



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

~~P-10. ABI-944~~ PN. ABI-944
73040

AGRICULTURAL CREDIT IN PAKISTAN

USAID/ISLAMABAD

This report was prepared by
William E. Scott and A. David Redding
under contract with USDA/OICD

Islamabad, Pakistan, 24 March 1988

Agricultural Credit in Pakistan

Table of Contents

	<u>Page</u>
Executive Summary	i
List of Tables	iv
 I. Introduction	
A. Purpose of Study	I - 1
B. Approach	I - 1
 II. Current Situation	
A. Overview- Growth of Credit	II - 1
B. Types of Credit and Credit Programs	
1. Institutional Credit	II - 3
a. Production Loans	II - 3
b. Mark-up Free Credit	II - 4
c. Development Loans	II - 4
d. Supervised Credit	II - 5
e. Recovery Rates	II - 6
2. Non-Institutional Credit	II - 7
C. Charges for Credit	II - 8
D. Recipients of Credit	II - 9
E. Adequacy of Credit	II -13
 III. Economic Implications of Present Credit Policies	
A. Direct Costs of Extending Credit	
1. Supervised Credit Program	III - 1
2. Mark-up Free Credit Program	III - 2
B. Economic Costs of Credit Misallocation	III - 4
 IV. Major Issues and Policy Options	
A. Mark-up Free Credit	IV - 1
B. Institutional Changes	IV - 1
C. Other Changes	
1. Changes in Process	IV - 3
2. Mandatory Credit Targets	IV - 4
3. Loan Applications and Approvals	IV - 5
4. Mobilizing Rural Savings	IV - 6
5. Reducing Administrative Costs	IV - 6
 Annexes	
Bibliography	

EXECUTIVE SUMMARY

AGRICULTURAL CREDIT IN PAKISTAN

This study was commissioned to explore whether the Pakistan Government's program of channeling agricultural credit to small farmers is working as intended and whether there are any opportunities for the USAID Mission either to assist in this area or to recommend changes in policies and practices which could improve the functioning of the credit program in particular and of rural financial markets in general.

The official statistics, in Chapter II, show a large and rapid increase in the volume of agricultural credit — more than 25% annually since the early 1970's, with credit by the cooperative system growing somewhat faster than that by the Agricultural Development Bank (ADBP) and the nationalized commercial banks (NCBs). Of the total institutional agricultural credit in 1986/87 (Rs 15.8 billion, or \$930 million), the NCBs and cooperatives provided 46% and 16% respectively, mostly short-term (seasonal or production) credit; and the ADBP provided 38%, mostly medium and long-term (development) credit.

Mark-up-free credit constituted over 40% of total institutional credit to agriculture and 60% of total production credits; and it made up over 60% of NCB and nearly 80% of cooperative credit to agriculture. The ADBP does not provide mark-up-free credit.

NCB and cooperative credit, according to their statistics, was directed mostly to small farmers, while ADBP credit went overwhelmingly to small and medium-size farmers.

Despite this large and rapid growth of institutional credit, targeted principally at small farmers (defined as having less than five hectares of land), an official government survey in 1985 showed that their share in such credit in 1984-85 was only 23%. Such farmers, who constitute over 75% of farm households, received only 15% of their credit from institutions then, compared with 85% from non-institutional sources. By contrast, large farmers (defined as having more than 20 hectares of land) received 60% of their credit from institutional sources.

Full details of this survey have not yet been published, but its summary results, in contrast to the picture from the statistics noted earlier, are amply confirmed by discussions with lending officials, academicians, and research staff; it is also confirmed in numerous research and survey reports and other documents. While between 25% to 35% of the institutional credit seems to have reached

small farmers, most of the remainder went to larger farmers; and a substantial though unknown proportion probably ended up in industry and commerce. These diversions, though illegal, can be discovered only through surveys of farmers, since the records of the lending institutions show that all legalities were observed.

The diversions are costly in several respects, as is noted in Chapter III:

(1) Small farmers are not getting the credit intended for them by the GOP program. While non-institutional credit makes up much of the gap, a large proportion of small farmers say they would like and need more of the lower-cost institutional credit.

(2) The direct costs to the State Bank of Pakistan of subsidizing mark-up-free credit amounted to Rs. 830 million (\$50 million) in 1986/87, and it could reach Rs. 2.1 billion (\$126 million) by 1989/90 if present trends continue. Moreover, if the administrative, default, and other costs of lending institutions are included, the total financial costs to the GOP in 1986/87 would be Rs 1.66 billion (\$98 million) in 1986/87 and Rs. 4.3 billion (\$250 million) in 1989/90 (again, if present trends continue). The total financial costs, estimated for the Sixth Plan period (1983-88), are about 45% of the planned public sector expenditures for agriculture during the same period (including the fertilizer subsidy but excluding expenditures for water).

(3) The indirect costs of the Government's agricultural lending program are also substantial: Many low-return investments are undertaken simply because the mark-up free credit is too attractive for the rich and powerful to pass up, regardless of their need for it, while some highly productive investments of the less rich and powerful are left unfinanced. Equally important, a stable and reliable source of credit for farmers in the future is being undermined by the failure of the Government's program to build up the long-term financial viability of agricultural lending institutions.

Two major issues and policy options which have emerged from the study are discussed in Chapter IV:

(1) The need for the Government to abolish the system of mark-up free institutional credit, which is perhaps the single most important government-controllable obstacle to a larger flow of credit to small farmers. Although its elimination might not result in an immediate substantial increase of credit to small farmers, it is a prerequisite to such an increase whenever other conditions are right. Its elimination would also reduce the government deficit, which would in turn enhance the likelihood of continued large inflows of foreign assistance.

(2) The need to reform or improve existing lending institutions or perhaps help finance an alternative channel for extending agricultural credit. Institutional changes are clearly necessary, under circumstances where some 95% of the cooperative societies seem to have been formed for the express purpose of obtaining mark-up-free credit illegally and where some two-thirds of the bank credits intended for small farmers seem to have been diverted to other uses. Some of the reforms proposed in Chapter IV would in time improve the institutions, but another system of channeling credit to small farmers -- namely, supplier credits for agricultural inputs -- is also proposed for further study and consideration.

Other changes are proposed in the final section of Chapter IV. The most important of these are greater efforts to mobilize rural savings and thus improve the financial viability of lending institutions, the removal of mandatory credit targets for banks, the reduction of lending costs, and improvements in lending procedures.

List of Text Tables

<u>Table No.</u>	<u>Table Title</u>	<u>Page</u>
II.1	Institutional Agricultural Credit -Pakistan 1971-1986	II-2
II.2	Institutional Agricultural Credit by Pro- vince, 1986-1987	II-3
II.3	Mark-up Free Loans by Institution	II-4
II.4	Supervised Credit by Institution, 1984-85	II-5
II.5	Published Rates of Agricultural Loan Recov- ery, Current Dues, 1984-1985	II-7
II.6	Loans Made to Farm Households, Institutional and Non-Institutional Sources During A Twelve Month Period, 1984-1985	II-8
II.7	Institutional Credit by Farm Size, 1984-1985	II-9
II.8	Institutional Credit to Farm Households During a 12-Month Period in 1984-85	II-12
III.1	Operational Cost of Supervised Agricultural Commercial Bank Average, 1984-85	III-2
III.2	Estimated Cost of Mark-up Free Credit	III-3

AGRICULTURAL CREDIT IN PAKISTAN

I. Introduction

A. Purpose of study

This study was commissioned to explore the agricultural credit situation in Pakistan, with particular emphasis on whether the Government's program designed to extend credit to small farmers is working as intended. A second purpose is to see if there are any opportunities for the USAID Mission to assist the Government of Pakistan in this area or to discuss with it possible changes in policies and practices which could improve the functioning of the credit program.

B. Approach

Two consulting economists, both experienced in the field of agricultural credit, were selected to undertake the study. They interviewed some 50 persons in over 20 different institutions in Pakistan, including 10 agricultural credit officers from the Agricultural Development Bank of Pakistan (ADBP) and several of the nationalized commercial banks (NCBs); and they talked with some 20 farmers, most of them while accompanied by mobile credit officers from the ADBP. They also consulted numerous publications (see the bibliography for partial list of publications).

Their findings are noted below: the current situation in Chapter II, its economic implications in Chapter III, and the major issues and policy options in Chapter IV.

II. Current Situation

A. Overview- As the need for modern agricultural inputs to fuel Pakistan's Green Revolution has increased, so has the need for agricultural credit. While much of this credit continues to come from the non-institutional sector--especially for small farmers--there has been a rapid growth in the amount of credit from the institutional sources.

As Table II.1 indicates, the amount of institutional credit provided to the agricultural sector had grown from Rs. 121 million in 1971-72 to over Rs. 15.8 billion (\$930 million) in 1986-87, at an average annual rate of 27.5%. This rate of growth was the result of a very low base and a determined effort to increase the availability of institutional credit, the lack of which was often identified by analysts in the 1960's and early 1970's as a serious constraint to increased agricultural production.

By the end of the 1970's, the Nationalized Commercial Banks (NCBs) had been inducted into agricultural lending by the Government of Pakistan (GOP) and were beginning to lend more to the agricultural sector. The Agricultural Development Bank of Pakistan (ADBP) was successfully attracting increasing amounts of funds from foreign donors and on-lending it to farmers. In 1979, the Cooperative system (Coops) and the commercial banks began what was to become a rapidly expanding program of mark-up free or cost-free lending aimed at providing more credit to small farmers.

All of these factors combined to create a rapid growth in institutional credit to the agricultural sector. As a percent of the agricultural sector's contribution to the country's Gross Domestic Product, agricultural credit grew from 1.4% in 1971-72 to 12.4% in 1986-87 (See Annex A, Table A.1). The rate of growth in agricultural credit was more rapid than growth rates for other agricultural inputs, such as fertilizer, tractors, and improved seeds.

There are currently three major institutions providing credit to the agricultural sector. In 1986-87, the Agricultural Development Bank of Pakistan (ADBP), supplied 38.1% of the total agricultural credit, or Rs. 6.02 billion. The large majority of ADBP's lending is long and medium-term "development" loans. Short-term "production" lending is done principally by the Cooperatives and the Nationalized Commercial Banks (NCBs). The Cooperatives supplied Rs. 2.47 billion of agricultural credit in 1986-87, while the NCBs provided Rs. 7.31 billion. This represented, respectively, 15.6% and 46.3% of the total institutional credit to agriculture. A fourth lending program, the taccavi or relief lending operation of the Government, has steadily declined in recent years to almost nothing.

Overall credit to each province corresponds to a certain degree to the percent of the total rural population found in each province (See Table II.2), although Baluchistan and the NWFP have a lower percentage of credit than their rural populations. ADBP and the Coops do the large majority of their lending in the Punjab (63% and 78%, respectively, see Annex A, Table A.2). The NCBs' portfolio is

Table II.1
INSTITUTIONAL AGRICULTURAL CREDIT - PAKISTAN
1971-1986
(Mil. Rs.)

Year		ADB	% Tot.	Coops/ FBC	% Tot.	NCBS	% Tot.	Tac- cavi	% Tot.	TOTAL
1971 - 72		80	65.9%	33	26.8%	0	0.0	9	7.3%	121
1972 - 73		169	56.4%	35	11.6%	86	28.6%	10	3.4%	300
1973 - 74		415	48.0%	96	11.1%	286	33.1%	68	7.8%	865
1974 - 75		396	39.4%	68	6.8%	527	52.5%	12	1.2%	1,093
1975 - 76		532	36.8%	80	5.5%	808	55.9%	26	1.8%	1,446
1976 - 77		638	37.3%	88	5.2%	970	56.8%	13	0.8%	1,709
1977 - 78		430	23.6%	95	5.2%	1,291	70.8%	9	0.5%	1,824
1978 - 79		417	18.7%	414	18.6%	1,381	62.1%	12	0.5%	2,224
1979 - 80		712	23.6%	709	23.5%	1,587	52.6%	8	0.3%	3,016
1980 - 81		1,067	26.5%	1,126	28.0%	1,827	45.4%	8	0.2%	4,028
1981 - 82		1,557	30.5%	1,101	21.6%	2,436	47.7%	8	0.2%	5,102
1982 - 83		2,311	39.4%	1,321	22.5%	2,238	38.1%	2	0.0%	5,871
1983 - 84		3,132	36.1%	1,450	16.7%	4,089	47.1%	9	0.1%	8,680
1984 - 85		4,168	40.2%	1,332	12.8%	4,869	46.9%	6	0.1%	10,375
1985 - 86		5,314	40.4%	2,049	15.6%	5,791	44.0%	2	0.0%	13,156
1986 - 87		6,024	38.1%	2,473	15.6%	7,313	46.3%	0	0.0%	15,810
Growth Rate		25.2%		31.6%		25.3%		-12.5%		27.5%

Source: GOP, Economic Survey, 1986-87

Note: All growth rates calculated using a semi-log regression model.

Table II.2
Institutional Agricultural Credit by Province
1986-1987
(Rs. Mil.)

<u>Province</u>	<u>Total</u>	<u>Province as % Tot. Lending</u>	<u>Prov. Rur. Pop. as % of Total Rural Popul.</u>
Punjab	8,883	56.9%	59.0%
Sind	3,201	31.4%	18.6%
Baluchistan	410	2.6%	6.3%
N.W.F.P.	1,422	9.1%	16.2%

Source: Food and Agriculture Division, Credit Monitoring Cell, Planning Unit, and 1980 Census. Also see Annex A, Table A.2,

about 45% in both the Sind and the Punjab, with the remaining 10% going to Baluchistan, N.W.F.P., and other areas.

B. Types of Credit and Credit Programs

1. Institutional- There are two main types of institutional lending to the agriculture sector: production (short-term) and development (medium and long-term). Over the past five years, production loans averaged 64% of the total institutional agricultural loan portfolio, while development loans accounted for the other 36% (See Annex A, Table A.3). In 1972-73, production loans comprised 51% of total institutional agricultural lending and development loans accounted for 46%.

a. Production loans are short-term loans, normally less than one year with the exception of sugarcane production loans which are given for 18 months. The intended use of these loans is generally to purchase inputs such as fertilizer, improved seeds, pesticides, etc.

In 1986-87, production loans totaled some Rs. 10.2 billion (Annex A, Table A.3). Over the past four years, the NCBs have been the largest providers of production credit, accounting on average for some 62 percent of total production credit. Coops are the second largest provider, with an average 25% share. ADBP, which has only recently started to provide short-term credit--mostly to the farmers who have received long-term loans from ADBP--has had an average 13% share of total production credit.

Institutions generally provide their production credit in-kind, although small amounts of short-term credit may be provided in cash to some farmers. Many observers suggested, however, that farmers can easily get credit in the form of cash instead of fertilizer by making a deal with fertilizer distributors. Banks say they make efforts to monitor this problem, but it is very difficult (and expensive) to keep close track. In a certain sense, if the rural household is viewed as an overall consumption/production unit, it shouldn't really matter if goes directly for consumption or production purposes. However, the problem comes when the loan is not

repaid. In this case, the State has provided credit at subsidized rates for the express purpose of increasing agricultural production which has ended up as a subsidy for something else, such as consumption.

Mark-up Free Credit- Much of the production credit now available in Pakistan is mark-up free or cost-free credit. These loans are meant to go to small farmers (with less than 5 hectares of land) at no charge if the loan is paid back in time. Table II.3 shows that in 1986-87, mark-up free credit was worth Rs. 6.4 billion, some 62.4% of all production lending and 40.4% of all institutional lending to the agriculture sector. In the same year,

Table II.3
MARK-UP FREE LOANS BY INSTITUTION
(Rs. Mil.)

Year	COOPS	MU Fr. as % T.Coop Loans	NCBs	MU Fr. as % T.NCB Loans	TOTAL	MU Fr. as % All Ag. Loans	MU Fr. as % Prod. Loans
1979-80	226	31.8%	235	14.8%	461	15.3%	N/A
1980-81	393	34.9%	348	19.0%	741	18.4%	N/A
1981-82	832	75.6%	441	18.1%	1,274	25.0%	N/A
1982-83	1,043	79.0%	538	24.0%	1,581	26.9%	N/A
1983-84	1,183	81.6%	1,701	41.6%	2,884	33.2%	53.6%
1984-85	1,409	100.0%	1,994	41.0%	3,403	32.8%	52.8%
1985-86	1,616	78.9%	2,952	51.0%	4,568	34.7%	56.4%
1986-87	1,918	77.5%	4,467	61.1%	6,385	40.4%	62.4%
Growth Rate					37%		

Source: Food & Ag. Division, Credit Monitoring Cell, Planning Unit

NCBs provided 70 percent of the mark-up free funds and Coops the remaining 30 percent (See Annex A, Table A.4). Mark-up free funds accounted for 61% of the NCB's total lending portfolio, and almost 78% of Coop lending. Finally, the overall mark-up free lending program grew at an average annual rate of 37%, considerably faster than the overall rate of growth for agricultural credit.

Mark-up free credit is granted on the basis of Rs. 1,000 per acre, with a limit of Rs. 12,000 per farmer. There are indications, however, that a number of farmers are able to obtain more than this limit through proxy loans- using the names of family members, tenants, servants, etc.

c. Development loans are generally defined as medium and long-term credits, with a term from 1-10 years. Development loans are intended to finance tractors, power tillers, equipment attachments, tubewells, pumps, and engines. In addition, there are some loans made for draught animals, poultry and dairy farming, fisheries, and cold storage.

In 1986-1987, development loans totaled some Rs. 5.6 billion (Annex A, Table A.3). ADBP is by far the largest source of development loans, providing an average 86% of these funds over the past four years. Commercial banks provided slightly more than 13% of development funds, with the Coops providing less than one percent.

d. Supervised credit is a particularly prevalent method of making development loans, although some production lending is carried out under a similar program. Generally, supervised credit in Pakistan means that lending is done by specialized agricultural credit officers with training in both agriculture and banking. These officers are supposed to provide technical assistance to small farmers, as well as assistance with the formalities of getting a loan. They are often equipped with a some form of transport—usually a motorcycle—to visit farmers in their villages.

The ADBP figures show that some 89% of its lending was done under a supervised credit program in 1986-1987 (See Annex A, Table A.5). Commercial banks were only lending some 28% of their total agricultural loan portfolio through supervised programs in 1985-86.

The commercial banks have many fewer agricultural credit officers, as shown in Table II.4. In 1984-85, the commercial banks had 403 agricultural credit officers (ACOs), while ADBP had some 1,079 mobile credit officers (MCOs), more than double. Two years later, ADBP had added two hundred more MCOs, while the commercial banks had added approximately 40 new ACOs (see Table A.6, Annex A).

Table II.4
Supervised Credit by Institution, 1984-85

	NCBs	ADBP
Ag. Credit Officers :	403	1,079
Villages Covered :	17,268	30,428
Villages per Officer :	43	28
Farmers Served ('000) :	480	100
Farmer per Officer :	1,190	93
Credit Advanced (Rs.Mil.):	1,227	3,433
Credit p. Officer(Rs.Mil):	3.0	3.2

Source: ADBP, Annual Report and Accounts, 1985
Pakistan Banking Council, Proposed Model Scheme
for Supervised Agricultural Credit, 1986

ACOs at the commercial banks, who have an average portfolio of some Rs. 3.0 million per year which is about the same as the MCOs at ADBP, appear to work with 50% more villages and over ten times the number of farmers. With this case load of over a 1,000 new loans annually plus follow-up on the recovery of old loans, one wonders how much time an ACO at a commercial bank has to verify the applications of potential borrowers or spend time explaining new technology to small farmers. The most probable answer to this question is that ACOs do not have the time to adequately service

this number of farmers. Therefore, they must find ways to reduce their work load.

The study team heard a wide range of responses as to how ACOs service such a large number of farmers. ACOs do not always visit the farmers at their farms, but simply have farmers come to an appointed spot in the village, usually the house of the numberdar or village leader. Many farmers are never contacted about loans. The technical discussions that are held with farmers are conducted in group sessions, and rarely with individual farmers. Finally, some loans are apparently batch processed, with a number of loans brought in by a single landlord for a number of tenants or by a big farmer who is taking out loans in the name of his children and servants. This batch processing appears to be particularly prevalent in the mark-up free production lending.

Several of these ideas were confirmed in a 1986 study, "Flow of Commercial Banks Agricultural Credit," by the Punjab Economic Research Institute (PERI). This survey of over 1,000 borrowers showed that some 35% of the loans given out by the NCBs were proxy loans, i.e. loans taken out under someone else's name (PERI, 1986, p.36). In addition, the survey found that while 54% of loans were recorded as "supervised," by the banks, only 4% of the loans were in fact supervised (PERI, 1986, p.28).

The experience at ADBP in supervised credit is relevant here. Although the normal work load of an MCO is responsibility for 25 villages, a 1985 survey of ADBP's MCOs showed that they felt that a limit of 15 villages would give much better results in terms of recovery and technology transfer. Indeed, ADBP has other more intensive supervised credit programs being conducted on a pilot basis in which MCOs are responsible for only five villages. The same survey reported that the average time for MCOs to work with a farmer was 5 hours, but in certain cases, it could take up to 25 hours to work with a farmer and process his application. It is clear from these statements that successful supervised credit can be an intensive and time-consuming process. It would also appear from the ADBP experience that recovery rates probably do improve with supervised credit. However, the important difference in ADBP's supervised credit program is that credit is made available only at 12% mark-up, and hence there is less incentive for corruption under this system.

The Pakistan Bank Council has recognized that changes are needed in the supervised credit program of the commercial banks. It has therefore been developing a new "Model Scheme for Supervised Agricultural Credit," under which the commercial banks would undertake a major new initiative in supervised credit, hiring as many as 5,000 new ACOs over the next decade. This ambitious program is only in the beginning stages of implementation.

e. Recovery Rates- It is difficult to obtain precise figures for the recovery rate of agricultural credit. For example, credit for agriculture is not separated out in the annual reports of the commercial banks. However, some rates have been published as

presented in Table II.5. These average figures should be viewed with some care for a number of reasons. First, there is a wide range of recovery rates from region to region. For example, ADBP current due recovery rates varied from a high of 87.2% in the Punjab to a low of 56.2% in Baluchistan (See Annex A, Table A.7). Second, recoveries of past dues are another important factor.

Table II.5
Published Rates of Agricultural Loan Recovery
Current Dues- 1984-85

<u>Institution</u>	<u>Date</u>	<u>Recovery Rate</u>
Habib B.L.	84-85	48%
National B.P.	84-85	85%
United B.L.	84-85	81%
Muslim C.B.	84-85	75%
ADBP	86-87	80%
FCB	85-86	99%

Sources: Model Scheme for Supervised Ag.Credit, PBC, 1986
Annual Report, 1987, ADBP
Annual Report and Accounts, 1986, FCB

For ADBP, recovery of past dues in 1986-87 were 39.2%, which combines with current dues recovery for a total recovery rate of 71.6%.

Third, recovery rates change from year to year. In 1979-80, ADBP's total recovery rates was 36.3%, improving each year. Fourth, perhaps a more useful rate of recovery is the cumulative rate of recovery, which for ADBP was 92% in 1986-87. Finally, recovery rates can be improved by creative accounting, clever assumptions in their presentation, and by roll-over financing at the farmer level. The team heard from a number of sources that these practices did exist in certain financial institutions.

2. Non-Institutional Credit

Despite the rapid growth in institutional credit to the agricultural sector, non-institutional sources provide over 68% of the credit to agriculture according to the Rural Credit Survey conducted by the Government in 1985 (See Table II.6). This compares to some 90% of borrowing by farm households coming from non-institutional sources in the 1972-73 Credit Survey (Annex A, Table A.8). What is striking in these 1985 statistics is the difference between the percentage of credit from non-institutional sources for small farmers (85.2%) and large farmers (40.2%). Farmers with less than one hectare of land averaged 95% of their credit from non-institutional sources.

Sources of Non-Institutional Credit:- The 1985 Credit Survey has not yet published information on the sources of credit from non-institutional sources. However, data from the 1972-73 Credit Survey (given in Annex A, Table A.8) do confirm the general observations of the people interviewed by the team and there is no

Table II.6
Loans Made to Farm Households
Institutional and Non-Institutional Sources
During A 12-Month Period, 1984-1985

Farm Size (ha.)	Institutional %	Non-Inst. %
All Farm Households	51.5%	68.5%
Under 0.5	4.1%	95.9%
0.5 - 1.0	5.9%	94.1%
1.0 - 2.0	13.2%	86.8%
2.0 - 3.0	16.5%	83.5%
3.0 - 5.0	21.5%	78.5%
Small Farmers-Total	14.8%	85.2%
5.0 - 10.0	34.4%	65.6%
10.0 - 20.0	52.4%	47.6%
Med. Farmers- Total	42.9%	57.1%
20.0 - 60.0	62.1%	37.9%
Above 60.0	53.6%	46.4%
Large Farmers-Total	59.8%	40.2%

Source: Rural Credit Survey, Preliminary Report, 1985
Agricultural Census Organization, Statistics
Division, Government of Pakistan, Lahore

reason to believe that these data have changed significantly over time. Friends and relatives were the most important source of non-institutional by a wide margin--over 60% in 1972-73. Next, commission agents (people who buy agricultural produce from farmers and sell it to other merchants) and merchants provided almost 13% of this credit, followed by land owners, who provided some 11%. Professional money-lenders accounted for some 2% of credit to farm households; factories provided less than 1%; and unclassified sources contributed some 3%. Across farm size, small farmers borrow the highest percentage from friends and relatives (75%) while big farmers borrow the least (42%). Big farmers tended to borrow the most from commission agents (19%), while small farmers borrowed less than 11% from them. Medium farmers tended to borrow the most from land owners (some 15%), while the smallest and biggest farmers borrowed less than 4% from them.

C. Charges for Credit

Charges for credit to the agriculture sector vary widely. The standard charge for short, medium, and long-term credit at the ADBP is 12% per annum (See Annex A, Table A.9). This is also the rate used by the Cooperatives for those short-term loans not a part of

the mark-up free program, while 12.5% is charged on medium and long-term Coop loans. Commercial banks charge 11% on their long-term development loans (classified as "fixed agricultural investment"- See Annex A, Table A.10). Much of the production loans made by commercial banks are under the mark-up free program, which means that farmers are not charged for the use of the money, over an 8-9 month period (18 months in the case of sugarcane loans). However, if the farmer does not repay the loan in time, he must pay 12% annual mark-up for the entire period the money was borrowed.

Charges for credit from non-institutional sources are difficult to quantify. Lacking data from the 1985 Credit Survey, we must go to the 1972-73 Survey for published information. According to this survey, money lenders charged the highest rates- on average 18.% per annum (See Annex A, Table A.11- Note that standard deviations on all these averages are rather high. The overall average does not include a substantial number of loans classified as "zero-interest."). Commission agents were the next highest, charging 13.5%, and then landowners, at 10.5%. The charge by friends and relatives was about 9%, with factories charging 8%. The average charge in the non-institutional sector was 15.3% at a time when the average cost of institutional credit was 8.2%. Since average institutional rates have moved up to around 11-12% (excluding the mark-up free program), it would seem reasonable to expect non-institutional rates to average 21-23% if percentage difference between the two figures has remained constant. This is consistent with the observations made by many of the people interviewed by the team.

D. Recipients of Credit

The goal of the institutional credit program--particularly mark-up free credit--is to reach small farmers. Statistics maintained by the banks (See Table II.7) would suggest that these programs are more or less reaching that goal. According to these

Table II.7
Institutional Credit by Farm Size
1984-1985
(Percent Share)

<u>Farm Size</u> (ha.)	<u>NCBs</u>	<u>ADBP</u>	<u>Total</u>
Landless	---	7	3
Up to 5.0	74	29	52
5.0 - 20.0	19	51	35
Above 20.0	7	13	10

Source: Agricultural Statistics of Pakistan, 1985

official figures, the commercial banks provide some 74% of their credit to small farmers with under 5.0 hectares of land. ADBP's figures show that they lend the majority of their funds to somewhat larger farmers with 5.0 to 20.0 hectares of land.

However, a number of field surveys conducted in recent years suggest that these statistics are far too optimistic in the number of small farmers that are being reached. The Pakistan Banking Council commissioned the Punjab Economic Research Institute (PERI) to conduct one of the more authoritative studies. PERI researchers were provided full access to bank records and asked to choose a random sample of over 1,000 borrowers. Then, they were to seek those people out in the field and compare bank records with the interviews. This methodology uncovered some interesting facts:

- 1) Thirty-five percent of the credit--which were mostly mark-up free production loans-- were classified as "proxy" and fictitious loans (See Annex B, Table B.1 and B.2). By far the largest category of proxy loans were the "disguised" ones, which were defined by the study as loans taken out by landlords in the names of tenants, which may or may not have been received by the tenants.
- 2) Among the 35% of proxy and fictitious loans, respondents stated the benefits of these loans were going largely to landlords (77%) and other influential persons (8%) (See Annex B, Table B.3). The beneficiaries of 13% of the loans could not be identified.
- 3) Only 23% of the loans were classified by the study as "genuine." Loans that were not genuine included the proxy/fictitious category (35%) and the loans in which land was under-reported (20%) or over-reported (22%) (See Annex B, Table B.4). Assuming that those over-reporting were large farmers trying to qualify for a mark-up free loan, then up to 55% of these mark-up free production loans were not going to the intended group of small farmers. (Note: Over-reporting borrowers were small farmers trying to increase the amount of their loan).
- 4) Multiple borrowing was present at all banks, accounting for about 14% of all loans.
- 5) Transaction cost per loan (official cost of obtaining a loan, travel, payment to guarantor, payments to officials, and other costs) averaged about Rs. 120.
- 6) Twenty-one percent of loan disbursements were not made in timely manner, although 69% were disbursed within 20 days of the missed deadline.

Several conclusions can be drawn from this report. First, it would appear that the majority of the mark-up free loans on the books do not go to small farmers. The report concludes that only 40% of the loans actually made are reaching small farmers. Second, the main beneficiaries of the proxy lending are the landlords and influential persons, as they received some 60% of these loans.

Third, proxy lending is feasible, among other things, because the banking system permits as sufficient identification a photocopy of a National Identity Card. The study suggests that banks should require that people should be present for the signing of a loan application and present their identity card in person to discourage this type of "bulk" lending.

Other studies report similar findings about the access of small farmers to institutional credit. Another PERI report, "Constraints Facing Small Farmers in Punjab," found that on average, only 15.1% of the farmers interviewed had access to institutional credit, with large farmers having almost twice as much access as small farmers (PERI, 1986b, p.194). Major reasons cited in the study for not using institutional credit (in order of importance) were: 1) non-availability of institutional credit; 2) complicated procedures; 3) lack of information; 4) need to pay illegal gratifications; 5) availability of sufficient funds of one's own; and 6) high transaction costs.

A companion study on constraints facing small farmers conducted in Sind by the Applied Economics Research Centre (AERC) in Karachi found that only 7.6% of the farmers interviewed had obtained institutional credit over the previous year. The report found that size of holding clearly affected access to institutional credit. In conclusion, the study states:

Agricultural credit policy has effectively ignored the small farm sector while the mark-up free small farms loan scheme has failed in reaching its target audience. The problem is basically one of inefficient and inequitable distribution of loans, not the total amounts disbursed. In fact, since larger farmers and landlords have easier access to all loans, including mark-up free loans, not only are they being subsidised but they get additional benefits (both monetary and otherwise) by extending credit to their tenants and other small farmers, thereby increasing both dependence and inequality.

Another study by researchers in Lahore examined the Cooperative Credit System in Punjab. The study (PERI, 1986b) looked in detail at a sample of 75 cooperatives in the Punjab and concluded:

- 1) Some 64% of the cooperative societies were classified as "one-man" or bogus. Another 20% were classified as family cooperatives and 13% as "non-genuine" coops (which means that farmers over-reported or under-reported farm size to receive an undue amount of credit). Only 3% of the societies were classified as "genuine" by the study.
- 2) The main occupation of 33% of the coop members was business. Large farmers (above 12.5 acres) made up 32% of the societies, while 18% were classified as government servants and influential persons. Only 17% of the coop members were in the "small farmer" category.

- 3) Seventy-three percent of the loans were classified as "bogus" (defined as loans given against the names of imaginary members or family members) (See Annex A, Table A.12). Another 18% of the loans were classified as under-reported or over-reported. Only 9% of the loans were classified as genuine. The study concludes that only 25% of the loans are going to small farmers.

The evidence from these reports on the flow of credit in commercial banks and cooperatives clearly demonstrates that the mark-up free credit program is not effectively reaching the intended group of small farmers. Only 40% goes to small farmers in the case of commercial banks, and 25% in the case of the coops. At ADBP, their own statistics show that under 30% goes to farmers with less than 12.5 acres of land. A weighted average of these figures shows, then, that small farmers are receiving some 34% of all credit and 35% of mark-up free credit.

These figures are conservative when compared with 1985 Credit Survey percentages of small farmer credit as shown in Table II.8. These figures suggest that only 23% of the institutional credit went to farmers with less than 5.0 hectares (12.5 acres) of land, even though this group represented over 76% of all farm households.

Table II.8
Institutional Credit to Farm Households
During a 12-Month Period in 1984-85

Farm Size (ha.)	:	Total Households (Mil.)	% Total Farm Hseholds	% T.Inst. Amount Loaned
All Farm Households	:	5.159	100.0%	100.0%
Under 0.5	:	0.484	9.4%	0.8%
0.5 - 1.0	:	0.583	11.3%	1.3%
1.0 - 2.0	:	0.887	17.2%	3.3%
2.0 - 3.0	:	0.919	17.8%	5.4%
3.0 - 5.0	:	1.083	21.0%	12.2%
Small Farmers-Total	:	3.957	76.7%	23.1%
5.0 - 10.0	:	0.770	14.9%	21.4%
10.0 - 20.0	:	0.307	6.0%	29.1%
Med. Farmers- Total	:	1.077	20.9%	50.5%
20.0 - 60.0	:	0.108	2.1%	19.9%
Above 60.0	:	0.018	0.3%	6.5%
Large Farmers-Total	:	0.126	2.4%	26.4%

Source: Pakistan Rural Credit Survey, 1985, Preliminary Results, Table 4, Pakistan. See Annex A, Table A.13

Medium farmers, owning land in the 5-20 hectare range, received some 50% of the institutional credit, even though they accounted for some 21% of farm households. The largest farmers, above 20 hectares, represented only 2.4% of all farm households, but received over 26% of the total institutional credit. If providing credit to small farmers is the goal of lenders and the Government, then changes must be made to more effectively reach that goal.

E. Adequacy of Credit

Whether agricultural credit is adequate in Pakistan can not be answered unambiguously. Information was not available on the extent and costs of agricultural inputs used and technologically desirable as well as on savings and consumption needs. Moreover, the "adequacy" of credit depends importantly on how much is charged for it.

For example, if credit is available free of mark-up, and if there is no penalty for non-repayment (as is sometimes the case), farmers will want as much credit as they can get. Any funds which are excess to their needs for agricultural inputs can always be used for consumption or non-agricultural purposes. Under these circumstances, credit can be said to be "inadequate," since farmers want more than is available.

On the other hand, if the charges for credit are high (say, 50% for seasonal credit) and if the penalty for non-repayment is loss of the land pledged as security, farmers will not want to borrow except in extraordinary circumstances. In this case, the volume of credit available to agriculture will in a certain sense be more than adequate.

It is for this reason that charges for credit are considered so important in virtually all economies.

If the Government of Pakistan were using charges for credit as a means for directing credit to its most productive uses, most of the need for allocating credit by sector would disappear, and the question of "adequacy of credit" would also be easier to handle. Since this is not the case, we shall rely here on a combination of informed judgments and surveys which note the credit needs expressed by farmers; also we shall consider only the "adequacy" for small farmers, inasmuch as large landowners (as already noted) have been able to obtain a very large proportion of the available agricultural credit — particularly the rapidly increasing volume of mark-up-free credit, extended by NCBs and the cooperative system, which the GOP has targeted for small farmers.

Informed observers — at academic/research institutions and in banking circles — differ as to the extent to which the credit targeted for agriculture remains there, for use by either the large landowner or his tenants. No institution either inside or outside of the government has explored this question, mostly because of the difficulty of obtaining credible evidence. Scattered evidence and logic suggest that some of the credit is passed on to small farmers by large landowners interested in obtaining larger yields from

their tenants. However, evidence on the relatively small increases in fertilizer use since the early 1970's suggests that much of the increased credit has been invested in commerce and industry, an outcome also supported by logic, inasmuch as charges for industrial and trade loans are higher than those in agriculture.

These (presumed) intersectoral flows, from agriculture to industry and commerce as well as to consumption, may explain why in every study consulted small farmers in general stated they wanted more institutional credit but were unable to obtain it.

In a survey of some 1,100 farms, "Constraints Facing Small Farmers in Punjab" (May 1986), the Punjab Economic Research Institute found credit to be one of several constraining factors facing small farmers in particular: Only 4.3% of the small farmers were able to obtain institutional credit, due to such factors as non-availability, complicated procedures, or lack of information. Over 30% of the small farmers covered by the sample survey reported using non-institutional credit, while only 11% mentioned their own funds were sufficient, as a reason for not obtaining institutional credit. We will not attempt to judge the importance of the credit constraint relative to other constraints, but it seems clear that farmers perceived a need for more credit than they were receiving.

In other studies undertaken by the Applied Economics Research Centre, for the Ministry of Food, Agriculture & Cooperatives ("Specific Constraints Facing Small Farmers in Pakistan", Sind and Baluchistan, 1986), the Centre found that in both the Sind and Baluchistan, "The strict collateral requirements have eliminated the majority of poor farmers, both owner-operators and share-croppers, from making use of the relatively cheap institutional credit policy. Such farmers have to turn to traditional money lenders (charging much higher rates of interest) or landlords to obtain capital." Thus, while 70% of all respondents in Sind province and 83% of those in Baluchistan reported obtaining non-institutional credit during the past three years, only 7.6% and 13.3% respectively reported obtaining institutional credit during the same time span. The report also noted that, in both provinces, "Credit is more readily available to large landholders despite the fact that loan recovery rates from such borrowers have been extremely poor."

The reasons for lack of institutional borrowing by small farmers were very much the same as in the Punjab study cited, namely lack of information and nonavailability of the credit. Some farmers also gave high cost as the reason for not borrowing from institutions, stating that they could obtain credit cheaper from traditional sources. This seems like a contradiction of the second statement quoted from this study, but the higher costs may include non-mark-up costs such as bribes and time lost in filing applications and getting the necessary documents. Note, however, that "few, if any, respondents had a clear knowledge of the rate of interest charged by their creditors" in the traditional credit market in both Sind and Baluchistan. (The generalizations and sometimes the words quoted from the two separate volumes cited were identical, although the figures were of course different.)

Other surveys provide similar information, that small farmers receive less credit than they would like from institutional sources. For example, in a monitoring and evaluation report for 1985-86, issued by the Directorate of the Command Water Management Project Punjab. 34% to 42% of the farmers in three of the areas covered by the project said they wanted institutional credit, while less than half of them in each area were able to obtain it (mostly from the ADBP).

In summary, evidence, reinforced by logic, informed judgments, and the expressed opinions of small farmers, indicates that institutional credit for small farmers in Pakistan is not adequate for their needs. The evidence does not indicate that more such credit should be allocated to agriculture as a whole, especially since non-institutional credit may fill part or all of the gap. (But, it should be noted, neither does it indicate that it should not be given.) Rather, the evidence indicates that whatever institutional credit is given should go in larger proportions to the small farmer — in order to fulfill the Government of Pakistan's proclaimed goal of increasing the credit available to them.

III. Economic Implications of Present Credit Policy

A. Direct Costs of Extending Credit

To maintain its long-term viability, a credit institution must charge borrowers at a rate that covers "the full cost of funds, including (1) the cost of funds borrowed or mobilized; (2) administrative costs; (3) default or delinquency costs; (4) a margin to offset expected inflation; and (5) a margin for profits and additions to reserves." (Redding, 1986, p. 19) By this definition, almost none of the credit provided to the agricultural sector is lent at a rate that can maintain the long-term viability of the financial institutions without subsidy from the State Bank.

At the NCBs, agricultural credit--both at 11% and mark-up free--is in essence subsidized by the banks' higher profits from loans for foreign exchange and working capital made at rates from 14-16%. At ADBP, the standard 12% rate for funds lent to farmers is possible because of cheap credit lines from the State Bank of Pakistan and low-cost loans from international institutions. In the cooperatives, the GOP pays the salaries of the cooperative bureaucracy and continues to support its mark-up free lending program with new money each year.

While it is not the purpose of this paper to discuss in general if, when, and where subsidies should be provided to the agricultural sector, it is instructive to examine the cost of the supervised mark-up free credit program, which is one of largest subsidies provided to the agricultural sector.

Direct Cost of the Supervised Credit Program- Some of the mark-up free credit is given by the commercial banks under a supervised credit program. In 1986, the Pakistan Banking Council published the "Model Scheme for Supervised Agricultural Credit," which sets out guidelines for a considerable increase in the number of agricultural credit officers at the NCBs. Included in the document is an estimate of the costs of the supervised credit programs at the various NCBs. Table III.1 provides a summary of those costs (See Annex A, Table A.14 for more detail.)

Some 44% of the cost can be attributed directly to supervised credit, or 8.2 Rs. per 100 Rs. loaned. Another 19.1% of the cost comes from the cost of administering funds at the banks. Together these administrative costs of the program equal almost Rs. 12 per 100 rs. loaned. The financial cost of obtaining funds makes up the final 37% of the cost. The Banking Council figured that the total average cost of supervised credit was 18.6 rupees per 100 rupees loaned. It is possible to argue that these average costs would decline as a supervised credit program grew bigger or that these institutional costs are simply too high and that they should be lowered by cutting administrative costs. However, lacking other data on the cost of supervised credit (especially and unfortunately on the costs of supervised credit at the ADBP), we can generally accept these figures as a reasonable estimate for the cost of supervised credit. Furthermore, since some of the mark-up free credit is granted under supervised program, we can assume that these

Table III.1
Operational Cost of Supervised Agricultural Credit
Commercial Bank Average - 1984-1985
(Per Hundred Rs. of Credit)

Cost Component	Ave. Cost	Ave. Cost as % Tot. Cost
M manpower (Sup. Credit)	5.81	31.2%
Logistics (transport)	0.99	5.3%
Office Supplies, etc.	0.70	3.8%
Rent	0.69	3.7%
Sup. Credit Subtotal	8.19	44.0%
Admin. Cost of Funds	3.57	19.1%
Admin. Cost Subtotal	11.76	63.1%
Financial Cost of Funds	6.87	36.9%
TOTAL	18.64	100.0%

Source: Model Scheme for Supervised Agricultural Credit,
Pakistan Banking Council, 1986

figures can be used as a partial proxy for the cost of administering this mark-up free credit.

Cost of the Mark-up Free Credit Program- The workings of the mark-up free credit program can be summarized as follows:

- 1) The commercial banks lend to farmers from their own funds for a period from 6-18 months. Cooperative societies are generally provided with loanable funds from the Federal Bank of Cooperatives through provincial offices. Funds are then lent to cooperative members through individual cooperative societies.
- 2) At the end of the specified period, the NCBs and cooperatives recover as much of the money as possible. They then submit to the State Bank evidence of this lending. They are reimbursed by the State Bank at a rate of 10% of the recovered funds.
- 3) If unrecovered current dues cannot be collected, the State Bank will reimburse the lenders for up to 50% of the bad debt. However, the burden of "proving" that the debt is bad is placed on the lenders.

If we assume an optimistic long-term cumulative recovery rate of 92% (which is the figure published in the 1987 Annual Report of the ADBP), then 8% is the amount written off for bad debt. If the lenders prove to the State Bank that 75% of this 8% is bad debt, then they will be reimbursed for half of 6%, or 3%. Combined with the 10% paid on recovered funds, we can estimate that the direct

financial cost to the State Bank of the mark-up free credit is 13% of the funds lent (See Table III.2). At that rate, the State Bank provided an annual subsidy of Rs. 830 million in 1986-87, or some \$49 million.

Table III.2
Estimated Costs of Mark-up Free Credit
(Rs.Mil.)

Year_	Total Amount MU Fr. Credit	Direct Financial Cost to SBP (13%)	Total Financial Cost to GOP (26%)	Tot.Est. Charge for Fin. Inst. Viability (38%)
86/87-Mil.Rs.	6,385	830	1,660	2,426
86/87-Mil. \$	376	49	98	143
1979-1987				
Total-Mil.Rs.	21,296	2,769	5,537	8,093
Total-Mil. \$	1,253	163	326	476

Source:Annex A, Tables A.4 and A.14, plus team calculations.

However, this is only a partial cost, with a number of other costs which should be included to reach a total financial cost. To examine this, we need to build up costs in a different way. First, there is the cost of obtaining funds which in recent years has averaged some 7% (the rate which banks pay to depositors on basic savings accounts). Then, to this we add the full administrative costs (9%)*, the complete cost of bad debt write-off (8%), and bank profit/fee (2%). When these costs are added together, then the real financial cost to the GOP of the subsidy paid on mark-up free credit program is some 26% of funds lent. In 1986-87, this would have been Rs. 1.66 billion, or \$98 million. Over the life of the program, this would have equaled Rs. 5.5 billion, or \$326 million.

Finally, one could argue that the real cost of a program should be judged against the alternative of what it would cost to maintain the long-term financial viability of that program. We have calculated that rate to be some 38% of funds lent. This includes the most recent cost of funds (8%), a slightly less optimistic assumption on cost of bad debts (10%), full administrative charges (12%) (assuming 100% of mark-up free credit under a supervised program), the additional reserve equal to an expected long-term average rate of inflation (6%), and bank profit/fee (2%). At this rate, the subsidy implicit in the mark-up free credit program in 1986-87 would have been Rs. 2.43 bil., or \$143 mil. Over the life of the program, this would have equaled Rs. 8.1 bil., or \$476 mil.

* The 9% administrative charge assumes the following: 1) 4% for costs of administering funds 2) An 8% administrative cost for MUF credit administered under supervised credit program (which we will assume is 50%) and a 2% administrative charge for the other 50% of MUF credit administered under regular NCB staff, for a combined administrative charge of 5% charged on mark-up free credit.

Of course, it might be possible to lower this figure: administration costs might (and probably should) be reduced several percentage points; expected inflation might be less; or the rate of recovery might improve. However, it is difficult to imagine how—as things stand now—this rate for long-term viability would fall below 35%. However, there are a number of changes that should be implemented to lower costs, as discussed in the next section.

Another way of looking at the cost of the subsidy for the mark-up credit program is to look at it in comparison with other programs in the agricultural sector. The total financial cost to the GOP of mark-up free credit in 1986-87 was estimated to be Rs. 1.66 billion. This is equal to 42% of the total budgeted expenditures for the agricultural sector under the Annual Development Plan for the same year (See the Economic Survey, 1986-87, Table 13.2, p. 194). As a percent of planned public sector expenditure in agriculture (including the fertilizer subsidy but not water) during the entire Sixth Plan (1983-1988), the cost of the total mark-up free credit program subsidy over the period 1983-1988 would be some 44 percent(*) (See Economic Survey, 1986-87, Table 13.1, p. 193).

When expenditures reach this level, particularly in relation to other programs for agricultural development, it is important to examine the real cost of mark-up free credit and decide if there are other means of achieving policy objectives or if the money can be used more productively in other programs. This is particularly critical when one important goal of the public sector's program is to assist small farmers to increase their productivity and income. With relatively little of the mark-up free credit going to small farmers, changes in the mark-up free credit program are clearly indicated.

B. Economic Costs of Credit Misallocations

The economic costs to Pakistan of credit misuse or misallocation are most apparent in the case of the mark-up-free credit offered by NCBs and the cooperative system. The Government of Pakistan has designated these credits for use by small farmers for seasonal inputs (e.g., fertilizer, seeds and pesticides). Instead, however, as both the reports cited and team observations and discussions indicate, more than 65% of this credit goes to large landlords and other influential persons in rural areas. Moreover, often it is not used for agricultural production purposes but instead finances consumption and other non-agricultural uses, including trade and industry.

Such a finding is not surprising. In virtually every other country which has offered agricultural credit at subsidized rates, the credit has been virtually monopolized by richer and/or more powerful farmers or others in rural areas. Thus, a recent study

* This assumes that the amount of mark-up free credit increased at the rate of 37% in 1987-88, which for the period 1983-88 would give a total financial cost to the GOP for mark-up free credit of Rs. 6.76 billion.

found that "only about 2% of the agricultural producers of Latin America and the Caribbean have been the beneficiaries of at least 80% of the substantial volume of credit granted and of a similar proportion of the large implied subsidy as a consequence of the underpricing of loans." Similarly, "World Bank estimates for the Philippines, Thailand, Tunisia, and Bolivia show that 5-10% of the farmers receive 70-80% of institutional credit." (Both studies are cited in Redding, 1986, p. 8.)

The reasons for this virtually worldwide result are worth summarizing: Cheap (i.e., subsidized) credit is too attractive an option for the rich or powerful to resist, even if they have no immediate need for it. At a minimum, the funds can earn dividends if placed in bank accounts or government bonds. From the lending institution point of view, except for the option of retaining the funds while only "loaning" them on their books, loans to large farmers are less costly to administer, are less risky (except for "politically-based" defaults), and often result in return favors to lending officials.

Is this result, whether or not expected, economically injurious to Pakistan (and other countries)? The answer is clearly yes, for the following reasons:

(1) This means of allocating credit is less efficient from a national economic point of view, since many low-return investments are undertaken that would not have been financed at market rates of interest, while potentially higher-return investments are not undertaken because credit was not available. Moreover, the corruption of lending institution officials as well as of borrowers is thereby encouraged and facilitated.

(2) The impact of subsidized credit on lending institutions -- in this case the NCBs and the cooperatives -- is also injurious. Neither institution is being encouraged to mobilize domestic savings and loan them at rates which can cover all their costs, so that they will be able and want to provide agricultural credit on a continuing basis. Instead, the cooperative system seems, by all accounts, to be acting virtually as a paymaster for State Bank credits, so that it will cease to function as a lending institution the minute the SBP cuts off the supply of funds. The NCBs are forced to extend some credits to agriculture -- certainly, by all accounts, very substantially less than the amounts officially reported. But since most NCBs loan to small farmers reluctantly, in view of the losses incurred, they can be expected to reduce these credits sharply the moment State Bank pressure to make these loans is removed. Thus, without the pressure and inflow of funds, both cooperatives and NCBs will cease to be significant sources of credit for agriculture in general and for small farmers in particular.

(3) Finally, small farmers, who constitute over 75% of Pakistan's farmers and who have been designated by the Government to receive subsidized agricultural credit, are not getting sufficient reliable credit to encourage them -- even when other economic conditions are favorable -- to purchase the agricultural

inputs needed to increase their production and improve their economic status.

Some have said that small farmers need subsidized (i.e., mark-up free) credit, that they are living too close to the subsistence level and therefore they can not afford to pay any mark-up for the production and other credits needed. Apart from the questions as to (a) whether the Government of Pakistan can afford the financial costs of the mark-up-free-credit subsidy, estimated at Rs. 1.66 billion (\$98 million) in 1986/87 and projected to rise by more than 150% by 1989/90 if present trends continue, (b) whether there are other more economically beneficial uses for these funds, and (c) whether the budget drain can be justified when such a small proportion of the credits actually reach small farmers, the facts are:

(1) Charges for credit are generally only a small proportion of a farmer's cash costs, so that if profitable investments are available, farmers and other rural borrowers can afford to pay the market charges for the credits needed. As a recent publication noted, "Five AID-sponsored projects (in the Dominican Republic, Honduras, Indonesia, Peru, and Bangladesh) successfully demonstrated that small farmers were willing to borrow at nonsubsidized interest rates" (AID Evaluation Study No. 47, 1987, Appendix D). The publication also stressed that "Demonstration plots and a proven technical package backed by adequate support services were more effective in persuading farmers than the prospect of a cheap loan."

(2) If profitable uses for the credits are not available, then improved economic policies, technology, or rural infrastructure are required, not cheap credit. As noted in the same study, "Farmers spontaneously adopted technical packages without benefit of government or donor loans when they were confident of a profitable return on their investment."

(3) Even where subsidies of some kind could possibly be justified, perhaps for an experimental or demonstration project, providing technical assistance and temporarily-subsidized inputs (rather than subsidized credit) is a more economically justifiable approach -- until the profitability of the activity is either clear or disproved.

IV. MAJOR ISSUES AND POLICY OPTIONS

Two major issues and policy options have emerged from our study: (1) the need to insure that small farmers have an opportunity to compete fairly for the credit the GOP is making available to the agricultural sector -- which they are not now able to do because the system of mark-up-free credit is too attractive for the rich and powerful to pass up; and (2) the need to reform or improve existing lending institutions, or perhaps help finance an alternative channel for extending credit to agriculture. In addition, the study notes a number of other changes, including greater efforts to mobilize rural savings, which could make the credit program more effective. We also discuss two other changes in procedures which the GOP has started to implement.

A. Mark-up-free (MUF) Credit

Mark-up-free credit, now extended to farmers by the NCBs and the cooperative system, is perhaps the single most important, government-controllable obstacle to a larger flow of credit to small farmers. Eliminating the subsidy from this credit would reduce (if it remove) its attractiveness to persons in rural areas who are powerful and/or strategically-placed to take most of it for their own purposes. This action might not result in an immediate substantial increase of credit to small farmers. Other conditions must also be right -- for example, essential agricultural inputs must be available at the right time as well as a profitable technology and security of tenure. However, removing this enormous corrupting influence from the credit system is a prerequisite to such an increase.

The elimination of mark-up-free credit would also reduce the total financial costs to the GOP by a projected Rs 4.3 billion (250 million) by 1989/90 if present trends continued (see Annex A, Table A.15); and it would improve the productivity of investments by a large but uncalculable amount (see section III.B.).

Finally, the reduction of GOP budget deficits is a goal to which the Government of Pakistan has subscribed and one which is supported by virtually all bilateral and international donors, including the IMF. The elimination of MUF credit would contribute very substantially to this widely shared goal.

Eliminating MUF credit might stir up some opposition within Pakistan, of course, but a precedent is already in place: The Agricultural Development Bank of Pakistan, which supplies about 40 per cent of the total agricultural credit and about 85 per cent of development (i.e., medium and long-term) loans, now charges a 12 per cent mark-up on all its loans. This fact, widely known and accepted, might help ease any government problems with large land-owners and religious authorities.

B. Institutional changes

Nationalized commercial banks, as discussed in an earlier chapter, are not disbursing credit to small farmers in the way the

Government of Pakistan has decreed. Some changes within the NCB agricultural credit system are in process (see point C below). If the other changes recommended in this chapter are also initiated, and particularly if MUF credit is eliminated, the NCBs would be much more able to fulfill their assigned role as a principal agent for channeling credit to agriculture.

The cooperative system of credit, however, is a different matter. According to the National Commission on Agriculture and the PERI reports on cooperative credit, a very large proportion of the cooperative societies receiving mark-up-free loans are obtaining them illegally, and only a very small proportion of the credit goes to the small farmer for whom the GOP intended the credit. One source estimated the number of "genuine" societies at "only about five percent."

Various steps are under way to improve this situation, we were told: For example, a government investigation into the legality of the cooperative societies in the Punjab is expected to lead to the deregistering of about a third of them. Although these seem to be worthwhile as well as drastic measures, we do not believe they get at the root cause of the difficulties. What seems to be needed, according to published material and persons interviewed, are grass roots efforts to organize genuine cooperatives which are free from the current domination of the government Department of Cooperatives.

Technical assistance would be required, if an interested donor can be found, to enable small farmers in time to manage their own affairs. Their cooperative efforts could then not only secure credit but also mobilize savings, purchase agricultural inputs and consumption goods, and process and market their production.

Especially if the temptation and complication of mark-up-free credit were then removed, the Federal Bank for Cooperatives and its Provincial Banks might be in a good position to judge loan applications from agricultural cooperatives on their merits instead of acting as a paymaster for the government Department of Cooperatives.

The above-noted tasks, and others which might be suggested after more intensive study, would clearly require great efforts over a number of years. Small farmers could not expect substantial improvements in their credit situation from this source in the near future. But reconstruction efforts need to be started as quickly as possible if significant benefits are to be realized any time soon.

We also considered briefly the feasibility of establishing or expanding other credit institutions. For example, the Aga Khan Foundation rural credit program for small farmers, in the Gilgit area, seemed initially a very attractive model to try to replicate in other parts of Pakistan. Unfortunately, for many reasons, including the relatively uniform farm holdings there and the extensive donor support, we concluded it would be virtually impossible to replicate the system elsewhere in Pakistan. We had no time to explore other such institutions, if any.

An expanded system of supplier credits for agricultural inputs, particularly fertilizer, was the final option explored. The time available to us allowed discussions only with persons generally knowledgeable about the system but not actually working in it, so that further exploration of its feasibility is needed and, we believe, warranted.

In essence, the credits would start with loans for agricultural-input manufacturers or importers, obtained from either the Pakistan banking system or foreign suppliers. They in turn would sell the inputs, on credit of perhaps 90 to 120 days, to distributors who would make similar credit sales to subdistributors and/or village merchants. The merchants would be the final link in the chain to farmers, selling them the fertilizer and other inputs (presumably mainly seeds and pesticides) as well as the usual consumption goods on the usual seasonal credit basis.

Village merchants seemed preferable as the final link, because they know their small-farmer customers better than bankers or fertilizer distributors in the towns would know them; and consequently they could be expected to have a good record of loan recovery -- as they have had from past credit to small farmers for consumption goods. They would probably sell mostly to small farmers, since large farmers (though they should not be excluded from the credit) would presumably prefer to buy from the distributors or subdistributors in neighboring towns where they could obtain a discount for larger-quantity cash purchases. Village might also be able to obtain loans directly from, say, the ADBP, to finance their sales to farmers.

C. Other Changes

Changes in Process- The Government of Pakistan, through the State Bank of Pakistan and the Pakistan Banking Council, has already initiated some procedural changes. In particular:

(a) Geographic exclusivity of lending by NCBs, where only one nationalized commercial bank (NCB) is allowed to loan in each Tehsil (District). This change should reduce the administrative costs of both rural lending and savings mobilization, prevent or reduce multiple borrowing by large landowners, improve the recovery of future loans, and assign responsibility for rural lending more clearly to a specific bank. At the same time, as the Banking Council has pointed out in its "Model Scheme for Supervised Credit" (1986, pp. 19-21), these plans involve certain dangers, including bank monopoly, inconvenient bank locations for farmers, and more difficulties in recovering past loans by those NCBs that are no longer lending in that district. Whether the potential benefits would outweigh the disadvantages of greater institutional controls is not clear at this time.

(b) Supervised agricultural credit, involving the hiring of many additional mobile credit officers. Neither this nor the geographic exclusivity scheme can be implemented quickly, in this case because the number of agricultural school graduates with practical experience is limited. Moreover, even the

current limited level of supervision by NCBs was found to be more theoretical than actual, according to the PERI report (already cited).

Increasing NCB supervision to an effective level will therefore require enormous additional efforts and expense, even after the geographic exclusivity program is fully implemented. And unless additional changes are undertaken to make agricultural lending more profitable -- by some combination of reducing bank lending costs and raising bank charges -- supervised credit by NCBs is unlikely ever to be effective.

Gradual efforts to expand supervision and provide technical assistance to small farmers could be beneficial, especially if combined with an improved Research and Extension service, but the additional costs should be more carefully considered. We also believe Pakistan's national interests would be better served by first enhancing the incentives for NCBs to extend agricultural loans (e.g., as a starter, by eliminating mark-up-free credit).

At this point, we turn to other procedural changes, none of which seems to be in process, which we believe would improve the chances for agricultural credit to reach the small farmer.

2. Mandatory NCB agricultural credit targets.

We understand and agree with the aim of expanding the credit allocated to agriculture, especially to small farmers. The volume of such credit has not been and is still not adequate (see point II.E above). At some point, especially as the Government becomes more successful in carrying out its agricultural credit goals, it would be in the national interest to face some difficult political/economic/social questions. At this time, however, we simply assume that the economic benefits of the GOP's stated goal of expanding credit to small farmers is worthwhile: Agricultural production, at least in the short run, will probably increase more than if the credit continues to go so heavily to large farmers; and in any event additional efforts to increase the production and living levels of small farmers are essential if the rural-urban migration with its attendant economic and social costs is to be slowed.

The question at this point, therefore, is only whether mandatory agricultural credit targets, now imposed on NCBs, contribute toward the goal of increased agricultural production. The findings of this study are that it does not, and therefore we recommend it be eliminated at the same time as MUF lending. Such targets have by and large not accomplished their intended purpose of increasing the volume of lending to small farmers. Instead, they have increased the incentive for NCBs to make large loans to large farmers, or even bogus loans, so as to avoid the penalties imposed by the SBP for nonfulfillment of the credit target. Moreover, even when NCBs do loan to agriculture, the funds can easily be invested by the recipients in industry and commerce or used for consumption, as knowledgeable observers believe is often the case. Given the fact that loans for non-agricultural uses are more costly

to obtain, borrowers have good reason to divert agriculture-designated funds to such other purposes.

If mandatory credit targets do not work, what changes in government regulations would lead to increased lending to agriculture? In other countries, allowing mark-up charges for agricultural loans to rise to a profitable level for lending institutions has been the only way. When lending to agriculture in Pakistan becomes as profitable for NCBs as other lending, or even approximately so, then genuine lending to agriculture can increase.

As with MUF credit, eliminating mandatory lending targets will not by itself increase the flow of funds to agriculture; however, such action will reduce the incentives for subterfuge and corruption -- important in itself -- and thus remove another obstacle to a gradual and sustainable increase in agricultural lending.

3. Loan applications and approvals

Excessive documentation and procedural requirements deter small farmers from applying for institutional credit and discourage them from completing the task even when they do apply, as was pointed out by both the National Commission on Agriculture and the PERI report on "Flow of Commercial Banks Agricultural Credit" (April, 1986, p.46). These requirements are greatly reduced and simplified for large landowners -- as might be expected, since they have adequate collateral and are generally known to bank officials.

Given the need for repayment of loans, no simple, efficient, and foolproof system has been (or perhaps can be) devised for extending small loans. The Passbook system, initiated in 1973, was intended as such a system, but according to an official "Rural Credit Survey" by the Agricultural Census Organization (Lahore, 1985), only 1 per cent of small farmers have them. The expense and non-monetary obstacles facing the small farmer have simply been too great; and in any event, many small farmers fear pledging their land as collateral, which is done with passbooks. Additional efforts to improve the system seem worthwhile, but we have nothing special to recommend in this regard.

The recommendation in the PERI Report (cited above) that several different local functionaries jointly prepare, before the start of each "kharif" season, lists of farmers with their operational farm sizes and location seems clearly worth doing. Making this list public each year at the Union Council level as well as reporting publicly information on the agricultural loans extended also seem like steps in the right direction. Certainly, publicity might act as a deterrent to the application for and approval of illegal loans. However, this recommendation would be much more effective if combined with the elimination of mark-up-free credit and the consequently reduced attractiveness of loans which persons other than small farmers can only obtain illegally.

4. Mobilizing rural savings in rural areas is essential if the NCBs and the Cooperative Bank system are to become financially viable and end their dependancy on the State Bank of Pakistan for funds. In time -- and it is a long-range process -- such efforts will provide not only additional funds but also a more stable source of funds. Moreover, such efforts normally lower transaction (i.e., administrative) costs of the lending institutions, because of the additional information available on borrowers and the combining of functions in the same branch; and for similar reasons, it can be expected to lead to lower loan delinquencies and defaults.

For a savings mobilization effort to be successful, rates of profit paid to savers must be attractive -- which is another important reason for allowing charges to borrowers to rise -- and savings depositories must be safe, easy to reach, and convenient. In particular, services must be friendly and efficient, hours convenient, and paperwork and other requirements of savers (such as minimum balances and penalties for early withdrawals) must not be onerous. Particularly important, savers must also see the prospect of enhanced access to future loans. That such measures can attract a substantial volume of savings is clear from research in The Dominican Republic, Bangladesh, and Peru (see Redding, p. 22).

Our talks with bank officials, including particularly the Federal Bank for Cooperatives, indicate that many of them see the importance and benefits of greater efforts to mobilize rural savings. The efforts to date, however, constitute barely a start on such a program.

5. Reducing administrative costs of lending institutions was highlighted as important mainly by academic/research personnel, not by banking officials, though it should be noted we did not raise this issue with the latter. Rather, our conversations with NCB officials centered on the need they expressed, to receive a larger subsidy from the SBP so as to cover a larger proportion of their administrative costs. Otherwise, they said, the extension of rural loans involved a loss for them. We were told, incidentally, that the SBP has accepted in principle the NCB request for a larger subsidy -- which from a national economic point of view represents at least some improvement over the current unsatisfactory situation where NCBs find their best interests are served by circumventing the GOP-set credit allocations to agriculture. It would of course be far better for the banks to reduce all transaction costs, both in lending and in savings mobilization, and for the Government to allow charges for bank loans to rise to a level which would cover this reduced level of costs. Then, the profitability of rural loans, rather than government targets and policing, would lead banks to increase their efforts to extend credit to small farmers.

Some non-bank officials suggested the need to reduce costs such as housing subsidies, but we had no time to explore these possibilities with NCB officials.

Combining savings and lending activities of banks will by itself reduce some costs, including that of establishing credit-worthiness, since the banks will be better acquainted with bor

rowers through their role as savers and since both functions can be handled in the same branch, with some savings in office space and personnel. Lending to all creditworthy borrowers in rural areas, including suppliers of agricultural inputs and other local service and manufacturing firms, would also reduce costs very substantially. Diversification of the banks' loan portfolios would not only reduce repayment risks, but it would even out repayment schedules to some extent. Moreover, establishing creditworthiness of diverse borrowers is less costly than administering detailed loan forms to selected borrowers and then reporting on the results to the State Bank.

USAID and other donors could help NCBs and other lending institutions go beyond these sources of cost reductions by financing research and technical assistance. The research might focus on the practical physical and financial packages needed to reduce costs and improve the quality of services provided by the lenders. Equipment and training to improve information processing on savers, borrowers, and loan applications/monitoring, so that (e.g.) creditworthiness and loan status can be determined quickly, accurately, and cheaply, would undoubtedly be required as would the training of staff in modern banking and accounting techniques.

For such assistance to be effective, donors and the government (and specifically the institutions receiving the assistance) would need to attach primary importance to the goal of achieving financial viability for the lending institutions, perhaps after a relatively short transition period. This means (inter alia): no political forgiving of loan defaults, a restricting of SBP funds to a back-up role only, and the removal or amelioration of inappropriate regulations that constrain the ability of lending institutions to compete for either savings or loans.

Annex A
Table A.1
Growth Rates of Agricultural Credit and Other Agricultural Inputs

Year	Tot. Ag. Credit Rs. Mil	Index Ag. Prod 1960=100	Fert. Offtake '000 N./t	Impr. Seed '000 t.	Water Avail. MAF	Tractors Import + Domest.	Agric. Credit GNP Rs. Bil.	Credit as % GDP
1971 - 72	121	183	379	23	71	4,224	17.9	0.7%
1972 - 73	300	188	436	18	81	1,847	21.9	1.4%
1973 - 74	865	196	403	28	80	5,216	29.1	3.1%
1974 - 75	1,003	187	426	26	77	7,190	33.5	3.0%
1975 - 76	1,446	199	551	43	86	10,009	38.3	3.8%
1976 - 77	1,709	203	632	94	85	15,554	44.0	3.9%
1977 - 78	1,824	209	714	48	89	11,902	53.6	3.6%
1978 - 79	2,224	219	860	49	87	15,178	54.1	4.1%
1979 - 80	3,016	239	1,044	61	91	19,313	62.2	4.9%
1980 - 81	4,023	249	1,080	73	98	16,137	71.7	5.6%
1981 - 82	5,102	258	1,080	79	96	19,253	83.4	6.1%
1982 - 83	5,871	270	1,244	70	101	22,147	90.7	6.5%
1983 - 84	8,680	237	1,202	76	104	27,279	92.2	9.4%
1984 - 85	10,375	275	1,253	86	103	28,141	108.7	9.5%
1985 - 86	13,156	298	1,512	75	105	22,075	119.2	11.0%
1986 - 87	15,810	318	1,582	90	110	22,512	127.5	12.4%
Growth Rate	27.5%	3.2%	10.2%	9.5%	2.6%	14.0%	12.1%	

Note: Agricultural GNP shown at current factor costs
All growth rates calculated use semi-log regression model.

Sources: Table II.1
Pakistan Economic Survey, 1986-87
Federal Directorate of Fertilizer Imports
Agricultural Statistics of Pakistan, 1985

Annex A - Table A.2
Institutional Agricultural Credit in 1986-87 by Province and Institution
(Rs. Mil.)

Province	ADB	Prov. as % Tot.ADB Lending	Coops/ FBC	Prov. as % Tot.Coop Lending	NCBS	Prov. as % Tot.NCB Lending	TOTAL	Prov. as % T.Inst. Lending	Prov.Rural Pop.as % Tot.Rural Popul.	Rural Pop. (000)
Punjab	3,734	62.9%	1,851	77.9%	3,298	45.2%	8,883	56.9%	53.0%	34,241
Sind	1,502	25.3%	202	8.5%	3,201	43.8%	4,905	31.4%	18.6%	10,786
Buluchistan	190	3.2%	0	0.0%	220	3.0%	410	2.6%	6.3%	3,655
N.W.F.P.	514	8.7%	324	13.6%	584	8.0%	1,422	9.1%	16.2%	9,396
Total	5,940		2,377		7,303		15,620			58,078

Source: Food and Agriculture Division, Credit Monitoring Cell
Planning Unit, and 1980 Census

Annex A - Table A.3
Breakdown of Production and Development Loans by Lending Institutions
1983-1987
(Rs.Mil.)

Production Loans									:	Development Loans						:	Prod. Devt.		
Year	ADB as % Prod.	NCBs % Prod	Coops %Prod.	Tot. Prod.	:	ADB as % Devt.	NCBs % Devt.	Coops % Dev	Tot. Dvt.	:	Total Lending	as % Total	%	%	%	%	%		
1983 - 84	590	11.0%	3,336	62.0%	1,450	27.0%	5,377	:	2,541	85.4%	435	14.6%	0	0.0%	1,377	:	8,354	64.4%	35.6%
1984 - 85	914	14.2%	3,974	61.6%	1,561	24.2%	6,450	:	3,254	84.9%	571	14.9%	7	0.2%	1,333	:	10,283	62.7%	37.3%
1985 - 86	11,326	16.4%	4,750	58.7%	2,020	24.9%	8,097	:	3,982	86.8%	574	12.5%	28	0.6%	4,585	:	12,682	63.8%	36.2%
1986 - 87	11,206	11.8%	6,608	64.6%	2,420	23.6%	10,235	:	4,825	86.1%	705	12.6%	75	1.3%	5,506	:	15,841	64.6%	35.4%
Average		13.3%		61.7%		24.9%	:		85.8%		13.7%		0.5%	:			63.9%	36.1%	

Source: Food and Agriculture Division, Credit Monitoring Cell
Planning Unit

236

Annex A - Table A.4
MARK-UP FREE LOANS
(Rs. Mil.)

Year	COOPS	MU Fr. as % T. Coop Loans	NCBs	MU Fr. as % T. NCB Loans	TOTAL	MU Fr. as % All Ag. Loans	MU Fr. as % Prod. Loans	Coops as % MU Fr. Loans	NCBs as % MU Fr. Loans
1979 - 80	226	31.8%	235	14.8%	461	15.3%	N/A	49.0%	51.0%
1980 - 81	393	34.9%	348	19.0%	741	18.4%	N/A	53.0%	47.0%
1981 - 82	832	75.6%	441	18.1%	1,274	25.0%	N/A	65.3%	34.7%
1982 - 83	1,043	79.0%	538	24.0%	1,581	26.9%	N/A	66.0%	34.0%
1983 - 84	1,183	81.6%	1,701	41.6%	2,884	33.2%	53.6%	41.0%	59.0%
1984 - 85	1,409	100.0%	1,994	41.0%	3,403	32.8%	52.8%	41.4%	58.6%
1985 - 86	1,616	78.9%	2,952	51.0%	4,568	34.7%	56.4%	35.4%	64.6%
1986 - 87	1,918	77.5%	4,467	61.1%	6,385	40.4%	62.4%	30.0%	70.0%
Growth Rate					37%				
Total-RsMil	8,620		12,676		21,296				
Total-\$ Mil	507		746		1,253				
Proj. '87-88					8,747				
" '88-89					11,984				
" '89-90					16,418				

Note: Projections assume that growth in MUF credit follows trend 1

Source: Food and Agriculture Division, Credit Monitoring Cell
Planning Unit
Agricultural Statistics of Pakistan, 1985

Annex A - Table A.5
SUPERVISED CREDIT BY INSTITUTION
(Rs.Mil.)

Year		Spv. Cr. as % T.ADBP		Spv. Cr. as % T.NCBs		Spv. Cr. as % Tot. Ag. Total		ADBP as % Total	NCBs as % Total
		ADBP	Loans	NCBS	Loans	TOTAL	Loans	Spv. Cr.	Spv. Cr.
1978 - 79	1	7	1.7%	178	12.9%	185	8.3%	3.8%	96.2%
1979 - 80	1	59	8.3%	204	12.9%	263	8.7%	22.4%	77.6%
1980 - 81	1	282	26.4%	217	11.9%	499	12.4%	56.5%	43.5%
1981 - 82	1	721	46.3%	325	13.4%	1,046	20.5%	68.9%	31.1%
1982 - 83	1	1,371	59.3%	507	22.6%	1,878	32.0%	73.0%	27.0%
1983 - 84	1	2,265	72.3%	1,290	31.6%	3,556	41.0%	63.7%	36.3%
1984 - 85	1	3,425	82.2%	1,227	25.2%	4,651	44.8%	73.6%	26.4%
1985 - 86	1	4,723	88.9%	1,649	28.5%	6,371	48.4%	74.1%	25.9%
1986 - 87	1	5,351	88.8%	N/A		N/A			
Growth Rate:						53.9%			

Source: ADBP, Agricultural Indicators Series No. 4, 1985
Proposed Model Scheme for Supervised Ag. Credit,
1986, Pakistan Banking Council

Annex A - Table A.6
SUPERVISED CREDIT OFFICERS BY INSTITUTION

	: NATIONALIZED COMMERCIAL BANKS - 1984-85						'84-85	'86-87	'84-85
	: Habib	National	United	Muslim	Allied	Total	ADBP	ADBP	TOTAL
Ag. Credit Officers	: 124	150	41	69	19	403	1,079	1,259	1,662
Villages Covered	: 8,050	4,405	967	2,424	1,422	17,268	30,428	39,576	56,844
Villages per Officer	: 65	29	24	35	75	43	28	31	34
Farmers Served ('000)	: 144	137	44	135	19	480	100	121	600
Farmer per Officer	: 1,158	916	1,080	1,957	1,019	1,190	93	96	361
Credit Advanced (Rs.Mil.):	674	324	38	133	57	1,227	3,433	5,351	6,577
Credit p. Officer(Rs.Mil.):	5.4	2.2	0.9	1.9	3.0	3.0	3.2	4.3	4.0

Note: Complete statistics for NCBs in 1986-87 were not available. However, total number of ACUs in 1986-87 was 443.

There are some 45,000 villages in Pakistan. The total number of village covered in 1984-85 was 56,844, which means that some villages received coverage by both the ADBP and NCBs.

Sources: Model Scheme for Supervised Agricultural Credit, Pakistan Banking Council, 1986
Annual Report, '87, Agricultural Development Bank of Pakistan, 1987

Annex A - Table A.7
Agricultural Development Bank of Pakistan
Recovery Ratios
1986-1987

Area	Current Dues	Past Dues	Total Recovery	Cumul. Recovery	(since inception)
Federal Area	73.7%	70.6%	73.3%	88.0%	
Punjab	87.2%	61.1%	83.5%	96.2%	
Sind	72.2%	28.4%	58.8%	85.6%	
N.W.F.P	80.8%	39.8%	73.6%	91.0%	
Baluchistan	56.2%	15.2%	39.1%	68.2%	
Azad Kashmir	70.4%	56.4%	67.9%	82.6%	
F.A. Northern Areas	68.6%	56.5%	67.2%	85.0%	
Pakistan	80.5%	39.2%	71.6%	92.0%	

Source: ADBP, Annual Report, 1987

76

Annex A - Table A.8

**DISTRIBUTION OF TOTAL BORROWINGS OF ALL CULTIVATOR HOUSEHOLDS
BY SOURCE AND SIZE OF FARM**

(Per cent)

Credit Source	Size of Farm (Acres)					All Sizes
	< 5	5—15	15—25	25—50	> 50	
A. Institutional :						
1. Co-operative Societies	0.64	0.95	1.23	1.49	0.90	1.00
2. Co-operative Banks	0.09	0.11	0.12	0.79	1.20	0.34
3. A.D.B.P.	0.18	3.36	3.12	6.32	16.62	5.01
4. Commercial Banks	0.08	1.93	1.16	3.64	8.51	2.63
5. Taccavi	0.14	0.32	0.64	1.08	1.32	0.57
6. Unclassified	0.39	0.22	0.13	0.07	0.44	0.24
Sub-Total : A	1.48	6.89	6.40	13.39	28.99	9.79
B. Non-Institutional :						
1. Friends and Relatives	75.23	62.48	57.53	60.07	41.99	60.73
2. Professional Money-Lenders	2.67	2.16	1.67	1.26	2.60	2.12
3. Land-Owners	4.47	14.67	16.92	6.99	3.01	10.66
4. Commission Agents and Merchants	11.89	10.16	15.02	13.42	18.82	12.85
5. Factories	0.17	0.35	0.97	0.93	1.98	0.72
6. Unclassified	4.09	3.29	1.49	3.94	2.60	3.13
Sub-Total : B	98.52	93.11	93.6	86.62	71.00	90.21
All Sources (A + B)	100.00	100.00	100.00	100.00	100.00	100.00

Source: Pakistan Rural Credit Survey Volume I, p.164, 1984 (1972-73 Data)

Annex A - Table A.9

RATES OF RETURN IN PAKISTAN

Rates of Return on Advances of Specialised
Agricultural Finance Institutions

(Percent per annum)

PERIOD	Agricultural Development Bank of Pakistan				Co-operatives Societies		Federal Bank for Co-operatives \$	
	Short-term		Medium and Long-term		Short-term	Medium and Long-term	Short-term	Medium and Long-term
	Loans upto Rs. 5000 **	Loans Exceeding Rs. 5000	Loan upto Rs. 5000 **	Loan Exceeding Rs. 5000				
1973-74†	9.00	10.00	9.00	10.00	12.00	12.00		
1974-75@	10.00	11.00	10.00	11.00	12.00	12.00		
1975-76	10.00	11.00	10.00	11.00	13.00	13.00		
1976-77*	11.00	11.00	11.00	11.00	13.00	13.00		
1977-78	12.00	12.00	12.00	12.00	13.00	13.50	8.00	8.50
1978-79	11.00	12.00	11.00	11.00	13.00	13.50	8.00	8.50
1979-80	11.00	11.00	11.00	11.00	13.00	13.50	8.00	8.50
1980-81	11.00	11.00	11.00	11.00	13.00	13.50	8.00	8.50
1981-82	11.00	11.00	11.00	11.00	13.00	13.50	8.00	8.50
1982-83	11.00	11.00	11.00	11.00	12.00₹	12.50₹	7.00₹	7.50₹
1983-84	11.00	11.00	11.00	11.00	12.00	12.50	7.00	7.50
1984-85	11.00	11.00	11.00	11.00	12.00	12.50	1.30‡	1.30‡
1985-86	12.00	12.00	12.00	12.00	12.00	12.50	1.36‡	1.36‡
1986-87	12.00	12.00	12.00	12.00	12.00	12.50	1.36‡	1.36‡

\$ The Federal Bank for Co-operatives was established on 14th December, 1976. The Bank grants short and medium-term loans for agricultural machinery, bullocks, etc. to Provincial Co-operative Banks for onward lending to Co-operative Societies.

* 11 percent from 16th October, 1976 and 12 percent from 8th June, 1977.

** Since July, 1978 a rebate of 1 percent was allowed, if repaid within 2 months of harvesting which was discontinued w.e.f. 1-4-1985.

† From 22nd January, 1974

@ From 31st October, 1974

₹ From 1st January, 1983

‡ Service charges from 1st April, 1985.

Source: State Bank of Pakistan, Annual Report, 1986-87, p.83.

Annex A - Table A.10

RATES OF RETURN IN PAKISTAN

Scheduled Banks' Rates of Return on Advances

(Percent per annum)									
EFFECTIVE FROM	Ceiling Rates					Minimum Rates*			
	Conven- tional Advances	Fixed Industrial Investments	Fixed Agricultural Investments	Export Finance Scheme**	Locally Manufactured Machinery (Export Sales)	Government Commodity Operations†		Finished Goods (Except Capital Goods)	Other Advances
						If refinanced by S.B.P.	From own Sources		
16-8-1973	11.00			9.00	8.00	8.25	8.25		
3-9-1974	13.00	13.00	13.00	10.00	9.00	9.25	9.25	12.00	10.00
7-6-1977	14.00	14.00	14.00	10.00	9.00	10.25	11.50	13.00	11.00
7-7-1977	14.00	14.00	14.00	8.00	7.00	10.25	11.50	13.00	11.00
5-9-1977	14.00	12.50	14.00	8.00	7.00	10.25	11.50	13.00	11.00
30-3-1978	14.00	12.50	14.00	6.00	5.00	10.25	11.50	13.00	11.00
1-7-1978	14.00	11.00	11.00	3.00	2.00	10.25	11.50	13.00	11.00

*No bank other than ADBP and IDBP may charge return on any loan or advance or credit facility of any nature, which is less than 10.0 percent per annum or more than 13.0 percent per annum, except to the extent that in case of advances against finished goods (excluding capital goods) the minimum return rate shall be 12.0 percent per annum and maximum 13.0 percent per annum.

**As a part of first phase of interest free banking, the financing of the entire trading operations of Rice Export Corporation of Pakistan, Cotton Export Corporation and Trading Corporation has been changed to mark-up basis from 1st March, 1981. The financing of Cotton Export Corporation under part-I of the Export Finance Scheme of the State Bank has also been changed to the mark-up basis at 0.75 percent for 90 days.

†The financing of Government commodity operations has been shifted from interest to mark-up basis at the rate:

- (i) If counter finance is obtained from SBP, 2.563 percent for 90 days shared between the bank and SBP as 1:40 and
- (ii) If financed from banks funds, 2.975 percent for 90 days.

(iii) Since July 1, 1978 and onwards, the rates are unchanged.

Source: State Bank of Pakistan, Annual Report, 1986-87, p.82.

Annex A - Table A.11

DISTRIBUTION OF AVERAGE RATE OF INTEREST AND ITS VARIANCE BY
SOURCE OF BORROWINGS

Credit Source	Mean Interest Rate (Per cent per Annum)	Standard Deviation
A. Institutional.		
1. Co-operative Societies	8.60	2.47
2. Co-operative Banks	8.68	2.28
3. A.D.B.P.	7.15	1.32
4. Commercial Banks	8.87	1.40
5. <i>Taccavi</i>	6.63	3.23
6. Unclassified	6.48	5.26
Sub-Total : A	8.16	1.82
B. Non-Institutional :		
1. Friends and Relatives	9.25	9.72
2. Professional Money-Lenders	18.53	12.99
3. Land-Owners	10.25	9.35
4. Commission Agents and Merchants	13.54	11.28
5. Factories	8.88	5.28
6. Unclassified	11.28	11.12
Sub-Total : B	15.34	11.63
All Sources (A + B)	10.13	7.06

Source: Pakistan Rural Credit Survey, Vol. I, p.206, 1984 (1972-73 Data)

Note: These mean rates of interest do not include loans classified as non-interest bearing.

Annex A - Table A.12
Extent of Genuine Loans

Zones	Actual Plus Family Loans										Bogus Loans		All Loans	
	Genuine Loans		Loans with below Record Area		Loans with Above Record Area		Loans below Record Amount		Total Actual + Family					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Barani	3	38	-	-	-	-	-	-	3	38	5	62	8	100
Rice	12	9	3	2	12	9	9	1	36	27	95	73	131	100
Mixed	17	13	2	1	10	7	13	10	42	31	95	69	137	100
Cotton	3	3	1	1	5	5	10	10	19	19	78	79	97	100
Overall	35	9	6	2	27	7	32	9	100	27	273	73	373	100

Source: PERI, Evaluation of Cooperative Credit Program in Punjab, 1986, p.48.

Annex A - Table A.13
Loans Made to Farm Households During A 12-Month Period 1984-85
From Institutional and Non-Institutional Sources

Farm Size (ha.)	: Tot.No. : House- : holds : (Mil.)	: % : Total : Farm : Hshlds	: Institutional Sources			: Non-Institutional Source:			Total Lending		
			: Hs.Rep.	Tot.Amt	% of	: Hs.Rep.	Tot.Amt	% of	: Hs.Rep.	Tot.Amt	% of
			: Loans	Loaned	T.Inst.	: Loans	Loaned	T.N-Inst:	: Loans	Loaned	T.Amt
			: ('000)	(Rs.Mil)	Loans	: ('000)	(Rs. Mil)	Loans	: ('000)	(Rs.Mil)	Loaned
All Farm Households:	5.159	100.0%	309	7,147	100.0%	1,894	15,578	100.0%	2,204	22,725	100.0%
Under 0.5	0.484	9.4%	3	55	0.8%	153	1,300	8.3%	156	1,355	6.0%
0.5 - 1.0	0.583	11.3%	8	93	1.3%	206	1,468	9.4%	214	1,561	6.9%
1.0 - 2.0	0.887	17.2%	23	239	3.3%	282	1,572	10.1%	305	1,811	8.0%
2.0 - 3.0	0.919	17.8%	39	389	5.4%	330	1,975	12.7%	370	2,364	10.4%
3.0 - 5.0	1.083	21.0%	72	873	12.2%	445	3,192	20.5%	517	4,065	17.9%
Small Farmers-Tot.	3.957	76.7%	145	1,650	23.1%	1,416	9,506	61.0%	1,561	11,156	49.1%
5.0 - 10.0	0.770	14.9%	77	1,528	21.4%	317	2,908	18.7%	394	4,436	19.5%
10.0 - 20.0	0.307	6.0%	55	2,082	29.1%	117	1,893	12.2%	172	3,976	17.5%
Med. Farmers- Tot.	1.077	20.9%	132	3,610	50.5%	434	4,802	30.8%	566	8,412	37.0%
20.0 - 60.0	0.108	2.1%	27	1,421	19.9%	39	867	5.6%	66	2,288	10.1%
Above 60.0	0.018	0.3%	5	467	6.5%	6	404	2.6%	12	870	3.8%
Large Farmers-Tot.	0.126	2.4%	32	1,888	26.4%	46	1,270	8.2%	78	3,158	13.9%
Small-Under 5-10	4.726	91.6%	223	3,177	44.5%	1,733	12,414	79.7%	1,955	15,532	68.6%
Large- 10-Above 60	0.433	8.4%	87	3,970	55.5%	163	3,164	20.3%	250	7,134	31.4%

Source: Pakistan Rural Credit Survey, 1985, Table 4, Pakistan

- 42 -

Annex A - Table A.14
Operational Cost of Supervised Agricultural Credit
By Institution- 1984-85
(Per Hundred Rs. of Credit)

Cost Component	:	HBL	NBP	UBL	MCB	ABL	AVE.	% Ave. T. Cost
Manpower	:	5.22	6.84	4.95	4.53	7.51	5.81	31.2%
Logistics (transport)	:	0.44	1.66	0.95	1.16	0.75	0.99	5.3%
Office Supplies, etc.	:	0.19	0.49	1.46	0.29	1.09	0.70	3.8%
Rent	:	0.23	0.38	0.60	0.66	1.59	0.69	3.7%
Subtotal	:	6.08	9.37	7.96	6.64	10.94	8.20	44.0%
Cost of Funds:	:							
Financial	:	7.31	8.29	6.38	6.05	6.33	6.87	36.9%
Administrative	:	1.91	4.84	3.19	3.95	3.95	3.57	19.1%
Subtotal	:	9.22	13.13	9.57	10.00	10.28	10.44	56.0%
TOTAL	:	15.30	22.50	17.53	16.64	21.22	18.64	100.0%

Source: Model Scheme for Supervised Agricultural Credit
Pakistan Banking Council, 1986

- 43

Annex A - Table A.15
Estimated Costs of Mark-up Free Credit
(Rs.Mil.)

Year	Total Amount MU Fr. Credit (Rs.Mil.)	Direct Financial Cost to SBP 13%(a)	Total Financial Cost to GOP 26%(b)	Tot.Est. Cost of Long-term Viability 38%(c)
1979 - 80	461	60	120	175
1980 - 81	741	96	193	282
1981 - 82	1,274	166	331	484
1982 - 83	1,581	206	411	601
1983 - 84	2,884	375	750	1,096
1984 - 85	3,403	442	885	1,293
1985 - 86	4,568	594	1,188	1,736
1986 - 87	6,385	830	1,660	2,426
86/87-Mil.\$	376	49	98	143
<hr/>				
TOTAL	21,296	2,769	5,537	8,093
TOT.-Mil.\$	1,253	163	326	476
<hr/>				
Proj. '87-88	8,747	1,137	2,274	3,324
" '88-89	11,984	1,558	3,116	4,554
" '89-90	16,418	2,134	4,269	6,239

(a) 10% paid by SPB to NCBs on funds recovered, which usually takes one year for processing, plus 3% for bad debts, assuming a 92% long-term recovery rate which is split 50:50 by the NCBs and SBP on debts that are proven by the NCBs to be unrecoverable. We assume that 75% of the loans can be proved unrecoverable.

(b) Assumes average cost of funds to NCBs equal to rate bank on normal bank deposits (7%). Plus 9% ave. admin. charge (4% on cost of funds and 8% on average cost of supervised credit--See Annex A, Table A.14. However, we assume that only 50% of MUF credit is presently given under supervised conditions. Furthermore, we assume that MUF credit under non-supervised conditions costs 2% admin. charges, for an ave. 5% admin. cost Plus an optimistic long-term cumulative bad debt rate of 8% which is equal to the published rate of ADBP. Plus 2% for bank profit or fee.

(c) Assumes cost of funds equal to 8%, administrative charges at 12%, long-term recovery rate at a less optimistic 90%, profit or fee at 2%, and 6% long-term average rate of inflation.

N.B. We have assumed that administrative costs for cooperatives are similar to those reported by the NCBs, given that some portion of the GOP's cooperative departments must be imputed to the mark-up free loan program of the Coops.

Projections assume present growth trends of 37% per annum.

Sources: Annex A, Tables A.4 and A.14

44

Annex B - Table B.1

4.2.1 Definitions of Categories of Loans

In the light of survey data commercial banks' agricultural loans were divided into various categories. Definitions adopted for these categories of loans are as follows:

i) Family Loans

Production loans without mark-up are for small holdings. If a large holding of a family was operated as one unit but the loan applications showed it being consisting of a number of small units in the names of family members, then such loans were treated as family loans.

ii) Loans Actually Got

'Loans reported' and family loans are those loans which go into actual loanees pockets. Thus sum of these two categories was called 'loans actually got'.

iii) Proxy at Will

Sometimes farmers get a loan sanctioned in their names for some one else who may be their friend or relative. These loans were called 'proxy at will'.

iv) Disguised Proxy

Landlords get loans in their tenants' names with or without their knowledge. Sometimes they give them farm inputs and sometimes not. Such loans taken with the knowledge of tenants were termed as 'disguised proxy'

v) Straight Proxy

If a loan was taken by a person in the name of another person without his knowledge, then such loan was termed as 'straight proxy'. In this case loanes generally did not know whether loans were taken in their names until our survey team told them so. In these cases generally one who stood guarantee for the loans, was the receiptent of them.

Annex B - Table B.1 (Cont'd)

vi) Genuine Loans

These are the loans for which the system of mark-up free lending was introduced. If a farmer gets a loan in his name by reporting correct operational land holding, such loan was regarded as 'genuine loan'.

vii) Loans with Area Over Reported

In order to get full benefits of mark-up free loans by utilizing full MCL, there was a general tendency among small farmers to over report their farm size in loan documents. These loans were termed as 'loans with area over reported'.

viii) Loans with Area Under Reported

In order to get benefits of mark-up free loans large farmers also reduced their farm sizes down to the small size level in loan applications. These loans were termed as 'loans with area under reported'.

ix) Fictitious Loans

Loans issued in imaginary or false names were termed as 'fictitious loans'.

Figures 4.1 gives distribution of samples loans according to this categories

Source: PERI, Flow of Commercial Banks Agricultural Credit, 1986, p.32-34

Annex B - Table B.2

Distribution of Sample Loans According to
their Category in Pakistan.

Banks	Loans Actually Reported By the Loanees		Proxy at Will		Disguised Proxy		Straight Proxy		Fictitious Loan		Family Loan		Total No
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	
NBP	155	58	13	5	63	24	11	4	-	-	23	9	265
HBL	242	58	13	3	118	29	16	4	2	*	23	6	414
UBL	58	43	10	7	50	37	4	3	-	-	14	10	136
MCB	105	56	10	5	51	27	13	7	2	1	8	4	189
ABL	103	75	6	4	12	9	8	6	-	-	8	6	137
Total	663	58	52	5	294	25	52	5	4	*	76	7	1141

* Less than 0.5 percent.

Source: PERI, op. cit., 1986, p.36

Annex B - Table B.3

Types of Persons Benefitting From Proxy
and Fictitious Loaning in Pakistan.

Banks	Land Lord		Influential Persons		Shopkeeper/ Commission Agent/Dealer		Do Not Know		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
NBP	56	64	10	12	6	7	15	17	87	100
MBL	129	87	5	3	-	-	15	10	149	100
UBL	53	83	6	9	2	3	3	5	64	100
MCB	59	77	4	5	1	1	12	17	79	100
ABL	14	34	7	27	-	-	5	19	26	100
Total	311	77	32	8	9	2	50	13	402	100

Source: PERI, c2. cit., 1986, p.44

Annex B - Table B.4

Details of Sample Loans Actually Got
By the Loanees and Proxy Loan in Pakistan

Banks	Loan Actually Got							Proxy And Fictitious Loans		Total Loans
	Total	Genuine Loans		Loans with Less Area Reported		Loans with More Area Reported		Nos.	%	Nos.
		Nos.	%	Nos.	%	Nos.	%			
NBP	178	35	13	52	20	91	34	87	33	265
HBL	265	114	27	74	18	77	19	149	36	414
UBL	72	11	8	45	33	16	12	64	47	136
MCB	113	64	34	16	9	33	17	76	40	189
ABL	111	33	24	41	30	37	27	26	19	137
Total	739	257	23	228	20	254	22	402	35	1141

Source: PERI, op. cit., 1986, p.42

Bibliography

Agricultural Credit in Pakistan

- 1) Agricultural Census Organization, Statistics Division, GOP, Lahore, "Pakistan Rural Credit Survey, 1985.
- 2) Agricultural Development Bank of Pakistan, "Annual Report & Accounts for the Year Ending June 30, 1985."
- 3) ..., Statistics Department, "Agricultural Credit Indicators, 1985."
- 4) ..., Monitoring and Evaluation Department, Islamabad, "Development Impact of Supervised Agricultural Credit," 1987.
- 5) Applied Economics Research Centre, "A Study of Specific Constraints Facing Small Farmers in Pakistan, Main Report (Province of Baluchistan)," 1986.
- 6) ..., "A Study of Specific Constraints Facing Small Farmers in Pakistan, Main Report (Province of Sind)," 1986.
- 7) GOP, "Report of the National Commission on Agriculture (Final draft), 1987.
- 8) Ministry of Finance, Economic Adviser's Wing, GOP, Islamabad, "Economic Survey, 1986-87."
- 9) Ministry of Food, Agriculture and Cooperatives, Food and Agriculture Division (Planning Unit), Islamabad, "Agricultural Statistics of Pakistan, 1985."
- 10), Agricultural Prices Commission, Islamabad, "Cost of Production of Field Crops: Methodology and Empirical Results (Rice, Cotton, and Wheat)," 1987.
- 11) Nishtar, A. Jamil, President National Bank of Pakistan, "The Mobile Supervised Agricultural Credit System for Small Farmers," Karachi, 1977.
- 12) National Bank of Pakistan, Agricultural Credit Dept, Karachi, "Agricultural Pass Book, Loans for Agricultural Purposes Act, 1973."
- 13) Pakistan Banking Council, "Model Scheme for Supervised Agricultural Credit," 1986.
- 14) Pakistan Institute of Development Economics (PIDE), "Agricultural Credit in Developing Countries: A Select Bibliography," 1986.

- 15) Pakistan Institute of Development Economics and State Bank of Pakistan, "Pakistan Rural Credit Survey," Volume 1 (Analytical Report).
- 16) Punjab Economic Research Institute (PERI), "Evaluation of Cooperative Credit Program," 1986.
- 17) ..., "Flow of Commercial Banks Agricultural Credit," 1986.
- 18) ..., "Constraints Facing Small Farmers in Punjab," 1986.
- 19) Quereshi, Sarfraz K. et al, "Rural Credit and Rural Development: Some Issues," The Pakistan Development Review, 1984, Nos. 2-3.
- 20) Redding, A. David, "Rural Financial Markets," Ohio State University, 1986.
- 21) Siew Tuan Chew, "Credit Programs for Small Farmers," AID Evaluation Study No. 47, Washington, DC, 1987.
- 22) State Bank of Pakistan, "Annual Report, 1986-87."
- 23) UN/FAO, National Fertilizer Development Centre, Pakistan, "Review of Agricultural Credit," 1984.
- 24) United Bank Limited, "Annual Report, 1986.
- 25) Zubair Iqbal and Abbas Mirakhor, "Islamic Banking," International Monetary Fund (IMF), Washington, DC, 1987.

Additional
Bibliography*
Agricultural Credit in Pakistan- 1980-1987

- Abdul Matin, "Financing of agricultural progress by ADBP,"
Economic Review, 11(1), Jan 1980: 42-44, 11(2), Feb 1980: 17-21
- "Agricultural Credit for Development," Agridigest 2(4), Apr 1982:
19-25
- Ahmed, Ghiasuddin, "Role of Cooperative in Agricultural Financing"
in Agricultural Credit: Pakistan's Experience: Collection of Papers
presented at the seminars of the Institute of Bankers in Pakistan.
Karachi, Institute of Bankers in Pakistan, 1984: 79-86
- Ali, Hahfooz, "Supervised Agricultural Credit Schemes in Pakistan:
An Evaluation," In: Agricultural Credit: Pakistan's Experience, op.
cit., 1984: 7-93
- Ansari, M.A.A. and Yusuf, Jamal, "Agricultural Credit: Facilities
and Failures," Pakistan Agriculture 5(1), Jan 1983: 32-36
- Choudhry, Maher Elahi, "Agricultural Credit Through Commercial
Banks," UBL Economic Journal 1(11), Nov. 1982: 35-40
- "Finance, Agricultural Credit: An Evaluation," Pakistan Agricul-
ture 4(13) Aug 1982: 13-14
- Hashmi, S.M. Taqi, "Agricultural Development Bank of Pakistan:
Credit at the Farmers' Doorstep," Pakistan and Gulf Economist 4(3),
19-25 Jan, 1985: 26-27
- Husain, Syed A., "Link Between Agricultural Credit and Marketing,"
In: Agricultural Credit: Pakistan's Experience, op. cit., 1984:
433-441
- Iqbal, Farrukh, "Agricultural Cooperative Credit Operations:
Pakistan's Experience," In: Agricultural Credit: Pakistan's
Experience, op. cit., 1984: 245-261
- Junejo, I.D. "Recovery of Agricultural Credit: Problems and
Techniques," In: Agricultural Credit: Pakistan's Experience, op.
cit., 1984: 79-490
- Kadri, Ashfaq H., "Role of Agricultural Finance in the Technical
Development of Agriculture," In: Agricultural Credit: Pakistan's
Experience, op. cit., 1984: 44-64
- Kadri, Ashfaq H., "Leading Issues in Agricultural Credit," In:
Agricultural Credit: Pakistan's Experience, op. cit., 1984: 197-211
- Kadri, Ashfaq H., "An Evaluation of the Growth of Agricultural
Credit Facilities in Pakistan," In: Agricultural Credit: Pakistan's
Experience, op. cit., 1984: 357-384

* Taken from PIDE, "Agricultural Credit in Developing Countries:
a Select Bibliography"

- Khan, Ahmad Saeed, "Supervised Agricultural Credit in Pakistan: An Evaluation and Suggestions for Improvement," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 97-116
- Khan, Ahmad Saeed, "Different Agricultural Credit Institutions Operating in Pakistan and Their Contributions Towards Achieving Food Autarky: An Evaluation," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 97-116
- Khan, Abdul Majid, "Farm Credit and the Sixth Five-Year Plan," Pakistan Agriculture, 6(11), Nov. 1984
- Khan, Dilarwar Ali, "Financing of Small-scale Agriculture: Problems and Prospects," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 65-78
- Khan, Shamsah Ashraf, "Growth of Agricultural Credit Facilities in Pakistan: A Historical Review," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 5-43
- Majidullah, Salim, "Agricultural Development in the 6th Plan: Credit and Infrastructural Facilities," Pakistan and Gulf Economist 11(6) 5-1 Feb 1983: 30-33
- Mansha, Mohammad, "Credit Technology: the Needs of Small Farmers," Pakistan Agriculture 2(11-12), 1980: 38-41
- Malik, Muzaffar Hussain, "Role of Agricultural Credit Institutions in Increasing Agricultural Production, particularly Food Production, " In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 117-127
- Malik, Muzaffar Hussain, "International Assistance for Expanded Agricultural Financing in Pakistan," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 385-414
- Malik, Muzaffar Hussain, "Financial Institutions and Technology Policy," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 333-343
- Mohammad, Khawaja and Shah, Mir Kalan, "Agricultural Production Credit Requirements in D.I. Khan District, Peshawar, Institute of Economic Studies, NWFP, 1981 iv, 33p. (Publication No. 148)
- Mirza, Zafar Abbas. "Recovery of Agricultural Credit: An Analysis of Factor Affecting Repayment," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 345-354
- Mustaf, Mehdi, "Supervised Credit," Pakistan and Gulf Economist 11(3), 15-21 Jan 1983: 24-25
- Nishtar, A. Jamil, "Successful Year of Agricultural Development Bank of Pakistan," Pakistan Agriculture 7(1), Jan 1985: 6-8

- Pasha, Syed Hazra, "Supply of Credit to Different Categories of Holdings: Evaluation and Scope," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 415-432
- Pasha, Syed Hazra, "Agricultural Credit, Requirements, and Potential: A Detailed Survey," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 163-193
- Pasha, Syed Hazra, "Agricultural Credit: A Detailed Survey," Pakistan Administration 19(1), Jan-June 1982: 40-64
- Rehman, Shama, "Mobile Credit Officer's Monitoring Report, 1982 Islamabad, ADBP, 1982, 19p.
- Sajidin, Muhammad, "Role of Agricultural Credit in the Economic Development of Pakistan," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 129-161
- Sajidin, Muhammad, "Role of Cooperative in Agricultural Financing: Pakistan's Experience," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 442-477
- Sajidin, Muhammad, "Supervised Agricultural Credit and the Need for Extension Education in Pakistan," Pakistan Agriculture 6(3), Mar 1985: 47-52
- Sajidin, Muhammad and Anjum, M.S., "Role of Agricultural Credit in Increasing Farm Productivity," Science, Technology and Development 4(1), Jan-Feb. 1985: 18-21
- Siddiqui, Shahid Hasan, "Distribution Pattern of Agricultural Credit and Credit Needs of Small Farmers," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 213-226
- Siddiqui, Shahid Hasan, "Supervised Agricultural Credit: A Detailed Analysis," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 491-518
- Sindhu, Chaudhry Rashid Ahmad, "Supervised Agricultural Credit-Requisites for Effectiveness," In: Agricultural Credit: Pakistan's Experience, op. cit., 1984: 263-279
- Unrani, Anwar Hussain, "Availability of Credit for Small Farmers in Pakistan," Pakistan Agriculture 6(11) Nov 1984: 40-42
- Zuberi, H.A. "Institutional Credit and Balance Growth: A Case Study of Pakistan," Journal of Economic Development 8(2) Dec 1983: 167-184
- Sial, Razia and Khan, Rao Abdul Rauf, "Role of Agricultural Credit in Making Rural Women a Vital Part of the National Economy of Pakistan," Agridigest 6(4), Oct. 1985: 11-15
- Siddique, Mohammad, "Agricultural Credit: Problems and Policies," Progressive Farming, 6(1), Jan. 1986: 99-101