



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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.*

Vol XXVI
No. 4

ISSN 0019-5014

CONFERENCE
NUMBER

OCTOBER-
DECEMBER
1971

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS



INDIAN SOCIETY OF
AGRICULTURAL ECONOMICS,
BOMBAY

A STUDY OF CREDIT REQUIREMENTS AND ADVANCES TO FARMERS IN PATIALA DISTRICT

HARWANT SINGH

Research Assistant

Department of Economics and Sociology

AND

A. S. KAHLON

Dean

*College of Basic Sciences and Humanities
Punjab Agricultural University, Ludhiana*

Introduction

The new seed-fertilizer technology and the associated complementary inputs have increased the credit requirements in Indian agriculture for current farm operations to an estimated level of about Rs. 1,800 crores by 1973-74. These huge credit requirements cannot be financed by the farmers out of their own funds. Even the targets fixed for co-operative credit for 1973-74, which are Rs. 654 to Rs. 752 crores and Rs. 700 crores as medium and long-term loans respectively, are far below these requirements. Institutional sources, especially commercial banks have, therefore, to play an increasing role in augmenting credit supply to the agricultural sector to make it possible for farmers and particularly for small farmers to actively participate in the process of adopting new technology. The commercial banks are expected to play a key role in achieving this goal. This study was specifically designed to make an assessment of the loans and advances made by the State Bank of Patiala, Punjab. The specific objectives of the study were (i) to study the pattern of loan advances made by the State Bank of Patiala and their recoveries, and (ii) to assess the credit requirements of small, medium and large size holdings.

Design of the Study

The study was conducted in Bhunerheri block of Patiala district, where the State Bank of Patiala launched a pilot project for advancing agricultural credit in 1968-69. Two villages, viz., Nanansu and Karhali were purposively selected for the study because the Bank's efforts in advancing supervised farm finance on the basis of farm plans submitted by the farmers were concentrated in these villages. The relevant information for analysing the pattern of loan advances was obtained from the Bank for each of the 73 cultivators of these two villages, who had taken different types of loans from the State Bank of Patiala. The farmers were classified into small, medium and large

holdings groups and relevant information for estimating the credit requirements based on the improved level of technology and farm plans was obtained through the survey method.

RESULTS AND DISCUSSION

(i) *Pattern of Loan Advances Made by the Bank*

Farm size and total loans : The total loans advanced to the small, medium and large farmers of Nanansu and Karhali villages, which comprised 58.90, 21.92 and 19.18 per cent of the total holdings respectively, are shown in Table I.

TABLE I—TOTAL LOANS ADVANCED BY THE STATE BANK OF PATIALA, IN RELATION TO FARM SIZE TO 73 CULTIVATORS : 1969-70

Size of farm				Number of holdings	Percentage of total holdings	Loans per holding (Rs.)	Loans per acre (Rs.)	Percentage to total loans
Small	..	..	..	43	58.90	7,586.34	616.69	47.46
Medium	..	..	..	16	21.92	8,740.00	406.51	20.34
Large	..	..	..	14	19.18	15,807.14	423.70	32.20
Total	..	..	..	73	100.00	9,416.02	492.63	100.00

Table I shows that the share of the small, medium and large holdings of the total loans was 47.46, 20.34 and 32.20 per cent respectively. It indicated that the large category farmers enjoyed larger share in loans advanced than the medium and small holdings size-group farmers.

Production loans in relation to farm size and purpose : Production loans advanced for different purposes are shown in Table II. Production loans amounted to Rs. 84,270 which were shared by 43 small, 16 medium and 14 large farmers in the proportion of 57.24, 19.98 and 22.78 per cent respectively or an absolute amount of Rs. 48,230, Rs. 16,840 and Rs. 19,200 respectively.

Small farmers obtained more short-term credit because it was easy for them to obtain short-term rather than medium-term loans and their owned funds were not sufficient to meet the operational expenses. The medium and large groups farmers could meet most of their working expenses out of their own funds and they concentrated more on medium-term bank loans. Some large holders could get credit for such inputs as improved seeds and fertilizers, etc., from the dealers of these inputs; their demand for operational credit was lower.

The study showed that as much as 65.58 per cent of the total production loan was utilized for purchase of chemical fertilizers. The share of casual

TABLE II—PRODUCTION LOANS ADVANCED BY THE STATE BANK OF PATIALA RELATIVE TO FARM SIZE AND PURPOSE TO 73 CULTIVATORS : 1969-70

Purpose of loan	Unit	Farm size			
		Small	Medium	Large	Total
		(43)	(16)	(14)	
Fertilizers	(a) Rs.	34,135	8,230	12,900	55,265
	(b) Number	21	6	4	31
	(c) Per cent	70.68	48.88	67.19	65.58
	(d) Per cent	61.77	14.89	23.34	100.00
High-yielding varieties seeds	(a) Rs.	6,195	3,200	1,800	11,195
	(b) Number	18	5	2	25
	(c) Per cent	12.84	19.00	9.37	13.28
	(d) Per cent	55.34	28.58	16.08	100.00
Insecticides	(a) Rs.	925	770	1,000	2,695
	(b) Number	7	5	4	16
	(c) Per cent	1.92	4.57	5.21	3.20
	(d) Per cent	34.32	28.58	37.10	100.00
Casual labour	(a) Rs.	6,975	4,640	3,500	15,115
	(b) Number	12	5	2	19
	(c) Per cent	14.46	27.55	18.23	17.94
	(d) Per cent	46.15	30.70	23.15	100.00
Total	(a) Rs.	48,230	16,840	19,200	84,270
	(b) Number	58	21	12	91
	(c) Per cent	100.00	100.00	100.00	—
	(d) Per cent	—	—	—	100.00
Per cent of total production credit advanced		57.24	19.98	22.78	100.00

(a) Credit advanced.

(b) Number of cultivators to whom loan was advanced. The cultivator was counted as many times as he was advanced credit for different purposes.

(c) Percentage of operational credit advanced for that group.

(d) Percentage of operational credit advanced for that purpose to all categories.

labour, high-yielding varieties seeds and insecticides or pesticides was 17.94, 13.28 and 3.20 per cent respectively in the production loan.

Instalment credit loans in relation to farm size and purpose : The study showed that a sum of Rs. 6,03,100 was advanced to 73 cultivators in 1969-70 as instalment credit loan (see Table III). The share of small, medium and large holdings group was 46.09, 20.40 and 33.51 per cent respectively.

TABLE III—INSTALMENT CREDIT LOAN ADVANCED BY THE STATE BANK OF PATIALA
RELATIVE TO FARM SIZE AND PURPOSE TO 73 CULTIVATORS : 1969-70

Purpose of loan	Unit	Farm size			Total
		Small	Medium	Large	
Pumping set and electric motor	(a) Rs.	1,09,000	53,000	45,500	2,07,500
	(b) Number	32	15	14	61
	(c) Per cent	39.21	43.08	22.51	34.40
	(d) Per cent	52.53	25.54	21.93	100.00
Electrification	(a) Rs.	1,45,000	70,000	70,000	2,85,000
	(b) Number	29	14	14	57
	(c) Per cent	52.16	56.92	34.64	47.26
	(d) Per cent	50.88	24.56	25.56	100.00
Tractor	(a) Rs.	24,000	—	86,600	1,10,600
	(b) Number	1*	—	4	5
	(c) Per cent	8.63	—	42.85	18.34
	(d) Per cent	21.70	—	78.30	100.00
Total	(a) Rs.	2,78,000	1,23,000	2,02,100	6,03,100
	(b) Number	62	29	32	123
	(c) Per cent	100.00	100.00	100.00	—
	(d) Per cent	—	—	—	100.00
Per cent of total instalment credit advanced		46.09	20.40	33.51	100.00

(a) Credit advanced.

(b) Number of cultivators to whom loan was advanced. The cultivator was counted as many times as he was advanced credit for different purposes.

(c) Percentage of instalment credit advanced for that group.

(d) Percentage of instalment credit advanced for that purpose to all categories.

* It was an abnormal case in which tractor loan was advanced to a small holding. This holding was separate for taking loans but was cultivated jointly with the other holdings.

Most of the instalment credit was taken by the farmers for raising the irrigation structures. It accounted for 47.26 per cent and 34.40 per cent of the total instalment credit for all the categories by way of farm electrification and pumping sets respectively. The remainder 18.34 per cent of the total instalment loan was advanced for purchasing tractors. Small holdings used credit mostly for developing irrigation. Of the total instalment credit, electrification and pumping sets accounted for 52.16 and 39.21 per cent respectively. A similar trend was found on medium size holdings. The situation, however, was different on large size holdings, where 42.85 per cent of instalment credit was used for tractors, followed by farm electrification and pump-set installation, for which 34.66 and 22.51 per cent respectively of the total instalment credit was used.

Recovery and overdues: The analysis of overdues and the number of loanees in the Mall branch of the State Bank of Patiala for the period December 31, 1969 to July 31, 1970 is shown in Table IV.

TABLE IV—OUTSTANDINGS AND OVERDUES AT HALL BRANCH OF STATE BANK OF PATIALA AS ON DECEMBER 31, 1969 AND JULY 31, 1970

Items	As on December 31, 1969		As on July 31, 1970	
	Production loans	Instalment credit loans	Production loans	Instalment credit loans
Number of loans	200	558	208 (4.00)	595 (6.63)
Total outstandings (thousand Rs.) ..	2830.75	5466.55	2441.34	4476.35
Overdues (thousand Rs.)	846.54	21.16	1441.10 (70.23)	236.52 (1017.59)
Number of defaulters	9	9	35 (288.89)	166 (1744.44)

Note : Figures in parentheses are percentage increase or decrease on July 31, 1970 over the corresponding figures of December 31, 1969.

The number of farmer loanees for production and instalment credit loans increased by 4 and 6.63 per cent respectively from December 31, 1969 to July 31, 1970. The number of defaulters increased from 9 to 35 (288.89 per cent) and from 9 to 166 (1744.44 per cent) for production and instalment credit loans respectively during the same period.

The analysis showed that bank recoveries were more 'effective' in the villages adopted under the "pilot project programme" of the Bank as compared to other villages where there was no such scheme. In fact, no overdues were reported upto July 31, 1970 against 73 cultivators of the Nanansu and Karhali villages which fell in the "pilot project programme" (Table V).

TABLE V—OUTSTANDINGS, RECOVERIES AND OVERDUES IN NANANSU AND KARHALI VILLAGES OF 73 CULTIVATORS AS ON JULY 31, 1970

Items	Farm size			Total
	Small	Medium	Large	
Production loans				
Number of loanees	21	6	4	31
Outstandings (Rs.)	48,230	16,840	19,200	84,270
Demand due on July 31, 1970 (Rs.) ..	48,230	16,840	19,200	84,270
Recoveries against demand (Rs.) ..	48,230	16,840	19,200	84,270
Overdues	—	—	—	—
Number of defaulters	—	—	—	—
Instalment credit loans				
Number of loanees	33	15	14	62
Actual loans obtained (Rs.)	2,78,000	1,23,000	2,02,000	6,03,000
Total outstandings (Rs.)	2,25,797	1,07,342	1,66,928	5,00,067
Demand due (Rs.)	39,855	14,997	25,809	80,661
Recoveries against demand (Rs.) ..	39,855	14,997	25,809	80,661
Overdues (Rs.)	—	—	—	—
Number of defaulters	—	—	—	—

(ii) Assessment of Credit Requirements

The capital and credit requirements of the three randomly selected model holdings one each from small, medium and large holdings groups are abridged in Table VI.

TABLE VI — CAPITAL AND CREDIT REQUIREMENTS FOR SELECTED FARM SITUATIONS :
1969-70 to 1970-71

Items					Farm situations		
					Small	Medium	Large
Farm size (acres)	..	..			12.00	21.00	37.80
Short-term capital requirements							
Existing level	..	..	Total	(Rs.)	2,850.56	5,005.55	18,664.04
			Per acre	(Rs.)	237.55	238.36	493.76
Alternative level	..	..	Total	(Rs.)	7,015.87	15,936.20	24,050.93
			Per acre	(Rs.)	584.66	758.86	636.27
Medium-term capital requirements							
Existing level	..	..	Total	(Rs.)	1,558.80	11,397.80	33,575.20
			Per acre	(Rs.)	129.90	542.75	935.85
Alternative level	..	..	Total	(Rs.)	2,440.00	2,062.80	7,196.20
			Per acre	(Rs.)	203.33	98.23	190.38
Short-term credit requirements							
Existing level	..	..	Total	(Rs.)	1,100.00	1,610.00	7,000.00
			Per acre	(Rs.)	91.67	76.67	185.18
Alternative level	..	..	Total	(Rs.)	3,987.40	8,459.00	6,590.00
			Per acre	(Rs.)	332.28	402.81	174.34
Medium-term credit requirements							
Existing level	..	..	Total	(Rs.)	800.00	8,000.00	27,500.00
			Per acre	(Rs.)	66.67	380.95	727.51
Alternative level	..	..	Total	(Rs.)	1,240.00	—	3,882.00
			Per acre	(Rs.)	103.33	—	102.70

Table VI shows that the short-term capital requirements increased with the increase in the size of holding and higher the level of technology. The short-term capital requirements were estimated at Rs. 2,850.56, Rs. 5,005.55 and Rs. 18,664.04 in the existing farm plans and increased to Rs. 7,015.87, Rs. 15,936.20 and Rs. 24,050.93 in the alternative farm plans, where a higher level of technology was incorporated in the alternative plans of small, medium and large holdings respectively.

Medium-term capital requirements also showed an increasing trend with the increase in farm size in 1969-70. The per acre medium-term capital requirements came to Rs. 129.90, Rs. 542.75 and Rs. 935.85 on the small, medium and large farm situations, respectively. Medium-term capital requirements were related to the type of investment made on the farm. Since the demand for these non-repetitive investments was satisfied in 1969-70 plans, the medium-term capital requirements of the medium and large holdings declined to Rs. 98.23 and Rs. 190.38 per acre respectively. On the small farm situation, however, the medium-term investment was higher (Rs. 203.33), because in 1969-70 this holding had made little investment of this kind.

The per acre short-term credit requirements increased from a level of Rs. 91.67 and Rs. 76.67 in 1969-70 to Rs. 332.28 and Rs. 402.81 in 1970-71 on the small and medium size holdings respectively. This was due to the higher level of improved inputs envisaged in the alternative plan for 1970-71. On the other hand, on the large farm situation, where improved inputs were used at a higher level in the existing plan, very little improvement was introduced in the alternative plan. The short-term credit requirements on this farm situation, therefore, did not increase to a significant extent.

Again, the per acre medium-term credit requirements increased with the increase in farm size and amounted to Rs. 66.67, Rs. 380.95 and Rs. 727.51 on the small, medium and large farm situations respectively during 1969-70. The credit requirements for 1970-71 on the small farm situation increased to Rs. 103.33 per acre. On the medium size farm situation, there was hardly any medium-term credit requirement, because these were met from their owned funds. On the large farm, the per acre medium-term credit requirement declined to Rs. 102.72 in 1970-71, as no heavy investment was planned during this year.

The relationship of working capital and investment capital requirements with the returns on different farm situations is indicated in Table VII.

TABLE VII—RELATIONSHIP OF WORKING CAPITAL, INVESTMENT CAPITAL REQUIREMENTS AND RETURNS ON DIFFERENT FARM SITUATIONS: 1969-70 to 1970-71

Items	Farm situations					
	Small		Medium		Large	
	1969-70	1970-71	1969-70	1970-71	1969-70	1970-71
Working capital						
Amount (Rs.)	2,850.56	7,015.87	5,005.55	15,936.20	18,664.04	24,050.93
	(64.65)	(74.20)	(30.52)	(88.54)	(34.54)	(76.97)
Per acre	237.55	584.66	238.36	758.86	493.76	636.27
Investment capital						
Amount (Rs.)	1,558.80	2,440.00	11,397.80	2,062.80	38,375.20	7,196.00
	(35.35)	(25.80)	(69.48)	(11.46)	(65.46)	(23.03)
Per acre (Rs.)	129.90	203.33	542.75	98.23	935.85	190.38
Total capital						
Amount (Rs.)	4,409.36	9,455.87	16,403.35	17,999.00	54,039.24	31,296.93
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Per acre (Rs.)	367.45	787.99	781.11	857.09	1,429.61	826.63
Net returns						
Total (Rs.)	6,267.32	15,490.11	8,495.72	28,285.31	22,108.13	44,149.32
Per acre (Rs.)	522.28	1,290.84	404.56	1,394.54	584.87	1,167.97

Note : Figures in parentheses are the percentages of total capital requirements.

Table VII shows that the per acre returns on the small, medium and large farm situations increased from Rs. 522.28 to Rs. 1,290.84, from Rs. 404.56 to 1,394.54 and from Rs. 584.87 to 1,167.97 respectively from 1969-70 to 1970-71. This increase could be attributed to the improvement in the ratio of working capital to the total capital.

Thus, the results of the study highlighted the increased capital and credit requirements and the role of the commercial banks in augmenting the credit advanced by the co-operatives. One very interesting and important conclusion that followed from this study is that the commercial banks should follow "village adoption approach" or "area planning approach" as a starting point, before they get too far in reaching out to the farmers scattered all over the area. This will reduce the cost of loaning operations and also facilitate easy recovery of the loans.

AN ASSESSMENT OF PRODUCTION CREDIT NEEDS IN DEVELOPING AGRICULTURE*

J. S. SHARMA

Senior Associate

AND

B. PRASAD

Assistant Professor

*Department of Agricultural Economics
U. P. Agricultural University
Pantnagar (Nainital)*

There has been a technological break-through in Indian agriculture during the last few years. Farmers are using more cash inputs for high-yielding varieties of seeds, fertilizers, irrigation, machinery and land development. Consequently, cash needs in agriculture have increased manifold. All of these cash needs cannot be met fully by the farmers out of their own savings. Unless they get some financial assistance from outside they cannot make full use of various technological developments. In order to sustain and grow the use of technological developments in agriculture, availability of credit in adequate amount is necessary.

* This paper is based on the project "Credit Needs in Changing Agriculture" conducted in the Department of Agricultural Economics, U. P. Agricultural University, Pantnagar, District Nainital (U. P.), 1971.