financing farmers is told in the pamphlet "Sonali Bank Serves Men Behind the Plow," (Reference 3) commemorating the first anniversary of the establishment of the bank's Rural Credit Department on September 15, 1973. Its first venture was in providing credit to the IRDP (Integrated Rural Development Program) TCCA's. A quotation from the pamphlet serves to underline the recommendations in this report: "It needed a lot of convincing for our field staff to realize

Table 11

COMMERCIAL BANKS

EXPECTED AGRICULTURAL FINANCING IN RELATION TO TARGET[1/]

1975 - 1976

Banks	Target: Taka (Crore)	Target: Dollars (Millions)	Purpose	Expected Disbursement[1/]: Taka (Crore)	Expected Disbursement[1/]: Dollars (Millions)
Sonali	3.50	2.3	Paddy, jute 6.21 Sugarcane 1.58	7.79	5.2
Janata	2.42	1.6	Paddy, sugarcane, cold storage, machinery	3.11	2.1
Pubali	2.25	1.5	Tea, cold storage, etc.	4.25	2.8
Agrani	2.59	1.7	Tea, cold storage, machinery	3.30	2.2
Rupali	1.30	0.9	Tea, cold storage	1.16	0.8
Uttara	-	-	Tea, cold storage	1.00	0.6
TOTAL	12.06	8.0[2/]		20.61	13.7

1/ The reasons for the increase over target were due to Sonali Bank's financing sugarcane growers through the mills (not included in target), Sonali Bank's increased loaning to IRDP TCCAs for paddy and increased commercial loans of other banks.

2/ By comparison aggregate disbursements were Tk 8.81 crores ($5.9 million) during 1974-75 (Annual Report, 1975-76, Bangladesh Bank).

that 'loan for what' is more important than 'loan against what' and that ultimate security in farm credit lay more in quick, timely sanction and disbursement of loan and intensive supervision over the end-use of loans rather than tangible security made available to the Bank."

The bank's staff of agriculturally trained credit officers in the Rural Credit Department now numbers ten. In late October 1976 arrangements were underway for the appointment of an additional 25. Training is quite extensive including work in the bank's own training institute. This is the only commercial bank which has such a facility. With a staff of six including a principal, it can handle 150 students at a time. The BIBM (Bangladesh Institute of Bank Management) also assists in training.

With the experience gained through its affiliation with the IRDP, the Sonali Bank has made a start, however small, in the direct financing of farmers as shown in Table 12. A new development by Sonali is the introduction of the village branch bank (Krishi Shaka). This experimental pilot project involves establishing five village level branches that will function as sub-branches of existing branches. These village branches, or "Krishi Shaka", will be housed in a typical village-type structure, such as those containing tea stalls or village shops. Each will be managed by a village oriented agricultural credit manager with special training. This manager, generally expected to be a native of the village or a neighboring village, will spend full time in credit work assisted by a five-man village volunteer group - his "eyes and ears." The office will be open for transactions only on a part time basis when a cashier and armed guard from the branch will be present to accept deposits and repayments and disburse cash. Each village branch will be authorized to extend loans up to Tk 1,000 ($67) each and will serve small farmers exclusively (group responsibility is contemplated). Loan funds will be provided through the parent branch. The village branch managers will be urged to operate their offices as discrete units on a profit making basis, thereby making principal and interest recovery a primary responsibility. It is expected that the village branches will be able to operate profitably after a few years. The objectives of a village branch would include functions in addition to lending, designed to improve the entire village. Although questioning whether a branch to serve small farmers only is the ultimate solution, the concept is a valuable interim measure. This approach appears to parallel closely the plan advanced for the Small Farmer Credit Program.

Table 12

LOANS TO FARMERS UNDER DIRECT FINANCING SCHEME

SONALI BANK, RURAL CREDIT DEPARTMENT
1976 - 1977

Period	Number of Loans: Tk 1,000/- and under ($ 67)	Tk 1,001/- to 3,000/- ($200)	Over Tk 3,000/- ($200)	Number of Farmers	Amount of Disbursement: Taka	Dollars	Recovery	Any Losses or Estimated Losses
July 1976	1	-	2	3	20,600	1,373	Not yet due	Nil
August 1976	-	3	10	13	124,500	8,300	Not yet due	Nil
September 1976	-	7	38	45	189,500	12,633	Not yet due	Nil

The Sonali Bank is well known throughout the nation, especially by local commercial interests. It had its origin as a government bank headquartered in Karachi with 51% ownership by the government. In the restructure on nationalization in 1971, it continued its special status as an agent for the Bangladesh Bank on behalf of the government. With headquarters in Dacca, field operations are handled largely by its 19 regional offices, each of which is responsible for 15-25 branches. A regional manager is required to visit personally each of the branches every 45 days. Regional managers may approve loans up to Tk 25,000 ($1,700) for capital expenditures and Tk 5,000 ($330) for agriculture.

With 436 branches at the end of October 1976, the bank has a target of 450 by December 31, and 500 by June 30, 1977 by which time it expects to have at least one branch in each of the 413 thanas. These branches are in both urban and rural areas. Although making loans largely on land mortgages, it does have a system for loans of less than 10,000 Tk ($667) to be made without land pledge but with adequate third party guarantees.

The bank pays the government-established interest rates on savings deposits and readily admits that although 50% of its savings come from rural areas, only 1 1/2% of its total loans are made in rural branches. It represents a classic case of a financial institution becoming the channel for investment of rural savings into urban development. The high costs of rural loan administration and the fixed interest rate structure serve to reinforce this pattern to the continual disadvantage of farmers in Bangladesh.

Two branches of the Sonali Bank were visited in company with the Assistant General Manager who heads the Rural Credit Department. The Tangail Branch, a district headquarters, is one of 52 branches which serves as an agent of the Bangladesh Bank. With a staff of 40, it handles numerous government transactions and serves as a central bank for six other branch banks in the area. It holds a substantial government currency reserve. It does not function as an overall clearing bank. Foreign exchange is arranged through Dacca. Serving an area of 20 square miles with 600,000 people, it has 8,000 bank accounts of which 10% are in the names of women. It has some 150 loans, and two credit officers Its loans to farmers are to the TCCA's under the IRDP. With a loan sanction of approximately Tk 1.5 million ($100,000), it has Tk 800,000 ($53,500) outstanding. About 2,400 farmers are involved.

The second branch visited was the Madhupur Branch which has some 33 loans for Tk 165,500 ($11,000) direct to farmers in two villages. The loans are for the production of pineapples. The average loan size is Tk 5,000 ($333). The loans are given against crop hypothecation - using the standard loan forms and procedures. In two instances where the loans exceeded Tk 5,000 (one was for Tk 8,000 ($533), another Tk 10,000 ($667)), a mortgage was taken by simple deposit of title deeds to land using a prepared form and at no out-of-pocket costs. The range in land holdings of these borrowers was one to 15 acres; the average was two and one-half. The Madhupur Branch has a staff of eleven with deposits of Tk 3.2 million ($20,000). Loans are relatively small - to traders or for agriculture. Of 2,500 depositors, 200 are women. Two of these women have agricultural loans.

A visit was made to the village of Chunia, accompanies by the Branch Manager and one of the bank's supervisors of agricultural credit. The latter had earned a Master's degree in agriculture with a specialty in farm management from Mymensingh Agricultural University, and had taken special training in agricultural credit management and bank management at the Bangladesh Institute of Bank Management. He then was assigned to a branch office and looked after a group financing project at Mymensingh Agricultural University - a research project. Such a supervisor works for several branches as an advisor to the managers. Chunia is located in the forest area. There are 150 families, and with about six per family, a total of 900 people. There are over 2,700 acres of tillable land, and pineapples are the principal crop. Costs of production are partially financed by buyers who contract in advance for the crop. The Sonali Bank has 15 pending loan applications from villagers whose holdings range from one to three acres.

D.2 Janata Bank

The Janata Bank (346 branches) is becoming involved in credit to farmers. Its Rural Credit Department was established in November 1973, and now has five officers, three of whom hold Master's degrees in soil science or agricultural economics. In addition to other training in bank management and agricultural credit they have taken special training in regard to small farmers and landless laborers. The bank is engaged in an aggressive plan of recruiting. In October 1976 they maintained a list of 25 agricultural graduates from Mymensingh Agricultural University who had passed the tests given by the bank and were to be called for interviews in the next month.

The bank's role in financing farmers is summarized in Tables 13 and 14. In addition to the activities listed in Table 13, the Janata Bank provided the Faridpur Academy involved in experimental work on sharecropping with a loan of Tk 175,000 ($ 11,667), provided the sugarcane growers of North Bengal with a loan of Tk 13,865,000 ($924,000), and credit facilities to the growers of Babas, Tangail, Dacca, Comilla and Noakhali areas.

Presently the bank is involved in production and marketing loans against hypothecation of crops and mortgage of land, recoverable immediately after harvesting/marketing of crops and loan for purchase of agricultural inputs, agricultural implements, cattle, pump sets and shallow tube wells. Under the joint scheme of FAO and UNDP known as ASARRD projects, the bank is participating in financing the small subsistence and landless farmers in the districts of Bogra, Comilla and Mymensingh. Supervision of the credit is being done jointly by the bank's field officers and the project people. About 1,500 farmers are involved in this group financing scheme.

The bank conducted a household survey in Rangpur district. On the basis of that survey, projects will be developed and implemented to meet the credit needs of the farmers.

In extending credit to farmers, the bank is more production than security conscious. An officer commented that in the event crop hypothecation is to become generally useful, there is a need for crop insurance. If its pilot projects for direct financing of farmers are successful, it intends to introduce them in other areas. It also plans to open specialized rural credit branches which will deal only in production credit. The bank is opening branches at the union level (next level below thana) and also at improtant "hats" or village markets.

A field trip was made to the Janata Regional Office in Comilla, which supervises 26 branches including four that deal with agricultural credit, and to the Dharmapur and Comilla Cooperative Branches. The Dharmapur Branch opened in 1961 and has two officers and a total staff of 14. It has deposits of Tk 3.8 million ($250,000), and loans, or advances, of Tk 300,000 ($20,000). Fifteen percent of its depositors are women. This branch handles loans under the Mennonite Central Committee Program to three cooperative societies for financing shallow

Table 13

FINANCING OF FARMERS
JANATA BANK - LAST TWO YEARS

Scheme	Area	Purpose	Amount
Schemes of Mennonite Central Committee	Noakhali & Comilla	Potato production Sunflower production Paddy production Tubewell installation	Tk 1,552,000 ($103,000)
Scheme of Comilla Sabuj Parskalpa	Comilla	Potato production Wheat production Seed production Vegetable and oil production	Tk 250,000 ($16,700)
Tobacco and Potato scheme of Rangpur area	Rangpur	Tobacco production Potato production	Tk 433,000 ($ 28,900)
Scheme of educational institutes	Bogra Rajshahi Chittagong Mymensingh	Paddy production Potato production	Tk 104,500 ($ 7,000)
Scheme of jute seed farm	Dinajpur Comilla	Paddy production Potato production Wheat production	Tk 60,000 ($ 4,000)
Scheme of cooperative societies	Tangail Noakhali	Purchase of tractor Paddy production	Tk 148,100 ($ 9,900)
Scheme of Canadian University Services overseas	Dacca	Paddy production	Tk 30,000 ($ 2,000)

Table 14

LOANS TO FARMERS UNDER DIRECT FINANCING SCHEME

JANATA BANK

Year	Number of Loans: Under Tk 1,000 ($67)	Number of Loans: Tk 1,000-3,000 ($200)	Number of Loans: Tk 3,000 ($200)	Total Number of Farmers	Amount Disbursed: Taka	Amount Disbursed: Dollars (Thousands)	Recovery: Taka	Recovery: Dollars (Thousands)	Percent Recovery
1974-75	293	59	21 1/	373	1,066,000	71.1	761,000	50.1	71 3/
1975-76	508	135	73 2/	1,155	1,916,000	127.7	1,560,000	104.0	81
1976-77 (Part Year) 4/	520	-	-	520	300,000	20.0	(Not due)	(Not due)	(Not Due)

100% recovery of all loans is expected

(1) Includes a loan to the Management Group of Faridpur Academy, a private initiative group working to increase agricultural production.

2/ Includes 11 cooperative societies, as for example the tube well projects.

3/ Five parties are involved in the unpaid balance, the Academy just mentioned and four big farmers.

4/ The summary was prepared in October.

tube wells. Land holdings of farmers in these three societies are divided as follows: farmers with less than one acre of ground, 50%; farmers having one to three acres, 40%; and farmers having thre acres and above, 10%. Loans are disbursed in kind; no cash is paid to the farmers. The credit is supervised by the branch manager, the agricultural officer and the Regional Manager along with the Mennonite volunteer. The village with its 150 families covers an area of about on square mile. The cooperative manager, (a school teacher), estimated that 60-70% can read and write to the extent of at least signing a paper.2/ Only men work in the field; 4-5% of the land is owned by women.

The Comilla Cooperative Branch operates with a staff of three officers, three cashiers and a total of 14. Its deposits amounted to Tk 10,400 ($693,000); advances or loans, Tk 5,100 ($340,000). It extends rural credit to 11 groups in two villages involving 69 farmers, fishermen, etc. The villages are Dishaband, two miles away, and Ballabpur, seven miles away. Table 15 reports on the status of these 11 credits.

In the village of Dishaband, a discussion was held with the leader of the seven men in the rickshaw group (item 10, Table 15). The loan financed the purchase of two rickshaws. Payments have been kept up as scheduled and the group has been able to purchase a third rickshaw. In the fishermen's group, one of the seven reported that in the first month he caught enough fish to pay off his loan, pay off a debt to the moneylender and repair his house.

The bank frequently faces the following problems in handling credit to the growers:

1. Small farmers/sharecroppers do not have any collateral to offer as security.

2. Title deeds are sometimes found defective in nature. It is difficult to obtain non-encumbrance certificates.

3. Supervision cost is higher in comparison with the cost of general advances.

2/ This is much higher than estimates received elsewhere - some as low as 30%.

Table 15
STATEMENT OF RURAL CREDIT AS ON OCTOBER 10, 1976
JANATA BANK, COMILLA COOPERATIVE BRANCH
(Amounts in Taka Except as Indicated)

Sl.#	Name	Purpose	Amount Sanctioned	Amount Utilized	Amount Repaid
1.	Ballabpur Pashchim para Beef fattening group	Beef fattening	4,200.00	4,200.00	Nil
2.	Ballabpur Purba para Beef fattening group	Beef fattening	4,100.00	4,100.00	Nil
3.	Ballabpur Dakhin para Beef fattening group	Beef fattening	4,800.00	4,800.00	Nil
4.	Ballabpur Maidhampara Beef fattening group #1	Beef fattening	4,200.00	4,200.00	Nil
5.	Ballabpur Maidhampara Beef fattening group #2	Beef fattening	3,600.00	3,600.00	Nil
6.	Lakshi Nagar beef fattening group, Dishaband	Beef fattening	2,400.00	2,400.00	25.00
7.	Dishaband Lakshipur beef fattening group	Beef fattening	5,400.00	5,400.00	760.00
8.	Dishaband milk raising group	Milk Raising	3,000.00	3,000.00	Nil
9.	Dishaband fishermen group	Netting	1,850.00	1,850.00	915.50
10.	Dishaband rickshaw puller group	Rickshaw purchase	6,400.00	6,400.00	520.00
11.	Dishaband net making group	Net making	400.00	400.00	22.00
	TOTAL IN TAKA		40,350.00	40,350.00	2,232.00
	TOTAL IN DOLLARS		$2,690.00	$2,690.00	$ 148.00

Table 15 (contd......)

Sl.#	Name	Amount Outstanding including Interest	Security	Total Number of Members	Repayment Schedule	Savings To Borrowers Taka	Dollars
1.	Ballabpur Pashchim para Beef fattening group	4,275.00	6 oxen	6	October 12, 1976	144.00	9.6
2.	Ballabpur Purba para Beef fattening group	4,173.00	9 oxen	9	October 12, 1976	238.00	15.9
3.	Ballabpur Dakhin Para Beef fattening group	4,886.00	8 oxen	8	October 12, 1976	312.00	20.8
4.	Ballabpur Maidhampara Beef fattening group #1	4,275.00	7 oxen	7	October 12, 1976	163.00	10.9
55.	Ballabpur Maidhampara Beef fattening group #2	3,664.00	6 oxen	6	October 12, 1976	237.00	15.8
6.	Lakshi Nagar beef fattening group, Dishaband	2,418.00	4 oxen	4	October 12, 1976	61.00	4.1
7.	Dishaband Lakshipur beef fattening group	4,739.00	9 oxen	9	October 12, 1976	104.00	6.9
8.	Dishaband milk raising group	3,000.00	2 cows with calves	2	Tk.40/week for 30 weeks. Full adjustment within 50 weeks.	100.00	6.7
9.	Dishaband fishermen group	957.50	Nets	7	July 30, 1977 - 3 equal instalments of Tk. 550/	140.00	9.3
10.	Dishaband rickshaw puller group	5,998.00	2 rickshaws	7	Tk.70/week until full adjustment	52.50	3.5
11.	Dishaband net making group	378.00	Nets	4	Tk.70/month repayable within six months	27.50	1.8
TOTAL IN TAKA		38,773.59		69		1,579.00	
TOTAL IN DOLLARS		$2,585.00		69		$ 105.3	105.3

The bank has had generally good experience as to repayment of loans by small farmers; much better than that with large farmers. Thus, it is tending to concentrate on loans to small and medium size operators where the funds available will serve more borrowers. With permission from IRDP, the Janata Bank made its first loan direct to a TCCA recently. In addition to its increasing role in financing farmers, the bank claims to finance 60% of the nation's jute trade.

D.3 Agrani Bank

The opening of the Rural Credit Division of the Agrani Bank (305 branches) is very recent - fiscal year 1975-76. A senior agricultural credit expert from the Agricultural Development Bank (BKB) was hired to head the Division and a number of Agricultural graduates have also been hired. The bank plans an area-wide approach under supervised credit control. Tk 10 million ($667,000) has been earmarked for 1976-77 as small farmer credit. The managers of specialized rural credit branches will have authority to sanction small loans to prospective cultivators. The bank plans to utilize village committees which will have knowledge about borrowers and will be expected to exercise moral pressure to assure repayment. The bank will disburse loans to farmers on an installment basis; e.g., plowing, transplanting, harvesting, marketing, etc. to assure proper use of credit.

Presently the bank is financing farmers of the Dacca-Narayanganj-Demra irrigation project who are already indebted to the National Cooperative Bank (JSB); the Agrani Bank is trying to give them a cushion.

D.4 Rupali Bank

In 1975-76 this bank (with 227 branches) sanctioned Tk 10.7 million ($713,000) for agricultural credit for tea estates, potato cold storage and for paddy production as a test. For the current year the expected amount is Tk 1.1 crore ($750,000). It plans to loan money to groups of farmers with adjacent land holdings in the following areas: Dacca-Mirkadam for potato production, Khulna-Satkhira for potato production, Noakhali-Chaumuhani for paddy production and Rajshahi for silk production. The bank is actually recruiting loan officers and plans to appoint some agricultural graduates.

Problems noted were the need for warehouses to store crops after harvest and the need of farmers for living expenses. Mention was made of the difficulty of direct contact with farmers in remote areas due to lack of institutional establishments in such areas.

D.5 Pubali Bank

The activities of the Pubali Bank (182 branches) in agricultural credit are shown in Table 16. The officer in charge of agricultural credit has been using other regular members of the bank staff for assistance. The bank has prepared an extensive Manual on Agricultural Financing that will be of use in designing the Small Farmer Credit Pilot Program.

D.6 Uttara Bank

With only four regional offices and ninety branches, this is a relatively small bank. Its involvement in agricultural credit has been limited to the financing of tea companies and the procurement of fertilizer by cooperative societies from time to time. Recently the bank issued a guarantee of Tk 5 million ($333,000) to UNICEF to supply 10,000 tube wells to IRDP. The bank plans to initiate pilot projects to advance credit directly to farmers, where they have a branch. It plans to give a portion of the credit in cash and a portion in kind. It plans to make some advances to groups of farmers with joint responsibility. In general, its experience has been that small borrowers are very prompt in repaying.

Summary - Commercial Banks

The commercial banks, Sonali and Janata in particular, have caught the spirit of the needs of the small farmers for credit. They have established branches at the village level (Krishi Shakas), are beginning to relax the generally stringent requirements for collateral, and are training large numbers of new loan officers with agricultural and agronomy backgrounds. Their experience in the good repayment record of small farmers (as compared with the record of recovery for large loans) has led them to actively extend their services to the small farmers. In many respects, these new approaches to the small farmers are similar to the ideas in the proposed Small Farmer Credit Program.

Table 16
AGRICULTURAL CREDIT
PUBALI BANK

Purpose	Name of Borrower	Security	Outstanding as of July 31, 1976 Taka (Lakhs)	Outstanding as of July 31, 1976 Dollars (Thousands)	Program for 1976-77 Taka (Lakhs)	Program for 1976-77 Dollars (Thousands)
1. Production of Paddy	Rangunia Thana Central Cooperative Association, Ltd.	Fixed deposits for Tk. 1,200,000 ($80,000)	10.15	68		
	Group of farmers under 'Swanirvar Program' at Sylhet & Sunamganj	Landed property, etc.	0.39	3	30.00	200
	Individual agriculturists	Landed property, etc.	1.25	8		
2. Horticulture	M/s.Taher's agricultural farm and other individual agriculturists	Landed property, etc.	5.37	79	7.00	47
3. Fisheries	Bangladesh Jatiya Matshyajibi Samabaya Samity	Against fixed deposits for Tk.8,423,000 ($562,000),pledge of Marine diesel engine, nylon twine, nylon ropes synthetic floats, cotton yards,navigational instruments, fishing materials, etc.	116.19	775	110.0	733
	M/s.Green Bay Corp.and other private individuals	Hypothecation of fishes in ponds, landed property, etc.	1.40	9		
4. Credit to Fertilizer Dealers	Hathazari Thana Central Cooperative Association, Ltd.	Fixed deposits for Tk.2,500,000	17.92	119	30.00	200
	Patiya Thana Central Cooperative Association Ltd.	Fixed deposits for Tk. 600,000	4.79	32		
5. Sericulture	BCIC	Against pledge of stock of raw materials,i.e.,co-coon and finished goods like silk cloth and saree of all types	7.09	47	8.00	53

(Contd.....)

Table 16 (contd......)

Purpose	Name of Borrower	Security	Outstanding as of July 31, 1976 Taka (Lakhs)	Dollars (Thousands)	Program for 1976-77 Taka (Lakhs)	Dollars (Thousands)
6. **Tea**	Different tea gardens	Hypothecation of tea plant, equitable mortgage of land, building, shed, etc.	120.46	803	150.00	1,000
7. **Potato**	Cold storage owners	Land, building, parts and accessories of cold storage, etc.	34.28	227	40.00	267
8. **Others**	Chittagong Central Cooperative Bank	Fixed deposits for Tk.2,500,000 ($167,000)	24.94	167	Nil	Nil

Suggested Format for Reporting Project Performance Data to the Bangladesh Bank and for Requesting Project Fund Releases

Ref No:________ Date:______________

TO: Agriculture Division
Bangladesh Bank
Dacca

FROM: ____________________

____

____

SUBJECT: AID Rural Finance Experimental Project
Report of Project Performance and Application for Release of Project Funds

1. Period covered by this report:_____________________

2. During the reporting period a total of __________ loans were extended to borrowers meeting project target group criteria. These loans totalled Tk ______________ in value as follows:

a Credit Outlet	b No. of loans extended during period	c Total Value of loans extended during period
A. ______________	______________	______________
B. ______________	______________	______________
C. ______________	______________	______________
D. ______________	______________	______________
E. ______________	______________	______________
F. ______________	______________	______________
G. ______________	______________	______________
H. ______________	______________	______________

I. __________	__________	__________
J. __________	__________	__________
TOTAL	__________	__________

3. During the same period principal and interest payments were collected on outstanding loans to target group borrowers as follows:

a Credit Outlet	b Target group payment due during period (total value)	c Target group payment actually collected (total value)
A. __________	__________	__________
B. __________	__________	__________
C. __________	__________	__________
D. __________	__________	__________
E. __________	__________	__________
F. __________	__________	__________
G. __________	__________	__________
H. __________	__________	__________
I. __________	__________	__________
J. __________	__________	__________
TOTAL	__________	__________

4. Total value of target group loan transactions

   A. Target group loans extended (2 c above) ______________

   B. Target group payments collected (e3 c above)______________

   C. Total ______________

5. Total project fund release requested
   (line 4 C $\div$ 3) : ______________

I hereby acknowledge that the final amount of the sum to be released in response to this request will be determined after the data presented above has been verified by the Bangladesh Bank.

____
Authorized Project Representative

____
(Credit Institution)

RURAL FINANCE EXPERIMENTAL PROJECT
Scope of Work for Technical Consultant

I. Project Objectives

The project will finance the conduct of a number of experimental rural finance models. The objective of the experiments is to devise or identify at least one or more finance systems which are successful at extending credit and recovering it from the target group defined in paragraph II below, as well as attracting capital through rural savings programs for self financed expanded lending.

II. Project Target Group

The target group for this project is defined as rural dwellers over age 18, male or female, earning less than Tk 3,000 ($200) per year from all sources (farming, day laboring, rickshaw driving, fishing, retail marketing, rice processing, handicrafts, etc.), having a net worth (excluding the value of cultivable land) or less than Tk 5,000 ($333), and cultivating six bighas of land (two acres) or less, irrespective of whether such land is owned, rented or sharecropped. This definition may be further refined during the course of project implementation.

III. Responsibilities of Technical Consultant

The Consultant, acting on behalf of the Bangladesh Bank, will have principal day-to-day responsibility for project implementation. This will involve providing technical assistance as appropriate to experimental models or their sponsoring organizations, verifying reported performance data to facilitate project fund releases, conducting regular evaluations of each model's performance in meeting the project objectives described briefly in Section I above, recommending measures to improve the delivery of institutional credit to the target group and in mobilizing savings, and assisting in the implementation of such recommendations. Each of these areas of responsibility are described in more detail below.

A. Providing Technical Assistance

The Consultant shall provide all possible assistance as needed in order to test the workability and effectiveness of each model. This includes specialized assistance in such areas as design of application forms, accounting, development of procedures for agricultural crop loans in cost and kind, determination of types and terms of savings mobilization plans, financial analyses of the loan and savings programs, management and publicity, information and training requirements. It also includes actual design and conduct of training seminars and courses for field credit personnel. The Consultant should be prepared to draw upon existing project staff in-country to address problems as they arise, and to bring in outside expertise if necessary. Potential problem areas for example include:

-- limited effectiveness in reaching significant portions of the target group;

-- inability to mobilize sufficient capital through saving to accommodate credit demand;

-- active opposition by money lenders;

-- lack of trained personnel capable of dealing in agricultural credit;

-- inability to motivate personnel to be responsive to borrower's needs without bribes or entertainment;

-- inability to cover operating costs through finance charges;

-- lack of understanding among the target group of the potential benefits of the use of borrowed resources, with consequent low motivation to secure loans;

-- low level of repayment discipline;

-- misunderstanding of the role of higher interest rates.

It will be the Consultant's responsibility to deal with all operational problems confronting each model.

B. Verification of Performance Reports Submitted by Participating Credit Institutions

Credit institutions sponsoring experimental models will submit regular reports to the Bangladesh Bank on the number and value of loans made by each experimental outlet to target group borrowers, and the number and value of such loans recovered from borrowers on time and with interest. These reports form the basis for the release of grant funds by the Bangladesh Bank to participating credit institutions, as follows.

For each verified loan to a target group borrower as defined in Section II above, the Bangladesh Bank will release funds on a grant basis to the lending institution totaling one-third the value of the loan extended. For each such loan fully recovered from a target group borrower, an additional sum totaling one-third the amount of the loan will be released on a grant basis. Partial recoveries will result in proportionally reduced releases, but in no instance will credit institutions be made to bear an overall loss attributable to this project. If losses exceed regular project fund releases as just described, special releases can be made outside the one-third-one-third formula on the basis of project evaluation. It will be the Consultant's responsibility to assure that the reports upon which the amount of the Bangladesh Bank's releases are based reflect actual target group lending and recovery performance.

For example, assume that 1,000 loans are reported by a participating bank, with a total amount extended of Tk 650,000. If 70 out of 100 loans field monitored by the

Consultant are found to have been extended to borrowers who meet the target group definition, and of those, 63 were fully repaid on time, then the Bangladesh Bank could finance the loans on a retrospective basis as follows:

A.	Total amount of loans reported	Tk 650,000
B.	Amount of Project Account release for loans extended if all were to target group Tk 650,000 ÷ 3 =	216,667
C.	Adjustment on basis of proportion of target group borrowers in consultant's sample Tk 216,667 x .70 =	151,667
D.	Amount of Project Account release for loans recovered if all were to target group Tk 650,000 ÷ 3 =	216,667
E.	Adjustment on basis of proportion of timely recoveries from target group borrowers (63 - 90% of 70) Tk 151,667 x .90 =	136,500
F.	Total amount of Grant release from Project Account:	
	From C above: Tk 151,667	
	From E above: Tk 136,500	
	Total	Tk 288,167

C. Conducting Regular Evaluations

In addition to verification of data for funding purposes, the Consultant shall be responsible for all aspects of the quarterly evaluation process, including collection and verification of detailed performance data for each outlet, its tabulation and analysis and the formulation of recommendations for improving performance. Specific responsibilities shall include the following:

1. Preparation of formats for the collection of detailed performance data. A set of illustrative formats has been prepared and is included at Annex B.9 to the Project Paper. These formats may form the basis for further work, but they require critical review by data collection and processing specialists.

2. Quarterly collection and verification of data at all project outlets. This will be a continuous process throughout the project life. Data collection may require additional personnel resources, either through direct hire of local nationals or through a sub-contract with a local university or research firm. Data should be verified on a sample basis to confirm its accuracy. The Consultant shall determine the most effective procedures for data collection and verification and will be fully responsible for its accuracy.

3. Data will have to be tabulated in order to enable performance comparisons between models, variation by region, season and type of borrower and depositor, as well as any other characteristics needed for thorough performance evaluation.

4. On the basis of data tabulated as above and of the direct field experience of the Consultant's personnel, an evaluation report will be prepared in narrative form each quarter analysing the strengths and weaknesses of each model. In cases where models exhibit weaknesses the Consultant will provide his best judgment regarding causative factors and will recommend specific corrective actions. The analysis should also include an assessment of the extent to which local target group demand for credit is being met by each model, along with an appraisal of the prospects for improving coverage of demand through added

staff, additional capital, increased mobility, more efficient procedures, better publicity, etc. The analysis shall also include assessment as to the effectiveness of those savings mobilization programs incorporated in the models, specifically the relationship of savings to credit needs, and recommend changes or improvements as necessary.

5. The evaluation report will conclude with a set of overall recommendations regarding the relative merits and potentials of each model. For models which demonstrate little prospect of satisfactory performance modification may be recommended in order to replicate successful models for expanded test operations. Recommendations may also be made to introduce new variations for experimentation. Specific operational plans and budgets should accompany such recommendations. Also recommendations for specific changes in credit and savings regulations and procedures should be made where necessary.

D. Recommendations to Improve Delivery of Institutional Credit and Mobilization of Savings.

The Consultant will assist in the implementation of all recommendations made per paragraph B.5 above. This will include assistance with organizational changes, modification of procedures, revision of accounting systems, additional training, and any other areas where recommendations may be made to improve the delivery of institutional credit to the target group or mobilization of savings. Likewise included will be assistance in establishment of new outlets as the project expands in the second and third years of implementation.

The scope of work outlined above will be accomplished through the assignment of technical and other specialists to the project. The Consultant should be prepared to provide expertise in areas including but not necessarily limited to the following:

Rural Credit
Credit Training
Rural Savings
Evaluation
Anthropology or Sociology
Accounting
Data Processing

The number of workmonths of service provided in each of these areas and others as necessary will be determined by the Consultant in consultation with the Bangladesh Bank. Up to 243 work months may be provided in total.

SUGGESTED FORMAT FOR QUARTERLY COLLECTION OF DATA FOR EVALUATION OF PERFORMANCE OF MODELS*/

I. Performance in extending credit to the target group

1. Name of model ____________________

2. Sponsoring organization ____________________

3. Name and location of outlet ____________________

4. What is the area served by the outlet being investigated?

   Square miles (approx.): ____________________

   Villages included (name): ____________________

   ____

   ____

   ____

5. What is the total estimated number of farms in this area? __________

   Please acquire whatever census or other data is available concerning this area, and attach copies to this form.

6. Based on discussions with villagers, union officials and bank officials, what is the approximate number of potential borrowers in this area who fit the target group definition? ____________________

   Describe how you developed this number, with whom it was discussed, and provide the estimates given by others for the same area (cite sources). Use back of this sheet and additional paper as necessary.

7. Provide the total number of loans made by this outlet since __________ ____________________ (date of project signing) and since the last evaluation

   a. since project signing __________; since last evaluation __________.

*/ NOTE: This format is illustrative only. The Technical Consultant will be fully responsible for format design, data collection and analysis. Although this format may be used as a guide or starting point, it is not considered to be comprehensive, it has not been field tested, and it should not be regarded as approved by AID for use on this project.

8. Based on your review of loan files and interviews with a minimum of ten percent of the borrowers acquiring loans since the last evaluation, categorize all borrowers as follows:

Summary Categorization of Borrowers by Landholdings

Borrowers Characteristics	Number of Borrowers: Since (Date of Project Agreement)	Number of Borrowers: Since (Last eval.)
	________	________
A. Cultivating no land	________	________
B. Cultivating up to 1 acre		
Sharecropping	________	________
Renting	________	________
Owning	________	________
Combination	________	________
C. Cultivating 1 to 2 acres		
Sharecropping	________	________
Renting	________	________
Owning	________	________
Combination	________	________
D. Cultivating 2 to 3 acres		
Sharecropping	________	________
Renting	________	________
Owning	________	________
Combination	________	________
E. Cultivating 3 to 4 acres		
Sharecropping	________	________
Renting	________	________
Owning	________	________
Combination	________	________

F. Cultivating 4 to 5 acres

Sharecropping	____	____
Renting	____	____
Owning	____	____
Combination	____	____

G. Cultivating over 5 acres

Sharecropping	____	____
Renting	____	____
Owning	____	____
Combination	____	____

H. Total borrowers ____ ____

9. Select a minimum of ten loan files at random for borrowers receiving loans since the last evaluation. Conduct interviews with each of the ten and obtain the following information for each:

Format for Borrower Questionnaire

A. Name of bank ____ Outlet ____

B. Name of borrower ____ Village ____

C. Distance from credit outlet ____

D. Land controlled by interviewee (acres)

Owned ____
Rented ____
Sharecropped ____
Total ____

E. When did you apply for loan? ____

F. How much did you ask for? ____

G. When did you receive loan? ____

H. How much did you get? ____

I. Did you go to the bank or did banker come to you? ____

____

____

J. Did you have to fill out forms and/or answer questions? Describe, as best as you can remember.

K. What are the terms of your loan?

Amount to be repaid ______
Interest rate ______
When payment(s) due ______

L. How much bakshish did you pay? ______

M. How long did you have to wait to get loan (No. of hours)? (24 hours for each full day waiting) ______

N. What problems are you facing with this loan?

O. How did you learn about loans being available?

P. Will you take another loan?

Q. If not why not?

R. Was the loan provided in time?

S. What reason did you tell the bank you needed the loan for?

T. What did you actually use the money for?

U. Do you think this loan program is good enough to recommend to your friends or neighbors?

V. Do you have savings deposited with this bank or any other bank? If not why not? If yes why?

W. What interest is paid?

X. Would you deposit savings if interest were 10%?______ 15% ______ 20%?______ 25%?______

Y. What other features would make depositing savings in a bank attractive to you?

Date of interview______________________

Name of interviewer______________________

10. Summary assessment of performance in extending credit to target group.

A. Total number of potential target group borrowers (Item 3 above): ____________________

B. Total number of actual borrowers since __________ (Date of project agreement) meeting target group criteria: ____________

C. Number in B above divided by total number of months since outlet established

_______________ ÷ _______________ = __________

D. Number in C above as percent of A

(C)_______________ ÷ (A)__________ x 100 = __________

E. Using data from questionnaire item 9. M. above, calculate average waiting time in hours between initial contact with bank regarding a loan and actual receipt of money or vouchers. For multiple days, use 24 hours for each day of waiting time.

Average waiting time __________ hours.

F. Divide number in D above by average number of hours waiting time in E above

(D)_______________ ÷ (E)__________ = __________

The resulting number value in F above represents an index number reflecting the proportion of target group reached and the timeliness with which the group was reached. The number has no intrinsic value, but can be used to compare one model outlet with another. A higher value suggests relatively more effective performance in achieving project objectives. These assessment values should be taken merely as a general guide for closer study and not as a definitive reflection of success or failure of a model.

II. Performance in recovering resources lent on time and with interest

1. Of the loans made since ____________ (Date of Project Agreement), how many are overdue?

   A. Up to 1 month ____________
   B. 1 to 2 months ____________
   C. 2 to 3 months ____________
   D. 3 to 4 months ____________
   E. 4 to 5 months ____________
   F. 5 to 6 months ____________
   G. 6 months and more ____________
   H. Total ____________

2. Describe what action has been taken, if any, by credit outlet personnel to recover the money due.

3. Select on a random basis ten percent of all overdue loans (but not less than ten, if available) and conduct interviews with each of the borrowers with overdue loans, obtaining the following information for each:

   A. Name of credit organization ____________ Outlet ____________

   B. Name of borrower ____________ Village ____________

   C. Your bank or cooperative says your loan is overdue. Why is this? ____________

   D. What do you plan to do about it? ____________

   ____

   E. What do you think will happen if you do not repay? ____________

   ____

   F. Have credit officials or anybody else come to you to discuss this overdue problem? If so, who? ____________

   What did he say? ____________

   ____

G. If the bank agreed to give you more time to pay, would you repay in full?

H. What threat or action would make you do everything possible to repay the loan?

Court action	____________
Jail	____________
Taking possession of your land, pump, cow, etc.	____________
Taking away right to vote	____________
Other (______________)	____________

I. Will you try to get another loan? For what______________

How much?__________ When?__________ From which source__________

Name of interviewer______________

Date of interview______________

4. Summary assessment of performance in recovering resources lent on time and with interest

A. Total value of loans extended under this program since

______________________(Date of Project Agreement)

____

B. Total value of payments which have come due since them, including interest:______________________

C. Total value of all loan payments which have actually been received, including interest:______________________

D. Number in C above as a percentage of B times magnitude of disbursements (A)

[(C)____________ ÷ (B)____________] X (A)____________

= ______________

____

The resulting number value in D above represents an index number reflecting actual repayment performance against amounts due, weighted to favor outlets with relatively high disbursements. As in I above, the number has no value other than as a tool to enable comparison of one model against another. A higher value suggests relatively more effective performance in achieving project objectives. However, these values should be taken merely as a general guide for closer study and not as a definitive reflection of success or failure of a model.

III. Performance in covering operating costs through interest, finance charges and other levies on the target group

1. List all actual costs attributable to this program on a monthly basis since ______________ (Project Agreement) _________ (last evaluation), whichever is more recent:

	Month/Yr	Month/Yr	Month/Yr
Cost items:	______	______	______
Salaries			
Professional	______	______	______
Sub-Professional	______	______	______
Cap. Eqpt. depreciation	______	______	______
Building rental	______	______	______
Utilities	______	______	______
Stationery & Supplies	______	______	______
Overhead (parent branch, HQ)	______	______	______
Defaults, write-offs	______	______	______
Other(______________)	______	______	______
Total Costs	______	______	______

2. List loan amounts outstanding as of the end of each month listed, and interest and other charges accrued (both paid and receivable)

Loan amount outstanding	______	______	______
Interest accrued during month			
at ________%	______	______	______

Interest actually received	______	______	______
Interest receivable	______	______	______
Principal recovered	______	______	______

3. List total assets, liabilities and net worth for the outlet as of the end of each month

A. Assets

Loans outstanding	______	______	______
Deposits in Parent Branch/HQ	______	______	______
Cash on hand	______	______	______
Accounts receivable	______	______	______
Real property and equipt.	______	______	______
Other assets	______	______	______
Total	______	______	______

B. Liabilities

Accounts payable			
Current Accounts	______	______	______
Other deposits	______	______	______
Loans from Parent Branch, HQs or B. Bank	______	______	______
Other liabilities	______	______	______
Total	______	______	______

C. Net worth (A - B) ________ ________ ________

4. Summary assessment of performance in covering operating costs.

   A. Calculate total average monthly operating costs for past three months using data entered in Item 1 above.

      Total average monthly operating costs ____________________

   B. Calculate total average monthly interest accrued on outstanding loan amounts for past three months using data in Item 2 above

      ________________________.

   C. Number in B above as a percentage of a

      [(B)__________ ÷ (A)______________] X 100 = __________

A high number in Item C suggests better performance in covering costs with accrued interest. However, it does not take into account the failure to receive the interest accrued, through defaults, delays, etc. Nonetheless a value over 100 suggests at least the potential for covering costs if not actual success in doing so.

IV. Performance in raising capital through local savings program

1. List deposits by size of deposit as of date of this evaluation.

Size of individual deposit	No. of depositors
Less than Tk 50	______
Tk 51 - 100	______
Tk 101 - 150	______
Tk 151 - 200	______
Tk 201 - 250	______
Tk 251 - 300	______
Tk 301 - 350	______
Tk 351 - 400	______
Over Tk 401	______
Total	______

2. List amounts on deposit at end of each month since ______ (Project Agreement), along with total loan amount outstanding.

a Month/Yr	b Deposits	c Loan outstanding	d Deposits as percent of outstanding loans (b ÷ c)
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______

3. Describe efforts being undertaken by outlets to attract savings.

Deposit interest rate: ____________________

Other features: ____________________

____

____

4. Tabulate responses to questions under item 1.9.V above concerning savings deposited by borrowers.

A. No. of borrowers interviewed who have savings deposited ________

B. Summary listing of reasons given for depositing savings.

	No.
________	________
________	________
________	________

C. No. of borrowers interviewed who do not have savings deposited ________

D. Summary listing of reasons given for not depositing savings.

	No.
________	________
________	________
________	________

E. Summary tabulation of attractiveness of various savings deposit interest rates

	No. who would save	No. who would not
10%	________	________
15%	________	________
20%	________	________
25%	________	________

F. Select ten depositors at random. Conduct interviews with each of the ten and obtain the following information for each:

a. Name of bank ____________________ Outlet ____________

b. Name of depositor ________________ Village ____________

c. Loans outstanding in name of depositor

Purpose	Amount	Due
____________	__________	____________
____________	__________	____________
____________	__________	____________

d. Amount on deposit as of: Tk _____________

e. Why have you deposited money with this bank?

f. Do you add money to your deposit occasionally?

How much? ________________ How often? __________

g. Would a higher deposit interest rate convince you to deposit more money?

h. What other features would make saving more attractive to you?

	___________
Security from robbery	___________
Confidence that money is retrievable	___________
Ease of withdrawal	___________
Other (____________)	___________

I. What problems or complaints have you had regarding your savings deposit?

____

Date of interview _______________

Name of interviewer ____________________

5. Summary assessment of performance in raising capital through local savings.

   A. Enter total amount of all outstanding loans as of date of evaluation ___________

   B. Enter total amount of all savings deposits as of date of evaluation ___________

   C. Number in B as percentage of A

   [(B)__________ - (A)__________] X 100 = ________

Environmental Assessment

This project involves experimentation with credit institutions. No construction, introduction of chemical substances, mineral extraction or water or air pollution will result, and accordingly there will be no direct impact upon the environment. If the experiments lead to identification of a workable credit system, a follow-on project will finance its installation nationwide. This will broaden the use of fertilizer, pesticides and high yielding varieties of rice and wheat as well as increase the scope and intensity of productive activities generally. As with all economic growth, both positive and negative effects upon the environment will result. The net effect, however, promises to be improved economic well-being of the population of Bangladesh.

AID 1020-28 (1-72)

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 77 to FY 80
Total U.S. Funding US $7.00 Million
Date Prepared: July 11, 1977

Project Title & Number: RURAL FINANCE EXPERIMENTAL PROJECT 388-0025

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: Establishment of an effective nationwide institutional rural finance system providing credit and savings facilities to small farmers and other small rural producers.	Measures of Goal Achievement: 10% increase in number of loans extended to small farmers and other small rural producers.	AID field surveys; reports of banks and other implementing organizations; Bangladesh Government Agricultural Census Data.	Assumptions for achieving goal targets: 1. Follow on project financing is available to assist in installing the new system. 2. BDG and credit institutions continue their support for project objectives.
Project Purpose: Development of one or more replicable model rural finance systems providing credit and savings facilities to small farmers and other small rural producers.	Conditions that will indicate purpose has been achieved: End of project status. At least one of the models tested demonstrating ability to extend credit to and recover it from the target group, meeting all or most credit demand by attracting savings and operating on a self financing basis. Model must be replicable throughout Bangladesh.	AID project monitoring; joint BDG-AID project evaluations; implementing organization reports.	Assumptions for achieving purpose: 1. Individuals in target group are capable of repaying loans and willing to borrow from institutional sources. 2. Rural capital is attracted to institutional savings facilities.
Outputs: Model rural finance systems fully tested and evaluated on a pilot operation basis.	Magnitude of Outputs: At least five models in operation.	AID project monitoring; joint BDG-AID project evaluations; implementing organizational reports.	Assumptions for achieving outputs: Implementing organizations remain willing and able to commit qualified personnel and sufficient resources to their pilots.
Inputs: AID 1. Technical Assistance 2. Training 3. Funds for credit and losses 4. Vehicles BDG 1. Legislative and policy changes 2. Overhead, including office space, staff and supplies; operation and maintenance of project vehicles.	Implementation Target (Type and Quantity) 1. 243 work months 2. 1200 work months in country training; 20 work months third country training 3. 8,850 loans disbursed through 321 credit outlets. 4. Six heavy duty project vehicles. (Total project financing $7.0 million) 1. Liberalization of interest and collateral policies to permit experimentation; 2. Overhead (Total contribution $440 thousand)	AID 1. AID contract monitoring 2. AID project records and trip reports 3. Financial reports. 4. Procurement and shipping reports. BDG 1. BDG gazette and official notices. 2. BDG Government orders and implementing organization reports.	Assumptions for providing inputs: BDG is willing to make legislative and policy changes required and will continue to have sufficient resources available.

STATUTORY CHECKLIST

A. GENERAL CRITERIA FOR COUNTRY

1.	FAA Sec. 116. Can it be demonstrated that contemplated assistance will directly benefit the needy? If not, has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights?	Yes, it can so be demonstrated.
2.	FAA Sec. 481. Has it been determined that the government of the recipient country has failed to take adequate steps to prevent narcotics, drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents or from entering the U.S. unlawfully?	No, Department of State has not so determined.
3.	FAA Sec. 620(a). Does the recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba?	The President has granted a waiver to the BDG to trade jute with Cuba.
4.	FAA Sec. 620 (b). If assistance is to a government has the Secretary of State determined that it is not controlled by the international Communist movement?	Yes.

5.	<u>FAA Sec. 620 (c)</u>. If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhaused available legal remedies and (b) debt is not denied or contested by such government?	No.
6.	<u>FAA Sec. 620 (e)</u>. If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?	In 1972 the BDG nationalized five firms which were fully or partially owned by U.S. entities. The BDG has announced a compensation policy and is taking steps to discharge its obligations toward U.S. citizens and entities.
7.	<u>FAA Sec.620 (f); App.Sec.108.</u> (a) Is recipient country a Communist Country? (b) Will assistance be provided to the Democratic Republic of Vietnam, Cambodia or Laos?	(a) No. (b) No.
8.	<u>FAA Sec. 620(i)</u>. Is recipient country in any way involved in (a) subversion of, or military aggression against the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression?	No.
9.	<u>FAA Sec. 620 (j)</u>. Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property?	No.

10. FAA Sec. 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason?

An OPIC bilateral agreement was signed on January 15, 1975.

11. FAA Sec. 620 (o). Fishermen's Protective Act, Sec. 5. Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? If so,

No.

a. has any deduction required by Fishermen's Protective Act been made?

b. has complete denial of assistance been considered by AID Administrator?

12. FAA Sec.620(q); App.Sec 504. (a) is the government of the recipient country in default on interest or principal of any AID loan to the country? (b) Is the country in default exceeding one year on interest or principal on U.S. loan under a program for which an Act of Congress appropriates funds, unless debt was earlier disputed or appropriate steps taken to cure default?

a) No.
b) No.

13. FAA Sec.620(s). a) What pereentage of country budget is for military expenditures? b) How much of foreign exchange resources are spent on military equipment? c) How much

a) Approximately seven percent.
b) and c) The Soviet Union has provided a limited number of aircraft for the BDG airforce. This non-sophisticated equipment was purchased

	is spent for the purchase of sophisticated weapons systems?	on credit at reduced prices. The BDG is not diverting development assistance funds for military expenditures.
14.	FAA Sec.620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?	No.
15.	FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget?	Not in arrears.
16.	FAA Sec. 620 A. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism?	No.
17.	FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. there to carry out economic development program under the FAA?	No.
18.	FAA Sec. 669. Has the country delivered or received nuclear reprocessing or enrichment equipment, materials or technology, without specified arrangements on safeguards, etc,?	No.
19.	FAA Sec. 901. Has the country denied its citizens the right or opportunity to emigrate?	No.

B. FUNDING CRITERIA FOR COUNTRY

1. Development Assistance Country Criteria

a. FAA Sec. 102(c), (d). Have criteria been established and taken into account to assess the commitment and progress of the country in effectively involving the poor in development, on such indexes as: (1) small-farm labor intensive agriculture, (2) reduced infant mortality, (3) population growth, (4) equality of income distribution and (5) unemployment.

(1) Yes
(2) Yes
(3) Yes
(4) Yes
(5) Yes

b. FAA Sec. 201(b)(5), (7) & (8); Sec. 208; 211(a) (4), (7). Describe the extent to which the country is

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

(1) Increasing foodgrain production is a major objective of the Bangladesh Five Year Development Plan (FYP). Included also in the FYP are programs for storage and distribution of food.

(2) Creating a favorable climate for foreign and domestic private enterprise and investment.

(2) BDG policy encourages both foreign and domestic private enterprise and investment, and in January 1975, in OPIC bilateral agreement was concluded. In addition, the new Martial Law Administration (since November 7, 1975) has particularly emphasized the role of private enterprise, is looking to the denationalization of a number of firms, and has announced a new private sector oriented investment policy.

(3) Increasing the public's role in the development process.

(3) Implementation of Bangladesh's development plans requires a large public role in development. Cooperatives are encouraged by the Government, directly involving the public in a participatory role. In addition, the national rural works program also requires a high degree of local decision-making and participation.

(4) (a) Allocating available budgetary resources to development.	(4) (a) Bangladesh's budgetary resources are overwhelmingly allocated to relief and development expenditures.
(b) Diverting such resources for unnecessary expenditures and intervention in affairs of other free and independent nations.	(b) Bangladesh's military expenditures are very low in absolute and real terms. The level of defense spending is not a diversion of development funds.
(5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press and recognizing the importance of individual freedom, initiative, and private enterprise.	(5) Bangladesh is predominantly a nation of small farms, and while a large proportion of these are cultivated by shareholders and lease farmers, as well as farmers who both own some land and lease or sharehold, the average area per family is under two acres and large holdings are the exception. Accordingly, land tenure changes while necessary in the long term, are not as critical an element for the development of Bangladesh as for other LDCs. On the other question, the new Martial Law Administration has evidenced a concern for each of these; this has been manifested through tighter public administration, return of newspapers to private control, and encouragement of private enterprise. Recognition of the importance of individual freedom and initiative also appear to be marks of the new Government. Martial Law has been extended to the country in what appears principally to be an effort to clear up carry-over problems of corruption and abuse of power. Respect for the rule of law is stated as underlying the current measures.
(6) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.	(6) The new Government evidences a concern for these questions and has been taking action to improve the public service, to release economic activity from constraints formerly imposed by governmental intervention, and to alleviate conditions of the people through rural works programs, food for work and other self-help programs.

(c) FAA Sec. 201(b), 211(a). Is the country among the 20 countries in which development assistance loans may be made in this fiscal year, or among the 40 in which development assistance grants (other than for self-help projects) may be made?

(c) Yes.

(d) FAA Sec. 115. Will country be furnished, in the same fiscal year, either security supporting assistance or Middle East peace funds? If so, is assistance for population programs, humanitarian aid through international organizations, or regional programs?

(d) No.

2. Security Supporting Assistance Country Criteria

a. FAA Sec. 502 B. Has the country engaged in a consistent pattern of gross violations of internationally recognized human rights? Is program in accordance with policy of this Section?

a. No. Program is in accordance.

b. FAA Sec. 531. Is the assistance to be furnished to a friendly country organization, or body eligible to receive assistance?

b. Not applicable.

c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

c. Not applicable.

C. GENERAL CRITERIA FOR PROJECT

1. App. Unnumbered; FAA Sec.653(b)

(a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than $1 million over that figure plus 10%)?

(a) The Committees on appropriations will be notified through standard procedures upon final approval.
(b) Assistance is within the OYB country allocation reported to Congress.

2. FAA Sec. 611 (a) (1). Prior to obligation in excess of $100,000, will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Yes.

3. FAA Sec. 611 (a) (2). If further legislative action is required within the recipient country, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?

No further legislation is contemplated.

4. FAA Sec. 611 (b); App.Sec.101. If for water or water-related land resource construction, has project met the standards and criteria as per Memorandum of the President dated Sept. 5, 1973 (replaces Memorandum of May 15, 1962; see Fed. Register, Vol 38, No.174, Part III, Sept. 10, 1973)?

N/A

5.	FAA Sec. 6ll (e). If project is capital assistance (e.g.,construction), and all U.S. assistance for it will exceed $l million, has Mission Director certified the country's capability effectively to maintain and utilize the project?	N/A.
6.	FAA Sec. 209, 6l9. Is project susceptible to execution as part of regional or multilateral project? If so why is the project not so executed? Provide information and conclusion whether assistance will encourage regional development programs. If assistance is for newly independent country, is it furnished through multilateral organizations or plans to the maximum extent appropriate?	Not susceptible to regional or multilateral execution.
7.	FAA Sec.60l (a); (and Sec.20l (f) for development loans). Provide information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	(a) The project will not direct influence the country's international trade activities; (b) by providing a reliable source of credit, private initiative and competition will be encouraged; (c) the development and use of all financial institutions in rural Bangladesh will be encouraged; (d) monopolistic practices, particularly in the field of credit, will be discouraged; (e) the overall productivity of agriculture and rural industry and commerce will be directly stimulated; (f) there is not expected to be any direct impact on free labor unions.
8.	FAA Sec. 60l (b). Provide information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance	The project will have no direct impact on U.S. private trade and investment abroad or on private U.S. participation in foreign assistance.

programs (including use of private trade channels and the services of U.S. private enterprise).

9. FAA Sec. 612 (b); Sec. 636 (h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.

Because of the high risk and high cost elements of this experimental project, all costs of expatriate contractual services, both foreign and local, will be financed by the AID grant.

10. FAA Sec. 612 (d). Does the U.S. own excess foreign currency and, if so, what arrangements have been made for its release?

The U.S. does not own excess local currency.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec.102(c); Sec.111;Sec. 281a. Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production, spreading investment out from cities to small towns and rural areas; and (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions?

Project purpose is to devise or identify a replicable model rural financial system which will meet the needs of the potentially productive rural poor. As such it is directed specifically toward increased participation of the poor in the economy of Bangladesh, and to improve their standards of living.

b. <u>FAA Sec.103,103A,104,105,106 107.</u> Is assistance being made available (include only applicable paragraph -- e.g., a, b, etc. -- which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.)	
(103) for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; (103A) if for agricultural research, is full account taken of needs of small farmers.	Yes; by enabling the establishment of a rural finance system directed specifically to the rural poor, it is expected both the productivity and the income of the target group will improve.
c. <u>FAA Sec.110(a); Sec.208(e).</u> Is the recipient country willing to contribute funds to the project, and in what manner has or will it provide assurances that it will provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)?	Because of the high risk and high cost associated with this experimental project, it is proposed that the 25 percent requirement be waived. The recipient is prepared to contribute to the project but should not be expected to commit scarce resources to such an experiment.
d. <u>FAA Sec.110(b).</u> Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing?	Not grant capital assistance.

e. FAA Sec.207; Sec.113. Extent to which assistance reflects appropriate emphasis on; (1) encouraging development of democratic, economic, political, and social institutions; (2) self-help in meeting the country's food needs; (3) improving availability of trained worker-power in the country; (4) programs designed to meet the country's health needs; (5) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (6) integrating women into the recipient country's national economy.	Reflects appropriate emphasis on (1), (2) & (5).
f. FAA Sec. 281 (b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.	See B. 1 a above.

g. FAA Sec.201(b)(2)-(4) and -(8); Sec.201(e); Sec.211 (a)(1)-(3) and -(8). Does the activity give reasonable promise of contributing to the development: of economic resources, or to the increase of productive capacities and self-sustaining economic growth; or of educational or other institutions directed toward social progress? Is it related to and consistent with other development activities, and will it contribute to realizable long-range objectives? And does project paper provide information and conclusion on an activity's economic and technical soundness?

Yes.

h. FAA Sec.201(b)(6); Sec.211(a)(5),(6). Information and conclusion on possible effects of the assistance on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving or safeguarding the U.S. balance-of-payments position.

Little or no impact on U.S. economy is expected.

D. STANDARD ITEM CHECKLIST

Procurement

1.	FAA Sec.602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of goods and services financed?	Yes.
2.	FAA Sec. 604 (a). Will commodity procurement be financed from the U.S. except as otherwise determined by the President or under delegation from him?	Yes.
3.	FAA Sec. 604 (d). If the cooperating country discriminates against U.S. marine insurance companies, will agreement require that marine insurance be placed in the U.S. on commodities financed?	Yes, agreement will so provide.
4.	FAA Sec. 604(e). If offshore procurement of agricultural commodities or produce is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?	Not applicable.
5.	FAA Sec. 608 (a). Will U.S. Government excess personal property be utilized wherever practicable in lieu of the procurement of new items?	Yes.
6.	MMA Sec.901 (b), (a). Compliance with requirement that at least 50 percent of the gross tonnage of commodities (computed separately for dry	Project Agreement will so provide.

bulk carriers, dry cargo liners and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

7.	<u>FAA Sec. 621.</u> If technical assistance is financed, will such assistance be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis? If the facilities of other Federal agencies will be utilized are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?	Yes. Not applicable.
8.	<u>International Air Transport Fair Competitive Practices Act 1974</u> If air transportation of persons or property is financed on grant basis, will provision be made that U.S. flag carriers will be utilized to the extent such service is available?	Yes.

B. <u>Construction</u>

1.	<u>FAA Sec.601(d)</u>. If a capital (e.g., construction) project, are engineering and professional services of U.S. firms and their affiliates to be used to the maximum extent consistent with the national interest?	Not applicable.

2. FAA Sec. 611 (c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?	Not applicable.
3. FAA Sec. 620 (k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million?	Not applicable.

C. Other Restrictions

1. FAA Sec. 201(d). If development loan is interest rate at least 2 percent per annum during grace period and at least 3 percent per annum thereafter?	Not applicable.
2. FAA Sec. 301 (d). If fund is established solely by U.S. contributions and administered by an international organization does Comptroller General have audit rights?	Not applicable.
3. FAA Sec. 620 (h). Do arrangements preclude promoting or assisting the foreign aid projects or activities of communist-bloc countries, contrary to the best interests of the U.S.?	Yes.
4. FAA Sec. 636 (i). Is financing not permitted to be used, without waiver, for purchase, long-term lease, or exchange of motor vehicle manufactured outside the U.S. or guaranty of such transaction?	Such is not permitted.

5. Will arrangements preclude use of financing:

a. FAA Sec. 114. to pay for performance of abortions or to motivate or coerce persons to practice abortions?	Yes.
b. FAA Sec. 620 (g). to compensate owners for expropriated nationalized property?	Yes.
c. FAA Sec 660. to finance police training or other law enforcement assistance, except for narcotics programs?	Yes.
d. FAA Sec. 662. for CIA activities?	Yes.
e. App. Sec. 103. to pay pensions, etc., for military personnel?	Yes.
f. App. Sec.106.to pay U.S. assessments?	Yes.
g. App.Sec 107. to carry out provisions of FAA Sections 209(d) and 251(h) (transfer to multilateral organization for lending).	Yes.
h. App. Sec. 501. to be used for publicity or propaganda purposes within U.S. not authorized by Congress?	Yes.

Department of State

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ACTION AID-31

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AIDAC

E. O. 11652: N/A
SUBJECT : RURAL FINANCE PROJECT - FY 77
GOVERNMENT REQUEST FOR ASSISTANCE

REF: STATE 185265

1. REFTEL PARA 7: WE HAVE RECEIV THE FOLLOWING BANGLADESH GOVERNMENT REQUEST FOR ASSISTANCE DATED AUGUST 11, 1977 AND ADDRESSED TO USAID DIRECTOR TONER:

QUOTE: DR. FAKHRUDDIN AHMED
JOINT SECRETARY
EXTERNAL RESOURCES DIVISION

MINISTRY OF PLANNING
EXTERNAL RESOURCES DIVISION
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
SHER-E-BANGLA NAGAR
DACCA-15

D. O. NO. 2Ø7/ERD/USA (P)-11/76 DATED: AUGUST 11, 1977

DEAR MR. TONER,

PLEASE REFER TO USAID LETTER NO. 862 DATED 14-7-1977 REGARDING PROPOSED AID GRANT OF $7.Ø MILLION AS CREDIT FOR SMALL FARMERS TO BE PROVIDED THROUGH THE RURAL FINANCE EXPERIMENTAL PROJECT. THE GOVERNMENT REQUESTS THE ASSISTANCE OF THE UNITED STATES GOVERNMENT IN CARRYING OUT THIS PROJECT THROUGH A GRANT OF $7 MILLION TO THE GOVERNMENT. THESE FUNDS WILL PROVIDE FOR THE COST OF CREDIT AS WELL AS TECHNICAL ASSISTANCE AND TRAINING. THE GOVERNMENT STANDS READY TO PROVIDE NECESSARY LOCAL RESOURCES TO UNDERTAKE THE PROJECT.

YOURS SINCERELY,
(SIGNED)
(FAKHRUDDIN AHMED)

UNQUOTE.

2. COPY OF THE ABOVE LETT BEING POUCHED.
BERGESEN

AUG 12 1977

Project Description

The project will provide the opportunity to Bangladeshi credit institutions to experiment with various systems for extending credit to small farmers, including tenants and sharecroppers, and other poor rural producers, and for recovering the resources lent, on time and with interest. The principal objective of the project is to identify at least one credit model which is successful at both extending credit to, and recovering it from, the target group. Corollary objectives are that the successful credit system identified be self-financing and capable of attracting capital for expanded lending through rural savings programs.

Request for Waiver of Country's 25 Percent
Contribution to Project

Section 110 (a) of the Foreign Assistance Act of 1961, as amended, requires that the country receiving AID project assistance provide at least 25 percent of the costs of the entire project. This section also provides, however, that the 25 percent contribution may be waived in the case of countries included on the United Nations Conference on Trade and Development list of "Relatively Least Developed Countries".

Bangladesh is included on the UNCTAD list, and therefore is eligible for such a waiver. In addition the following factors apply in the case of this project in support of a waiver.

a. Because of its experimental nature, the project's costs are high. A wide variety of models will be tested simultaneously. They will be closely monitored, thoroughly evaluated and modified on the basis of operational experience in order to improve performance. A relatively high level of technical assistance is required to carry out these functions adequately, and thus the costs of technical assistance are higher than usual.

b. In view of the difficulties faced in Bangladesh as well as other countries in rural finance, the project involves a high degree of risk. Many rural finance models will be tested, but most may fail to achieve project objectives. If only one model is identified capable of extending credit to and recovering it from the target group, the project will be a success. Accordingly the risk element is high.

Therefore, in view of the inclusion of Bangladesh on the UNCTAD list, and considering the high costs and high degree of risk associated with this project, it is requested that the requitement that Bangladesh contribute at least 25 percent of project costs be waived, with AID providing up to 100 percent of all project costs.

Approved ________________

Disapproved ______________

Date ________________

DRAFT PROJECT AUTHORIZATION

Bangladesh

Rural Finance Experimental Project
A.I.D. Grant No.

Pursuant to Part I, Chapter 1, Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Grant to Bangladesh of not to exceed four million United States dollars ($4,000,000) to help in financing certain foreign exchange and local currency costs of goods and services required for the Project. The Project will identify an effective nationwide institutional credit system to provide reliable credit and savings facilities to small farmers and other small rural producers.

I approve a total Grant Funding of not to exceed seven million United States dollars ($7,000,000) of A.I.D. appropriated funding for this Project, including the funding authorized above and additional increments during the period of FY 1977 through FY 1978 up to $3,000,000 subject to availability of funds in accordance with A.I.D. allotment procedures.

I hereby authorize the negotiation and execution of the Project Agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and delegations of authority subject to the following essential terms, covenants and major conditions, and together with such other terms and conditions as A.I.D. may deem appropriate:

a. Goods and services financed by A.I.D. under the Project shall have their source and origin in Bangladesh or the United States except as A.I.D. may otherwise agree in writing.

b. Prior to any disbursement by A.I.D., or the issuance by A.I.D. of any commitment documents under the Project Agreement, The Government of Bangladesh shall furnish in form and substance satisfactory to A.I.D. directives waiving as necessary regulations governing interest rates for loans and deposits, security requirements, etc., in order to permit experimentation as described in the Project Paper.

Signature____________________________

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Deputy Administrator