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Magnitude and Determinants of Indebtedness Among Farmers in Punjab

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ABSTRACT

The ongoing agrarian crisis in Punjab is becoming a centrestage issue as the farmers are reeling under debt arising from stagnant productivity and low profitability. The total debt burden on Punjab farmers is estimated to be Rs. 22943 crores and the debt per farm household is Rs. 218092. The level of education, non-farm income, farm size and non-institutional credit were the main factors which affect the level of farmers' indebtedness. The farmers face a large number of problems in availing institutional credit which drives them to fall into the debt trap of the crafty and exploitative non-institutional sources of credit. There is a need to strengthen the existing credit delivery system to accelerate growth of the farming sector for evacuating the peasantry from the incessant debt trap.

Keywords: Farmer, Indebtedness, Credit, Finance, Rural and Punjab

JEL: Q10, Q14, R51

I

INTRODUCTION

Agricultural economy of Punjab has been passing through a phase of stagnant productivity, increasing costs, declining returns and squeezing employment. This crisis was not built of a single day as its seeds were sown with the initiation of new agricultural strategies which escalated in the wake of liberalisation. The green revolution model introduced in the mid-1960s distorted the self-sufficiency of the state's economy and linked it with market-driven mode of production. In this phase, the financial requirements of the farmers surged which increased their dependency on outside funding. The state of Punjab witnessed a boom in the agricultural sector during the 1970s as the net returns of the farmers increased due to paramount increase in the productivity of principal crops. However, the period of 1980s witnessed a phase of stagnation in the crop yield and net returns from farming (Singh, 2000). Farming demands regular outflow of cash to acquire various agricultural inputs but the inflow of the same is not continuous due to seasonal nature of agriculture. The gap so created is plugged in by borrowed funds from either institutional or non-institutional sources. The incidence and extent of indebtedness has considerably increased over the past one decade across the states in India. The extent of indebtedness is higher among the agriculturally developed states (Narayanamoorthy and Kalamkar, 2005). The root cause for the same is lack of

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technical know-how, declining irrigational facilities, increasing biotic and abiotic constraints, lower crop yields and farm income, burden of higher family expenditure, insufficient institutional credit availability and easy credit from non-institutional sources (Kumari, 2005). The concern about indebtedness of the farmers and their plight dates back to as many as nine decades when M.L. Darling (1925) quoted that “the Indian peasant is born in debt, lives in debt and dies in debt”. However, the farmers had no respite since then instead their situation has worsened over a period of time.

The farmers, especially the smaller ones, had been adversely affected by neo-liberal economic policies during the 1990s to the extent that some of them even over-extended themselves financially. Not only had their agricultural income declined, the cost of cultivation increased. They were experiencing increasing trend towards individualisation (Mohanty, 2005). As a ramification of such policies, the debt burden of Punjab peasantry started to swell. The total debt of the Punjab farmers during the mid-1990s was Rs. 5,700 crores with an average of Rs. 51,029 per farm household (Shergill, 1998). The cotton belt of the state was the most affected region by the financial crisis as it suffered from continuous failure of cotton crop during 1997-2002. In this region 90 per cent of the farmers were indebted with an average debt of Rs. 1,12,636 per farm household (Sidhu *et al.*, 2000). Further, in 2002-03, the debt burden of Punjab farmers surged at Rs. 9,886 crores and the average debt per farm household was to the tune of Rs. 92,394 (Singh and Toor, 2005). The National Sample Survey Organisation found that Punjab farmers were the most heavily indebted (65.4 per cent) as the average debt per farm household was the highest amongst all the states of the country (NSSO, 2005). During 2005-06, as much as 89 per cent of the farmers were under severe debt in Punjab and per farm household debt was Rs. 1,78,934. The total debt on Punjab peasantry was Rs. 21,064 crores, out of which 38 per cent was owed to non-institutional sources (Singh *et al.*, 2007). The role of non-institutional sources for providing ready credit to the farmers has been of paramount importance as the small and marginal farmers are heavily dependent on them (Samal, 2002).

The intensity of this crisis can be ascertained from the fact that in the early 2000s, three villages of the state were declared as ‘villages for sale’ by Gram Panchayats who offered all the land and resources of these villages to the state government in order to get rid of debt (Singh and Toor, 2005). The farmers who are unable to withstand distress manifested by debt trap, in many cases, are emboldened to commit suicide in order to be relieved of their wretchedness. The major reasons behind the suicides in the state were indebtedness, economic hardship and crop failure (AFDR, 2000). The grievous state of the peasantry is further highlighted by Deshpande (2002) who exhibited that the farmers committed suicides following the fall in the prices of agricultural commodities, especially in the rich states including Punjab. A Punjab government’s census survey conducted by three universities of the state exhibited that the total number of suicide cases in the state during the period 2000-2010 were 6,926,

of which 3,954 (57.1 per cent) were farmers and 2,972 (42.9 per cent) were agricultural labourers. Majority of these cases were the outcome of stress of debt burden as 74 per cent of these farmers and 59 per cent of these agricultural labourers committed suicide for being debt ridden (Singh *et al.*, 2012b; Sharma, 2013). Keeping the deplorable state of the economy in mind, the present study is planned to assess the magnitude, pattern and determinants of indebtedness of farmers in Punjab.

II

METHODOLOGY

This study is based on the primary data from the sample households which was collected on specially structured schedule through personal interview method under the research study funded by NABARD (Singh, 2013). Punjab state is divided into three well-defined agro-climatic zones, namely, sub-mountainous zone, central zone, and south-western zone which occupy 9 per cent, 65 per cent and 26 per cent of the net sown area of the state, respectively. The dominant cropping patterns in these zones are maize-wheat, paddy-wheat and cotton-wheat, respectively. A total of six districts from all the zones, namely, Hoshiarpur from Zone I, Ludhiana, Amritsar and Patiala from Zone II, and Bathinda and Mansa from Zone III were selected for the study. Thereafter, a total sample of 300 farmers comprising 28 marginal farmers (<1 ha), 66 small farmers (1-2 ha), 79 semi-medium farmers (2-4 ha), 102 medium farmers (4-10 ha) and 25 large farmers (>10 ha) was taken. The number of these sampled farmers from different agro-climatic zones was 50 farmers from the sub-mountainous zone, 150 farmers from the central zone and 100 farmers from the south-western zone of the state. The data relates to the agricultural year 2012-13.

III

LEVEL OF INCOME AND CONSUMPTION EXPENDITURE

The costs of production generate income which caters to their domestic consumption expenditure. The surplus generated after meeting this expenditure is at the disposal of the farmers to repay the outstanding debt. This is also known as the debt servicing capacity which hints about the financial status of the farmers. The average net income, i.e., total farm and non-farm income after meeting the cost of production, of the 300 sampled farmers was found to be Rs. 5,88,413 and the average domestic consumption expenditure was Rs. 1,24,336. The average debt servicing capacity was Rs. 4,64,077 (Table 1).

The situation of the marginal farmers in the state was dismal as their debt servicing capacity was negative to the tune of Rs. 4,953 which shows that these farmers are incapable to meet even their domestic expenditure from the generated income. The debt servicing capacity of the small, medium and large farmers was

positive. Though the small farmers in the state have the capacity to pay debt but it was not sufficient to repay their outstanding debt.

TABLE 1. INCOME, CONSUMPTION EXPENDITURE AND DEBT SERVICING CAPACITY OF FARMERS IN PUNJAB

<i>(Rs./household)</i>				
Size of holdings (1)	Sample size (No.) (2)	Net income* (3)	Domestic consumption expenditure (4)	Debt servicing capacity (5)
Marginal	28	75,504	80,457	-4,953
Small	66	1,56,233	89,168	67,065
Semi-medium	79	6,73,379	1,11,159	5,62,220
Medium	102	7,12,194	1,50,667	5,61,527
Large	25	15,30,315	1,77,298	13,53,017
Average	300	5,88,413	1,24,336	4,64,077

*Net income= Gross farm income – cost of production + non-farm income.

IV

INCIDENCE AND MAGNITUDE OF INDEBTEDNESS

Punjab peasantry is reeling under debt. The amount of loan which is not repaid over the given period of time is called debt. The average amount of debt per farm household was the highest in Punjab amongst all the states of the country (NSSO, 2005). In Punjab, about 88 per cent of the sampled farmers were indebted (Table 2). The proportion of indebted households was the highest among semi-medium farm households (93.67 per cent), followed by small farm households (90.91 per cent), marginal farm households (89.29 per cent), medium farm households (86.27 per cent) and large farm households (68 per cent).

TABLE 2. INCIDENCE AND MAGNITUDE OF INDEBTED FARM HOUSEHOLDS IN PUNJAB

Size of holdings (1)	Sample size (No.) (2)	Indebted households (No.) (3)	Percentage of indebted households (4)	Amount of debt (Rs.)		Debt-income ratio (8)
				Per hectare (5)	Per household (7)	
Marginal	28	25	89.29	1,70,184	1,07,216	1.42
Small	66	60	90.91	1,04,155	1,46,859	0.94
Semi-medium	79	74	93.67	83,864	2,28,949	0.34
Medium	102	88	86.27	40,629	2,42,146	0.34
Large	25	17	68.00	26,668	3,97,882	0.26
Average	300	264	88.00	50,021	2,18,092	0.37

The debt per household was Rs. 2,18,092 and was witnessed to be directly related to the farm size. It was the lowest for marginal farm households (Rs. 1,07,216) followed by small farm households (Rs. 1,46,859), semi-medium farm households (Rs. 2,28,949), medium farm households (Rs. 2,42,146) and large farm households (Rs. 3,97,882). The relationship between the amount of debt per hectare and size of

farm was inversely related as the small farmers had higher debt amount as compared to the large farmers. The relative debt burden of small farmers was 6.38 times higher than that of large farmers. This shows that smaller farmers are facing more of financial crisis and hence, rely on borrowed funds which is usually expensive credit from non-institutional sources and are further dragged into the financial crunch. The average debt-income ratio of the farmers in the state was 0.37. It was the highest for the marginal farmers (1.42), followed by small farmers (0.94); smallest for the large farmers (0.26).

The estimate of debt on the total number of agricultural households in Punjab, which were 10.52 lakhs in number, during the year 2012-13 was estimated to be Rs. 22,943 crores (Table 3). About 57 per cent of this total debt was taken for productive purposes and it amounted to Rs. 13,158 crores. Although the banking sector is well developed in Punjab with a total of 5035 bank branches, out of which 2724 are commercial and 804 are co-operatives bank branches (Government of Punjab, 2012), still only about 89 per cent of the farmers have bank accounts and deal with banks actively (Singh, 2013). The non-institutional sources of finance contributed about 39 per cent of the total debt in the state which amounted to Rs.8,863 crores.

TABLE 3. ESTIMATES OF TOTAL INDEBTEDNESS OF FARMERS IN PUNJAB, 2012-13

Description (1)	Debt (Rs. crores) (2)	Percentage (3)
Total debt on Punjab farmers	22,943	100.00
Total productive debt	13,158	57.35
Total non-productive debt	9,785	42.65
Total institutional debt	14,080	61.37
Total non-institutional debt	8,863	38.63
Total number of agricultural households (lakhs)	10.52	

Purpose-wise Debt

The purpose for which the loan is taken has its potential to be repaid. Table 4 reveals that 57 per cent of the credit was taken for productive purposes like purchase of farm inputs, farm machinery and agricultural land. This proportion was very high among small farmers (67.87 per cent), followed by medium (59.61 per cent), semi-medium (58.05 per cent), marginal (55.47 per cent) and large farmers (40.80 per cent). The non-productive purposes including housing loan, consumption loan, health care and social ceremonies have taken 42.6 per cent share of the total loan. The major share of non-productive credit was incurred for consumption purposes (27.38 per cent), followed by housing loan (6.08 per cent) and health care and social ceremonies (5.38 per cent). Unlike the general perception whereby farmers are believed to be incurring high proportion of credit for non-productive purposes, the study reveals that a larger proportion of the farmers' debt was being utilised for productive purposes. The share of non-productive loan was about two-fifth of the total loan which indicates that the social and domestic expenditure of farmers was not being met by

the farm income as a result they had to borrow money. The non-productive credit adds to the woes of farmers as unlike the credit taken for productive purposes, the non-productive purposes do not assist in the future growth of the farming.

TABLE 4. PURPOSE WISE MAGNITUDE OF DEBT AMONG FARMERS IN PUNJAB

Purpose (1)	<i>(Rs./household)</i>					
	Marginal (2)	Small (3)	Semi-medium (4)	Medium (5)	Large (6)	Total (7)
Productive purposes	59471 (55.47)	99670 (67.87)	132898 (58.05)	144343 (59.61)	162324 (40.80)	125078 (57.35)
Farm inputs/Farm machinery	59471 (55.47)	99670 (67.87)	132898 (58.05)	128608 (53.11)	103044 (25.90)	113805 (52.18)
Agricultural land	0 (0.00)	0 (0.00)	0 (0.00)	15735 (6.50)	59280 (14.90)	10290 (4.72)
Non-productive purposes	47745 (44.53)	47189 (32.13)	96051 (41.95)	97803 (40.39)	235558 (59.20)	93014 (42.65)
Housing loan	16857 (15.72)	0 (0.00)	5772 (2.52)	29922 (12.36)	0 (0.00)	13267 (6.08)
Consumption loan	25049 (23.36)	43697 (29.75)	67570 (29.51)	60019 (24.79)	114658 (28.82)	59706 (27.38)
Health care and social ceremonies	5839 (5.45)	3492 (2.38)	15684 (6.85)	2373 (0.98)	65700 (16.51)	11725 (5.38)
Others	0 (0.00)	0 (0.00)	7025 (3.07)	5490 (2.27)	55200 (13.87)	8317 (3.81)
Grand Total	107216 (100.00)	146859 (100.00)	228949 (100.00)	242146 (100.00)	397882 (100.00)	218092 (100.00)

Sources of Credit

The farmers have access to various institutional and non-institutional sources of credit. Of all the non-institutional sources, commission agents (*arhtiyas*) were the most popular sources of credit. In Punjab the payment of the farmers' produce is being made through the commission agents. These agents act as middlemen for the sale of crops between the buyers and farmers, and disburse the amount so received after deducting the outstanding loan amount. Thus, the farmers are contrived to be dependent on these middlemen for their financial needs (Singh and Bhogal, 2013). Table 5 holds out that an average farm household in the state was indebted to institutional source of credit to the tune of Rs. 1,33,844 (61.37 per cent), while that from the non-institutional sources was Rs. 84,248 (38.63 per cent). Among the institutional credit agencies 29.06 per cent of the total credit amount was advanced by the public banks, 11.81 per cent by private banks and 20.50 per cent was advanced by the co-operatives. Although, the banking system is highly developed in the state still 35.25 per cent of the total credit is advanced by the commission agents (*arhtiyas*), 2.35 per cent by the big landlords, and about 1 per cent of the total credit is borrowed from shopkeepers, relatives, friends and others which includes service men, neighbours, etc.

TABLE 5. SOURCE WISE AMOUNT OF CREDIT IN PUNJAB

Source of credit/Farm category (1)	Marginal (2)	Small (3)	Semi- medium (4)	Medium (5)	Large (6)	Total (7)
Institutional source	64187 (59.87)	76303 (51.95)	117096 (51.14)	148520 (61.33)	356819 (89.68)	133844 (61.37)
Government banks	43272 (40.36)	39627 (26.98)	54145 (23.65)	81045 (33.470)	105760 (26.58)	63383 (29.06)
Private banks	6657 (6.21)	4239 (2.88)	19398 (8.47)	14045 (5.80)	171884 (43.20)	25761 (11.81)
Co-operative banks/societies	14258 (13.30)	32437 (22.09)	43553 (19.02)	53430 (22.070)	79175 (19.90)	44700 (20.50)
Non-institutional source	43030 (40.13)	69661 (48.05)	111855 (48.86)	93626 (38.67)	41064 (10.32)	84248 (38.63)
Landlords	4214 (3.93)	19145 (13.04)	1270 (0.55)	578 (0.24)	0	5136 (2.35)
<i>Arhtiya</i>	25330 (23.63)	49622 (33.79)	108382 (47.34)	93048 (38.43)	41064 (10.32)	76880 (35.25)
Shopkeepers/relatives/friends/others	13486 (12.58)	1788 (1.22)	2203 (0.97)	0	0	2232 (1.02)
Grand Total	107216 (100.00)	146859 (100.00)	228949 (100.00)	242146 (100.00)	397883 (100.00)	218092 (100.00)

In Punjab, the large farmers availed maximum of their loan requirements from institutional sources as compared to the smaller farmers. Though the institutional sources have various benefits which help in pulling out the peasantry from the clutches of non-institutional sources but the most hard-hit farmers are unable to breakaway the age-old bonds of money lenders as availing loans from institutional sources require various formalities and complex procedures that make these institutions unapproachable and hence, fall prey to the non-institutional sources of credit. The bank procedures and formalities have been designed in such a way that the influential farmers are in a better position to avail loans easily as compared to small farmers.

Rate of Interest

It is interesting to note that though farmers preferred non-institutional sources of credit for their timeliness and adequacy, the rate of interest charged by them was much higher than that of banks. The institutional sources (banks and cooperatives) were providing loans to farmers by charging rate of interest varying from 4-19 per cent while commission agents were charging 12 to 36 per cent (Table 6). The rate of interest charged by landlords varied from 18 to 24 per cent. The shopkeeper/relatives/friends were also charging a high rate of interest varying from 14 to 19 per cent. Of the total credit advances, about 33 per cent was advanced at the rate of interest varying from 14 to 19 per cent and *arhtiyas* were the main lenders (69.48 per cent) of credit. About 30 per cent of the total loan outstanding was lent at 9 to 14 per cent rate of interest and private banks accounted for the maximum (71.72 per cent) of it. Of the 24.81 per cent credit advanced at 4 to 9 per cent rate of interest, the co-

operatives contributed for 64 per cent of the total amount of outstanding loan. The picture of outstanding loan of the farmers reveals that on an average, each farm household was indebted to the tune of Rs. 2.18 lakh. Of the total credit advanced, about 35 per cent was lent by *arhtiyas* though they were charging exorbitant rate of interest, followed by government banks (29.06 per cent), co-operatives (20.50 per cent), private banks (11.81 per cent), landlords (2.35 per cent) and other sources of credit like shopkeepers, relatives, etc. (1.02 per cent). The total costs incurred in farming are very high and often the farmers are not able to generate enough revenue to meet the same (Singh *et al.*, 2012a). Expensive credit from non-institutional sources which can also be availed at lower interest rates from institutional sources further augments the financial distress of farmers.

TABLE 6. LOAN OUTSTANDING WITH FARMERS DUE TO DIFFERENT RATES OF INTEREST CHARGED BY VARIOUS CREDIT AGENCIES IN PUNJAB

Rate of interest/ source (1)	Institutional sources			Non-institutional sources			Total (8)
	Govt. Bank (2)	Pvt. Bank (3)	Cooperatives (4)	Landlord (5)	<i>Arhtiyas</i> (6)	Others (7)	
4 to 9	22804 (35.98)	2685 (10.42)	28611 (64.01)	-	-	-	54100 (24.81)
9 to 14	34881 (55.03)	18476 (71.72)	10323 (23.09)	-	1405 (1.83)	-	65085 (29.84)
14 to 19	5698 (8.99)	4600 (17.86)	5765 (12.90)	1003 (19.53)	53419 (69.48)	2232 (100.00)	72718 (33.34)
19 to 24	-	-	-	4133 (80.47)	21965 (28.57)	-	26098 (11.97)
>24	-	-	-	-	91 (0.12)	-	91 (0.04)
Total loan outstanding	63383 (29.06)	25761 (11.81)	44700 (20.50)	5136 (2.35)	76880 (35.25)	2232 (1.02)	218092 (100.00)

Note: Figures in parentheses indicate percentage to respective total loan outstanding.

Determinants of Indebtedness

Although, the state has achieved from time to time very high levels of productivity from all crops but still the farmers are reeling under heavy debt. The factors affecting indebtedness namely, level of education, non-farm income, farm size, share of non-institutional loan in total loan, high expenditure on house, laziness, etc. were identified during the study. Multiple step regression analysis was performed with 15 independent variables including nine dummy variables in the form of 'yes' or 'no' in the first run model. In the final run model six significant variables including two dummy variables were retained. The results so obtained are presented in Table 7.

In order to identify the socio-economic factors affecting indebtedness among farmers, multiple step regression was applied in its semi-log form as under:

$$\text{Log } Y = \text{Log } a + b_1 \text{Log } X_1 + \dots + b_n \text{Log } X_n + \mu$$

where,

TABLE 7. SOCIO-ECONOMIC FACTORS AFFECTING INDEBTEDNESS AMONG FARMERS:
REGRESSION ANALYSIS

Variable (1)	β (2)	t-value (3)
Constant	4.783	50.09***
Education (schooling years)	0.012	2.62***
Non-farm income (Rs./farm)	-0.0000032	4.10***
Farm size (acres)	0.016	6.66***
Per cent non-institutional loan	0.007	3.89***
High expenditure on house: dummy (Yes=1, No=0)	0.089	1.94*
Laziness: Dummy (Yes=1, No=0)	0.109	2.05**
$R^2=0.7123$	F ratio = 121.72**	

Note: ***:** and *Significant at 0.01, 0.05 and 0.10 level, respectively.

- Y = Total loan outstanding
A = a constant term
 X_1 to X_n = Independent variables
 B_1 to b_n = Regression coefficients of X_1 to X_n
 μ = a random error term

The value of R^2 was found to be 0.7123 indicating that 71.23 per cent of the variation in the indebtedness was explained by the independent variables included in the equation. The regression coefficients of education, farm size, share of non-institutional loan, high expenditure on house and laziness were significantly positive. This reveals that with an increase in these variables, the debt amount increases. However, the regression coefficient of non-farm income was significantly negative which indicates that an increase in non-farm income results in decrease in the amount of debt of farmers. Thus, farmers with higher education, larger farm size, larger share of non-institutional loan, high expenditure on house and lazy attitude are highly prone to indebtedness as compared to their counterparts. In order to improve the incidence of indebtedness, non-farm sources of income need to be encouraged.

Farmers' Perceptions Regarding Indebtedness

Credit is considered as a lifeline of agriculture but being a gamble of monsoon and due to other natural conditions, the farmers are often pushed in the vicious circle of poverty which does not allow them to improve their economic conditions. The farmers have some perceptions regarding their indebtedness. Table 8 reveals that farmers of Punjab believed that low price of their produce was the main reason of indebtedness as all the sampled farmers complained about it.

The second major reason for indebtedness was identified as low profit margins due to stagnant crop productivity or crop failure and 73 per cent of the farmers reported the same. High rate of interest charged by commission agents was the third important reason as reported by about 67 per cent of the farmers, followed by high expenditure on house construction and expensive health care and education as

TABLE 8. FARMERS' PERCEPTIONS REGARDING THE REASONS OF INDEBTEDNESS IN PUNJAB (MULTIPLE RESPONSE)

Perception (1)	Total (2)	Percentage (3)	Ranking (4)
Low price of farm produce	300	100.00	1
High rate of interest by commission agents	200	66.67	3
Low profit margins due to stagnant crop yield /crop failure	218	72.67	2
Exploitation by commission agents	73	24.30	7
Emphasis on allied agricultural occupations	27	9.00	10
High expenditure on house construction	128	42.67	4
High expenditure on social ceremonies	99	33.00	6
Laziness and lack of hard work	71	23.67	8
Unjustified purchase of tractor	68	22.67	9
High expenditure on health care and education	126	42.00	5

expressed by about 43 per cent and 42 per cent of the sampled farmers, respectively. About 33 per cent of the total sampled farmers considered high expenditure on social ceremonies to be responsible for their indebtedness. Further, exploitation by commission agents was found to be the reason for indebtedness of about 24 per cent of the sampled farmers. Also, lack of hard work, unjustified purchase of tractor, starting allied occupations were reported as reasons of indebtedness by about 24 per cent, 23 per cent and 9 per cent of the sampled farmers, respectively.

Farmers' Problems in Availing Institutional Loans

Though being exploited by the non-institutional sources of credit, farmers still turned towards them in times of need since they faced a lot of problems in availing credit from institutional sources. The most common problem faced by about 85 per cent of the respondents was complicated and time consuming procedure of availing loan (Table 9). The second and third most common problems faced by the sampled farmers as expressed by about 47 per cent and 42 per cent of the farmers were

TABLE 9. PROBLEMS FACED BY FARMERS FOR AVAILING INSTITUTIONAL CREDIT IN PUNJAB (MULTIPLE RESPONSE)

Problems (1)	Total (2)	Percentage (3)	Ranking (4)
Complicated and time consuming procedure	256	85.33	1
High transaction cost	127	42.33	3
Non-availability of domestic loan	22	7.33	7
Bribe for <i>Patwari</i> , agents and officials	42	14.00	6
Illiteracy and less links with bank officials	91	30.33	4
No bank at village level	67	22.33	5
No loan without surety/security by banks	142	47.33	2
Unapproachable for marginal farmers/tenants due to hypothecation of land	2	0.67	9
Bureaucratic behaviour of bank officials	67	22.33	5
Insufficient loan for farm needs	5	1.67	8

unavailability of non-collateral loans and high transaction cost of credit, respectively. About 30 per cent of sampled farmers could not establish links with bank officials as they were uneducated. Further, about 22 per cent each of the sampled farmers complained about the bureaucratic behaviour of bank officials and lack of banking facility at village level. Corruption, non-availability of domestic loan, insufficient loan amount and inability of marginal farmers/tenants to hypothecate their land value were some of the other problems as stated by 14 per cent, 7.33 per cent, 1.67 per cent and 1 per cent of the sampled farmers, respectively.

Farmers' Suggestions for Improving Institutional Credit System

The farmers also gave some valuable suggestions for improvement in the existing institutional credit delivery system (Table 10). The most common suggestion stated by about 85 per cent of the farmers was simplification of banking procedures, and about 52 per cent suggested for setting up of automated teller machine (ATM) in every village. Other suggestions made by 48 per cent, 38 per cent and 37 per cent of the sampled farmers were subsidy on loan for small farm category, on the spot sanction of loan directly through Panchayat and reduction in transaction cost involved in availing bank loan, respectively. For improving the credit delivery system, waiving off old debts (24.67 per cent), bank branches at village level (23.33 per cent), increase in credit limit (20.67 per cent), provision of domestic loan (5.00 per cent) and provisions of loan to tenants (1.33 per cent) were suggested by the sampled farmers.

TABLE 10. FARMERS' SUGGESTIONS FOR IMPROVING THE PERFORMANCE OF INSTITUTIONAL CREDIT DELIVERY SYSTEM (MULTIPLE RESPONSE)

Suggestions (1)	Total (2)	Percentage (3)	Rank (4)
Simplify loan procedure	255	85.00	1
Reduce transaction costs	110	36.67	5
Sanction of loan on the spot (through Panchayat)	113	37.67	4
Increase credit limit	62	20.67	9
Subsidise the loans for the small farmers	145	48.33	3
Bank branch facility in every village	70	23.33	8
Waive off old debt	74	24.67	7
Provision of loans to tenants (on the basis of leased land)	4	1.33	11
ATM in every village	156	52.00	2
Check corruption/bribe	92	30.67	6
Provision of domestic loans	15	5.00	10

Reasons for Farmers' Preferences for Non-Institutional Source of Credit

Along with problems and suggestions for getting loans from institutional sources, the farmer also expressed reasons for their preferences of non-institutional sources of credit. The most common reason for preferring non-institutional sources as expressed by about 95 per cent of the farmers was all-time availability of credit (Table 11).

Availability of loan for all purposes like marriages or other social functions, was identified as the second most common reason for preference (81 per cent). Ease in getting loans, availability of non-collateral loans and no need for any kind of security/formality were the other reasons for preference of these institutions as stated by about 70 per cent and 53 per cent of the sampled farmers, respectively. The other reasons stated for readily preferring non-institutional agencies included availability of low credit limit from banks (7 per cent), high cost of transaction of banks (5 per cent) and no need to bribe any person/official in order to avail loans (3.67 per cent).

TABLE 11. REASONS GIVEN BY FARMERS FOR PREFERENCE OF NON-INSTITUTIONAL LOANS (MULTIPLE RESPONSE)

Reasons (1)	Total (2)	Percentage (3)	Rank (4)
Easy to avail	210	70.00	3
Credit can be taken for any purpose	243	81.00	2
Credit can be taken at any time	284	94.67	1
No surety, security or formality needed	158	52.67	4
Low credit limit in banks	21	7.00	5
High transaction cost of banks	15	5.00	6
No bribe to any official	11	3.67	7

V

CONCLUSIONS AND POLICY SUGGESTIONS

Punjab agriculture has been passing through a phase of severe economic crisis due to stagnant productivity, declining income and increasing indebtedness. The peasantry is heavily indebted as 88 per cent of the farmers are indebted to the tune of Rs. 2.18 lakh per household. The relative debt burden of the marginal farmers on per hectare basis was about six times more than the large farmers. A major proportion of the total debt was taken for productive purposes like purchase of farm machinery, inputs and agricultural land (57.4 per cent). However, non-productive purposes like maintenance and repair of house, consumption, health and social ceremonies comprised 43 per cent of the total debt. Around one-fifth of the total debt was owed to non-institutional sources, of which *arhtiyas* were the most popular source as they facilitated easy availability of credit at all times and for all purposes. Low prices of farm produce, low profit margins due to stagnant productivity, high expenditure on health care and house construction were some of the most common reasons for indebtedness.

In view of these sullen economic conditions of the farmers in Punjab there is a need to incorporate certain improvements which would help these farmers in addressing the ongoing agrarian crisis. The non-institutional sources of finance need to be regularly monitored and the functioning of commercial banks needs to be improved so that the farmers can be bailed out from the clutches of money lenders and have better and convenient alternatives of finance. As the farm inputs and

machinery costs are high, the village level co-operative farm and machinery centres needs to be strengthened and their functioning should be redefined to provide quality farm inputs and other required services at lower prices. Hiring of heavy farm machinery and equipment on custom hiring basis from these centres should be encouraged for reducing farming fixed as well as variable costs without any direct individual investment for the same. As farm income is insufficient to meet the farm and domestic expenditure, therefore, to ensure alternative and supplementary source of income the off-farm employment opportunities need to be invigorated in the rural areas for diverse employment opportunities. The crop insurance schemes need to be effectively implemented which would cover the losses of the farmers against crop failure and damage. There is a need to mull over these issues to accelerate growth of the farming sector so that the level of living of farmers, particularly small farmers, can be improved.

Received October 2013.

Revision accepted May 2014.

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