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RURAL CREDIT AND INDEBTEDNESS IN PUNJAB

1998

H.S. SHERGILL

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FOREWORD

The advent of the new agricultural technology resulted in spectacular increase in production in the State of Punjab from the 1960s. The new technology required heavy infusion of capital for irrigation and other inputs. The steady growth of agriculture production at more than 5 per cent per annum in the last three decades was made possible by a matching accessibility to rural credit for the farmers in Punjab. This period has seen the growth of credit from institutional sources, cooperative banks and commercial banks, even as the role of the traditional money lender in the rural economy is gradually diminishing.

It was in this scenario that the Chief Minister, Punjab, has directed this systematic study to be conducted about the status and nature of indebtedness of the farmers in Punjab. The exercise is expected to assist the Government and institutions linked to the rural sector to address the problems of credit and indebtedness. The study is also expected to provide information about the level of monetisation of Punjab agriculture and to evaluate the ability of the farmers in the State to repay production credit (short term loans) and investment credit (medium and long term loans). Expectedly this study has yielded revealing data on the linkage of production with repayment of loans. The study has analysed the nature and status of rural indebtedness across farm sizes and income groups in the rural community in Punjab.

Rajan Kashyap, IAS
Financial Commissioner
(Cooperation)
Government of Punjab.

PREFACE

The re-organisation of Punjab in 1966 and the introduction of green revolution strategy initiated a new process of political and economic development. It has led to the faster growth and creation of agricultural surpluses. The green revolution strategy has been presented as a model for all round development even for mitigating inequalities. The trickle-down effect of the green revolution was highlighted by referring to the fact that even the landless labourers and small and marginal peasants did benefit from this. On the contrary, it has been argued that the green revolution strategy accentuated the inter-class inequalities of income and assets. Therefore, it will be worthwhile to analyse the strata-wise indebtedness of rural Punjab.

Further the institutional networking for credit distribution to provide loans on easy terms to all the farm size groups have been developed, so that even the households owning 2.5 acres could benefit from the technological changes. The number of credit agencies started meeting the credit needs of the farmers in the state. However, the informal sector credit agencies like commission agents and agriculturist money lenders continue to remain in the business. It would be interesting to analyse the role of these agencies as very little information is available about the quantum of business and also the interest rates charged by them from the farmers. This study perhaps will be first of its kind to have systematically analysed the role of these agencies and also the perceived credit needs of the farmers and their preference for the sources of credit. This study shall help to formulate credit policy not merely in response to people's need, but in terms of their wants.

This study shall also help to clearly define the role of the formal sector credit agencies in commensurate with the need for building up inter-sectoral linkages. It is in view of the structural transformation of the economy in terms of mechanization of farm operations and adoption of new technology including post harvest technology and building-up of forward linkages through agro-processing, the credit policy has to be redefined.

I am sure this study has generated sufficient knowledge to restructure our credit policy, institutional framework and implementation strategy.

Pramod Kumar
Director IDC
Chandigarh.

INTRODUCTION

This study on rural credit and indebtedness in Punjab was undertaken for the Department of Cooperation, Government of Punjab. The main objective of the study was to examine the nature, extent and burden of farmer's debt and availability of short-term and long-term credit to them from different credit agencies. In recent years apprehensions have been repeatedly expressed in academic as well as policy making circles about the growing indebtedness of the peasantry in the Green Revolution states of Punjab and Haryana and the possible adverse effects of this increasing indebtedness on the further growth of agriculture in these states. Another aspect causing serious concern has been the alleged disadvantage that small farmers suffer in the availability and cost of credit in the rural credit markets. The failure of formal sector credit agencies in fully meeting the credit needs of farmers has also been often discussed by academics and policy makers. Agriculture in these north-western Green Revolution states having become modernised and Commercialised, farmers have to spend huge amounts of cash on purchasing market supplied farm inputs and machinery to carry out their crop production operations. Rarely farmers have sufficient cash of their own (from past savings) to purchase these market supplied inputs and machinery. They have to borrow a larger proportion of their cash expenditure on farm inputs and machines. That is why in modern commercialised agriculture availability and cost of credit plays an important role in farmers decisions on use of modern farm inputs, mechanisation of farm operations and adoption of new technology. Hindrances and interruptions in the smooth flow of credit to farmers at a reasonable cost can result in slowing down the pace of agricultural growth and may even result in stagnation in farm production.

It is in view of this overriding importance of credit in modern farming that Ministry of Agriculture of the Union Government appointed a high level committee in May, 1997 under the chairmanship of Sh. B.K. Taimni to examine the various issues relating to rural credit and farmer's indebtedness in the states of Punjab and Haryana. As a sequel to that the present study was sponsored by the Department of Cooperation, Government of Punjab to generate reliable information on important aspects of rural credit and farmer's indebtedness in the state. The main objectives of the present study were : (i) to examine the availability to and use of short-term credit by farmers; (ii) to examine the use and availability of long-term credit to farmers; (iii) the role of different credit agencies in meeting farmer's credit needs; (iv) to examine the extent, nature and burden of debt on Punjab farmers; and (v) to assess farmer's views / perceptions on the availability and cost of credit to them and on the functioning of different credit agencies.

In carrying out this study a number of individuals helped in different ways. I would like to especially thank Sh. Rajan Kashyap, I.A.S. Financial Commissioner (Cooperation) for his support and encouragement throughout the course of this study. My sincerest thanks go to Sh. J.R. Kundal, I.A.S. Registrar Cooperative Societies Punjab for giving me an opportunity to carry out this study. A number of discussions with him in the earlier stages of the study were quite helpful in clarifying the issues and objectives of the study. The help and cooperation of Sh. K.S. Pannu, Additional Director, Punjab State Cooperative Bank, Chandigarh is also appreciated and I am thankful to him for that.

I am sincerely thankful to Professor M.M. Puri, Vice-Chancellor of Punjab University for giving me permission to take up this project.

Mere words can not express my thanks to Dr. Parmod Kumar, Director I.D.C., Chandigarh for not only providing all the facilities to carry out this project, but also for his unfailing support and understanding throughout the course of this study.

The hard work put in by the field survey team members is appreciated and acknowledged. Out of the research team I would like to especially put on record my thanks to Sh. Manoj Kumar, Sh. Varinder and Sh. Harsh Chopra who worked on this project from its start and right upto its completion. Sh. Mohinder Kumar, Research Fellow, Punjab University helped in the field survey, I am thankful to him for that.

The work done by the computer section of I.D.C., Chandigarh in data analysis and typing is appreciated and I am thankful to them as well.

H.S. SHERGILL

LIST OF TABLES

CHAPTER - I

MODERNISATION OF PUNJAB AGRICULTURE AND GROWTH OF AGRICULTURAL CREDIT

The transformation of Punjab Agriculture from traditional subsistence farming into modern commercialised farming in a short span of about three decades has been internationally acclaimed as one of the rare success stories. Over this period of about three decades not only agricultural production has been growing at a high rate of more than 5 per cent per year, but the production and input structure of Punjab farms has become almost completely commercialised. Farms of all sizes have become highly specialised units producing only two or three crops and selling most of their output in the market. Most of the inputs used by Punjab farms are now purchased from the market and input structure of these farms has become almost completely monetized. The use of modern machines like Tractors, Tubewells and Harvesting Combines and inputs like chemical fertilizers, insecticides and Weedicides, diesel and electricity etc. on Punjab farms is reaching levels of highly developed countries.

The key features of this complete transformation of Punjab agriculture are summarised in Table 1. Over this period of three decades (1960-61 to 1990-91) farm production in Punjab grew at a steady rate of 5.05 per cent per year and as a result agricultural output in the state has more than quadrupled in these thirty years. Net state domestic product originating in agricultural sector grew at the rate of 4.04 per cent per year over the same period and has tripled in these 30 years. Output of Wheat and Rice grew at even higher rates of 6.69 per cent and 11.80 per cent per year respectively over this period and Wheat and Rice. Production increased by 7 times and 28 times respectively. The marketed surplus of wheat and rice contributed by Punjab to the central food grains pool has been largely responsible for feeding the urban population

TABLE -1

GROWTH OF PRODUCTION AND INPUT USE IN PUNJAB AGRICULTURE

Indicator of Growth / Input use	1960-61	1990-91	Ratio of 1990-91 to 1960-61	Growth Rate (Percent Per year)
Agricultural Production Index (1969-70 = 100)	61.7	270.3	4.4	5.05
Net Value of Agricultural Production (Rs. Crores) (at 1970-71 prices)	527.2	1599.8	3.0	4.04
Wheat Output (lakh tonnes)	17.4	121.5	7.0	6.69
Rice Output (lakh tonnes)	2.3	65.1	28.3	11.80
Agricultural productivity per acre (Rupees) (At 1970-71 prices)	424	1169	2.8	3.98
Wheat yield per acre (kilograms)	503	1503	3.0	3.71
Rice yield per acre (kilograms)	408	1307	3.2	3.95
Fertilizer use per acre (kilograms)	0.4	65.9	164.8	18.27
Percent of Sown Area Irrigated	54	95	1.8	1.9
Number of Tubewells per thousand acres of sown area	1.6	76.9	48.1	13.73
Number of Tractors per thousand acres of sown area	0.5	28.0	56.0	15.16

TABLE - 2

GROWTH OF CASH EXPENDITURE ON CROP-PRODUCTION IN PUNJAB

(1974-75 to 1996-97)

Crop / Crop Rotation	**Cash Expenditure per acre at current prices (Rupees)**		**Compound Growth Rate of Cash Expenditure Between 1974-75 / 1991-92 (percent / year)**	**Cash Expenditure Per acre at Current Prices (Estimated) (Rupees) (1996-97)**
	1974-75	1991-92		
Wheat	425	1829	8.97%	2810
Paddy	437	2641	11.17%	4485
Cotton	341	1675	9.81%	2674
Paddy / Wheat Rotation (Average for the whole year)	862	4470	10.17%	7295
Cotton / Wheat Rotation (Average in the whole year)	766	3504	9.36%	5484

Source : Reports of Commission on Agricultural Costs and prices in the country. Growth in land productivity and yields of wheat and paddy has also been very impressive. It is thus clear from the data presented in table 1 that Punjab agriculture has grown at a very high rate over this period. The high growth rate in the use of modern market purchased inputs by farmers is also clearly revealed by information given in table 1. The use of chemical fertilizers has grown at the high rate of 18.27 per cent per year, the use of Tractors and Tubewells has grown at the high rates of 13.73 per cent and 15.16 per cent per year respectively over these three decades. Consequently not only the use of irrigation, tubewells, tractors, chemical fertilizers, insecticides and Weedicides and other modern inputs is the highest in Punjab among Indian states, but in even absolute terms the use of these modern market purchased inputs by Punjab farms is reaching the levels prevailing in the agricultural sectors of developed countries.

These developments over the last about three decades that made Punjab agriculture modernised and Punjab farms completely commercialised have also resulted in a very fast growth of cash expenditure incurred by Punjab farmers in carrying out their farm operations. The growth in the cash expenditure incurred by farmers in Punjab in purchasing these modern market supplied inputs is shown in table 2. These figures on cash expenditure per acre in cultivating different crops (Wheat, Paddy and Cotton) has been worked out from the cost of cultivation data presented in reports of Commission on Agricultural Costs and Prices (CACP). It can be seen that between 1975-75 to 1996-97, cash expenditure on the cultivation of wheat has gone up more than 6 times, on the cultivation of cotton more than 7 times and on the cultivation of paddy more than 10 times. A comparison of growth rates in agricultural production and productivity given in table 1 and the growth rates in the cash expenditure per acre on the production of major crops like wheat, paddy, cotton given in table 2 leads to the clear conclusion that modernisation of Punjab farms over the last about three decades has resulted in a much higher growth in cash expenditure on farm inputs compared to growth of farm output. Figures on cash expenditure per acre on major crops given in table 2 clearly show how cash / finance intensive has become farm operations in Punjab agriculture by the early 1990’s.

TABLE - 3

BREAK UP OF CASH EXPENDITURE ON CROP PRODUCTION

(figures are in percentages)

Item of Expenditure	Percent of Total Cash Expenditure		
	Cotton	Paddy	Wheat
1. Fertilizers and Chemicals	32.59	25.05	30.15
2. Hired Labour	31.44	23.41	18.07
3. Hired Machines / Bullocks for Tilling / Sowing / Harvesting	4.55	11.73	14.24
4. Irrigation Expenses	7.85	17.45	3.98
5. Rent paid for leased in land	11.11	10.42	15.73
6. Expenses on tractor repair and Diesel used in tractors	5.39	5.95	7.43
7. Other (miscellaneous) cash expenses	7.07	5.99	10.40
8. Cash Expenditure per acre (Rupees) in 1996 - 97	2674	4485	2810

Source : Worked out from information given in reports of the commission for agricultural costs and prices.

To finance this high cash expenditure per acre on crop production, Punjab farmers are now regularly and routinely using huge amounts of cash - partly from their own sources and partly borrowed from various credit agencies.

The break up of this cash expenditure on crop production is presented in table 3 and clearly shows the relative importance of different purchased inputs in the input basket used by Punjab farms today. The biggest single item of cash expenditure on Punjab farms today is chemical fertilizers and other chemicals; about one-third of total cash expenditure is done on this item alone. Hired labour (both casual and attached) is the second most important item of cash expenditure on Punjab farms, absorbing about one-fifth of all cash spent by farmers on farm operations. Rent paid on leased in land has also emerged as a big item of cash expenditure - about one-tenth of total cash expenditure is on this item. Expenses incurred on running the tubewells and tractors and also on hiring tractors and harvesting combines etc. are the other major items requiring considerable cash expenditure. The financing of this cash expenditure on modern market supplied inputs requires huge amounts of surplus cash which many a times most of the farmers may not be having out of their own past savings. Although agricultural production has been growing at a very high rate in the state, per capita incomes of the farmers have not grown at the same high rate - mainly because of population growth and also the absorption of lakhs of migrant labourers by Punjab agriculture. The per capita income of agricultural population has been growing at the rather slow rate of about 1.5 per cent per year over these three decades and even this growth in per capita income has been absorbed mostly by the growth of per capita consumption expenditure and rising living / consumption standards of the farming community. The growth of consumption having absorbed almost the entire increase in per capita real income of the farming community, very little surplus cash is left with farmers to finance these big amounts of cash expenditure on modern market supplied farm inputs. As a consequence farmers have to, regularly and routinely, borrow huge amounts to finance this cash expenditure on modern farm inputs. That is why the spectacular growth of agricultural output in the state has been accompanied by an even faster growth of agricultural credit, which has

TABLE - 4

CROP YIELDS IN PUNJAB : 1985 - 86 TO 1995 - 96

Crops	**Yield per acre (Kilograms)**		**Compound growth rate (Percent / year)**
	Average for 3 years (1985-86 to 1987-88)	Average for 3 years (1993-94 to 1995-96)	
1. Wheat	1354	1617	1.79 %
2. Rice	1308	1359	0.38 %
3. Cotton (A)	205	195	(-) 0.50 %
4. Cotton (D)	123	120	(-) 0.25 %
5. Maize	698	743	0.63 %
6. Sugarcane	2464	2545	0.32 %
7. Rapeseed and Mustard	393	459	1.56 %
8. Potato	7900	7914	0.02 %
9. Moong	345	158	(-) 7.51 %
10. Net Value of all crops per operated acre at 1980-81 prices (Rupees)	1318	1355	0.27 %

Source of Information : Statistical Abstracts of Punjab

started causing apprehensions even about the indebtedness of the Punjab peasantry.

In the last about one decade (roughly since the mid 1980's) an other dimension of the modernisation process of agriculture has appeared in Punjab. It is the continuing stagnation of yields of main crops, despite the increasing application of modern inputs and growing expenditure on these inputs. Summary information to highlight this stagnation in yields of major crops is presented in table 4 and it may be seen that in the last about ten years (1985-86 to 1995-96), yield of wheat has grown at a very slow rate, yield of rice has remained stagnant and yields of cotton (American) and cotton (Desi) have actually declined. Similarly yields of sugarcane, maize, and potato have remained stagnant. The information given in the bottom row of this table reveals clearly that net value of all crops per acre (at constant 1980-81 prices) has remained stagnant over this ten year period. During the same period cash expenditure, on modern farm inputs incurred by Punjab farmers has been steadily growing and that has resulted in a continuous decline in the net surplus generated from the production of these crops. This has resulted in Punjab farmers increasing dependence on borrowed funds to finance the purchase of their growing use of modern farm inputs.

In fact in more recent years, the farmers have been even reporting a decline in the yields of main crops. The information on this aspect, collected during our survey of 260 farms located in 13 village scattered over the whole state, is presented in table 5. About one-third of the surveyed farmers have reported an actual decline in wheat and paddy yields during the last three years. In the cotton belt of the state (Zones III, IV and V) more than 50 per cent farmers reported a fall in cotton yields over the last three years. This combination of growing cash expenditure on modern farm inputs and stagnant or even declining crop yields has made Punjab farmers increasingly dependent on borrowed money which many of them are finding difficult to repay out the meagre and declining net surplus from crop production.

Farmers in Punjab are borrowing from various credit sources / agencies. The main credit agencies that are financing the credit needs of farmers in the state

TABLE - 5

BEHAVIOUR OF CROP YIELDS OVER THE LAST 3 YEARS : ZONE-WISE INFORMATION

(Survey Information)

Zone	Percent (of farmers sowing the crop) reporting fall in crop yields over the last 3 years		
	Wheat	Paddy	Cotton American
I	27.80	31.50	Not sown
II	45.80	58.30	Not sown
III	28.10	40.4	42.71
IV	31.70	17.10	87.80
V	30.60	8.30	66.70

are cooperative credit institutions like Primary Agricultural Credit Societies and Primary Land Development Banks, Commercial Banks and Regional Rural Banks and also the informal sector credit agencies like Commission Agents (Kutcha Artias) and agriculturist money lenders. Farmers in Punjab at present borrow to finance their working capital requirements to meet the current expenditure on farm operations and also to finance the purchase of farm machines like Tractors, Engines, Electric motors, installation of Tubewells. The borrowing for financing the current farm expenses is on a short-term basis normally for a crop season, and these loans are repaid (fully or partly) after the harvesting and sale of that crop; fresh loans being taken again to finance the working capital requirements of the next crop. In a way this results in a sort of continuous recurring flow of credit between the borrowing farmers and the lending credit agencies. For financing the purchase of machine like tractors etc. loans are taken for a longer duration and are repaid through instalments over a period of time. In addition to these productive type of loans, farmers also borow to finance their spending on social ceremonies and other non-productive expenditures.

At present (1996-97) 72 Primary Land Development Banks are functioning in the state and are catering to the long-term credit requirements of the farmers for purchasing. Tractors and other machines. There are 5574 primary agricultural cooperative credit societies that are giving short-term loans to farmers to purchase farm inputs. There are 1325 rural offices (branches) of Commercial Banks and Regional Rural Banks that are supplying credit to farmers both for their short-term needs like purchase of fertilizers and also the long-term needs to purchase farm machinery. In addition to these formal sector Institutional credit agencies, about 23942 Commission Agent firms (Kutcha Artias) operating in agricultural produce markets are also giving credit to farmers. These Commission Agent firms are more diversified multi-activity firms that not only act as commission agents in the farm produce markets, but also in most cases sell fertilizers / insecticides to farmers and also give them credit for purchasing current farm inputs and also to meet their domestic consumption needs and expenditure on social ceremonies. Information on the functioning and activities of formal sector credit institutions like Cooperatives and Commercial Banks is available in the usual records and information is also available about the loans given by these agencies to farmers, loans remaining outstanding and interest rates charged. On the functioning / activities of informal sector credit agencies (like Commission Agents) very little reliable information is available; very little is known about the amount of finance given by them to farmers and also on the interest rate charged. One major objective of the present survey is to generate atleast some reliable information about the extent of agricultural credit given by these informal sector credit agencies.

CHAPTER - II

SAMPLE DESIGN AND PROFILE OF SURVEYED VILLAGES

Sample Design

Keeping in view various considerations and trying to strike a balance between the requirements of sampling theory and time and finances at our disposal, a three stage stratified random sampling procedure was used in this survey to select the farmers (holdings). Tehsil was the first stage of sampling unit, village the second unit and the owned operated holding (farmer) was the third stage of sampling unit. The whole state was stratified into five almost homogenous agro-climatic / crop / cultural zones on the basis of climate, soil type, cropping pattern, holding size, history and culture of land tenures and farming community. These five zones are described briefly hereafter.

Zone I : Shiwalik Foot Hills Zone

This zone / region consists of Gurdaspur, Hoshiarpur and Ropar districts and covers about 16 per cent of net operated area of the state. The terrain in this zone is severely dissected by numerous seasonal streams, underground water reservoir is inadequate, annual rainfall exceeds 900 mm. Maize, paddy, sugarcane and wheat are the important crops grown in this region. Holdings are small, relatively higher proportion of rural population is engaged in urban type jobs and activities. Most of this zone came under British rule very early and proportion of Jat sikh peasantry is lower in this zone compared to other zones.

Zone II : Central Plains Zone - North

This zone / region consists of Amritsar, Kapurthala, Jalandhar, Nawanshar and Ludhiana districts and covers about 29 per cent net operated area of the state. The average height of this plain is 230 to 260 meters about sea level. The depth of under ground water reservoir varies from two to twenty meters below the ground surface. The mean annual rainfall varies from 800 mm. to 500 mm. Paddy is the principal crop in Kharif and Wheat during the Rabi season. The proportion of Jat sikh peasantry in the rural population of this zone is relatively higher than Zone I.

Zone III : Central Plains Zone - South

This zone / region consists of Patiala, Sangrur and Fatehgarh Shaib districts and covers about 20 per cent of the net operated area of the state. Most of the features and cropping pattern of this zone are similar to zone II, except that land holdings are relatively bigger and the land tenure history is also different. Most of the area of this zone was under the princely rule upto 1947 and that has left a mark on the land tenures of the region.

Zone IV : Western Plains Zone - South

This zone / region consists of Bathinda and Mansa districts and covers about 17 per cent of the net operated area of the state. It is a plain region but dotted with sand dunes. The average height of land varies between 200 to 250 meters about sea level. Almost no river / stream worth the name flows through this region. Annual average rainfall is between 400 mm. to 500 mm. Paddy and Cotton are important Kharif crops and Wheat and Rapeseed and Mustard are main crops during the Rabi season. This region was also under the princely rule upto 1947 and that has left a mark on the land tenures of this region. The average size of holdings is relatively bigger in this region.

Zone V : Western Plains Zone

This zone / region consists of Ferozpur, Faridkot, Moga and Mukatsar districts and covers about 18 per cent of the net operated area of the state. The average height above sea level is less than 200 meters. This region is dotted with sand dues and has a dry climate. The quality of ground water is only marginal. The average rainfall is less than 400 mm. Parts of this region suffer from the problem of water logging. Cotton and paddy are important Kharif crops and wheat is the main Rabi crop. Most of the area of this region was not under princely rule and land holdings in the region are big relative to other regions of the state.

From each of these zones / regions the number of tehsils selected randomly was in the proportion of net operated area of the state falling in that zone. From each of the selected tehsils, one village was randomly selected. In all 13 tehsils and 13 villages were selected and the names of these tehsils and villages are given in table 6 and their location is shown in the map on the next page. From each of these selected villages 20 owned - operated holdings (farmers) were selected - taking 4 from each of the five size groups. For selecting these 20 holdings, all the owned - operated holdings in a village were listed in descending order of owned area and divided into the following five size categories.

1.	Marginal	owned land upto 2.5 acres
2.	Small	owned land above 2.5 acres and upto 5.0 acres
3.	Semi-Medium	owned land above 5.0 acres and upto 10.00 acres
4.	Medium	owned land above 10.0 acres and upto15.00 acres
5.	Large	owned land above 15.00 acres or above

From each size - class 4 holdings were selected at random. So from each of the 13 villages 20 holdings were selected and this gave us a sample of 52 holdings for each of the five size - groups of holdings. The basis of holding size classes was owned land and not land operated. This procedure was used because in giving loans Institutional credit agencies (Cooperatives and Commercial Banks) take owned land of a household into consideration and not land operated. Moreover operated area of a holding goes on fluctuating a little from year to year due to leasing in / out of land, but owned area provides a solid and stable basis on which a farmer can borrow money. But informal sector agencies like Commission Agents give operated area and gross value of output sold the main consideration while giving loans. So a balance was struck by selecting holdings for survey on the basis of owned area, but later on converting these 260

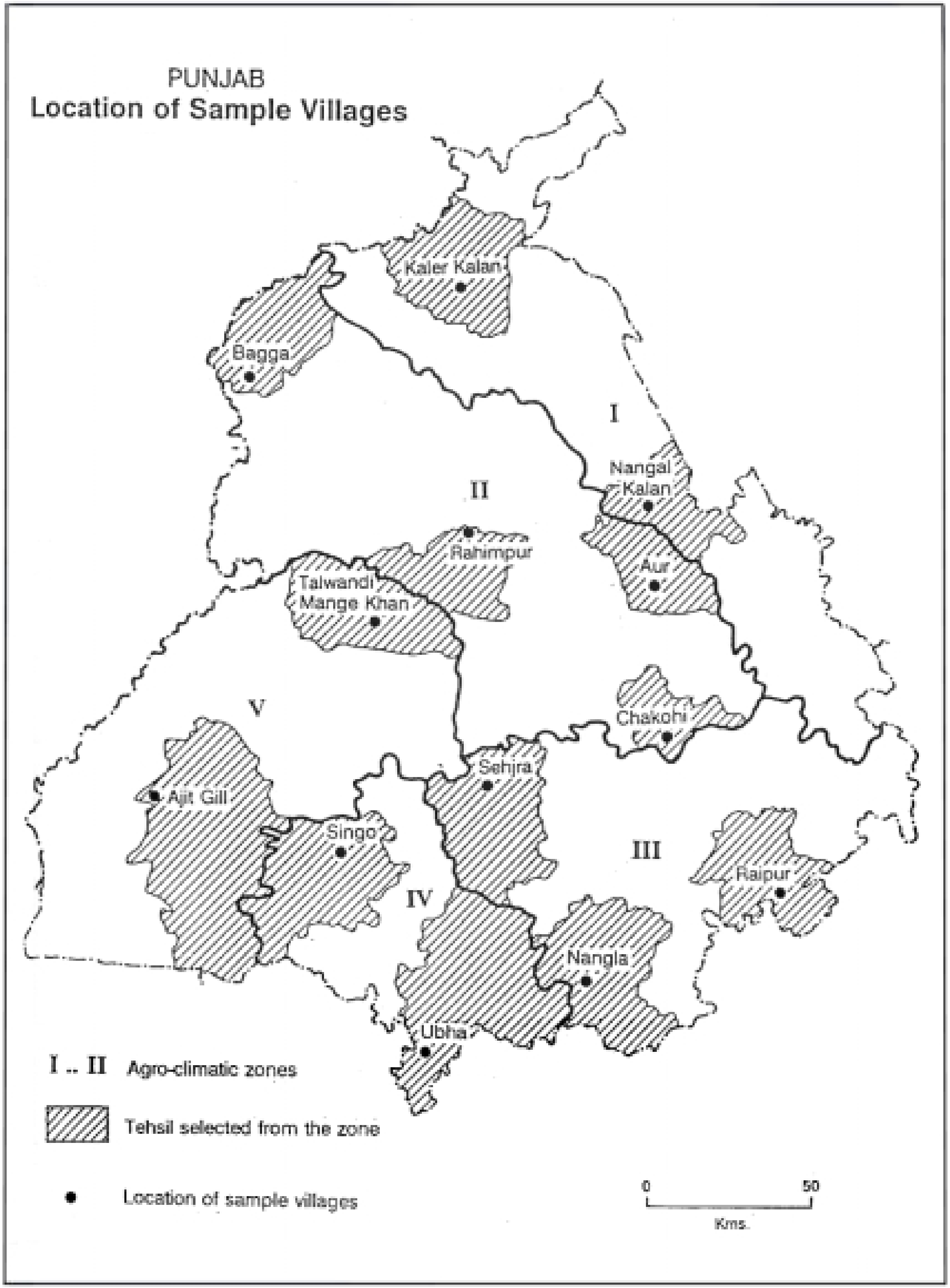
PUNJAB
Location of Sample Villages
Kaler Kalan
Bagga
I
II
Nangal Kalan
Rahimpur
Talwandi Mange Khan
Aur
V
Chakohi
Sehjra
Ajit Gill
Singo
III
Raipur
IV
Nangla
Ubha
I .. II Agro-climatic zones
Tehsil selected from the zone
Location of sample villages
0
50
Kms.

TABLE 6

SAMPLE DESIGN

(Punjab rural credit / indebtedness survey, 1997)

A. Zone-Wise Design

Zone	Districts in the Zone	Proportion of state's Net Sown Area in the Zone	Number of Farmers / holdings selected from the zone	Names of Tehsils selected from the zone	Name of villages selected from each selected tehsils
I.	Gurdaspur, Hoshiarpur, Ropar	16 %	40	1. Gurdaspur 2. Garh - Shankar	Kaler Kalan Nangal Kalan
II.	Amritsar, Kapurthala, Jalandhar, Nawanshar, Ludhiana	29 %	80	3. Ajnala 4. Nakador 5. Nawanshar 6.Khana	Bagga Rahimpur Aur Chakohi
III.	Patiala, Fatehgarh-Sahib, Sangrur	20 %	60	7. Patiala 8. Barnala 9. Sunam	Raipur Sehjra Nangla
IV.	Bhatinda, Mansa	17 %	40	10.Talwandi-Sabo 11. Mansa	Singo Ubha
V.	Ferozepur, Faridkot, Mukatsar, Moga	18 %	40	12. Zira 13. Faridkot	Talwandi-Mange khan Ajit Gil

B. Ownership holding wise Design

Owned Holding Size-class Name	Holding size-class range (Owned area in acres)	Number of Holdings Selected
Marginal	Upto 2.50	52
Small	Above 2.50 and upto 5.00	52
Semi-Medium	Above 5.00 and upto 10.00	52
Medium	Above 10.00 and upto 15.00	52
Large	Above 15.00	52

selected holdings into 4 operational size - classes for estimating the amount borrowed and outstanding. The four operational holding size categories are the following.

1.	Small	operated land upto 5.0 acres
2.	Semi-Medium	operated land 5.0 acres and upto 10.0 acres
3.	Medium	operated land 10.0 acres and upto 15.0 acres
4.	Large	operated land 15.0 acres and above

To these 260 randomly selected farm households, a carefully designed and pre-tested schedule was convassed during the post-paddy harvesting season of 1997 (October / November, 1997) and detailed information was gathered on the credit / indebtedness and many other related features and variables. A village schedule was also used to gather information about the credit / indebtedness situation in the village and also about the interest rates in the informal sector, cash rents on rented land, rates of mortgage money per acre and land price per acre. This information has been used to build estimates of short - term borrowings, long-term borrowings (productive), long - term borrowings (Non-productive), mortgage debt, extent and burden of debt on farmers of different holding size - groups. It may be made clear that estimates presented in this study are for the reference year of our survey i.e. Rabi (*Hari*) crop season ending in April / May, 1977 and Kharif (*Soni*) crop season ending in October / November, 1997. Farmer's perceptions about the causes of indebtedness and the role and functioning of different credit agencies have also been analysed to build a picture and get a feed back from borrowers side about the nature and extent of indebtedness and the role of different credit agencies.

Profile of the Surveyed Villages

Features of the socio-economic and demographic profile of surveyed villages are presented in tables 7, 8 and 9. There is considerable variation in the population size of the surveyed villages the biggest, *Ubha* had 3662 persons in it compared to the smallest, *Rahimpur* that has a population of only 1040. Similarly there is considerable variation in the proportion of scheduled caste population in the sample villages - it being only 16 per cent in village *Singo* compared to the highest proportion, 42 per cent, in village *Bagga*. Literacy rate also varied considerably, between the very low (8 per cent) in village *Singo* and the quite high (59 per cent) in village *Nangal Kalan*. The dependence of population and labour force on farming also varies considerably among the sample villages. Labour force engaged in farming was as low as 32 per cent in village *Aur* and as high as 96 per cent in village *Singo*. Similarly the proportion of agricultural labourers in the labour force engaged in agriculture varied between the high 56 per cent in village *Kaler Kalan* and the low 31 per cent in village *Nangla*. The extent of non-farm labour force varied between the low 4 per cent in village *Singo* and the high 68 per cent in village *Aur*. It is thus clear that the sample villages represented a real cross-section of socio-economic and demographic conditions in the rural areas of the state.

Holding size also varied considerably among the sample villages; the biggest holdings being in village *Singo* (16.21 acres) and the smallest being in village *Aur* (5.46 acres). The intensity of irrigation also varied considerably; being more than 95 per cent in 6 villages and less than 50 per cent in two villages. Sample villages also represent a good cross-section so far as cropping pattern is concerned. In 9 villages paddy was the dominant Kharif crop, in 3 cotton was the dominant Kharif crop and in one Majze was the main Kharif crop. Of course Wheat was the dominant crop in all villages during Rabi season.

Tractorisation also varied considerably among the sample villages. In two villages about 70 per cent of cultivating households were having Tractors, in another 4 villages more than 50 per cent households were having tractors, in the remaining villages less than 50 per cent households were having Tractors. But there was not even a single village where proportion of cultivating households having Tractors was less than one - third. It seems Tractorization of Punjab agriculture has already reached a very high level.

In most of the sample villages cash renting has become dominant mode of renting in land in the land lease market and in almost half the villages the whole

TABLE 7

PROFILE OF SAMPLE VILLAGES - I

(1981 Census Data)

Zone	Village Name	Total Population	Percent-age of Scheduled Caste Population	Percent-age of Literates	Number of Cultivator Households	Number of Male Cultivator workers	Percent of total male workers engaged in farming	Male agricultural labourers as percent of total male workers in farming	Percent of total male workers engaged in non-farm activities
I	1. Nangal Kalan	1040	36 %	59 %	77	115	64 %	39 %	36 %
	2. Kaler Kalan	3479	18 %	48 %	143	258	65 %	56 %	35 %
II	3. Bagga	2649	42 %	29 %	153	286	73 %	49 %	27 %
	4. Rahimpur	1332	28 %	42 %	102	169	87 %	40 %	13 %
	5. Aur	3150	37 %	53 %	120	172	32 %	34 %	68 %
	6. Chakohi	1655	22 %	45 %	128	286	79 %	33 %	21 %
III	7. Raipur	1912	36 %	29 %	105	180	60 %	43 %	40 %
	8. Nangla	2230	28 %	18 %	221	477	86 %	31 %	14 %
	9. Shejra	2910	31 %	30 %	229	482	85 %	38 %	15 %
IV	10. Singo	2287	16 %	8 %	206	288	96 %	38 %	4 %
	11. Ubha	3662	39 %	17 %	340	583	85 %	33 %	15 %
V	12. Talwandi Mange Khan	1583	32 %	45 %	102	191	77 %	48 %	23 %
	13. Ajit Gill	1796	32 %	36 %	116	238	79 %	38 %	21 %

TABLE 8

PROFILE OF SAMPLE VILLAGES - II

Village S.No.	Net Operated Area (acres)	Percentage of irrigated Area (Percentage)	Average size of holdings (Acres)	Per cent of cultivating households owning tractors	Land Price per acre (Average in Rs. lakhs)	Mortgage Money per Acre (Average in Rupees	Cash rent per acre (Average in Rupees)	Trend in Cash Rent per acre during the last three years
1.	749	45 .0	9.72	49.35	1.50	30000	5500	A
2.	1614	97 .0	11.28	55.94	2.00	60000	5500	A
3.	1957	100.0	12.79	73.20	2.00	75000	4500	A
4.	561	79 .0	5.50	58.82	3.50	65000	7000	B
5.	655	99 .0	5.46	58.33	2.50	70000	5500	A
6.	1157	100 .0	9.04	69.53	3.50	50000	8000	B
7.	1068	100 .0	10.17	38.10	4.00	80000	6000	C
8.	2466	46 .0	11.16	40.27	3.00	40000	7000	C
9.	2454	91 .0	10.72	43.23	2.50	40000	6500	C
10.	3339	54 .0	16.21	55.83	1.50	40000	5000	B
11.	4668	62 .0	13.73	48.88	1.25	25000	5000	B
12.	1233	97 .0	12.09	49.02	3.15	42000	8000	C
13.	1339	79 .0	11.55	44.83	1.70	42000	6000	B

Note : A : Stagnant B : Declining C : Increasing

TABLE 9

PROFILE OF SAMPLE VILLAGES - III

Village S.No.	Name of the Nearest Town and Distance from it in K.M.	Primary agricultural Cooperative Credit Society exists in the village	Commercial Bank Branch exists in the village	Cropping pattern	Land renting system dominant in the village	Currently pervailing custom about cash rent payment
1.	Hoshiarpur (20)	Yes	Yes	Maize/Wheat	Cash Rent	A
2.	Dhariwal (5)	No	No	Rice/Maize/Wheat	Cash Rent	B
3.	Amritsar (13)	Yes	No	Rice/Wheat	Cash Rent	B
4.	Nakodar (10)	No	No	Rice/Wheat	Cash Rent	B
5.	Rahon (8)	Yes	Yes	Rice/Wheat	Cash Rent	B
6.	Khanna (9)	Yes	Yes	Rice/Wheat	Cash Rent	B
7.	Patiala (10)	Yes	No	Rice/Wheat	Cash Rent	A
8.	Lehragaga (10)	No	No	Rice/Wheat	Cash Rent	A
9.	Barnala (14)	Yes	No	Rice/Wheat	Cash Rent	A
10.	Raman Mandi (16)	Yes	Yes	Cotton/Wheat	Cash Rent	A
11.	Maur Mandi (14)	Yes	No	Cotton/Wheat	Cash Rent	A
12.	Zira (7)	Yes	No	Rice/Wheat	Cash Rent	B
13.	Jaitu (4)	Yes	No	Cotton/Wheat	Cash Rent	B

Note : A. Full amount in advance in the Beginning of Kharif crop season

B. Half amount in advance in the beginning of Kharif crop season / half amount at the end of Kharif crop season

amount of cash rent has to be paid in advance by the tenant. In the other 50 per cent villages half the amount of cash rent was paid in the beginning of Kharif season and half after harvesting the Kharif crop. The cash rent per acre varied considerably among sample villages; the highest being Rs. 8000 per acre (villages *Talwandi Mange Khan* and *Chakohi)* and the lowest being Rs. 4500 per acre in village *Bagga*. The average cash rent per acre seems to be Rs. 5500 per acre. In most of the villages cash rent per acre has either remained stagnant during the last 3 years or has actually declined. Only in 4 village a small increase in cash rent per acre was reported. Land price per acre also varied considerably among the sample villages; it being Rs. 4.00 lakh per acre in village *Raipur* and the lowest was Rs. 1.25 lakh per acre in village *Ubha*. The average land price per acre seems to be Rs. 2.50 lakh per acre. Similarly mortgage money per acre varied between the highest Rs. 80000 per acre in *Raipur* and the lowest Rs. 25000 per acre in *Ubha*. However, it was reported by surveyed farmers in all the villages that mortgaging in of land is no longer the favoured option with people having surplus cash - outright purchase is preferred to that.

There was a wide variation among the sample villages in the availability of various infrastructural facilities. Out of the 13 villages, in 10 a Primary Agricultural Cooperative Credit Society was functioning. However, in only 4 villages out of 13, a Commercial Bank Office was located. Only two of these sample villages were located at a relatively short - distance from a town (less than 5 Km.). Some villages were situated at a considerable distance (more than 10 Km.) from the nearest town. So, in terms of their location and infrastructural facilities also the sample villages present a wide cross-section of villages in the state. On the basis of above description of features of the surveyed villages it can be safely said that the sample villages represent a fair cross-section of rural Punjab.

CHAPTER - III

SHORT TERM BORROWINGS TO FINANCE CROP PRODUCTION OPERATIONS

Punjab farmers are now regularly and routinely borrowing money from various credit agencies to finance various crop operations and for purchasing inputs used in crop production. These loans are normally for a crop season (about 5 to 6 months) and are expected to be repaid back after the harvesting and sale of the crop concerned. The major items for which these short-term crop loans are taken are : purchase of fertilizers and other chemicals used; for hiring casual and attached labour used in sowing transplanting and harvesting of crops; for paying advance instalment of the cash rent on rented in land; for running expenses on tractors, Electric motors and Diesel Engines and the spares of these machines; for making payments for hiring of combine harvests etc; and for meeting other miscellaneous expenses in carrying out crop production operations. These short-term loans are taken from Commission Agents, Primary Agricultural Cooperative Credit Societies and Commercial Banks.

I. Short-Term Borrowing : Amount Borrowed

The information collected during the survey was processed and analysed according to size-class of operational holdings and this information is given in table 10.

Proportion of Farmers Borrowing

It may be seen that the proportion of farmers borrowing short-term loans to finance their crop operations is very high in all the size-categories of holdings. About 86 per cent of Punjab farmers are now regularly and routinely borrowing from various credit agencies. The absence of any significant difference in the percent of borrowing farmers in different size-classes of holdings is an-other import feature of the short-term credit in the Punjab rural side. The range of

Table 10

Short-Term Borrowings : Amount Borrowed And Outstanding : Per Farmer Borrowing And Per Operated Acre Of Borrowing Farmers

Holding Size-Class	Amount Borrowed (Rupees/ Year)			Amount Outstanding (Rupees/ Year)		
	Percent of Farmers Borrowing	Amount Per Borrowing Farmer	Amount Per Operated acre of Borrowing Farmers	Percent of Borrowers with outstanding loans	Amount Per Farmer with Outstanding loans	Amount Per Operated Acre of Farmers with outstanding loans
Small	84.34	11052	4536	70.00	4354	3396
Semi-Medium	90.10	27779	3858	40.00	17707	2211
Medium	85.00	60218	3929	47.00	25202	1398
Large	89.50	99115	2488	28.30	71434	1599

Source : Field Survey

variation is between 84.34 per cent of small farmers borrowing and 90.10 per cent of semi-medium farmers borrowing. It can be safely concluded that so far as proportion of farmers borrowing short-term loans is concerned there is no significant difference among small, medium or big farms.

Amount Borrowed Per Farmer and Per Operated Acre

Information on amount of short-term loans taken per borrowing farmer and per operated acre of the borrowing farmers is also presented in table 10 and clearly reveals that amount borrowed per borrowing farmer increases steadily with holding size : the average amount borrowed per borrowing farmer among the small holding size category was Rs. 11052, compared to Rs. 99115 per borrowing farmer among the large farms category. This, of course, is quite natural, as the farm size increases the total amount borrowed per holding also goes up.

However, amount borrowed per operated acre of the borrowing farmers displays a clear inverse relationship between holding size and per acre borrowings. The borrowed amount per acre of borrowing farmers was the highest among small farmers (Rs. 4536 per acre) and continuously declines as we shift to the bigger holding categories. The borrowed amount per acre was the smallest (Rs. 2488) in the case of large farms. A number of important conclusions follow from this pattern of relationship between holding size and per acre borrowings. First, and probably the most important, is that in the short-term credit market in Punjab, the smaller farms are not at any disadvantage so far as the availability of credit to them is concerned. The next conclusion that emerges is that small farms are much more dependent on short-term borrowings to carry out their production operations compared to the large ones. The large farms seem to depend proportionately more on their own cash savings to finance the crop production operations. The third conclusion is that in the Punjab rural side today even the bigger sized farms are significantly dependent on short-term credit market for carrying out their crop production operations. Almost 90 percent of large farms were taking short-term crop loans and borrowed amount per farmer was almost one lakh and per operated acre also it was not a small amount, being Rs. 2488 per acre.

TABLE : 11

SHORT TERM BORROWINGS : AMOUNT BORROWED AND OUTSTANDING PER ACRE

DISTRIBUTION BY HOLDING SIZE-CLASS AND CREDIT AGENCY

(figures are in Rupees)

Credit Agency	Operational Holding Size-Class							
	Small		Semi-Medium		Medium		Large	
	Borrowed Amount per acre	Outstand-ing amount per acre	Borrowed Amount per acre	Outstand-ing amout per acre	Borrowed Amount per acre	Outstanding amount per acre	Borrowed Amount per acre	Outstanding amount per acre
Commission Agents	4124	2940	3944	2942	2890	2602	2391	2224
Primary Cooperative Credit Societies	2441	2108	1391	1046	3049	881	891	795
Commercial Banks	3091	906	2056	5062	1135	1440	784	880

Source : Field Survey

Note : (1) 'Borrowed amount per acre' is per acre of operated area of borrowing farmers

(2) 'Outstanding amount per acre' is per acre operated area of farmers with outstanding loans.

Borrowings from Different Credit Agencies

The breakup of amount borrowed per operated acre from different credit agencies is presented in table 11. It may be seen from this table that amount borrowed per acre of borrowing farmers varies across credit agencies and holding size classes. The earlier noted pattern of borrowed amount per acre declining as holding size increases is again noted in the case of loans taken from Commission Agents. This inverse relation between holding size and borrowed amount per acre is noted even in the case of borrowings from commercial banks. However, in the case of short-term loans taken from primary agricultural cooperative credit societies no systematic pattern is noted in this connection. In case of the loans taken from cooperative credit institutions the highest amount per acre is in the case of medium farms (Rs. 3049), small farms come next with Rs. 2441 per acre, followed by semi-medium and large farms. Comparison of credit agencies loans in each of the four holding size classes reveals that the biggest amount of loan per acre is taken from commission agents in all the size-categories, except in the case of medium farms in whose case the biggest amount per acre is borrowed from cooperative credit societies.

Short-Term Borrowings : Estimates for the State as a Whole

Information presented in tables 10 and 11 was used to work out estimates of total amount of short-term borrowings of Punjab farmers as a whole. For this purpose information on per acre borrowings from different credit agencies by different size categories of farms was used along with the area operated by each size-class of holdings in the state according to the 1990-91 agricultural census. These estimates on total short-term borrowings of Punjab farmers are presented in tables 12, 13, 14. It may be seen from table 12 that according to our estimates the total annual short-term borrowing of Punjab farmers (from all the credit agencies taken together) work out to be Rs. 3119.33 crores. Out of these Rs. 3119.33 crores, 61.31 percent (Rs. 1912.58 crores) were borrowed by farmers from Commission Agents, 33.98 per cent (Rs. 1059.86 crores) were borrowed by them from cooperative credit societies and only 4.71 per cent (Rs. 146.89 crores) were borrowed from commercial banks. Information given in the

Table : 12
Estimates Of Short-Term Borrowings : Amount Borrowed And Outstanding
(Amount In Rs. Crore: Estimates Are For The State As A Whole)

Credit Agency	Percent of farmers borrowing	Amount Borrowed	Per cent of borrowing farmers with-outstanding loans	Amount outstanding	Outstanding amount as per cent of borrowed amount
Commission Agents	63.85	1912.58 (61.31)	39.46	617.83 (88.66)	32.30
Primary Cooperative Credit Societies	51.35	1059.86 (33.98)	8.61	45.12 (6.47)	4.26
Commercial Banks	8.85	146.89 (4.71)	19.56	33.85 (4.86)	23.04
All credit Agencies	86.29	3119.33 (100.00)	34.43	696.80 (100.00)	22.34
Borrowed amount per borrowing farmer		Rs. 32362	Outstanding amount per farmer with outstanding amount		Rs. 15062
Borrowed amount per operated acre of borrowing farmers		Rs. 3590	Outstanding amount per operated acre of farmers with outstanding amount		Rs. 2354

Note : Estimates are for one year consisting of Hari Crop of 1996-97 and Soni Crop of 1997.

TABLE : 13

SHORT-TERM BORROWINGS : ESTIMATES OF AMOUNT BORROWED AND OUTSTANDING

(Holding Size-Class Wise Information)

Holding Size-class	Amount borrowed (Rs. crores)	Amount outstanding (Rs. crores)	Outstanding amount as per-cent of borrowed amount	Percent share of holding size-class in states total		
				Amount borrowed	Amount outstanding	Oper-ated Area
Small	465.59	128.39	27.58	14.93	18.43	12.21
Semi-medium	722.80	184.29	25.50	23.17	26.45	20.87
Medium	1338.40	263.26	19.67	42.90	37.78	40.22
Large	592.54	120.86	20.40	19.00	17.34	26.70
All	3119.33	696.80	22.34	100.00	100.00	100.0

same table also indicates that the highest proportion (63.85 per cent) of farmers were going to commission agents for short-term loans; 51.35 per cent have borrowed short-term loans from cooperative credit societies; and only 8.85 per cent went to commercial bank for short-term loans to finance their crop production operations. The information presented in this table leaves little doubt about the domination of informal sector credit agency - commission agents - in the short - term credit market in rural Punjab. These commission agents are meeting the short-term credit needs of 63.85 per cent farmers and are providing 61.31 per cent of the total short-term credit to farmers in the state. The significant role of cooperative sector in the short-term credit market in Punjab agriculture also emerges quite clearly. These cooperative credit societies are meeting the short-term credit needs of 51.35 per cent farmers and provide 33.98 per cent of the total short-term credit to Punjab agriculture. The marginal role of commercial banks in the short-term credit market in rural Punjab is also clearly revealed. Commercial Banks are meeting the short-term credit needs of only 8.85 per cent farmers and are providing the meagre 4.71 per cent of total short-term agricultural credit in the state. It may be noted that the percent of farmers borrowing from different credit agencies adds up to more than 100 per cent, which indicates that many of the borrowing farmers were taking short-term loans from more than one credit agency.

In the information presented in table 13 we have given the estimates of amount of short-term borrowings of different size-groups of holdings and also their respective share in the total net operated area of the state. This information clearly confirms our earlier conclusion that short-credit market in Punjab agriculture has not worked to the disadvantage of small farms. It may be seen that the share of short-term credit is higher compared to their respective share in the operated area of the state in the case of both small and semi-medium holdings; it is about the same in the case of medium sized holdings. The share of large holdings is lower in short-term credit compared to their share in the operated area of the state. It can, therefore, be safely concluded that short-term credit market in Punjab has not been working to the disadvantage of smaller farms.

Credit Agencies, Holding Size and Short-Term Credit

Estimates of short-term borrowings from different credit agencies by different sized holdings are presented in tables 14 and 15. It may be seen from these estimates that small, semi-medium and large farms are more dependent on commission agents for their short-term credit needs. In these size categories the per cent of total short-term credit taken from commission agents is about 70 per cent. On the other hand, medium farms are much less dependent on commission agents for their short-term credit needs i.e. only to the extent of 48.67 per cent of their short-term credit. These medium farms meet more than 50 per cent of their short-term credit needs from formal sector credit agencies like cooperatives and commercial banks. Infact these medium farms meet as high as 47.93 per cent of their short-term credit needs from cooperative credit societies. The share of cooperative sector in the short-term credit of the other three size - categories (small, semi-medium and large) is almost the same i.e. between 20 to 25 per cent. In the case of commercial banks we note, semi-medium farms are going to them to a significantly higher degree. About 10 per cent of the short-term credit needs of semi-medium farms were meet by commercial banks. In the case of other three size-categories of farms commercial banks were meeting only about 2 to 3 per cent of the short-term credit needs.

A very clear pattern is revealed by this information presented in table 15. Medium farms are much less dependent on Commission Agents for short-term credit; they rather meet about 50 per cent of their short-term credit needs from cooperative societies.

Commercial bank's role in meeting the short-term credit needs of farmers is very marginal in all the size-categories except semi-medium farms, in the case of which they have a significant presence. All the size-categories of farmers, except medium, are heavily dependent on commission agents which are meeting about 70 per cent of their short-term credit needs.

TABLE : 14

SHORT-TERM BORROWINGS : AMOUNT BORROWED AND OUTSTANDING

DISTRIBUTION BY HOLDING SIZE CLASS AND CREDIT AGENCIES

(Amount in Rs. Crores)

Holding Size Class	Commission Agents			Primary Cooperative Credit Societies			Commercial Banks		
	Amount Borrowed	Amount Outstanding	Outstand-ing as percent of borrowed	Ammount Borrowed	Amount Outstand-ing	Outstand-ing as percent of borrowed	Ammount Borrowed	Amount Outstand-ing	Outstand-ing as percent of borrowed
Small	332.59	113.48	34.12	121.68	14.08	11.57	11.32	0.83	7.33
Semi-Medium	497.51	154.38	31.03	151.70	12.70	8.37	73.59	17.21	23.39
Medium	651.44	240.49	36.92	641.46	13.16	2.05	45.50	9.61	21.12
Large	431.04	109.48	25.39	145.02	5.18	3.57	16.48	6.20	37.62
All Holdings	1912.58	617.83	32.30	1059.86	45.12	4.26	146.89	33.85	23.05

Source: Estimated From Survey Information

TABLE : 15

SHARE OF CREDIT AGENCIES IN SHORT-TERM BORROWINGS OF HOLDING SIZE-CLASSES

(figures are in percentages)

Credit Agency	Operational Holding Size Class			
	Small	**Semi-Medium**	**Medium**	**Large**
Commission Agents	71.43	68.83	48.67	72.74
Primary Cooperative Credit Societies	26.14	20.99	47.93	24.47
Commercial Banks	2.43	10.18	3.40	2.78
All Credit Agencies	100.00 (465.59)	100.00 (722.80)	100.00 (1338.40)	100.00 (592.54)

Source : Field Survey

II. Short-Term Loans : Amount Outstanding

The short-term loans taken by farmers to finance their crop production operations are expected to be repaid back after the harvesting and sale of crops and in most cases these loans are paid back also. But many a times farmers fail to replay the full amount or a part of these short-term loans and some amount remains outstanding. In our survey of 260 holdings we collected information on these short-loans remaining outstanding after the sale of crops (mainly Wheat) in April / May 1997 and also after the sale of Kharif crops (mainly Paddy and Cotton) in October / November 1997. The figures on short-term loans outstanding are average figures over these two crops seasons. The basic information on these short-term loans outstanding is given in table 10. It may be seen the proportion of borrowing farmers who could not repay the entire amount borrowed was very high among small farms; 70 per cent of them reporting short-term loans outstanding. Even in the case of semi-medium and medium farms 40 per cent and 47 per cent respectively could not repay the entire amount borrowed. Surprisingly even 28.30 per cent of the large farms also could not repay the entire amount borrowed to finance the crop production operations. The amount of outstanding short-term loans per household and per operated area of those having outstanding loans is also given in this table. It may be seen that the amount outstanding per farmer family varied directly with holding size; it being small (Rs. 4354) in case of small farms, but quite a big amount in the case of large farms, being Rs. 71434 per farmer. The outstanding amount per operated acre of the farmers with outstanding loads was, of course, the highest (Rs. 3396 per acre) in the case of small farms and it declines as holding size increases and was the minimum (Rs. 1398) in the case of medium farms, rising again to (Rs. 1599 per acre) in the case of large farms. It is clear from these figures that the burden of outstanding short-term loans per acre was the highest in the case of small farms and lowest in the case of medium farms.

Information presented in table 13 on short-term loans outstanding as per cent of amount borrowed in the case of each of the holding size categories, however, suggests no marked variation among holding size classes. About 22.34 per cent of short-term loans taken by farmers in Punjab remained outstanding even after the sale of Rabi and Kharif crops; the crops for the production of which these loans have been used. This proportion of outstanding short-term loans (amount) was the lowest (19.67 per cent) in the case of medium farms and the highest (27.69 per cent) among small farms. Even 20.40 per cent of the short-term (amount) loans of large farms has remained outstanding after the sale of these Rabi and Kharif crops.

Loans Outstanding to Different Credit Agencies

Short-term loans of different credit agencies outstanding towards different size categories of farms were also computed and this information is presented in table 11 and 12. It may be seen that short-term loans outstanding were the highest in the case of commission agents; 39.46 farmers borrowing from the commission agents failed to repay 32.30 per cent of the amount borrowed. Even in the case of commercial banks the repayment rate of short-term loans was poor; 19.56 per cent of farmers borrowing from commercial banks failed to repay 23.04 per cent of the amount borrowed for financing short-term crop production operations. Only in the case of cooperative credit societies the recovery rate was good; only 8.61 per cent of their borrowing farmers failed to repay only about 4.26 per cent of the amount borrowed. Taking all the credit agencies and all size-classes of farmers as a whole, 34.43 per cent the farmers taking short-term loans failed to repay about 22.34 per cent of the amount borrowed.

Holding size-wise information on short-term loans outstanding is presented in table 13 and clearly reveals a pattern. Although these is no very marked variation in the percent of short-term loans outstanding among holding size categories; a definite pattern does seem to exist. In the case of small and semi-medium farms the percent of short-term loans outstanding is almost the same and similarly this proportion is also almost same in the case of medium and large farms. But between small / semi - medium classes of farms on the one hand and medium / large classes of farms on the other, a clear difference exists. On the basis of information presented in table 13 it can be concluded that the proportion of short-term loans outstanding was higher in the two smaller size-categories compared to the two bigger size-categories of farms. This conclusion is strengthened when we compare the share of different size-classes of farms in short-term loans outstanding with their respective shares in the operated area of the state. This information is also given in table 13 and clearly reveals that per cent share of total outstanding short-terms loans in the state was higher (Compared to their respective shares in the operated area of the state) in the case of small and semi-medium farms and reverse was the pattern in the case of medium and large farms. On the basis of all this information it may not be wrong to conclude that the burden of outstanding short-term loans was higher on smaller size-categories of farms and they failed to repay a higher proportion of the short-term loans taken by them to finance the crop production operations.

Short-Term Loans Outstanding : Estimates for the State as a Whole

Using the same procedure as was followed for working out the total amount of short-term borrowings of Punjab peasants as a whole (described in the earlier section of this chapter), estimates of total outstanding short-loans for the state as a whole, as well as for different credit agencies and different sized holdings were prepared. These estimates are given in tables 12, 13 and 14. It may be seen from figures given in table 12 that total amount of short-term loans outstanding against Punjab farmers was Rs. 696.80 crores, which constituted 22.34 per cent of the total amount of short term loans (Rs. 3119.33 crores) taken by them (during the survey reference year) to finance their crop production operations. Out of this total outstanding amount of short-term loans, 88.66 per cent (Rs. 617.83 crores) was due to the commission agents, 6.47 per cent (Rs. 45.12 crore) was due to primary agricultural cooperative credit societies and 4.86 per cent (Rs. 33.85 crores) was due to commercial banks. On the basis of this information we can clearly conclude that almost the entire amount of short-term loans outstanding was due to commission agents and only a very small amount was due to formal sector credit agencies.

However, when we look at the proportion of short-term loans outstanding in the case of each of the three major credit agencies (see table 12), we observe that the proportion of outstanding short-term loans was highest in the case of commission agents (32.30 percent). The proportion of short-term loans outstanding was also fairly high (23.04 per cent) even in the case of commercial banks. Only in the case of primary agricultural cooperative credit societies the proportion of outstanding short-term loans was quite low (4.26 per cent). So we can conclude with the observation that most of the outstanding amount of short-term loans is due to commission agents and almost a third of the money advanced by them remained unpaid. In the case of commercial banks also about one-fourth of the amount advanced to farmers was not paid back, although this amount in absolute terms was only 4.86 per cent of total outstanding short-term loans of the peasantry in the state. The cooperative credit societies seems to be recovering back a very high proportion of their short-term loans and only a very negligible proportion (4.26 per cent) of which remained unpaid. This unusually good performance of cooperatives in recovering short-term loans is little puzzling in the context of poor performance of the other two credit agencies and needs further and deeper investigation.

The recovery of short-term loans given by different credit agencies to different size -categories of farms and the proportion of loans remaining outstanding was also estimated and information on this aspect is detailed in table 14. It may be seen that the pattern of proportion of short-term loans outstanding towards different sized farms was almost the same in the case of commission agents loans; it varied between the lowest (25.39 per cent) in the case of large farms and the highest (36.92 per cent) in the case of medium farms. So one can say that there is no definite pattern so far as the incidence of outstanding short-term loans of Commission Agents towards different sized farms is concerned.

In the case of primary agricultural cooperative credit societies, we can observe a clear pattern in the proportion of outstanding short-term loans towards different sized farms. The proportion of outstanding short-term loans of cooperative society was very low (2.05 per cent and 3.57 per cent respectively) in the case of medium and large farms. It was relatively higher in the case of small farms; 11.57 per cent of whose short-term borrowings from cooperative societies remained unpaid and outstanding. On the basis of information given in table 14 we can safely say that proportion of unpaid / outstanding short-term loans of cooperative societies was almost negligible in the case of large and medium farms and was comparatively higher in the case of small and semi-medium farms.

The pattern of short-term outstanding loans among different sized holdings was quite different in the case of commercial banks compared to cooperative credit societies. In the case of commercial banks loans the proportion of short-term loans outstanding was quite low (7.33 per cent) in the case of small farms. In the case of the middle two categories of farms (semi-medium and medium) about one-fifth of the short-term loans advanced by commerical banks to them remained unpaid and outstanding. The proportion of outstanding commercial bank short-term loans was the highest in the case of large farms. The large farms failed to repay almost two-fifths (37.62%) of the short-term loans taken by them from commercial banks to finance their crop production operations.

These differences among the farm size categories in the proportion of short-term loans outstanding to the formal sector institutional credit agencies (Cooperatives and Commercial Banks) is rather puzzling and difficult to explain. Only further research on this question can help uncover the real reasons for this varied pattern of outstanding short-term loans of formal sector credit agencies. On the whole one can say that the incidence of short-term loans outstanding in Punjab agriculture is fairly serious because about one-third of the borrowing farmers were failing to repay back the amount borrowed by them to finance their crop production operations, and this outstanding loans amount was a fairly big sum (Rs. 696.80 crores) constituting about one-fifth (22.34 per cent) of the total short-term credit being used by Punjab farmers to finance their crop production operations. The burden of this outstanding amount of short-term loans is quite heavy on the concerned farmers, the outstanding amount being as high as Rs. 2354 per acre of the area operated by them.

CHAPTER - IV

LONG-TERM BORROWINGS FOR PRODUCTIVE PURPOSES

Modernisation of Punjab agriculture over the last about three decades has resulted in a big increase in the number of machines and other capital equipment used by farmers. The number of tractors in the state has already reached four lakhs, number of tubewells is about nine lakhs. Similarly the number of threshing machines and harvesting combines has increased in a big way. This expansion of machinery used in Punjab agriculture was partly financed by farmers from their own past savings and partly with the help of loans taken from various credit agencies. The financing of agricultural machinery with borrowed finance no longer carries any social stigma among Punjab peasants and the acquisition of these machines now a days is mostly financed with borrowed funds. For purchasing machinery and for making many other long-term investments, farmers need finance for durations longer than a crop season. The amount of loans taken for this purpose is also relatively big and this amount can be repaid back only over a period of several years. During our survey we collected information from the surveyed households about their long-term borrowings for productive investment purposes like purchase of tractor and its accessories, installation of tubewell and purchase electric motors and diesel engine, purchase of harvesting combines, thrashers and other machines and many other such investments that help in increasing the productive capacity of their farm enterprise. These data were processed and analysed and the results are presented in the next few pages.

In quantifying the amount borrowed by farmers for long-term productive investment purposes, formal credit agencies (Commercial Banks, and Cooperative Institutions) normally do the accounting for each year separately. This procedure has advantages for the accountant, but has no justification from the economists point of view. A long- term loan is used to purchase machines and make investments that will have their impact over a fairly long-period of

TABLE : 16

LONG TERM BORROWINGS (PRODUCTIVE) : AMOUNT BORROWED AND OUTSTANDING

(Survey Information : Holding size wise; Amount in Rupees)

Holding Size-Class	Amount Borrowed		Amount Outstanding	
	Percent of farmers borrowing	Borrowed amount per operated acre of borrowers	Percent of borrowers with outstanding loans	Outstanding Amount per operated acre of Farmers with outstanding loans
Small	26.24	12407	83.91	13335
Semi-Medium	21.15	17347	86.33	13964
Medium	36.20	7562	90.21	1541
Large	30.78	5021	38.49	11291

time in the future and consequently has very little economic relevance to the actual year in which the loan is taken. In our analysis we have quantified these loans in terms of actual amount borrowed by farmers that is not yet fully repaid and consequently that long-term loan is still live. The second aspect on which we collected information is that out of these long-term loans how much was still outstanding on the date of the survey. In section I of this chapter we discuss the total amount Borrowed of still live long-term loans and in section II the amount still outstanding is discussed.

I. Long-Term (Productive) Loans : Amount Borrowed

Amount of long term (productive) loans borrowed by farmers per operated acre of borrowing households is given in table 16. The percent of farm households of each holding size class taking long-term loans is also given in this table. It may be seen that 26.24 per cent of small farmers, 21.15 per cent of semi-medium farmers, 36.20 pre cent of medium farmers and 30.78 per cent of large farmers in our sample have taken long-term (productive) loans that were still live and were being paid. These proportions suggest that long-term borrowing for productive purposes was quite wide-spread among the surveyed farmers; (See bottom of table 18) 27.53 per cent of all farmers in the state were borrowing on this account. It may be mentioned that since long-term (productive) borrowing is not a repetitive annual affair (as is the case of short-term crop loans discussed in the last chapter), these proportions (21.15 per cent to 36.20 per cent) indicate a very high degree of dependence of Punjab farmers on long-term borrowings for financing the purchase of agricultural machinery and for making other long-term investments. It is also revealed by a comparison of these proportions that the incidence of long-term (productive) borrowings is slightly higher in the two bigger holding size categories (medium farmers and large farmers) compared to the two smaller size-categories (Semi-medium farmers and small farmers)

So far as the amount of long-term (productive) borrowing per operated acre of the borrowing farmers is concerned, we do observe some tendency for this amount to decline as holding size increases. The long-term borrowing (productive) per operated acre of the borrowing farmers is the highest among semi-medium group of holdings (Rs. 17347) and second highest (Rs. 12407) among the small farms. In the two bigger size categories it is much smaller and declines as holding size increases. On the basis of the information presented in table 16 it can be safely inferred that per acre long term (productive) borrowings are much higher among small and semi-medium categories of farms compared to Medium and large farms categories. Combining the information in the relevant two columns of this table we may say that the proportion of small and semi-medium farms taking long-term productive loans is lower, but the amount borrowed by them per acre of their holdings is bigger; compared to medium and large farms who borrow for long-term productive purposes in greater proportion, but take smaller amount per acre operated by them.

Long Term (Productive) Borrowings : Estimates for the State as a Whole

The information given in table 16 on proportion of surveyed farms of each holding size-class borrowing and the amount borrowed per operated acre was used to build estimates of total long term (productive) borrowings in the state as a whole. The procedure used earlier to build up state level estimates of short-term borrowings was used and operated area of each holding size-class in the state was used to prepare these estimates. These estimates for the state as a whole (all holdings) and also separately for each of the four size-classes of holdings (small, semi-medium, medium and large) are presented in table 17. It may be observed from this table that in the state as a whole, the total amount of such long-term (productive) borrowings made by farmers in the last few years comes out to be Rs. 2670.99 crores. Out of this total amount of long-term productive borrowings 14.84 per cent (Rs. 396.15 crore) was borrowed by small farmers, 28.69 per cent (Rs. 766.56 crores) was borrowed by semi-medium farmers, 41.08 per cent (Rs. 1079.06 per cent) was borrowed by medium farmers and 15.39 per cent (Rs. 411.22 crores) was borrowed by large farms. A comparison of the share of different holding size-classes in the long-term (productive) borrowings described above, with their respective share in the operated area of the state (given in last column of table 13, Chapter III) clearly reveals the following pattern : (1) In the case of small and semi-medium farmers the share in total long-term (productive) borrowings is more than their respective

TABLE 17

LONG TERM BORROWINGS (PRODUCTIVE) : DISTRIBUTION BY HOLDING SIZE

(Amount in Rs. Crores)

Sr.No.	Holding Size Class	Amount borrowed upto the date of survey		Amount outstanding on the day of survey		Outstanding amount as percentage of borrowed amount
		Amount	Percentage	Amount	Percentage	
1.	**Small**	396.15	14.84	357.27	24.68	90.18
2.	**Semi-Medium**	766.56	28.69	532.73	36.80	69.49
3.	**Medium**	1097.06	41.08	201.65	13.93	18.38
4.	**Large**	411.22	15.39	355.97	24.59	86.56
5.	**Total**	2670.99	100.00	1447.62	100.00	54.20

Source : Estimated from Survey Information

shares in the operated area of the state; (2) In the case of large farmers the share in long-term productive borrowings is less than the share of this size-group in operated area; (3) In the case of medium farmers these two shares are almost the same. On the basis of these comparisons it can be said that small and semi-medium farmers in Punjab do not suffer any visible disadvantage in the availability of long-term productive credit. It may be mentioned that we reached a similar conclusion (in chapter III) about the availability of short-term credit to these small and semi-medium farmers.

Long-Term (Productive) Borrowings : Share of Different Credit Agencies

Among our surveyed farmers not even a single one reported having borrowed from informal - traditional credit agencies like commission agents for long-term productive purposes. As per our survey these informal sector credit agencies were conspicuously absent from this segment of the agricultural credit market. All the borrowings for long-term productive purposes have been made by our surveyed farmers from the formal sector credit agencies, namely Commercial Banks and Cooperative Primary Land Development Banks. The share of these two formal sector credit agencies in the long-term borrowings (productive) made by Punjab farmers was estimated on the basis of information gathered in our survey. These estimates are presented in table 18 and clearly reveal that these two formal sector credit agencies are almost evenly balanced in this segment of the agricultural credit market; though Commercial Banks are having a little edge over the Cooperative Primary Land Development Banks. It may be seen that out of the total estimated long-term (productive) borrowings in the state (Rs. 2670.99 crores), 54.99 per cent (Rs. 1458.06 crores) have been made from Commercial Banks and 45.41 per cent (Rs. 1212.93 crores) have been made from Cooperative Primary Land Development Banks.

The holding-size wise break up of the share of these two formal sector credit agencies in long-term (productive) borrowings in the state is reported in table 19. It may be seen that the distribution of Commercial Bank long-term productive loans by holding size and that of Cooperative Primary Land Development Banks, does differ though not very markedly. Small farmers as well as large farmers do seem to depend to a greater extent on Primary land Development

TABLE - 18
LONG TERM BORROWINGS (PRODUCTIVE)
(Estimated from Survey Information for State as a whole. Amount in Rs. Crores)

Credit Agency	Amount Borrowed and Live upto the Time of Survey		Amount Outstanding upto to the Time of Survey		Outstanding Amount as percent of Amount Borrowed
	Amount	Percent of Total	Amount	Percent of Total	
Commercial Banks	1458.06	54.59%	960.06	66.32%	65.84%
Co-operative Land Development Banks	1212.93	45.41%	487.56	33.68%	40.20%
Total	**2670.99**	**100.00**	**1447.62**	**100.00**	**54.20%**
Percent of Farmers Borrowings for Long-term Productive Purposes					27.53%
Borrowed Amount Per Operated Acre of Borrowing Farmers					Rs. 9737
Percent of Borrowing Farmers with Outstanding Loans					83.49%
Outstanding Amount Per Operated Acre of Farmers with Outstanding Loans					Rs. 6321

TABLE - 19

LONG TERM BORROWINGS (PRODUCTIVE) : DISTRIBUTION BY HOLDING SIZE AND CREDIT AGENCY

Holding Size Class	Cooperative Land Development Banks		Commercial Banks		Share in Total Productive Loans (Percent)	
	Ammount Borrowed (Rs. Crore)	Percent of Total	Amount Borrowed (Rs. Crore)	Percent of Total	Land Develop-ment Banks	Commercial Banks
Small	236.11	19.47	160.04	10.98	59.60	40.40
Semi - Medium	267.95	22.09	498.61	34.20	34.96	65.04
Medium	507.37	41.83	589.69	40.44	46.25	53.75
Large	201.50	16.61	209.72	14.38	49.00	51.00
All Holdings	1212.93	100.00	1458.06	100.00	45.11	54.59

Source : Estimated from Survey Information

Banks for long-term productive borrowings. On the other hand semi-medium farmers seem to be more dependent on Commercial Banks for meeting their long-term productive loan needs. Medium farmers seem to be equally dependent, for these loans, on Commercial Banks and Primary Land Development Banks.

II. Long-Term Productive Loans : Amount Outstanding

The information on long-term (productive) loans outstanding at the time of survey was analysed and is summarised in table 16, 17, 18 and 19. Before we look at this information to draw some inferences about long-term (productive) loans outstanding in the state, it is necessary that importance of the difference in outstanding long-term and outstanding short-term loans in clearly understood. The short-term loans taken by farmers to finance their working capital requirements for crop production operations, are supposed to be repaid after the harvesting and sale of the concerned crops. So any amount that is not repaid after the harvesting and sale of crops becomes outstanding and really indicates the inability of farmers to repay the entire amount of short-term loans taken. On the other hand long term loans are not supposed to be paid immediately after the sale of crops, rather are expected to be repaid over an extended period through instalments. So the amount of long-term outstanding loans as such does not signify any failure of borrowers to repay the long-term loans. Rather the outstanding amount of long-term loans indicates how much of the borrowed amount is still live and due on which interest has to be paid and the principal also to be repaid.

Long-Term (Productive) Loans Outstanding : Survey Information

The information on the proportion of borrowing farmers of each size-class, reporting outstanding loans, and the amount of outstanding loans per operated acre of these farmers having outstanding loans, is given in table 16. It may be seen that except for the large farm size category, the proportion of borrowing farmers having outstanding long-term (productive) loans is quite high and almost uniform : 83.91 per cent of small, 86.33 per cent of semi-medium and 90.21 per cent of medium farm sized borrowers were reporting some outstanding long-term (productive) loans. In the case of large farms, however, only 38.49 per cent of borrowers reported outstanding long-term productive loans. The amount of long-term (productive) loans outstanding per acre of operated area also displayed an interesting pattern. This amount is almost the same among small and semi-medium farms, but very small in case of medium farms. The amount of outstanding long-term (productive) loans per acre is again very high in the case of large farms (Rs. 11291 per acre). For all the farms taken together we find 83.49 per cent of borrowers reporting outstanding long-term (productive) loans and the amount outstanding per operated acre works out to be Rs. 6321 (see figure at the bottom of table 18). On the basis of this information we may conclude that a very high proportion of small and medium farmers have outstanding long-term (productive) loans and the amount outstanding per acre of their farms is also quite big. In the case of medium and large farms a more complex and interesting pattern emerges. A much higher proportion of medium farms have outstanding long-term (productive) loans, but the amount outstanding per acre operated by them is rather small. On the other hand, only a relatively smaller proportion of large farms reported outstanding long-term (productive) loans, but the amount outstanding per acre operated by them was quite big (Rs. 11291 per acre).

Long-Term (Productive) Loans Outstanding : Estimates for State as a Whole

The information on proportion of borrowing farmers having outstanding loans and amount outstanding per operated acre was used to build up estimates of total outstanding long-term productive loans in the state as a whole. The procedure used was the same as in chapter III; multiplying per acre outstanding amount with operated area of each holding size category in the state. These estimates are given in table 17 and reveal that Rs. 1447.62 crores of long-term (productive) loans (54.20 per cent of the total amount borrowed) was outstanding towards Punjab farmers at the time of our survey. Out of this amount : 24.68 per cent (Rs. 357.27 crore) was outstanding towards small farms, 36.80 per cent (Rs. 532.73 crore) was outstanding towards semi-medium farms, 13.93 per cent (Rs. 201.65 crores) was outstanding towards medium farms, and 24.59 per cent (Rs. 355.99 crores) was outstanding towards large farms. Comparison of share of each holding size class in total long-term (productive) loans outstanding and its respective share in operated area of the state clearly shows a pattern. In the case of two lower size-categories (small and semi-medium farms), share in long-term (productive) loans outstanding is much higher compared to their respective shares in operated area of the state. In the case of large farms these two shares are almost the same. However, medium farms share in outstanding long-term (productive) loans is much lower compared to their share in this operated area of the state. Information on percent of long-term (productive) loans outstanding given in the very table (17) also confirms the relatively better position of medium farms. Only 18.38 per cent of the total amount borrowed by them remains outstanding, compared to 90.18 per cent of small farms, 69.49 per cent of semi-medium and 86.56 per cent of large farms. Taking all farm sizes together we observe that 54.20 per cent of total amount borrowed for long-term productive purposes was outstanding towards formers in the state as a whole.

Long-Term (Productive) Loans Outstanding : Distribution By Credit Agency

Information on the amount and proportion of long term (productive) loans remaining outstanding in the case of each of the two credit agencies (Cooperative Land Development Banks and Commercial Banks) was also prepared and is presented in table 18. Out of the total long-term (productive) loans outstanding in the state (Rs. 1447.62 crores), 66.32 per cent (Rs. 960.60 crores) was due to Commercial Banks and the remaining 33.68 per cent (Rs. 487.56 crores) was due to Cooperative Bank. In the case of Commercial Banks 65.84 per cent of total amount advanced by them for productive long-term purposes remained unpaid and outstanding. On the other hand, only 40.20 per cent of long-term (productive) loans advanced by Primary Land Development Banks were outstanding. So we see a pattern similar to short-term (productive) loans (Chapter III) : Cooperative Credit Institution having a better recovery rate and lower proportion of outstanding amount compared to Commercial Banks.

CHAPTER - V

LONG-TERM BORROWINGS FOR NON-PRODUCTIVE PURPOSES

With the growth of income and prosperity in the Punjab rural side expenditure on social ceremonies, house building, consumer durables etc. has also grown at a fast rate. The financing of this expenditure on non-productive items is done by farmers partly out of their own past savings and partly out of borrowed funds. As a result of the almost single caste (Jat Sikh) complexion of Punjab farmers, demonstration effect on peasant families is also very strong. Even those farm families that are in deficit go in for huge expenditure on these non-productive activities / items due to this strong demonstration effect of their other caste brethren incurring this expenditure on social ceremonies and other items. These deficit farm families resort to borrowing to meet these non-productive expenditures. Formal sector credit agencies do not normally give loans for many of these non-productive activities (like social ceremonies). Even when there is a provision for some loans (for house buildings etc.) for non-productive purposes, farmers rarely go to these formal sector credit agencies for these loans because of their time consuming procedures and the complex paper work involved. For these loans for non-productive purposes farmers go to commission Agents and private money lenders. These loans normally involve big amounts and are repaid over a number of years. In our survey of 260 farms, we collected information on the long term (non-productive) loans taken by these surveyed farms and also the amount of such non-productive long-term loans outstanding at the time survey. In the case of these long-term loans also, the accounting was not done for a single year, rather information on amount borrowed and live (not yet fully paid back) at the time of survey and amount outstanding, was collected. This information is presented in tables 20 and 21 and is discussed in this chapter.

TABLE - 20

LONG - TERM BORROWINGS (NON - PRODUCTIVE) : DISTRIBUTION BY HOLDING SIZE

(Survey Information : Amount in Rupees)

Holding Size - Class	Amount Borrowed			Amount Outstanding		
	Percent of Farm Households Borrowing	Borrowed Amount Per Borrowing Household	Borrowed Amount Per Operated Acre of Borrowers	Percent of Borrowers with Outstanding Loans	Outstanding Amount Per Household and with outstanding Loans	Outstanding Amount Per Operated Acre of with Outstanding Loans
Small	27.19	14883	6109	85.71	13995	5745
Semi Medium	22.00	63188	8775	81.82	71348	9908
Medium	18.00	45423	2964	90.90	32395	2114
Large	10.71	9896	2497	66.67	11584	2923

Source : Field Survey

TABLE - 21

LONG - TERM BORROWINGS (NON - PRODUCTIVE) : HOLDING WISE DISTRIBUTION

(Estimated Amount in Rs. Crores)

Holding Size Class	Amount Borrowed upto the Date of Survey		Amount Outstanding on the day of Survey		Outstanding Amount as Percentage of Borrowed Amount	Percent of operated area of the State
	Amount	Percentage	Amount	Percentage		
Small	202.14	22.75	162.91	22.38	80.59	12.21
Semi - Medium	401.45	45.18	370.89	50.95	92.39	20.87
Medium	213.79	24.06	138.60	19.04	64.83	40.22
Large	71.17	8.01	55.54	7.63	78.04	26.70
Total	**888.55**	**100.00**	**727.94**	**100.00**	**81.92**	**100.00**
	(All Holdings)					
1.	Percent of Households Borrowing				28.50%	
2.	Borrowed Amount Per Operated Acre of Borrowing Households				Rs. 4951	
3.	Percent of Borrowing Households With Outstanding Loans				81.40%	
4.	Outstanding Amount Per Operated Acre of Households With Outstanding Loans				Rs. 2809	

Source : Estimated From Survey Information

Long-Term Loans (Non-Productive) : Amount Borrowed

Information on percent of surveyed farms of each holding size-class borrowing for non-productive purposes, amount borrowed per household and also amount borrowed per operated acre of these borrowing farmers is presented in table 20. It may be seen that 27.19 per cent of small farms, 22.00 per cent of semi-medium, 18.00 per cent of medium and 10.71 per cent of large farms reported having borrowed for long-term non-productive purposes. In the state as whole (all holding size categories taken together) 28.50 per cent of farm households (see table 21) were borrowing for non-productive purposes. The holding size-pattern of proportion of farmers borrowing for non-productive purposes emerges very clearly : the percent of farmers borrowing for non-productive purposes declines sharply as holding size-increases. This is in sharp contrast to the pattern of long-term productive borrowings observed in the last chapter.

The amount of these non-productive loans per borrowing household and per operated acre of these borrowing households shows a more complex pattern. Both these amounts (per household and per operated acre) are low in the case of large farms and high in the case of semi-medium farms. In the case of small farms, although the per household borrowed amount does not look very big, but in per operated acre terms it comes out to be very high. In the case of medium farms amount borrowed for non-productive purposes per household is the biggest of all holding size categories (Rs. 63188), and so is case of borrowed amount per operated acre (Rs. 8775). When we take all the holdings together than the borrowed amount per acre comes out to be Rs. 4951 (table 21) which is not a very big amount and just about half of the per acre borrowed amount for long-term productive purposes reported in table 18 of the last chapter.

Amount of Non-Productive Long-Term Loans : Estimates for the State as a Whole

The information presented in table 20 was used to work out the estimates of total amount of non-productive long-term borrowings of farmers in the state as a whole. These estimates are given in table 21 and indicate that a total amount of Rs. 888.55 crores has been borrowed (and was live) by Punjab farmers for non-productive purposes like social ceremonies, house buildings etc. Out of this total amount of Rs. 888.55 crores, 22.75 per cent (Rs. 202.14 crores) was borrowed by small farmers, 45.18 per cent (Rs. 401.45 crores) was borrowed by semi-medium farmers, 24.06 per cent (Rs. 213.79 crores) was borrowed by medium farmers and 8.1 per cent (Rs. 71.17 crores) was borrowed by large farmers. Comparison of share of different holding size classes in non-productive long-term loans with their respective share in operated area of the state (last column in table 21) reveals that in the case of the two lower size-classes of holdings (small and semi-medium), share in non-productive long-term loans was almost double compared to their respective shares in the operated area of the state. In the case of two bigger size-classes of holdings (medium and large), the reverse was true; their share in non-productive long-term loans was much lower compared to their respective shares in operated area of the state. On the basis of this above described disproportionality in the non-productive long term loan's share and operated area share and also the earlier described information on per acre amount of non-productive long-term loans, we may say that the burden of non-productive long-term loans is much higher on small and semi-medium farms compared to medium and large farms. This indicates that whereas medium and large farms are able to finance their non-productive expenditure on social ceremonies etc. from their own sources to a much bigger extent, the small and semi-medium farms borrow to a much greater extent to finance these non-productive expenses.

Long-Term (Non-Productive) Loans : Amount Outstanding

Information on amount of non-productive long-term loans outstanding per acre and per farmer family with outstanding loans, is given in table 20. The proportion of borrowing farms in each holding size category which have outstanding non-productive long-term loans is also given in this table. It may be seen (from table 21) that in the state as a whole 81.40 per cent of borrowing farmers are estimated to be having outstanding non-productive long-term loans. Looking at the information in table 20 we observe that 85.71 per cent of small farmers, 81.82 per cent of semi-medium, 90.90 per cent of medium and 66.67 per cent of large farmers reported outstanding non-productive long-term loans. As is clear this proportion of borrowers with outstanding non-productive long-term loans does not differ much among small, semi-medium and medium farmers; only among large farmers it is significantly lower (66.67 per cent). On the whole one can say that most of the borrowers who took non-productive long-term loans failed to repay the whole amount and were having outstanding loans standing against them.

The amount outstanding, of these loans, per family with outstandings and also per operated acre of these farmers reveals that in the case of large farms both these figures were quite low. Even in the case of medium farms outstanding amount per operated acre was quite low. The outstanding amount per operated acre of these non-productive long-term loans was the highest among semi-medium farmers (Rs. 9908); it was also quite high in the case of small farmers (Rs. 5745 per operated acre). On the whole one may say that the incidence of outstanding non-productive long-term loans was relatively higher among small and semi-medium farmers compared to medium and large farmers.

Amount of Non-Productive Long-Term Loans Outstanding : Estimates for the State as a Whole

The information on per operated acre amount of non-productive long-term loans given in table 20 was used to build up estimates of total non-productive loans amount outstanding in the state as a whole. The standard procedure used earlier was employed for this purpose. These estimates are reported in table 21. It may be seen that in Punjab as a whole (all holding sizes taken together) Rs. 727.94 crores of non-productive long-term loans were outstanding at the time of our survey. Out of this total outstanding amount of non - productive long - term loans, 22.38 per cent (Rs. 162.91 crores) were due towards small farmers, 50.95 per cent (Rs. 370.89 crores) were due towards medium farmers, 19.04 per cent (Rs. 138.60 crores) were due towards medium farmers and only 7.63 per cent (Rs. 55.54 crores) were due towards large farmers. Comparison of their respective shares in outstanding non-productive long-term loans and operated area of the state (last column of table 21) we observe that the share in outstanding non-productive loans of small and semi-medium farms is almost double and more than double compared to their respective shares in operated area of the state. On the other hand, in the case of medium farmers and large farmers the share in outstanding non-productive long-term loans is less than half and less than one-third compared to their respective shares in the operated area of the state.

Looking at the outstanding non-productive long-term loans from a different angle we observe that 81.92 per cent of the total non-productive long-term loans were outstanding towards farmers in the state. Holding size wise information on this aspect given in table 21 indicates that 82.59 per cent of the non-productive loans taken by small farmers, 92.39 per cent by semi-medium farmers, 64.83 per cent by medium farmers and 78.00 per cent by large farmers were still outstanding. Looking at from this angle the differences in the incidence of outstanding non-productive long-term loans among holdings of different size do not seem to be very marked. On the whole one may conclude that the burden of outstanding long-term non-productive loans was greater on smaller size-categories of farmers.

CHAPTER VI

ESTIMATES OF MORTGAGE DEBT

Borrowing farmers are forced to mortgage out land whenever the possibility of repayment of the loans taken is remote and even the annual interest repayment cannot be maintained. Under this arrangement the lender takes over a piece of land owned by the borrower and retains it till the loan is repaid i.e. the borrowed principal is returned. The notional rent of this mortgaged out piece of land is supposed to cover the annual interest charge of the loan taken by the borrower. The mortgage debt indicates chronic loans which borrowers have failed to repay on the agreed time schedule and are not even expected to be repaid in the near future. Most of the mortgage debt arises out of borrowings for non-productive purposes. But some part of it may have originated initially even in borrowings for productive investment purposes, which misfired and did not result in enhancing the earning capacity of the borrowing farmers and enbale them to repay the amount borrowed.

MORTGAGED OUT LAND AND MORTGAGE DEBT OF SURVEYED FARMERS

In our survey we have collected sufficient information on mortgaged out land and amount of mortgage debt of the surveyed farmers. This information is tabulated and summarised in table 22 and reveals that 13.59 per cent of small farmers and 3.58 per cent of large farmers were having some land mortgaged out and the resulting mortgage debt. In contrast to these two extreme size categories of farmers, in the middle size-categories of farmers (semi-medium and medium) the incidence of mortgaging out land was small; only 2 per cent farmers in these two-size categories of farms reported having some mortgaged out land. It may also be seen from information given in this table that small farmers have mortgaged out as much as 4.46 per cent of their owned land and large farmers have mortgaged out 3.58 per cent of their owned land. In the case of semi-medium and medium farmers, per cent of owned area mortgaged

TABLE - 22

MORTGAGED OUT LAND AND MORTGAGE DEBT : INFORMATION ON SURVEYED HOLDINGS

Holding Size - Class	Percent of Households Mortgaging Out Land	Percent of Owned Area Mortgaged Out	Total Mortgage Money Received (Rs. Lakhs)
Small	13.59	4.46	11.70
Semi - Medium	2.00	0.41	0.57
Medium	2.00	0.19	0.32
Large	3.57	3.58	6.80

out was only 0.41 and 0.19 respectively. The amount of mortgage money received (the principal of the loan taken) by mortgaging out land in each holding size-class is given in last column of this table and indicates that surveyed small farmers have raised loans equal to Rs. 11.70 lakhs by mortgaging out land and large farmers have borrowed Rs. 6.80 lakhs against mortgaged out land. The amount borrowed against mortgaged out land, however, was quite small in the case of semi-medium farmers (Rs. 0.57 lakhs) and medium farmers (Rs. 0.32 lakhs). One thing becomes quite clear from the information on surveyed farmers presented in table 22; that the incidence of mortgaging out land to raise substantial amounts of loans was prevalent much more among the small and large farmers, compared to semi-medium and medium farms. This is a very interesting pattern which needs considerable further investigation to uncover the reasons behind it.

ESTIMATES OF MORTGAGE DEBT FOR THE STATE AS A WHOLE

Information given in table 22 was used to build up estimates of total mortgage debt of farmers in the state as a whole. The same standard procedure used earlier was employed; operated area of each holding size class in the state was multiplied by mortgaged money received per acre of operated area. These estimates are presented in table 23 and indicate that farmers in the state as a whole have received Rs. 406.02 crores of mortgage money (consideration money in revenue records jargon) by mortgaging out land. So the total amount of mortgage debt of farmers in the state is Rs. 406.02 crores according to our estimates.

Out of this total mortgage debt of Rs. 406.02 crores, 60.05 per cent (Rs. 243.81 crores) is taken by small farmers and another 29.92 per cent (Rs. 121.48 crores) is taken by large farmers. The amount of mortgage debt against semi-medium farmers was only Rs. 24.89 crores (6.13 per cent of state total) and against medium farmers Rs. 15.84 crores (3.90 per cent of state total). It may be seen that 89.97 per cent of total mortgage debt in the state was due towards small and large farmers and only 10.03 per cent towards semi-medium and medium farmers. This confirms our earlier conclusion that the practice and the incidence of raising loans by mortgaging out land is somehow confined mainly

TABLE - 23

ESTIMATES OF MORTGAGE DEBT : HOLDING SIZE WISE

(Amount in Rs. Crores)

Holding Size Wise Distribution

Holding Size - Class	Amount of Mortgage Debt	Percent of State Total
Small	243.81	60.05
Semi - Medium	24.89	6.13
Medium	15.84	3.90
Large	121.48	29.92
All Holdings (State Total)	406.02	100.00

Source : Estimated From Survey Information

to small and large farmers (the two extreme size categories of holdings) and most of the mortgage debt in the state is also due towards these two size-categories of farmers. In the case of semi-medium and medium farmers the practice of mortgaging out land to raise loans is relatively much less popular and only a small amount of loan has been raised by farmers of these two size-classes through this financial mechanism.

CHAPTER VII

INDEBTEDNESS OF PUNJAB FARMERS : EXTENT AND BURDEN

On the basis of information quantified and presented in the preceding chapters, it is now possible to work out a reasonable estimate of total debt of farmers in the state. Indebtedness is a difficult concept to define and there can be genuine difference of opinion on what it exactly means, or should mean. We have defined total debt as the amount on which farmers have to pay interest i.e. the principal amount that is due towards them and has to be repaid. On the basis of this definition total debt of farmers will consist of the following :

(Amount of short-term recurring Borrowings) + (Amount of long-term productive loans outstanding) + (Amount of long-term non-productive loans outstanding) + (Amount of mortgage debt)

It may be noted that although the short-term loans taken by farmers are mostly repaid back after harvesting and sale of crops, yet this constitutes debt because interest has to be paid on these loans every year as the amount is borrowed again and again every year to finance the crop production operations. So these short-term crop loans amount continues from year to year and may be called recurring debt. Similarly, although on mortgage debt no interest is paid by the borrower apparently, yet the rent of mortgaged out land being sacrified by the mortgagor (borrower) is the actual (but hidden) interest being paid by him on this amount.

I. ESTIMATES OF TOTAL DEBT

Estimated total debt of Punjab farmers is given in table 24. This information has been brought forward from the previous chapters in which estimates of loans of each type taken by farmers were presented. It may be seen that at present total estimated debt of farmers in the state is Rs. 5700.91 crores. Out of this total amount of debt, 54.72 per cent (Rs. 3119.33 crores) is short-term crop loans

TABLE - 24

ESTIMATES OF INDEBTEDNESS OF PUNJAB FARMERS
(Amount in Rs. Crores)

	Credit Agency					
Nature and Type of Debt	Commercial Banks	Cooperative Institutions	Commission Agents	Agriculturist Mortgages	Total Debt (All Agencies)	
Short - Term Credit Productive (Annual Flow)	146.89	1059.86	1912.58	-	3119.33	(54.72)
Long - Term Productive (Amount Outstanding)	960.06	487.56	-	-	1447.62	(25.39)
Long - Term Non Productive (Amount Outstanding)	-	-	727.94	-	727.94	(12.77)
Long - Term Mortgage Debt	-	-	-	406.02	406.02	(7.12)
Total Debt (Agency Wise)	**1106.95 (19.42)**	**1547.42 (27.14)**	**2640.52 (46.32)**	**406.02 (7.12)**	**5700.91 (100.00)**	**(100.00)**

Note : Figures in Parentheses are Percentages

recurring debt; 25.39 per cent (Rs. 1447.62 crores) is the outstanding amount of long-term loans taken for productive purposes; 12.77 per cent (Rs. 727.94 crores) is the outstanding amount of long-term loans taken for non-productive purposes; and 7.12 per cent (Rs. 406.02 crores) is the mortgage debt on mortgaged out land.

Credit source-wise / agency-wise distribution of this total debt of farmers in the state is also given in this table. It may be observed that out the total debt amount of Rs. 5700.91 crores, 19.42 per cent (Rs. 1106.95 crores) is due to Commercial Banks; 27.14 per cent (Rs. 1547.42 crores) is due to Cooperative Sector Institutions (Primary Credit Societies and Land Development Banks); 46.32 per cent (Rs. 2640.32 crores) is due to Commission Agents; and 7.12 per cent (Rs. 406.02 crores) is due to agriculturist mortgagee farmers who have mortgaged in land of the indebted farmers.

It may be noted 53.44 per cent of total debt of farmers in the state was due to informal sector credit agencies like Commission Agents and Agriculturist mortgagees, and the remaining 45.56 per cent was due to formal sector credit agencies like Commercial Banks, Primary Agricultural Cooperative Credit Societies and Primary Land Development Banks. It may not be wide of the mark to conclude that the farmers in Punjab owe almost equal amounts to formal and informal sector credit agencies.

HOLDING SIZE-WISE DISTRIBUTION OF DEBT

Holding size-wise estimates of total debt of farmers were also worked out and are presented in table 25. It may be seen that out of total debt of Rs. 5700.91 crores, 21.57 per cent (Rs. 1229.58 crores) was due towards small farmers; 28.97 per cent (Rs. 1651.31 crores) was due towards semi-medium farmers; 29.72 per cent (Rs. 1694.49 crores) was due towards medium farmers; and 19.74 per cent (Rs. 1125.53 crores) is due towards large farmers. Information on amount of debt per operated acre of each holding size-class is also presented in the last column of this table and indicates that per acre debt was the highest among small farmers (Rs. 10105) and second highest among

TABLE - 25
HOLDING SIZE WISE INDEBTEDNESS OF PUNJAB FARMERS
(Amount in Rs. Crores)

		Nature and Type of Debt				Percent Share in Total Debt		Total Debt Per Operated Acre (Rupees)
Holding Size - Class	Productive Short-Term Credit (Annual Flow)	Long-Term Productive (Amount-Outstanding)	Long-term Non-Productive (Amount Outstanding)	Long - term Mortgage Debt	Total Debt	Productive	Short-Term	
Small	465.59	357.27	162.91	243.81	1229.58 (21.57)	63.92	37.87	10105
Semi-Medium	722.80	532.73	370.89	24.89	1651.31 (28.97)	76.03	43.77	7941
Medium	1338.40	201.65	138.60	15.84	1694.49 (29.72)	90.89	78.99	4228
Large	592.54	355.97	55.54	121.48	1125.53 (19.74)	84.27	52.65	4230
All Holdings	3119.33	1447.62	727.94	406.02	5700.91 (100.00)	80.11	54.72	5721

Note : Figures in Parentheses are percentage

semi-medium farmers (Rs. 7941). Among medium and large farmers per acre debt was relatively smaller being Rs. 4228 and Rs. 4230 respectively. For all size-classes of holdings taken together per operated acre debt amount comes out to be Rs. 5921.

PURPOSE-WISE AND DURATION WISE DISTRIBUTION OF DEBT

Proportion of total debt due to loans taken for productive purposes was also worked out and this information is also presented in this table. It may be seen that 80.11 per cent of total debt of farmers in the state has resulted from loans taken by them for productive investment purposes and only 19.89 per cent from the loans raised by them for non-productive purposes. It may also be observed that the proportion of total debt resulting from loans taken for productive purposes was lower among small farmers (66.92 per cent) and semi-medium farmers (76.03 per cent), compared to medium farmers (90.89 per cent) and large farmers (84.27 per cent). On the basis of this information we can conclude that a greater proportion of debt of small and semi-medium farmers originated from loans taken for non-productive purposes, compared to medium and large farmers.

Proportion of total debt arising due to short-term recurring borrowings to finance crop production operations every year, and the proportion of long term debt was also estimated and these estimates are also presented in this table. It may be seen that 54.72 per cent of total debt of farmers in the state was in the form of annually recurring short-term crop loans, and the remaining 48.25 per cent was the outstanding amount of long-term loans taken for productive and unproductive purposes and the mortgage debt. It may also be seen that a relatively lower proportion of the debt of small farmers (37.87 per cent) and semi-medium farmers (43.77 per cent) was in the form of recurring short-term crop loans, compared to medium farmers (78.99 per cent) and large farmers (52.65 per cent).

II. ESTIMATES OF BURDEN OF DEBT

The burden of debt can be quantified and assessed with the help of many indicators, the more important of which are following :

(I) Ratio (proportion) of interest payments on debt to net income of the farmers out of which these interest payments are to made.

(II) Ratio (proportion) of annual amortization amount (payment) to net income of farmers, out of which this amortization amount is to be paid. Amortization amount (payment) is the annual amount that must be paid if the principal (of debt) and interest payments on it are to be completely liquidated in a given period of time

(III) Annual amount of interest payments on debt per acre operated by the farmers in the state.

(IV) Ratio (proportion) of annual interest burden per acre to rental surplus per acre from crop production. A measure of rental surplus per acre is the average going rate of cash rent per acre in the surveyed villages.

(V) Ratio (proportion) of total debt to the total value of land owned by farmers. Land can be valued at the current average price per acre prevailing in the surveyed villages.

(VI) Ratio (proportion) of total debt to the total mortgage money that can be raised by notionally mortgaging out all owned land of the farmers at the average going rate of mortgage money per acre.

(VII) Ratio (proportion) of short-term recurring debt to total cash expenditure on crop production.

(VIII) Ratio (proportion) of outstanding long-term debt to value of tractors, tubewells and other machinery owned by farmers.

Many other indicators can also be devised and used to quantify and assess the burden of debt on the farmers. No single indicator out of these will tell the full story of burden of debt. All of these used together can be more helpful in throwing light on different facets of burden of debt on the farmers. We have used most of the above described measures to quantify and assess the burden of debt on farmers in the state and resulting estimates are summarised in table 26.

TABLE - 26

BURDEN OF DEBT ON PUNJAB FARMERS

1.	Annual Interest Charges (Absolute Amount) (@ 14% on debt due to formal Sector Agencies) (@ 24% on debt due to informal Sector Agencies)	Rs. 1102.78 crores
2.	Annual Interest Charges as Percent of Net State Domestic Product Originating in Agriculture (NSDPA) at Current Prices	10.96 %
3.	Annual Interest Charges Per Operated Acre	Rs. 1073.77
4.	Annual Interest Charges as Percent of Rental Surplus from Farming (Rental Surplus Per Acre = Average cash Rent Per Acre)	21.48%
5.	Short - term Credit as Percent of Cash Costs of Production of Crops in each Crop Season	90.42%
6.	Principal and Interest Charges as Percent of NSDPA at Current Prices	67.60%
7.	Principal and Interest Charges Per Operated Acre	Rs. 6621.73
8.	Principal and Interest Charges as Percent of Total Rental Surplus from Agriculture	132.44%
9.	Owned Area that Farmers will have to Mortgage Out if annual Interest Charges are to be frozen (@ of Average Mortgage Money Per Acre Prevailing in the State)	13.25%
10.	Owned Area that Farmers will have to sell if the Debt is to be Completely liquidated (@ of average Price of Land Prevailing in the State)	3.31%
11.	Long-Term productive debt Outstanding as Percent of Total Estimated Value of Tractors and Tubewells owned by Farmers	15.04%
12.	Long-Term Total debt (Productive and Non-productive) Outstanding as Percent of Estimated Value of Tractors and Tubewells Owned by Farmers	26.82%

@ Cash Rent Rs. 5000 per acre

@ Mortgage Money Rs. 50000 per acre

@ Land Price Rs. 2.00 lakh per acre

These estimates indicate that the annual recurring interest charge on farmers' debt in the state comes out to Rs. 1102.78 crores -- a fairly big amount in absolute terms. This annual interest burden absorbs (eats up) about 11 per cent of the net income originating from crop production operations of the farmers. This annual recurring interest charge works out to Rs. 1173.77 per operated acre of all land under cultivation in the state and absorbs (eats up) about 21.48 per cent of the net rental surplus (notionally) arising in farming -- when average cash rent per acre is taken as the measure of net surplus originating in agriculture. On the basis of these estimates it may not be wrong to say that the burden of annual interest payments arising out of their indebtedness is quite heavy on Punjab farmers.

Looked at from an other angle, it may be seen that total debt is about 70 per cent of the net state domestic product originating in agriculture in the state in a year. It means almost three-fourth of one years total agricultural income of the state has to paid if the total amount of debt is to be liquidated. When the total amount of debt is compared with the total rental surplus originating in agriculture in the state in a year, it is seen that total debt is 32 per cent more than the rental surplus of one year (notionally calculated at the rate of average cash rent per acre prevailing in the surveyed villages) on the entire farm land of the state. It may also be observed that only by selling 3.31 per cent of the total farm land area of the state (at the current average price per acre) the total debt can be liquidated. Looked at from another angel, it may be seen that 13.25 per cent of total farm land area of the state must be mortgaged out by farmers (at the current going rate per acre of mortgage money) to even freeze the annually recurring interest charge on total debt. All these indicators point towards quite a heavy burden of debt on Punjab farmers compared to the value of land owned by them. This burden is further highlighted when we observe that 90.42 per cent of the total cash expenditure incurred by farmers in the state on raising crops, has to be borrowed by them and they do not have any surplus savings of their own to carry out crop production operations. This means crop production in

Punjab has become almost completely dependent on recurring short-term crop loans.

However, when we compare the outstanding amount of long-term (productive and non-productive) loans with the value of tractors, tubewells and other machines owned by farmers in the state, then the burden does not seem that high. It may be seen from this table that outstanding amount of long-term productive loans was only 15.04 per cent of the estimated value of tractors, tubewells, electric motors and diesel engines owned by them. Even when we take the outstanding long-term loans (productive and unproductive) in entirety, these constitute only 26.82 per cent of the total estimated value of tractors and tubewell etc. However, the lightness of debt burden suggested by these ratios is illusory, because farmers are not building up any depreciation fund (like Industry) to replace these machines as and when these become completely worn out junk and have to be replaced. Farmer's will have to then take huge fresh loans to replace these machines and get heavily indebted again.

Information presented in table 25 also suggests that burden of debt varies inversely with holding size. The burden of debt (in terms of any of the indicators) is higher on small farm size-categories. It may be observed that per acre amount of debt is higher in the small size-categories compared to bigger size-categories. Comparison of share of farm size-categories in total farm debt in the state with their respective shares in operated area of the state indicates that the share in debt is higher compared to operated area in the case of lower sized farms and reverse is the case for bigger sized farms. All this information indicates heavier burden of debt on small and semi-medium farmers compared to medium and large farmers.

CHAPTER - VIII

FARMER'S PERCEPTIONS ABOUT CREDIT AVAILABILITY AND INDEBTEDNESS

In the schedule canvassed to 260 sample farms, we have included a large number of questions to get and assess the views and perceptions of the surveyed farmers about all the important and relevant aspects of rural credit situation in the state. More specifically we have included questions to collect information about the following aspects of the rural credit situation : (1) availability of short-term credit and problems connected with it; (2) farmer's preference about various credit agencies for getting loans; (3) reasons for farmer's preference for particular credit agencies; (4) farmer's views about the functioning of cooperative credit institutions; (5) farmer's views about the functioning of commercial banks in the rural credit market; (6) farmer's perceptions about the functioning and usefulness of commission agents in rural credit market; and (7) farmer's perceptions about the reasons for indebtedness of the peasantry in the state. This information was analysed and has been summarized in tables 27 to 33 and is discussed in the next few pages.

I. Farmer's Perceptions About Availability of Short-Term Credit

We have seen in chapter III, how about 85 per cent of farmers in the state are now using and dependent on short- term credit to carry out their crop production operations. In view of that, their (farmers) perceptions / views about the availability of short-term credit in the state become very important for understanding the rural credit and indebtedness situation in the state. Information on farmers perceptions about the availability of short-term credit and various aspects of it is summarised in table 27 and reveals many interesting aspects of farmers thinking. As many as 86.29 per cent of surveyed farmers admitted being dependent on short-term credit for successfully carrying out their

TABLE - 27

PERCEPTIONS OF SURVEYED FARMERS ABOUT THE SHORT-TERM CREDIT AVAILABILITY IN THE STATE

S.N.	Perception Description	Percentage
1.	Farmers Dependent on Short-term Credit for Carrying Out their Crop Operations	86.29%
2.	Percent of Borrowing Farmers who are Borrowing Short-term from More than One Credit Agency	54.22%
3.	Percent of Borrowing Farmers who Feel their Dependence on Short-term Loans Adversely Affects their Crop Operations	62.69%
4.	Percent of Borrowing Farmers who did not Experience much Difficulty in Getting Adequate Short-term Credit for Crop Operations	75.48%
5.	Percent of Borrowing Farmers who got Adequate Amount of Short-term Credit for Meeting their Production Needs	79.11%
6.	Percent of Borrowing Farmers who got Short-term Credit on Time when Needed for Crop Operations	77.73%
7.	Percent of Borrowing Farmers who Feel their Dependence on Short-term Credit Adversely Affects the Timeliness of Crop Operations	57.85%
8.	Percent of Borrowing Farmers who Feel their Dependence on Short-term Credit Adversely Affects the Amount of Farm Imputs used by them in Farm Operations	58.47%

crop production operations. Out of these borrowing (86.29 per cent) farmers, 54.22 per cent revealed that they are routinely borrowing from more than one credit agency. This shows that there is no watertight separation in the client segments of short-term credit market in which various credit agencies are operating; rather their farmer clients are highgly inmeshed. 75.48 per cent of these borrowing farmers experienced no difficulty in arranging the short-term credit needed by them and 79.11 per cent revealed that they were able to get adequate / needed amount of short-term credit to carry out their crop operations. 77.73 per cent of the borrowing farmers also revealed that they were able to get short-term credit on time (when needed), without any delay, for purchasing inputs or other short-term working capital requirements. From the information presented upto now one gets a very encouraging picture about the working of short-term credit system in the rural areas of the state and a great majority of farmers seem to be quite satisfied with the availability of short-term credit. However, we did get some information from these very surveyed farmers that reveals their worries and apprehensions about their dependence on borrowed money to carry out their crop production operations. 62.69 per cent of borrowing farmers have a feeling that their dependence on borrowed money adversely affects their crop operations; 57.85 per cent were of the view that their dependence on borrowed money to purchase farm inputs adversely affects the timeliness of their crop operations; 58.47 per cent were of the view that the quantity of farm inputs used by them per acre is adversely affected (is reduced) because of their dependence on borrowed money to purchase these inputs. On the whole one can say that borrowing farmers were quite satisfied with availability of short-term credit in the rural areas of the state, although they do not like their dependance on it to carry out production operations.

II. Preference For Credit Agencies

Information on farmer's preferences for different credit agencies is summarised in table 28. It may be seen that 58.03 per cent of the surveyed farmers preferred traditional credit agencies (namely Commission Agents) for satisfying

TABLE - 28

PREFERENCE PATTERN OF SURVEYED FARMERS FOR CREDIT AGENCIES

(Figures are in Percentages)

Credit Agency	Credit Type		
	Short-Term Credit (Productive)	Long -Term Credit (Productive)	Long-Term Credit (Non-Productive)
1. Traditional / Informal Sector Agencies	58.03%	20.79%	85.89%
A. Commission Agents (Artias)	56.67%	15.96%	65.78%
B. Money Lenders and Other Private Sources	1.36%	4.83%	20.11%
2. Modern Sector / Formal Sector Credit Agencies	41.97%	79.21%	14.11%
A. Cooperative Credit Institutions	35.10%	19.89%	3.00%
B. Commercial Banks and Regional Rural Banks	6.87%	59.32%	11.11%

their short-term credit needs for carrying out crop operations. 41.97 per cent of surveyed farmers preferred formal sector credit agencies for short-term crop loans and out of these 35.10 per cent preferred primary agricultural cooperative credit societies for crop loans and only 6.87 per cent preferred to go to commercial banks. The dominanace of traditional Commission Agents in farmers' preference for getting crop loans emerges very clearly. Equally clearly emerges the reluctance of farmers to go to commercial banks for these crop loans. Cooperative sector institutions, however, seem to have made a major niche in farmers' preference pattern for getting short-term crop loans.

Long-Term (Productive) Credit

Farmers' preference for credit agencies for getting long-term productive loans to purchase agricultural machinery etc. was just the reverse of their preference pattern in the case of short-term loans. For long-term productive loans 79.21 per cent of surveyed farmers preferred formal sector credit agencies like Commercial Banks and Primary Land Development Banks and only 20.79 per cent expressed their preference for traditional credit agencies like Commission Agents. Out of the two formal sector credit agencies, Commercial Banks seem to be their first and clear preference: as many as 59.32 per cent of surveyed farmers' preferred Commercial Banks for long-term productive loans and only 19.89 per cent expressed preference for Cooperative Primary Land Development Banks.

Long-Term (Non-Productive) Credit

For getting long-term credit for non-productive purposes like social ceremonies, 85.89 per cent of surveyed farmers preferred traditional informal sector credit agencies, only 14.11 per cent expressed their preference for formal sector credit agencies for this type of loans. Out of the traditional informal sector credit agencies, Commission Agents were clearly their first and dominant choice for getting this type of loans; 65.78 per cent of surveyed farmers expressed preference for Commission Agents for getting long-term (non-productive) loans.

TABLE - 29

PREFERENCE FOR CREDIT AGENCIES : REASONS GIVEN BY SURVEYED FARMERS

(Figures are in Percentages)

Reasons Given for preferring the Credit Agency	**Credit Type**		
	Short-Term Credit (Productive)	Long-Term Credit (Productive)	Long-Term Credit (Non-Productive)
1. Ease of Getting the Loan	63.59%	25.77%	71.69%
2. Low Interest Rate	30.54%	62.88%	10.10%
3.Flexibility in Repayment of Loans	6.05%	7.83%	10.79%
4. Other Reasons	2.80%	3.52%	7.42%

On the basis of information given in table 28 it may not be wrong to conclude that for getting short-term crop loans farmers prefer Commission Agents and Primary Cooperative Credit Societies, for long-term (productive) loans they prefer Commercial Banks and Primary Land Development Banks and for getting long term (non-productive) loans their preference is for Commission Agents and other private money lenders. It seems each of the three credit agencies has created its own clear niche in the preference pattern of Punjab farmers.

III. Reasons For Farmer's Preference For Credit Agencies

Why farmers prefer different credit agencies? What are the reasons for this preference? Farmers views on these questions are summarised in table 29 and are quite revealing.

In connection with their choice and preference for taking short-term crop loans, the most important factor that determined their choice of a credit agency was the 'ease of getting loans'; 63.59 percent farmers gave this as the main reason. The rate of interest charged by a credit agency was a much less important factor in choosing a credit agency for short-term loans. In the rubric `ease of getting loans' is included the absence of paper work and various other psychological and non-psychological transaction costs that farmers have to face in getting loans from formal sector credit agencies. To avoid these transaction costs farmers prefer Commission Agents for taking short-term crop loans and do not mind even paying their high rate of interest.

In the case of long-term (productive) loans for purchasing machinery etc. the main reason for preferring a credit agency by farmers was the interest rate charged by it; credit agencies charging lower interest rate were a clear preference over the ones charging higher interest rates. 'Ease of getting the loan' was a relatively much less important factor (Compared to lower interest rate) in determining the choice of credit agency for these long-term (productive) loans. In case of these loans, it seems, farmers were not much bothered by the paper work involved and other formalities and lower interest rate was the determining factor. The amount of loan being very big even a one

TABLE - 30

PERCEPTIONS OF SURVEYED FARMERS ABOUT THE SHORT-TERM CREDIT SUPPLIED BY PRIMARY COOPERATIVE CREDIT SOCIETIES

S.N.	Perception Description		Percentage
1. (A)	Percent who are Members of Primary Cooperative Credit Societies		63.10
(B)	Percent who are not Members of any Primary Cooperative Credit Societies		36.90
2.	Reason Given for not Becoming Member of Primary Cooperative Credit Society by Non-members Mentioned in 1 (B) above	a) No Cooperative Credit Society in the Village	21.68
		b) Ignorant About the Credit facilities and Benefits to members of Cooperative Credit Societies.	21.95
		c) Prefer to deal with and get their credit needs satisfied from other credit agencies	56.37
3.	Percent of Cooperative Credit Society members (1 A above) reporting poor quality of fertilizers Supplied by Cooperatives		30.63
4.	Percent of Cooperative Credit Society members reporting satisfaction with the timeliness of Supply of fertilizers by Cooperative Credit Societies		92.37
5.	Percent of Cooperative Credit Society members reporting satisfaction with the quantity (Amount) of Fertilizers Supplied by Cooperative Credit Societies		69.12
6.	Percent of Cooperative Credit Society Members in Favour of delinking (On the Pattern of Commercial Banks) of Fertilizer Purchase from Credit given by Cooperative Credit Societis		63.96

per cent lower interest rate will make a big absolute reduction in the absolute amount of interest to be paid by farmers.

In the case of long-term non-productive loans again the 'ease of getting the loan' was the most important factor in choosing a credit agency; as high as 71.69 per cent of surveyed farmers gave this as the main reason for their preference for a credit agency for this type of loans. In this type of loans, interest rate charged by a credit agency played only a very small part in determining farmers choice of a credit agency; only 10.10 per cent mentioned interest rate as the deciding factor in the choice of credit agency. It seems that in the case of non-productive long-term loans transaction costs of getting credit from formal sector credit agencies are very high, and that is why informal sector credit agencies are preferred for this type of loans.

IV. Farmer's Perceptions About Cooperative Credit Institutions

Surveyed farmer's views / perceptions about the working and credit supplied by cooperative credit institutions in the state are summarised in table 30. 63.10 per cent of surveyed farmers were members of primary cooperative agricultural credit societies and the remaining 36.90 per cent have not joined these credit societies.

Out of these 36.90 per cent non-members; 21.68 per cent could not become members because there was no cooperative credit society in their village; 21.95 per cent were not members because they were not even aware that such an institution exists and they can benefit from its membership, 56.37 per cent did not become members of cooperative credit societies out of preference because they said they prefer to deal and get loans from the other two (Commission Agents and Commercial Banks) credit institutions.

Out of 63.10 per cent who were members of primary cooperative credit societies : only 30.63 per cent were not satisfied with the quality of chemical fertilizers supplied by cooperative credit societies, the great majority (69.37 per cent) were quite satisfied with the quality of fertilizers given on credit; 92.37 per

TABLE - 31
PERCEPTIONS OF SURVEYED FARMERS ABOUT THE SHORT-TERM CREDIT BY COMMERCIAL BANKS

S.N.		**Perception Description**	Percentage
1.	**(A)**	Percent of Surveyed Farmers who Borrow from Commercial Banks for Short-term Production Needs.	8.85%
	(B)	Percent of Surveyed Farmers who have never Approached Commercial Banks for Short-term Credit Purpose	91.15%
2.	**Reason Given for not Approaching Commerical Banks for Short-term Credit Needs by those Mentioned in 1 (B) above**	Ignorance about the Short-term Credit Facilities Available in Commercial Banks.	25.97%
		Psychological Hesitation / Barrier in Approaching the Commercial Banks for Short-term Loans	18.80%
		Did not Approach the Commercial Banks for Short-term Credit because lot of Paper Work is Involved	19.37%
		Prefers to Deal with Other Credit Agencies for Short-term Credit Needs.	35.87%
3.	**Experience of [Those mentioned in 1 (A) above] about the Commercial Bank Short-term Credit System**	Experienced Great Difficulty in Getting Short-term Loans from Commercial Banks	41.86%
		Experienced no Difficulty in Getting Short-term Loans from Commercial Banks	58.14%

cent were satisfied with the timelines of chemical fertilizers supplied on credit by cooperative credit societies; 69.12 per cent were satisfied with the amount (quantity) of fertilizers supplied by these societies - it being adequate for their crop production operations. On the basis of this information, it can be said that a great majority of members of the cooperative credit societies were quite satisfied with their current system of supplying chemical fertilizers on credit to farmers. In spite of such clear and wide spread satisfaction with the current system of fertilizer supply by Cooperatives, as many as 63.96 per cent still favoured the delinking of fertilizer supply from the crop loans given by cooperatives and favoured the system followed by Commercial Banks in which the borrowing farmer is free to purchase fertilizer from any dealer in the market and submit the bills for getting crop loans. These 63.96 per cent of cooperative credit society members wanted cooperatives also to follow this system of giving crop loans.

V. Farmer's Perceptions About Commercial Banks

Surveyed farmer's perception / views about the Commercial Banks supply system of agricultural credit are summarised in table 31. It may be seen that only 8.85 per cent of surveyed farmers reported having borrowed from Commercial Banks and the remaining 91.15 per cent have never approached Commercial Banks for any type of loans.

Out of these 91.15 per cent farmers who have never approached Commercial Banks for loans : 25.97 per cent were completely ignorant about the facility of short-term crop-loans existing in the Commercial Banks; an other 18.80 per cent revealed psychological hesitation / barrier in approaching the Commercial Banks for short-term crop loans; another 19.37 per cent did not approach Commercial Banks for crop loans because of the paper work and other formalities involved; and 35.87 percent said they preferred other credit agencies (Cooperative credit society or Commission Agents for these loans). This information about the reasons of these 91.15 per -cent farmers not going to Commercial Banks for crop loans is very revealing and should be useful to credit managers in Commercial Banks for modifying / changing their strategy and methods of supplying credit to rural clients.

TABLE - 32

PERCEPTIONS OF SURVEYED FARMERS ABOUT THE SHORT-TERM CREDIT SUPPLIED BY COMMISSION AGENTS

S.N.	Perception Description	Percentage
1.	Percent of Surveyed Farmers Borrowing from Commission Agents for Short-term Needs	63.85
2.	Percent of these Borrowing Farmers Reporting Commission Agent was able to meet their Short-term needs fully	45.40
3.	Percent of these Borrowing Farmers feeling Commission Agents were charging very high interest rates	79.02
4.	Percent of these Borrowing Farmers feeling Commission Agents temper with Credit Accounts to Fleece the farmers	31.77
5.	Percent of these Borrowing Farmers who were purchasing fertilizers on Credit from their Commission Agents	56.20
6.	Percent of these Borrowing Farmers who feel Commission Agents Charge higher than market price for the fertilizers purchased from them	56.19
7.	Percent of these Borrowing Farmers who feel that they get Lower than Market Price for their Produce because they have to Sell through the Commission Agent from whom they have taken Short-term Credit	36.21
8.	Percent of these Borrowing Farmers who feel they cannot Successfully Carry out their Farm Operations Without the Credit Given by Commission Agents	70.12

Out of the 8.85 per cent who were using the credit facilities of Commercial Banks for short-term crop loans ; 41.86 per cent experienced great difficulty in getting short-term crop loans from the Commercial Banks and 58.14 per cent said they did not experience any difficulty in getting crop loans from banks.

VI. Farmer's Perceptions About Commission Agents Credit System

Perceptions / views of surveyed farmers about various aspects of the credit supply system of Commission Agents are summarised in table 32. It may be seen that 63.85 per cent of surveyed farmers were getting short-term credit from Commission Agents. Out of these farmers borrowing from Commission Agents; 45.40 per cent reported that Commission Agents were able to meet their short-term credit needs fully; 56.20 per cent were purchasing their fertilizers on credit from the Commission Agents or dealers tied with Commission Agents; and 70.12 per cent of these borrowing farmers felt that they can not carry on their farming operations successfully without the credit facilities made available by Commission Agents.

There was also considerable dissatisfaction among the farmers borrowing from Commission Agents: 79.02 per cent of those borrowing from Commission Agents felt that Commission Agents are charging very high interest rates on these loans; 31.77 per cent of Commission Agent's client farmers felt some tempering even of their credit accounts by Commission Agents; 56.19 per cent farmers borrowing from Commission Agents felt they charge higher than market price for fertilizers sold to farmers on credit; 36.21 per cent of Commission Agents' client farmers complained getting a lower than market price for their farm produce because they have to sell through their Commission Agents under compulsion.

So farmers have a mixed complex of perceptions about the Commission Agents functioning and role in meeting their short-term credit requirements. The role of Commission Agents in providing short-term credit is accepted and appreciated, but the higher cost of the credit services of the Commission Agents is resented by farmers.

TABLE - 33

PERCEPTIONS OF SURVEYED FARMERS ABOUT THE MAIN REASON FOR CULTIVATORS INDEBTEDNESS

S.N.	Main Reason For Farmers Indebtedness in Punjab	Percent of Surveyed Farmers Giving this as the Main Reason
1.	Abnormalty High Prices of Farm Inputs	30.80%
2.	Excessive Expenditure on Domestic Consumption	21.50 %
3.	Frequent Crop Failures / Yield Fluctuations	18.50%
4.	Excessive Expenditure on Social Ceremonies	14.60%
5.	Low Price of Farm Products	7.30%
6.	Low and Stagnant Crop Yields	4.60%
7.	Unjustified / Irrational Purchase of Tractors	1.50%
8.	Laziness and Lack of Hard Work by Farmers	1.20%

VIII. Farmers Perceptions About Causes of Indebtedness

We have also collected information on farmers views about the causes of indebtedness of peasantry in Punjab inspite of the green revolution and manifold increase in farm output. This information is summarised in table 33 and reveals that 30.80 per cent of the surveyed farmers (the highest proportion) thought abnormally high prices of farm inputs mainly responsible for farmers indebtedness in the state. The second largest number (21.50 per cent) of surveyed farmers attributed farmers indebtedness to excessive expenditure by them on domestic consumption. The next largest number (18.50 per cent) blamed frequent crop failures and fluctuations in crop yields for indebtedness of farmers in the state. According to 14.60 per cent of the surveyed farmers main cause of farmers indebtedness in the state is excessive expenditure done by them on social ceremonies like marriages. Only 7.30 per cent of the surveyed farmers blamed low prices of farm products for farmers indebtedness. Another 4.60 per cent put the blame on low and stagnant crop yields. Unjustified / irrational purchase of tractors and laziness were mentioned as causes of indebtedness by 1.50 percent and 1.20 per cent farmers respectively. To conclude the biggest proportion of surveyed farmers (36.10 per cent) attributed indebted to excessive expendeture on domestic consumption and social ceremonies. High farm input prices (mentioned by 30.80 per cent) and frequent crop failures (mentioned by 18.50 percent) were other two major causes of farmers indebtedness in the perception of surveyed farmers.

CHAPTER - IX

SUMMARY OF FINDINGS

1. A random sample of 260 cultivating households located in 13 randomly selected villages of Punjab were surveyed in October / November, 1997 to gather information on various aspects of short-term and long-term loans taken by these farmers from different credit agencies operating in rural areas of the state.

2. The state was divided into five homogenous agro-climatic zones. Number of tehsils selected from each zone was in proportion to the operated area of the state falling in the zone. From each tehsil one village was randomly selected and from each selected village 20 cultivating households (4 from each of the marginal, small, semi-medium, medium and large farm size categories) were randomly selected for collecting the required information.

3. Tehsils and (villages) surveyed were the following : Gurdaspur (Kaler Kalan), Garhshankar (Nangal Kalan), Ajnala (Bagga), Nakodar (Rahimpur), Nawanshar (Aur), Khanna (Chakohi), Patiala (Raipur), Barnala (Sehjra), Sunam (Nangla), Talwandi Sabo (Singo), Mansa (ubha), Zira (Talwandi Mange Khan), Faridkot (Ajit Gill).

4. 89.29 per cent of farmers in Punjab were found to be taking short-term loans from different credit agencies to carry out their crop productions operations. Percent of borrowers did not differ much among different sized holdings. 63.85 per cent of farmers were taking crop loans from Commission Agents, 51.35 per cent from Cooperative Credit Societies

and 8.85 per cent from Commercial and Rural Regional Banks. 54.22 per cent of farmers were found to be borrowing from more than one of these credit agencies.

5. Amount borrowed (of short-term loans) per operated acre was the highest among small farmers (Rs. 4536) and the lowest among large farmers (Rs. 2488). For all farmers taken together the average amount borrowed per operated acre comes out to be Rs. 3590. Amount borrowed per acre declined as farm size increased.

6. Our estimates (prepared from the information given in para 5 above) indicate that total short-term loans taken by Punjab farmers in the survey reference year (Hari crop harvested in April / May, 1997 and Soni Crop harvested in October / November, 1997) amounted to Rs. 3119.33 crores. Out of these 3119.33 crores, 61.31 per cent (Rs. 1912.58 crores) were advanced by Commission Agents, 33.98 per cent (Rs. 1059.86 crores) were advanced by Primary Cooperative Agricultural Credit Societies, and only 4.71 per cent (Rs. 146.89 crores) were advanced by Commercial and Regional Rural Banks.

7. 34.43 per cent of the farmers borrowing short-term crop loans failed to repay the entire amount borrowed after harvesting and sale of their crops. The unpaid / outstanding short-term loans amounted to Rs. 696.80 crores i.e. 22.34 per cent of the total amount borrowed. The incidence of outstanding short-term loans was highest in the case of Commission Agents' loans (32.30 per cent of the amount) and the lowest in the case of Cooperative Credit Societies' loans (4.26 per cent of the amount). 23.04 per cent of Commercial Banks' short-term loans towards farmers remained outstanding.

8. 70 per cent of small farmers, 40 per cent of semi-medium, 47 per cent of medium, and 28.30 per cent of large farmers were not able to fully repay the crop loans taken by them.

9. There is no evidence, as per the information collected in our survey, that small farmers are at a disadvantage in the availability of short-term credit in Punjab. The share of small and semi-medium farmers in the total short-term credit in the state was higher than their respective shares in the operated area of the state . So proportionately these small and semi-medium farmers were getting more short-term credit than what they deserve on the basis of their operated area.

10. Small farmers, semi-medium farmers and large farmers were more dependent on Commission Agents for short-term crop loans (about 70 per cent of the total amount borrowed by them came from Commision Agents). Medium farmers on the other hand were much less dependent on Commission Agents for crop loans (only 48.67 per cent of their total borrowings from Commission Agents).

11. 27.53 per cent of surveyed farmers have taken long-term loans for productive purposes like purchase of tractors etc. The proportion of farmers taking long-term loans for productive purposes did not vary much among different sized holdings. Amount borrowed for long-term productive purposes came to Rs. 9737 per operated acre for all the farmers taken together. Amount borrowed per operated acre was higher among semi-medium (Rs. 17347) and small farmers (Rs. 12407) and lower among large farmers (Rs. 5021) and medium farmers (Rs. 7562).

12. Estimated amount of long-term productive loans taken by farmers in Punjab Comes to Rs. 2670.99 crores. Out of this total amount 54.59 per

cent (Rs. 1458.06 crores) has been advanced by Commercial Banks and 45.41 per cent (Rs. 1212.93 crores) has been advanced by Primary Land Development Banks.

13. There was no evidence of small and semi-medium farmers suffering any disadvantage in the availability of long-term credit to them for productive purposes. The share of these smaller farm size categories in the total long-term credit (productive) in the stae was higher than their respective shares in operated area of the state. So proportionately these smaller sized farmers were availing more than proportionate share of total long-term (productive) credit.

14. 83.49 per cent of farmers taking long-term loans for productive purposes have 54.20 per cent of the total borrowed amount outstanding against them. This outstanding amount comes to Rs. 6321 per acre of land operated by these farmers. The proportion of farmers with outstanding long-term (productive) loans was lowest among large farmers (38.49 per cent) but this proportion was almost similar in the other three size - categories of farms.

15. 66.32 per cent (Rs. 960.06 crores) of the total long-term (productive) loans outstanding were due to Commercial Banks; 65.84 per cent to whose total amount advanced was outstanding towards farmers. Only 33.68 per cent (Rs. 487.56 crores) of total outstanding long-term (productive) loans were due to Cooperative Primary Land Development Banks; 40.20 per cent of whose advanced amount remained outstanding towards farmers.

16. 28.50 per cent of farmers have also taken long-term loans for non-productive purposes. These non-productive long-term loans were given to

farmers almost entirely by Commission Agents and other informal sector money lenders. The proportion of farmers taking long-term loans for non-productive purposes was higher among smaller sized farmers (small and semi-medium) and lower among bigger sized farmers (medium and large). Borrowed amount per acre (for non-productive purposes) was almost 3 times higher among small and semi-medium farmers compared to medium and large farmers. For all farmers taken together borrowed amount (non-productive purposes) comes to Rs. 4951 per acre i.e. about one half of the amount per acre borrowed by farmers for long-term productive purposes.

17. Total estimated amount of long-term (non-productive) loans taken by farmers in the state comes to Rs. 888.55 crores. Out of this amount 22.75 per cent (Rs. 202.14 crores) was taken by small farmers, 45.18 per cent (Rs. 401.45 crores) by semi-medium farmers, 24.06 per cent (Rs. 213.79 crores) by medium farmers, and only 8.04 per cent (Rs. 71.17 crores) by large farmers. Proportionate to their operated area in the state, small and semi-medium farmers have taken more long-term loans for non-productive purposes.

18. 81.40 per cent of borrowing farmers (for long-term non-productive purposes) have not yet fully paid back these loans and have some amount outstanding against them. The proportion of farmers having outstanding non-productive long term loans did not differ much among small, semi-medium and medium farm, but was significantly lower among large farmers. Outstanding amount of non-productive loans per operated acre of the concerned farmers in the state as a whole comes out to be Rs. 2809. This amount of outstanding non-productive loans per acre was

relatively much higher among small and semi-medium farmers compared to large and medium farmers.

19. The total estimated amount of outstanding non-productive long-term loans in the state comes out to Rs. 727.94 crores. Out of this 22.38 per cent (Rs. 162.91 crores) was outstanding towards small farmers, 50.95 per cent (Rs. 370.89 crores) towards semi-medium farmers; 19.04 per cent (Rs. 138.60 crores) towards medium farmers, and only 7.63 per cent towards large farms.

20. Out of the total amount of non-productive loans taken by Punjab farmers as high as 81.92 per cent was outstanding on the date of survey. The percent of total borrowed amount outstanding was 80.59 per cent among small farmers, 92.39 per cent among semi-medium farmers, 64.83 per cent among medium farmers and 78.04 per cent among large farmers.

21. The outstanding amount (and proportion) of long-term loans (productive as well as non-productive) does not directly indicate farmers failure to repay those loans as is the case in short-term loans; because the repayment of long-term loans is expected to occur over a fairly long period through instalements. The amount of outstanding long term loans (productive and non-productive), however, does indicate the amount of live debt that needs to be repayed and on which interest has to be paid if is not completely liquidated.

22. The incidence of mortgage debt was negligible among semi-medium and medium farms. 13.59 per cent of small farmers and 3.58 per cent of large farms have reported having mortgaged out 4.46 per cent and 3.58 per cent of their owned land respectively. Estimated amount of mortgage debt towards farmers in the state come out to Rs. 406.02 crores. Out of this

amount 60.05 per cent was towards small farmers and 29.92 per cent towards large farmers.

23. Total estimated debt of farmers in the state comes to Rs. 5700.91 crores. Out of this total amount 54.72 per cent is short-term annually recurring type crop loans, 25.39 per cent is outstanding amount of long-term productive loans, 12.77 per cent is outstanding amount of long-term non-productive loans, and 712 per cent is mortgage debt.

24. Out of the total debt (Rs. 5700.91 crores) of farmers in the state 46.32 per cent they owe to Commission Agents, 7.12 per cent to agriculturist mortgagees, 27.14 per cent to Cooperative Institutions, and 19.42 per cent to Commercial Banks. Amount of debt per operated acre was higher among small and semi-medium farmers and relatively lower among medium and large farmers. The share of small and semi-medium farmers in total debt was higher compared to their share in the operated area of the state. So small and semi-medium farmers were relatively more indebted compared to medium and large farmers.

25. The annual interest burden of debt on Punjab farmers is quite heavy and works out to Rs. 1102.78 crores, which is 11 per cent of net income originating from crop production. This interest burden amounts to Rs. 1074 per acre of total operated area of the state and 21.48 per cent of the average cash rent per acre current in the state.

26. The burden of principal (of debt) on the farmers is also quite heavy. If the entire debt of farmers is to be liquidated then 3.31 per cent of total area owned by all farmers in the state has to be sold at the current average per acre price of land. If at least the interest burden of this total debt is to be taken care of, (by freezing it) then farmers have to notionally mortgage

out 13.25 per cent of their total owned area at the current average rate of per acre mortgage money.

27. The highest proportion of surveyed farmers (36.10 per cent) attributed indebtedness of farmers in the state to their excessive expenditure on domestic consumption and social ceremonies; 30.80 per cent attributed it to abnormally high prices of farm inputs; and 18.50 farmers felt it is caused by frequent crop failures and yield fluctuations.

28. A great majority of surveyed farmers (75 per cent or above) did not experience any difficulty in getting short-term crop loans on time and in needed adequate quantity and were quite satisfied with the availability of short-term credit in the state. Inspite of that, about 50 per cent of farmers were not very happy with their dependence on borrowed money for carrying out their crop production operations.

29. For short-term crop loans Commission Agents were the clear preference of most of the farmers, followed by Cooperative Credit Societies. For long-term productive loans Commercial Banks were the most preferred credit agency, followed closely by Primary Land Development Banks. For non-productive long-term loans Commission Agents and Private money lenders were the leading preference of surveyed farmers. So each of the three credit agencies has created its own particular niche in the agricultural credit market of the state.

30. In farmer’s choice of a credit agency, different factors dominated for different types of loans. In the short-term crop loans, ‘ease of getting the loan’ was the most important factor in credit agency choice, interest rate played only a minor role. In long-term productive loans ‘interest rate’ was the main factor determining credit agency choice. In long-term non-

productive loans interest rate did not matter much and credit agency choice was made on the basis of, ‘ease of getting loans’. That is why for short-term loans as well as non-productive long-term loans Commission Agents were the preferred credit agency, and for long-term productive loans formal sector credit agencies (Commercial Banks and Land Development Banks) were preferred.

31. 63.10 of the surveyed farmers were members of primary cooperative credit societies and a great majority of them (About 70 per cent or above) were quite satisfied with the quantity, quality and timeliness of fertilizers supplied by cooperative societies on credit. Inspite of that, 64 per cent of borrowers wanted freedom to purchase fertilizers from the market and cooperative societies giving them cash loans. The remaining 36.90 per cent who were not members of cooperative credit societies could not do so because of absence of credit society in the village, or ignorance about benefits from membership, or they were getting adequate short-term credit from other credit agencies.

32. Only 8.85 per cent of surveyed farmers were getting loans from Commercial Banks and even out of this small proportion about 42 per cent have experienced great difficulty in arranging short-term loans from these institutions. Out of the 91.15 per cent who have never gone to a Commercial Bank for a loan: 26 per cent were completely ignorant about the existence this facility; 19 per cent did not go to Commercial Banks because of psychological barrier / fear in going to these institutions; another 19 per cent did not try for Commercial Bank loans because of the fear of paper work and formalities; only 36 per cent did not approach the Commercial Banks because they had adequate alternative credit arrangements.

33. Out of 63.85 per cent of surveyed farmers who were getting crop loans from Commission Agents 45 per cent reported getting adequate credit from this source; 56 per cent of Commission Agents credit clients were also purchasing fertilizers from these Commission Agents. There was considerable dissatisfaction among borrowers about the very high interest rate charged by Commission Agents, about the suspected tempering of credit accounts by them, for charging higher than market prices for fertilizers sold by them and for being responsible for farmers' getting lower than market price for the farm produce sold through these Commission Agents. Inspite of this dissatisfaction 70 per cent of the surveyed farmers felt they can not carry on their cultivation without the credit supplied to them by Commission Agents.

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About the Report

The study examines the state of rural credit and indebtedness in Post-Green Revolution Punjab (1997). Over this period of three decades of Green Revolution (1966-96) not only farm production has become completely commercialised, but input structure of Punjab farms has also become highly monetised. Most of the farm inputs used by Punjab farmers are now purchased from the market and they have to spend huge amounts of cash on purchasing these inputs. But farmers rarely have sufficient cash of their own (from past savings) to purchase these inputs. They have to borrow a large proportion of their cash expenditure on farm inputs and machines. This study shows the extent and nature of farmers short-term and long-term borrowings to carry- out their farm operations and the role of formal and informal sector credit agencies in meeting the credit needs of Punjab farmers. It also quantifies the magnitude of farmer's indebtedness and its burden on peasantry of the state.

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