

A Critical Review of Rural Credit Policy in Pakistan

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Lack of liquidity which acts as a constraint for agricultural development has provided a rationale for rapid growth in formal agricultural credit in Pakistan since the early 1960s. Between 1959-60 and 1991-92 institutional credit for the sector had registered an annual growth rate of 31 percent in nominal terms and 20 percent in real terms. The explosive increase in agricultural credit was accompanied by a creation of new financial institutions, the strengthening of already existing institutions and the adoption of credit policies to increase the flow of credit for the sector in general and for small farmers in particular. In this paper, an attempt is made to review farm credit policy in Pakistan in relation to its impact on agricultural growth and equity and to assess the strength of the credit institutions to keep contributing effectively to the provision of credit in the rural sector.

Credit is an important instrument in enabling farmers to acquire command over the use of working capital, fixed capital and consumption goods. In the wake of the Green Revolution, credit requirements have increased for both inputs for crop production and farm investment. The small farmers, with a limited ability to finance investment, are the logical target group for loans advanced by the credit institutions. In view of the large credit requirements for lumpy investments, large farmers also need to be serviced by the credit system. Due to the important and increasing role of the non-farm sector as a source of employment in rural

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areas, the need to cater to credit requirements of this sub-sector has also been a motive factor for the reorientation of the rural credit system in Pakistan.

The policy approach adopted in Pakistan is a multi-dimensional one and has evolved in a gradual manner since independence in 1947 in response to the changing perception of the role of rural credit. During the period prior to independence, formal credit was provided as *taccavi* loans by the government and as cooperative credit by the cooperative societies. The *taccavi* loans were advanced in response to natural disasters like floods. This window has continued to be available but was never significant in quantitative terms. Cooperative credit has a long and a somewhat chequered history. In the distant past, it had no formal relationship with the financing of inputs and/or farm investments. It was designed to compete with non-institutional sources of credit and was aimed generally to meet the credit needs of farmers to finance their consumption expenditure. With the establishment of a Federal Bank for Cooperatives in 1976, which has been provided with large and cheap financial support from the State Bank of Pakistan, the philosophy behind cooperative credit has changed in a fundamental manner. An explicit relationship between the credit and input use and between the credit and farm size has been postulated. In addition, technical assistance was provided for the strengthening of the cooperative credit structure.

The commercial banks in Pakistan in the past have been generally reluctant to lend to the agricultural sector. Prior to the 1972 Banking Reforms and the nationalisation of commercial banks, their involvement in the agricultural sector was limited to the financing of agricultural marketing with produce as a collateral for the loans. The reluctance on the part of the commercial banks was based on high administrative costs of lending to small farmers widely scattered throughout rural Pakistan and high risks of lending to and non-availability of acceptable securities with farmers. The 1972 Banking Reforms had ordained commercial banks to broaden the scope of lending by the banks to finance modern farm inputs and investments. The banks were also required to fulfil a target level of lending for the agricultural sector. This target was determined as a proportion of total bank lending in the economy.

The 1972 Banking Reforms had assigned an important role to the State Bank not only to increase the flow of credit to the agricultural sector but also to redistribute it in favour of small farmers. A scheme for agricultural loans was introduced by the State Bank in December 1972. An Agricultural Credit Advisory Committee was also constituted to estimate credit requirements each year for the agricultural sector. The Agricultural Credit Advisory Committee works out the agricultural credit requirements each year. On the basis of the available data

on acreage under each crop in each province and observed input-to-acreage ratios for different crops, total physical input requirements are estimated. Using input prices, the input requirement is worked out in value terms. Accounting for farmers' own savings and their access to the private credit market, an estimate of the total credit supply from institutional lending agencies is worked out. The distinctive features of the Reforms are many. The institutional agencies were urged to move away from the traditional criterion of credit-worthiness in that the banks could advance loans against expected increased production and against personal sureties. Quotas are fixed for each bank to encourage lending in support of agricultural and rural development. The non-observance of these quotas by the banks meant an imposition of penalties in the form of non-interest-bearing deposits with the State Bank. A pass-book system was introduced to expedite the approval of institutional credit against land mortgage. The pass-book is a legal document which contains a complete record of the land owned by a particular farmer. Any institutional lender can grant a loan against the security of land by just recording an entry in the pass-book. Quotas of production credit for different sizes of farms are fixed under the Agricultural Purposes Rules, 1973. Under these rules, 70 percent of institutional loans must be advanced to farms of less than 12.5 acres, 20 percent to farms between 12.5 acres and 50 acres, and 10 percent to farms larger than 50 acres. Initially these targets were in respect of small loans. In 1980-81 the entire amount of credit to be provided by commercial banks to the agricultural sector was to be treated as a mandatory target.

In addition to a re-vitalisation of cooperative credit and the introduction of commercial banks in agricultural lending, a specialised credit institution by the name of the Agricultural Development Bank of Pakistan (ADBP) was established in 1961, through the merger of the previously existing Agricultural Development Finance Corporation and the Agricultural Bank of Pakistan. The ADBP has five loan windows, i.e. Development Loans, Production Loans, Agri-business Loans, Cottage Industry Loans and Off-farm Income Generating Activity Loans. The Bank started its operation with lending for farm investments and has gradually extended the scope of its loaning for other purposes listed above.

Credit institutions vary considerably with respect to their sources of funds. The commercial banks depend entirely on their deposits. All other institutions, though not barred from deposit mobilisation, have depended on refinancing from the State Bank of Pakistan and/or foreign financial institutions. The ADBP has borrowed extensively from the World Bank, the Asian Development Bank, the International Fund for Agricultural Development and the State Bank of Pakistan. The Federal Bank for Cooperatives has depended exclusively on the State Bank

1985 are used to delineate changes trends in access to credit over time. Detailed analysis for 1973 is presented in Qureshi (1984) and for 1985 in Government of Pakistan (1988) and Malik *et al.* (1989). The government operationalised its policy objectives in the field of rural credit in terms of three indices. First, the government stipulates that a specified proportion of production credit should flow to farmers below a certain size of farms. Second, the proportion of farmers to be brought under the purview of institutional credit should be increasing through time. Third, the institutional credit should gradually replace the non-institutional sources of credit in rural areas.

Table 1 showing distribution of credit by tenure, size of farm and type of credit throws up an interesting picture. Average inequality in the distribution of credit measured by the Gini coefficient increases in the case of all tenures excepting owner-cum-tenant households between 1973 and 1985. However, the share of the small farmers in different types of credit increases with the sole exception of owner-cum-tenants category in whose case the share in institutional credit drastically falls from 2.28 percent in 1973 to 0.36 percent in 1985. The extent of average inequality for the institutional credit is higher than for the non-institutional credit for all categories except tenants. In both years, the extent of average inequality is high relative to the inequality in distribution of operated area. Most importantly, it should be noted that the share of institutional credit going to small, medium and large farms in each of the two years diverges sharply from the prescribed shares. Small and medium farmers get much less than is due to them.

The distribution of credit shown in Table 1 is decomposed in two measures of proportion of households with access to credit and average borrowings per borrowing household. Table 2 shows the pattern of and changes in the credit widening. It is interesting to note that despite and impressive rate of increase in institutional credit the proportion of cultivators with access to such credit increases from 1.98 percent in 1973 to only 5.95 percent in 1985. The credit widening is related positively with the size of farm and this is so for each kind of tenurial category. The average inequality in access to credit is high for each year and has risen between the two years. The small farmers have also experienced an increase in access to institutional credit between the two years. The magnitude of increase in access is, however, much larger for large than small farmers.

The credit deepening measured by the amount of credit per borrower is shown in Table 3. In the case of the institutional credit, average inequality is high for each year and it increases sharply between 1973 and 1985. The credit deepening is noticed in each category and it increases with the size of farm. Between years, the credit deepening has increased sharply. In the case of non-institutional credit,

Table 1

Distribution of Loans Obtained by Sources and Size of Farm, Pakistan, 1973 and 1985

Size (Acres)	Owner-		cum-Tenant		Tenant		All Cultivators	
	Owner		1973	1985	1973	1985	1973	1985
All Sources								
0-5	22.22	27.36	9.24	6.37	14.53	15.80	17.23	20.90
5-15	32.55	27.78	42.99	29.31	54.37	53.42	40.37	32.29
15-25	12.93	15.33	18.73	18.88	18.47	17.68	15.69	16.50
25-50	13.43	13.82	15.45	29.20	8.68	9.94	12.74	16.54
> 50	18.87	15.71	13.59	16.24	3.94	3.16	13.97	13.77
All Sizes	100	100	100	100	100	100	100	100
Gini								
Coefficients	0.317	0.353	0.145	0.340	0.118	0.209	0.215	0.372
Institutional Sources								
0-5	2.73	6.44	2.28	0.36	2.17	5.53	2.60	4.99
5-15	27.71	24.54	13.40	14.70	60.87	42.21	28.36	22.61
15-25	10.78	18.82	9.00	13.93	7.39	25.63	10.26	17.80
25-50	18.81	22.88	17.68	43.37	2.39	14.07	17.41	27.50
> 50	39.97	27.32	55.64	27.64	27.17	12.56	41.37	27.10
All Sizes	100	100	100	100	100	100	100	100
Gini								
Coefficients	0.295	0.334	0.495	0.367	0.118	0.166	0.327	0.342
Non-Institutional Sources								
0-5	25.58	39.90	9.68	9.39	14.93	16.21	18.81	28.10
5-15	33.39	29.71	44.81	36.69	54.20	53.91	41.68	36.69
15-25	13.30	13.25	19.36	21.39	18.84	17.36	16.27	13.90
25-50	12.48	8.39	15.29	22.08	8.85	9.77	12.24	11.57
> 50	15.24	8.75	10.86	10.45	3.18	2.75	11.00	7.74
All Sizes	100	100	100	100	100	100	100	100
Gini								
Coefficients	0.290	0.294	0.042	0.225	0.170	0.212	0.187	0.243

Table 3

Distribution of Average Borrowing per Borrowing Household by Sources and Size of Farm, Pakistan, 1973, 1985

(Rupees)

Size (Acres)	Owner-		cum-Tenant		Tenant		All Cultivators	
	1973	1985	1973	1985	1973	1985	1973	1985
All Sources								
0-5	1385	7991	1190	5442	830	4162	1196	6983
5-15	1821	8868	1291	7339	978	5990	1313	7574
15-25	2456	13939	1434	10959	1146	8415	1603	11786
25-50	3296	22117	2012	26013	1463	15529	2366	22477
> 50	6588	44625	3605	38408	2926	21103	5150	41202
All Sizes	2168	11583	1525	11863	1036	6409	1586	10282
Gini								
Coefficients	0.639	0.627	0.447	0.727	0.600	0.507	0.611	0.755
Institutional Sources								
0-5	766	11300	492	2526	360	4191	672	10301
5-15	3743	14027	809	10259	1472	5342	2424	12526
15-25	2545	23044	896	15874	635	7725	1812	20171
25-50	5345	36773	1771	44002	447	6493	3768	37170
> 50	8683	67939	7804	52885	3591	23573	7947	62516
All Sizes	4289	24034	1969	25250	1394	6575	3220	23012
Gini								
Coefficients	0.368	0.709	0.593	0.610	0.483	0.737	0.450	0.692
Non-Institutional Sources								
0-5	1389	7771	1192	5567	830	4161	1197	6807
5-15	1666	7502	1283	6940	960	6014	1252	6822
15-25	2339	10433	1426	9947	1152	8462	1557	9735
25-50	2855	13390	1966	18502	1482	16948	2169	15772
> 50	5502	27172	2918	28121	2687	20683	4235	25752
All Sizes	1949	8839	1468	9356	1021	6402	1477	8222
Gini								
Coefficients	0.634	0.524	0.271	0.473	0.824	0.549	0.589	0.507

the average inequality falls through time for owners and tenant households. In the case of all cultivator households, the average inequality falls from 0.589 in 1973 to 0.507 in 1985. In nominal terms, the amount of borrowings per borrower increase between 1973 and 1985.

Table 4 presents information on the importance of institutional sources in total credit for 1973 and 1985. Despite an increasing importance of the institutional credit, the non-institutional credit is still the dominant source of credit as institutional credit in 1985 is only 31 percent of total credit for the category of all cultivators. The importance of the institutional sources increases with the size of farm for each type of tenure.

Table 4

Distribution of Institutional Loans as a Percentage of All Loans by Categories and Size of Farm, Pakistan, 1973, 1985.

(In Percentages)

Size (Acres)	Owner		Owner- cum-Tenant		Tenant		All Cultivators	
	1973	1985	1973	1985	1973	1985	1973	1985
0-5	1.80	8.83	1.50	1.90	0.43	1.36	1.48	7.45
5-15	12.52	33.10	2.19	16.83	3.38	3.17	6.88	21.81
15-25	12.25	45.96	2.91	24.73	1.22	5.76	6.40	33.63
25-50	20.62	62.05	6.99	49.83	0.81	5.68	13.38	51.82
> 50	31.15	65.18	24.92	57.20	21.02	16.24	29.00	61.31
All Sizes	14.71	37.47	6.10	33.57	3.02	4.01	9.80	31.16

Table 5 presents three farm size dimensions for 1973 and one for 1985. These dimensions are (1) percent of farm numbers; (2) percent of production; and (3) percent of operated area. Comparing the shares in the credit reported in Table 1 with each type of farm size dimension indicated above, one can evaluate the extent to which, on the country-wide basis, the objectives of increased and equitable distribution of institutional credit have been achieved. The comparison shows a failure to achieve the objective of an equitable distribution of credit judged according to either of the criterion indicated above as the share of the small farms in the institutional credit is less than their share according to each of the yardstick.

The failure of the government policy at the implementations stage needs an explanation. The extent to which the production loans advanced by the commercial

Table 5
*Size Distribution of Farms, Production and Operated Area
 by Tenure - Pakistan 1973, 1985*

Size of Farm (Acres)	Owner	Owner-cum-Tenant	Tenant	All Cultivators
Percentage of Farms: 1973				
0-5	36.69	12.04	17.97	25.18
5-15	38.96	52.31	58.53	48.18
15-25	10.59	18.44	15.26	13.85
25-50	8.27	11.87	6.76	8.61
> 50	5.49	5.33	1.48	4.18
All Sizes	100.00	100.00	100.00	100.00
Percentage of Production: 1973				
0-5	9.14	3.87	7.43	6.03
5-15	29.24	32.86	51.99	36.87
15-25	13.97	20.03	22.69	18.17
25-50	12.99	17.04	11.98	15.60
> 50	34.65	26.20	5.91	22.42
All Sizes	100.00	100.00	100.00	100.00
Percentage of Operated Area: 1973				
0-5	5.95	2.26	4.20	4.48
5-15	22.62	27.34	45.84	29.90
15-25	13.20	19.45	22.96	17.45
25-50	17.63	21.96	17.51	18.81
> 50	40.60	28.99	9.49	29.36
All Sizes	100.00	100.00	100.00	100.00
Percentage of Farms: 1985				
0-5	45.77	16.88	28.08	38.21
5-15	35.92	50.76	54.37	41.65
15-25	10.07	19.80	12.33	11.88
25-50	5.57	9.64	4.05	5.85
> 50	2.67	2.92	1.17	2.41
All Sizes	100.00	100.00	100.00	100.00

banks and cooperative societies have reached the intended beneficiaries has been studied by Khan and Sarwar (1986); NFC (1983); Qureshi (1984); and Sarwar *et al.* (1986). In the case of the commercial bank credit, it has been shown that commercial banks' records show that banks have met the mandatory targets for loans to small farmers. The prevalence of proxy loans, family loans and splitting of loans between the owners and tenants leads to a situation where large farmers obtain a much larger share of production loans than shown in the bank's books.

In the case of the cooperative credit, the ground level reality is different than the government's intentions. It has been shown by Sarwar *et al.* (1986) that of 75 sample cooperative societies in Punjab only 3 percent were genuine. One-man societies at 64 percent and family societies at 33 percent accounted for the bulk of cooperative credit. The dismal situation was in the know of the cooperative department which was understaffed and did not do its job of inspection and auditing. Corruption was found to be a pervasive phenomenon.

The reasons for small farmers in not benefitting from the production loans are not hard to find. Funds earmarked for such loans are limited, and as pointed out previously, low priced. In view of large claimants, the credit has to be rationed. Access to land is extremely unequal as is apparent from Table 5. The social and political power within rural areas follows the pattern indicated by the distribution of land. The cost to commercial banks of servicing small farmers is higher than is the case for large farmers. The large farmers and the bank officials collude with the net result that bulk of the credit is appropriated by the non-eligible group. The same story is repeated for the cooperative credit. The rural credit policy may be well intentioned but has floundered, in practice, as it has ignored the distribution of economic and political power in rural areas. Financial institutions face considerable disincentives to implement the reforms imposed on them from above. The under-pricing of credit for the small farmers did not benefit the small farmers as larger farmers managed to get more than what they would have attempted to receive if the credit was priced higher at its opportunity cost.

IMPACT OF RURAL CREDIT ON PRODUCTION

The improvement in agricultural productivity, among many things, depends on an appropriate technical change in the agricultural sector, an effective agricultural extension system, a well functioning marketing system for both agricultural inputs and outputs and adequate rural infrastructure. The role of the public sector in providing the above mentioned services is paramount in determining the prospects for agricultural change especially when it succeeds to crowd in private investment in the agricultural sector. In view of the liquidity constraint, the private

investment by farmers in inputs and farm machinery, nevertheless, requires access to increased formal credit. Viewed this way, agricultural credit impacts on growth indirectly through the financing of investment. In the case of Pakistan, not much empirical work has been done on the relationship between farm credit and agricultural growth. The only major study on the subject had come to a conclusion that the impact of credit has come through the financing of seed and fertilizer [Zuberi (1989)]. The role of credit for financing fixed investment was found not to be relevant in the case of Pakistan.

An attempt is made below to estimate the relationship at the aggregate level between agricultural output, credit and a number of other independent variables. We also present some evidence that shows that a redirection of credit to small farms may improve agricultural productivity as well as distribution of income between small and large farmers.

Initially, several variables such as credit, labour force in agriculture, cropped area, fertilizer, tractors, tubewells and water availability were included in the analysis to estimate the effect of different inputs on agricultural production. Equations were estimated by using the ordinary least square method (OLS). The autocorrelation was removed by applying the Cochrane-Orcutt transformation technique. Per hectare series of annual data from 1959-60 to 1989-90, in the log form, were used in the analysis.

Of the many equations estimated, we present only two equations.¹ The variables included in the equations are as under:

- YA = Value added in agriculture per hectare (in million rupees);
- CR = Credit per hectare (in million rupees);
- LF = Labour force in agriculture per hectare (in thousands);
- FR = Fertilizer per hectare (in thousand N/T);
- TR = Tractors per hectare (number); and
- TW = Tubewells per hectare (number).

The results in the form of estimated equations are as follows:

$$\log YA_t = 0.0516 + 0.0096884 \log CR_t + 0.023021 \log TR_t \dots \dots (1)$$

(0.6) (0.47) (0.49)

$$+ 0.069007 \log FR_t + 0.9068 \log LF_t + 0.083802 \log TW_t$$

(1.66)** (6.13)* (1.64)**

¹As presented here, the equations do not involve any lagged independent variables. However, some estimates, not reported here, of first order log and second order logs in CR , TR and TW were found not to be significant. It is possible that if credit flows were disaggregated, we could get different results.

$$R^{-2} = 0.95 \quad D.W. = 1.92 \quad F = 111.7$$

$$YA_t = -0.16968 + 0.41874 \log CR_t + 1.0446 \log (LF)_t \quad \dots \dots (2)$$

(-0.25) (3.71)* (8.83)*
 +0.15987 (FR)_t
 (9.5)*

$$R^{-2} = 0.96 \quad D.W. = 1.69 \quad F = 224.48$$

Note: Figures in parenthesis are *t*-statistics.

* 5 percent level of significance.

** 10 percent level of significance.

In the first equation, the credit and tractors have right signs but are not significantly related to output while labour, tubewells and fertilizer are positively and significantly related to output. Since credit, tractors and tubewells were correlated with each other, in Equation 2, the last two variables were deleted. The coefficients of credit, labour force and fertilizer are highly significant. It seems that credit is impacting on agricultural output through its role in financing capital purchases. It must also be noted that the responsiveness of output to credit is larger than the responsiveness of output to fertilizer.

A reference to Table 5 indicates that the small farmer produces more per acre of operated land than the large farmer. A case can be made to divert part of the credit to the small farmers which would result in higher production in the economy and would also improve the distribution of income. In this sense, there is no trade-off between equity and growth. The real question in this context is how to ensure a larger flow of credit to the small farm sector and not whether it would be at the cost of agricultural production.

FINANCIAL VIABILITY OF CREDIT INSTITUTIONS

In the discussion so far, we have concentrated on the demand side of the rural credit market with only scattered and few remarks on lenders' incentives to lend to the farmers. In this section, we present some evidence that shows that the financial viability of most credit institutions dealing with rural credit is quite precarious. We concentrate on two aspects of the financial viability i.e. the interest spread and the extent of loan recovery. The gross interest spread is defined as the difference between interest revenue from loans advanced and payments made to depositors and refinancing institutions. The net interest spread is computed by deducting transaction costs from the gross interest spread. A credit institution is viable in financial terms if the net interest spread is high enough to build

reserves to cover bad debts after providing for a reasonable level of transaction costs to improve the quality of lending to achieve the objectives set for the credit policy.

Table 6 provides information on both the financial and the administrative cost per 100 rupees of loans dispersed by the ADBP for the period since 1972-73. The ADBP has many loan windows with different rates of interest charged from the borrowers. The weighted rate of return charged for each year turns out to be much lower than the disbursement cost per 100 rupees of loan advanced.

The negative net interest margin, which is quite high in some years, clearly indicates the weak health of the ADBP. The picture with respect to commercial banks and the cooperative credit societies is not as bleak as is the case for the ADBP. In the case of commercial banks, for agricultural loans, the gross interest margin for 1984 has been estimated at 4 percent and the net margin at zero percent. For the cooperative credit, for the year 1985, the weighted average rate of interest on deposits in cooperative banks was 6.38 percent and the interest charged on advances was 10.48 percent. The gross interest margin worked out to be 4.1 percent. Also, the net margin turned out to be positive [Irfan-ul-Haque (1988)]. It is clear that the margins are either negative or, when positive, too small to permit the accumulation of surpluses to cover bad debts.

The position with respect to the recovery of loans for most rural credit institutions is also not very happy. According to the unpublished information from the Agricultural Credit Department, State Bank of Pakistan, for 1989-90, the recovery rate for commercial banks and ADBP was respectively 35.5 percent and 42 percent. In the case of the latter institution, the recovery rate for the subsistence holdings, economic holdings and large holdings respectively was 45.3 percent, 46.3 percent and 28 percent. Since the external adverse natural conditions should be the same for holdings of different sizes in any one year, it seems that the large holdings are defaulting willfully to a higher extent than the small and medium holdings. Table 7, which presents data for different years for ADBP, also shows a dismal situation regarding the recovery of loans. Not much analytical work on factors explaining the poor recovery exists in Pakistan. Low administratively fixed returns on deposits and high returns on other saving instruments in the past could explain, to some extent, the voluntary default in the repayment of formal agricultural loans. Other factors that might explain the situation include a lack of political support for the loan recovery, mis-use of loan by borrowers and natural calamities. The defaults in repayments and inadequate levels of the interest spread even to cover the transaction costs in some cases are constraining the ability of credit institutions for further recycling of funds.

Table 6
*Disbursement Cost per 100 Rupees for Agriculture
 Development Bank of Pakistan*

Year	Loans Disbursed (Rs Million)	Expenditure			Disbursement Cost per 100 Rupees	
		Financial Expendi- ture for Raising Funds (Rs Million)	Adminis- trative Expendi- ture for Deliver- ing Credit to Clients (Rs Million)	Total Expen- diture (Rs Million)	Financial Costs (Rs)	Adminis- trative Costs (Rs)
1972-73	169.100	30.118	17.242	47.360	17.8	10.2
1973-74	415.570	41.157	23.098	64.255	9.9	5.6
1974-75	396.310	69.442	31.880	101.322	17.5	8.0
1975-76	532.850	89.168	39.630	128.798	16.7	7.4
1976-77	638.770	118.274	43.615	161.889	18.5	6.8
1977-78	430.530	145.523	54.864	200.387	33.8	12.7
1978-79	416.937	149.351	66.287	215.638	35.8	15.9
1979-80	711.550	165.715	79.587	245.302	23.3	11.2
1980-81	1066.619	172.071	97.343	269.414	16.1	9.1
1981-82	1557.386	190.071	124.326	314.397	12.2	8.0
1982-83	2310.435	230.280	161.214	391.494	10.0	7.0
1983-84	3131.676	287.646	250.393	538.039	9.2	8.0
1984-85	4167.908	357.827	341.014	698.841	8.6	8.2
1985-86	5307.867	491.248	446.642	937.890	9.3	8.4
1986-87	6031.152	626.193	540.457	1166.650	10.4	9.0
1987-88	7716.078	787.258	679.953	1467.211	10.2	8.8
1988-89	8667.523	1117.216	722.834	1840.050	12.9	8.3
1989-90	9389.861	1495.007	805.705	2300.713	15.9	8.6
1990-91	8323.947	1721.467	1072.870	2794.337	20.7	12.9

Source: Unpublished data files, Agricultural Development Bank of Pakistan, Government of Pakistan, Islamabad.

Table 7

Recovery Performance of Agricultural Development Bank of Pakistan

Years	Percentage of Current Dues Recovered	Percentage of Cumulative Dues Recovered
1961-62	N.A	64.27
1962-63	N.A	60.76
1963-64	N.A	54.19
1964-65	N.A	50.19
1965-66	N.A	42.43
1966-67	N.A	41.26
1967-68	N.A	43.61
1968-69	N.A	51.19
1969-70	N.A	39.21
1970-71	N.A	36.14
1971-72	N.A	34.04
1972-73	N.A	41.96
1973-74	50.82	40.67
1974-75	50.20	42.30
1975-76	46.57	39.51
1976-77	49.49	35.45
1977-78	47.82	45.25
1978-79	54.14	36.25
1979-80	63.33	44.67
1980-81	68.52	47.07
1981-82	74.64	51.58
1982-83	83.89	56.90
1983-84	87.43	68.91
1984-85	89.02	73.03
1985-86	79.46	70.20
1986-87	80.49	71.55
1987-88	79.80	71.99
1988-89	72.08	63.75
1989-90	69.77	61.00
1990-91	69.15	59.29

Source: Unpublished data files, Agricultural Development Bank of Pakistan, Government of Pakistan, Islamabad.

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Comments on
“A Critical Review of Rural Credit Policy in Pakistan”

The authors are to be congratulated for providing a preliminary, national-level analysis of a critical and highly policy-relevant piece of the rural development puzzle—rural credit. I would like to offer a few suggestions, as to how the analysis might be expanded and improved.

While a convincing case can be made for institutional credit being a *necessary* condition for agricultural growth (infusions of liquidity to cover purchased inputs, funds to bridge the annual outlay/income gaps, etc.), it is difficult to envision a scenario in which rural credit is a *sufficient* condition for agricultural growth. Access to input and output markets, agricultural extension, and a host of other factors condition the impact of rural credit. This assertion may seem innocuous, but it has serious implications for policy, and modelling exercises aimed at assessing the contributions of changes in the availability and/or cost of rural credit.

The authors should make their working definition of access to credit very clear. Work at IFPRI and elsewhere has demonstrated that geographic proximity to a rural money-lending institution is neither necessary nor sufficient to guarantee access to credit. Julie Anderson's work incorporating the preferences and characteristics of lenders into a behavioural model of credit *supply*, as well as Sohail Malik *et. al.*, papers on the determinants of credit use both provide illustrations of how access to credit might be reinterpreted and empirically estimated.

To the extent possible, I suggest the authors disaggregate flows of rural credit by type of use. A division along the line of production (or productivity) investments versus farm-level natural resource conservation investments would seem appropriate. Such a division would make a nice contribution to current sustainability debate, as well as have important implication for the probability and timing of loan repayment—a topic of particular interest in Pakistan, and elsewhere. Finally, distinguishing short-term from medium- or long-term credit would assist the authors in specifying a more appropriate lag structure for the model they ultimately estimate. (More on that later.)

The authors claim that consumption credit is not made available from rural lending agencies. I would submit that farmers shift line items in their “budgets” just like everyone else in their efforts to get the job done. Remembering that their “jobs” entail much more than bringing in the annual harvest, at least some agricultural credit is likely to be syphoned off for non-farming purposes, that,

in the farmers' eyes, are more productive. While this claim has no immediate implications for this paper, I suggest it be born in mind in more comprehensive, household-level rural credit modelling exercises.

As regards the statistical model the authors specify and estimate, I have several suggestions. First, some right-hand side variables included in the model are likely to be simultaneously determined. Fertilizer, modern seeds, agricultural extension, and the possession and use of tube-wells are not likely to be uncorrelated at a given point in time, and generally respond to a common set of socioeconomic and ecological factors. Second, I suggest the model be expanded to incorporate and test for the presence of non-linear relationships. This is particularly important in assessing how heavily policy-makers can 'push' rural credit to augment value added in agriculture.

On the institutional side, I encourage increased attention to be definition and interpretation of "non-performing" loans. A simple declaration by lending institutions regarding uncollectible debts masks several potentially important issues. First, following the notion of the flexible budget constraint introduced by Janos Kornai, it is possible that declaring high ratios of non-performing to total loans will generate increased inflows of resources from State and/or National Banks to guarantee "solvency". If collusion on this issue is high among rural lending institutions and their customers, the definition and proper treatment of non-performing loans becomes all the more critical. Finally, and perhaps most importantly, the non-performing loans argument has been used to actually reduce the flow of resources to rural areas—particularly in times of greatest need. Agriculture is a very seasonal business, and inter-year fluctuations are also known to be quite severe, especially in rainfed areas. Tying access to credit to the settlement of last year's debt (a strategy that would, ultimately, reduce the proportion of non-performing loans in banks' portfolios) could have very high productivity costs as well as severe equity consequences.

It is with some caution that I mention the issue of absorptive capacity in this paper, since the potential for misinterpretation has historically been (and continues to be) quite high. That said, I believe the authors need to re-emphasise the fact that absorptive capacity is a real thing—it matters for the wholesale transfer of modern technology, the provision of development assistance, and it matters for rural credit. The ability of traditional agriculture (and agricultural in the process of transition, as well) to absorb and efficiently use credit can be limited, and swamping the rural sector with subsidised credit is likely to fuel corruption rather than promote agricultural change. There are many institutional and other preconditions that must be met to effectively use rural credit, and due thought (and

action) must be dedicated to these when designing and implementing rural credit schemes.

Finally, I recommend that this analysis be undertaken at a much more disaggregate level—both on the supply side, and on the demand side. (See work by Malik *et al.* on the latter.) There are certainly wide differences across regions and states in degree of access to rural credit, and the anticipated benefits of extending additional credit, or altering its cost. In addition, there are likely to be important differences across farmers within states that condition access to credit as well as its eventual impact on agricultural development. A more disaggregate approach will also allow testing for asymmetric access to and impact of (in cases of users) rural credit across relevant subgroups within the rural sector—particularly small farmers and those without access to owned land.

It was my pleasure to comment on this paper, and I look forward to receiving the revised version.

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