FARMERS INDEBTEDNESS IN HARYANA: AN ASSESSMENT

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Abstract: *Farmers Indebtedness in the State has emerged as a central issue. This is because, the problem of indebtedness, damaged the social status of a farmer and triggered to commit suicide. In India, on an average, there is one farmer suicide in every 30 minutes since 2002 [Sainath: 2008a], while in case of Haryana, the suicide rate of farmers is 4.8 per cent per one lakh farmers [NCRB]. Therefore, the issue of farmers' indebtedness becomes a matter of intense debate for whole of the country and as well as for Haryana. In this background, the present study is made to attempt the status of farmers' indebtedness in the State in detail. The results of the study indicate that the informal mechanism of credit delivery is playing an important role for marginal and small farmers in meeting their credit requirements in the State. Seventy one per cent loans to total loan were used in productive activities in Haryana, while in case of India the same ratio was found 73.10 per cent. The marriage & ceremonies was the major unproductive expenses in Haryana, which was higher as compared to aggregate India. In addition, the maximum debt burden was found to be Rs. 25289 on the 615-775 MPCE class farmer households in the State and the status of Scheduled Cast and Backward Class farm households is not better, while on an average the status of farm households those belong to other social group of farming community is better in the State as compared to aggregate India. The size of land holding is also negatively associated to informal borrowing. On the basis of foregoing analysis, we suggest that the State government should monitor the informal mechanism of credit, increase the awareness among farmers in general and marginal and small in particular, about the disadvantages of utilization of loan in unproductive activities and strengthen the Co-operative movement in the State.*

Keywords: *Farmers' Indebtedness, MPCE Class, Social Groups, Informal & Formal Credit, Productive Activities*

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INTRODUCTION

In Haryana, the contribution of agriculture sector in total Net State Domestic Product [NSDP] has been decreasing over the period due to high growth in manufacturing & service industry, and slower rate of growth in agriculture sector of the State. The Central Statistical organization [CSO] data indicates that the ACGR of agriculture NSDP of the State was 4.86 per cent during the period from 1983 to 1994 and has decreased to 1.77 per cent from 1993 to 2004. The share of agriculture employment has also decreased due to expanding of non-farming activities[1] in the State. But, the absolute number of persons has engaged in agriculture sector in the State increased significantly. The census of Haryana also shows that number of persons engaged in agriculture activity has increased to 4322234 in 2001. Further, Situation Assessment Survey (SAS: 2003) revealed that in Haryana, aggregate 39 per cent farmer[2] [s] don't like farming due to many reasons such as- no-profitable, high risk, etc. In addition, National Crime Record Buru (NCRB) indicates that the suicide rate among one lakh farmers in Haryana is 4.8 per cent. The proportion of farmers' suicide is 0.5 in comparison to general suicides of the State. The above symptoms indicate that the agriculture sector of the State has been shifting from accelerating to decelerating since 1990s. Although, there are a number of reasons [i.e., marketing, cost of cultivations, indebtedness, climate, surge in food grains prices, reduced per capita food grain availability, etc.] behind slow down in agriculture sector of the State. But, indebtedness of farmers in the State has emerged as a central issue. This is because, the problem of indebtedness, damaged the social status of farmers and triggered to commit suicide. In India, on an average, one farmer commit suicide every 30 minutes since 2002 [Sainath: 2008a], while in

[1] Rural Non-Farm Activities: The rural non-farm activities (RNFA) are generally defined as comprising all those non-agricultural activities, which generate income to rural households (including income in kind and remittances), either through waged work or in self-employment. In other words, it includes all economic activities in rural areas except agriculture, hunting and fishing (Lanjouw and Lanjouw: 2001). Since it is defined negatively, as non-agriculture, it incorporates a wide range of activities including manufacturing, petty trading, services, as well as transfer payments and remittances from temporary or seasonal migration to rural areas (Davis and Pearce, 2001). The census of Haryana indicates that only 2.60 per cent of total main workers were engaged in non-farm sector in 1971 which increased from 23.52 in 1981, 26.23 in 1991 to finally 35.00 per cent in 2001].

[2] Farmer may be define as a person who operates some land (owned or taken on lease or otherwise possess) and also engaged in agricultural activities on that land in last 365 days.

case of Haryana, the suicide rate of farmers is 4.8 per cent per one lakh farmers [NCRB]. Therefore, the issue of farmers' indebtedness becomes a matter of intense debate for whole of the country and as well as for Haryana. In this background, the present study is made to attempt the status of farmers' indebtedness in the State in detailed. The study has been divided into six sections. The first section of the study highlights the objectives, hypotheses, research methodology, data sources and tools and techniques that have been applied in the study. The second section of the study describes the overview of farmers in the State along with aggregate India. In section three, the farmers' indebtedness in Haryana and India by sources along with size of land holdings is discussed. Section four presents the loan utilization pattern of farmers, while in section five; we discussed the debt burden on farmers in Haryana along with India; and concluding remark in the last section of the study.

OBJECTIVES OF THE STUDY

1. To find out the farmers' indebtedness by source in the State.
2. To search the utilization pattern of loan by farm households in the State.
3. To examine the loan burden on farm households in the State.
4. To compare the position of farmers' indebtedness of the State to aggregate India.

HYPOTHESES OF THE STUDY

- ❖ There is no significant difference in farmers' indebtedness by source in Haryana and India.
- ❖ There is no significant different in loan burden on various social groups farm households according to different MPCE classers between Haryana and India.
- ❖ There is a negative association between size of land holding and informal borrowing.

RESEARCH METHODOLOGY

The nature of research is exploratory. The study is based on secondary data, which were collected from the Farmers Satiation Assessment Survey [2003], Indebtedness of Farmer Households Survey [2003], National Crime Record Bauru [various issues], Census of India & Haryana [various issues], Economic Census of Haryana [1998 & 2005], and Agriculture Statistics at a Glance [2008].

PLAN OF ANALYSIS

The collected data have been transcribed into long sheets from, tables have been formulated and analyzed using a wide range of appropriate techniques such as; mean, S.D., C.V and Regression Method.

SIMPLE LINEAR REGRESSION ANALYSIS

Simple linear regression represents a logical extension of between two variables analysis. Under it one independent variable is used to estimate the values of a dependent variable. The simple regression equation describes the average relationship between two variables and this relationship is used to predict or control the dependent variable. The formula for calculating multiple regression is as follows

$$Y = a_0 + a_1 X_1 + \varepsilon \text{..................} \ [1]$$

Where X_1, is regressor variable, a_1 is the parameter to be estimated from the data and ε is the error term following classical ordinary least square {OLS} assumptions i.e., the deviation ε is assumed to be independent and normally distributed with mean 0 and standard deviation (σ).

Table 1

Estimated No. of Rural Households in Haryana and India

Particular	Estimated No. of Rural Households	Estimated No. of Farm Households
Haryana	3147400 [100]	1944500 [61.78]
India	147898800 [100]	89350400 [60.41]

Source: NSS Report No. 498: Indebtedness of Farmer Households, 2003

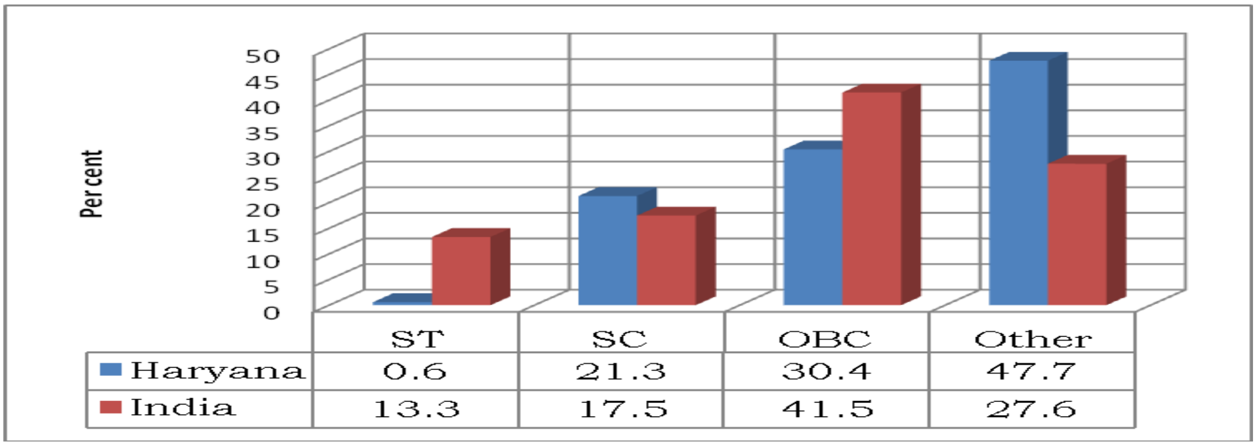
Table 1 reveals that the rural and farm household[3] [s] in Haryana are 3147400 and 1944500, which is only 2.12 and 2.17 per cent of the total rural and farm households of whole of India. The per cent share of farm households to total rural households in Haryana is 61.78 per cent, while the same ratio is 60.41 per cent in context of aggregate India. It means, the rural economy of the State is more dependent on farm activities as compared to aggregate rural economy of the country.

[3] Generally, a farm household can be defined as a household having a farmer as its member.

Figure 1

Farmer Households According to Social Group in Haryana and India

[In per cent]



Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Figure 1 shows the farm households in Haryana and India according to the social groups. The figure clearly shows that only 0.60 per cent farm households belong to ST, 21.30 per cent to SC, 30.40 per cent to OBC and 47.70 per cent to Other category in the State, while in case of India, these ratios of farm households are 13.30, 17.50, 41.50 and 27.60 per cent respectively.

Table 2

Farm Households According to Size of Land Holding

[In per cent]

Size of Land Holding	Haryana	India
<0.01	0.38	0.13
0.01 to 0.40	30.50	29.90
0.41 to 1.00	18.00	29.80
1.01 to 2.00	18.30	18.90
2.01 to 4.00	19.70	12.50
4.01 to 10.00	8.80	6.40
Above 10.00	9.00	12.00
All Size	100	100

Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Table 2 represents the per cent share of farm households according to the size of land holding in Haryana and India. It is clear from table 2 that the majority of farm households

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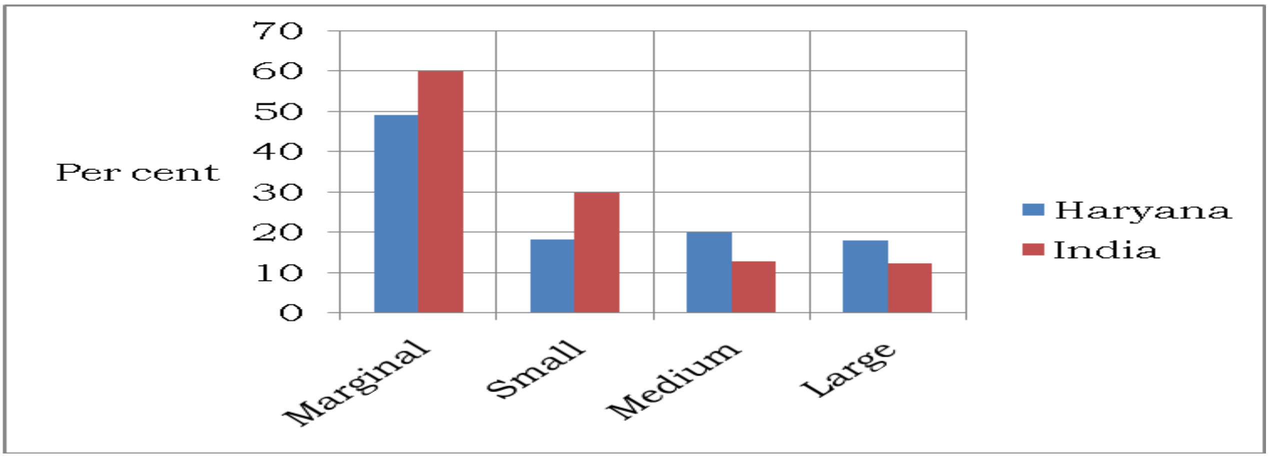
have land size between 0.01 to 0.40 in Haryana and India. To make the analysis simpler, all sizes of land holdings have been categorized into four categories [i.e., Marginal (up to .01), Small (1.01 to 2.00), Medium (2.01 to 4.00) and Large (above 4.01) see figure 2].

Figure 2

Broad Category of Farm Households According to Size of Land Holding



Source: Calculation by Authors from Table2

Figure 2 depicts that in Haryana the marginal, small, medium and large farm households are 48.88, 18.0, 19.70 and 17.80 per cent are respectively. In case of India, these ratios of farm households are 59.83, 29.80, 12.50 and 12.00 per cent respectively. But, the fact is clear from figure 2 that the marginal farm households are in in Haryana as well as India.

Table 3

Indebted Farm Households

Particular	Estimated No. of Indebted Farm Households	Indebted Farm Households as per cent to Total Farm Households
Haryana	1033000	53.00
India	43424200	48.60

Source: NSS Report No. 498: Indebtedness of Farmer Households, 2003

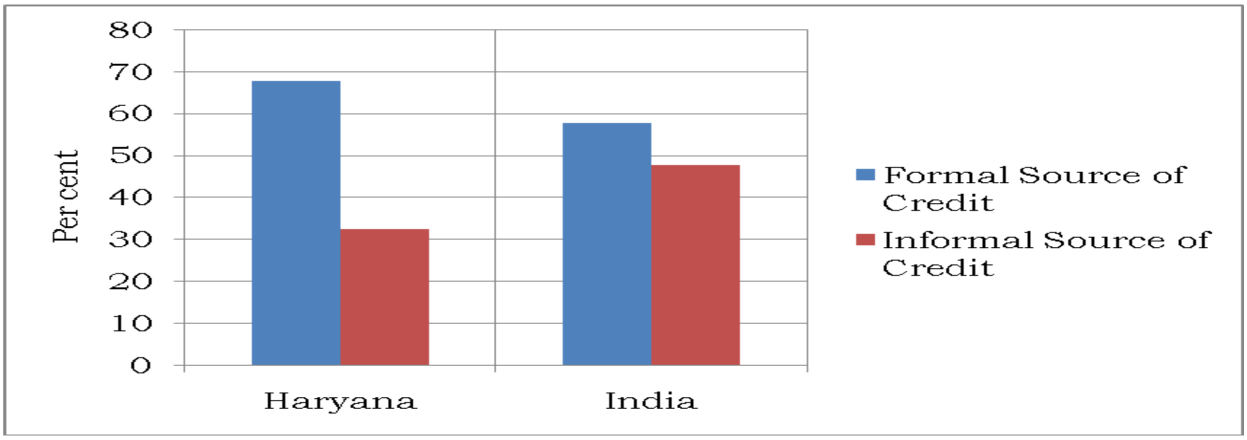
Table 3 expresses the estimated number of indebted farm households and indebted farm households as per cent to total farm households of Haryana and India. The ratio of indebted farm households as per cent to total farm households in Haryana is 53.00 per cent, while in case of India it is only 48.60 per cent. The main cause high indebtedness of farm households in Haryana is easy availability of credit as compared to other States and aggregate India. The

CMIE data base [2010] also shows indicate that population per bank office in Haryana is only 11145.07, in comparison to 14107.23 of aggregate India.

Figure 3

Indebtedness of Farm Households By Source

[In per cent]



Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Figure 3 shows the contribution of formal and informal sources[4] of credit in indebtedness of farm households in Haryana along with India. It is clear from figure 3 that the formal source of credit to total demand of credit by farm households contributes 67.60 and 57.70 per cent in Haryana and India respectively. Further, NSS Report No. 498 [Indebtedness of Farmer Households: 2003] also shows that the commercial banks are dominant in formal source of credit in Haryana as well as India, while, agriculture professional money lenders have dominated at informal source of credit in both places. The contribution of commercial banks in total formal debt has been 63.01 and 61.69 per cent Haryana and India respectively, while the contribution of agriculture professional money lenders have been 74.38 per cent in Haryana and 60.75 per cent in aggregate India in total informal supply of credit.

Table 4

[4] The formal sector of rural credit is the sector in which loan transactions are regulated by legislation and other public policy requirements. The institutions in this sector include commercial banks, Co-operative banks, RRBs and other registered financial institutions. The informal sector of credit is not regulated by public authorities, and the terms and conditions attached to each loan are personalized and therefore it differ according to the bargaining power of borrowers and lenders in all cases.

Size of Land Holdings and Indebtedness by Source

[In per cent]

Size of Landing Holding	Haryana			India		
	Formal	Informal	Total	Formal	Informal	Total
<0.01	14.60	85.4	100	22.60	77.4	100
0.01 to 0.40	46.50	53.5	100	43.30	56.7	100
0.40 to 1.00	71.00	29	100	52.80	47.2	100
1.01 to 2.00	62.00	38	100	57.60	42.4	100
2.01 to 4.00	86.40	13.6	100	65.10	34.9	100
4.01 to 10.00	59.40	40.6	100	68.80	31.2	100
Above 10.00	74.70	25.3	100	67.60	32.4	100

Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Table 4 depicts the loan taken by different size of land holder farm households by sources [i.e., formal and informal] in terms of per cent. It is understandable from table 4 that the informal mechanism of credit supply is playing a significant role for the farm households having size of land holding up to 0.40 acre in Haryana as well as India. Jointly, both categories [i.e., <0.01 and 0.01 to 0.40] farm households fulfils their 70 [Haryana] and 67 [India] per cent credit requirements by informal mechanism of credit supply in general and agriculture/professional money lender in particular [54.25 per cent in Haryana and 39.55 in aggregate India]. The per cent share of less than 25000 credit limit size class loan has been continuous decreasing since 1990. The share of above credit limit size was 58.70 per cent in 1990 and it decreased to 13.30 per cent in 2006 [BSR-RBI: 2007], while at same time, the share of marginal farmers to total farmers has significantly decreased from 43.70 per cent to 39.60 per cent. To know the impact of average size of landing holding on borrowing of informal lending, we applied simple regression equation model. A log-linear regression model[5] has been designed to explain it. The model is

$$Y = a + \beta_1 x_1 + \varepsilon \text{ .... [2]}$$

Where

Y = (Informal borrowing as per cent to total borrowings)

X_1 = average size of land holding and ε: stands for error term

[5] Both, variable used in natural logarithm form, for econometric estimation. Because, on theoretical and empirical grounds the log linear form is superior to the linear form. A log-linear form is more likely to find evidence of a restraint than linear form. So, the transformed natural log form of the model is i.e., Log IB = a + $\beta_1$log (SLH) + e

Informal Borrowing = 1.541 – 0.180

[21.775]* [-2.447] **

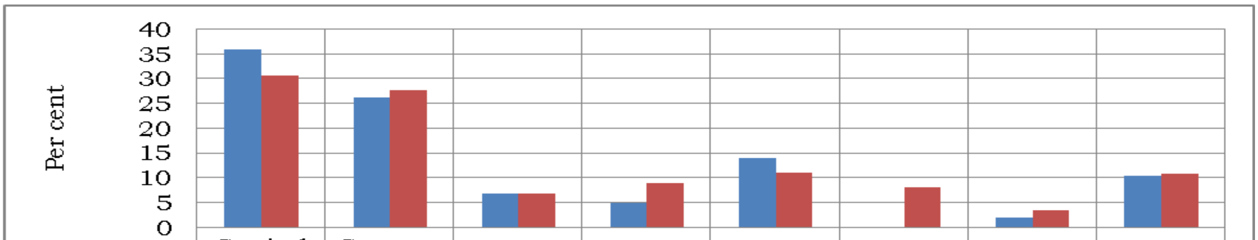
R^2 = .545, Adjusted R^2 = .454, SE = .18702, F = 5.987 [.058] **

Note: * 1 per cent and ** 10 per cent level of significance respectively

The regression equation reveals that, the average size of land holding is negatively associated with informal borrowings in the state. The value of R^2 is .545 or 54.50 per cent. It means 54.50 per cent variation in informal borrowing is arising due to the average size of land holdings. So, for popularizing the formal borrowing the State should be reduce the value of collateral security, develop the low cost financial products for marginal and small farmers [Chhikara and Kodan: 2011]; and reduce paper work and lowering the costs of access {transaction costs, especially in terms not only of fee and charges but also requirements for documentation are the main area for attention in context of formal financial exclusion} [Johnson and Zarazua: 2011]. In short, we can say that the informal credit in general and professional money lenders in particular, play a significant role to farmer community in general and marginal & small farmers in particular for lending in India as well as Haryana. In this context, strengthen of the Co-operatives may be a possible step. Because, at one hand Co-operatives will fight to professional money lenders in villages and it will increase the supply of formal credit in villages on the other. Moreover, the rate of interest on Co-operative loan/advances is less by 2 per cent as compared to commercial banks loan. So, definitely the loan burden on farm households can be reduced in future.

Figure 4

Loan Utilization Pattern of Farm Households



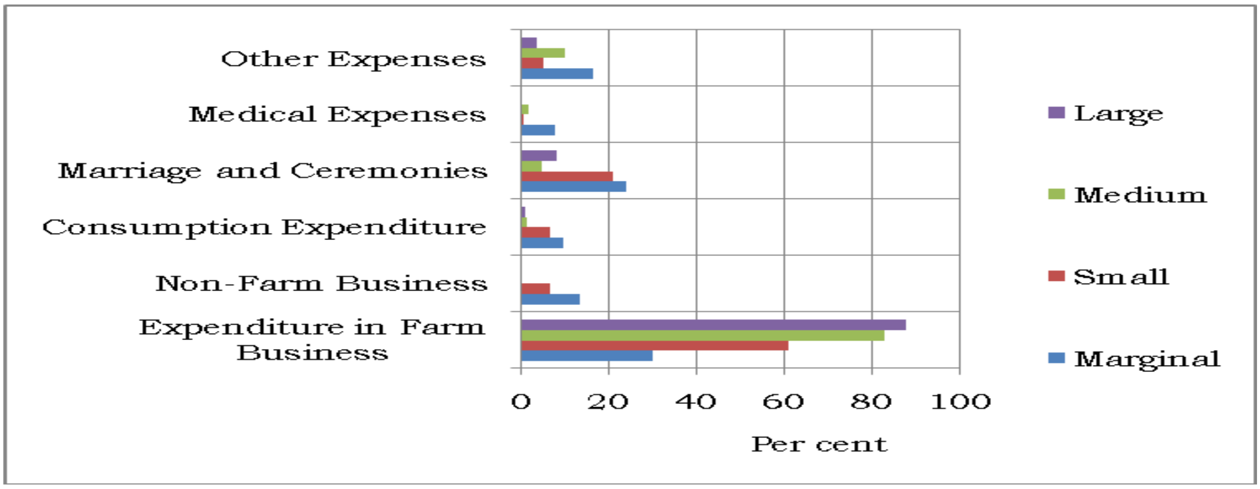
	Capital Expenditure in Farm Business	Current Expenditure in Farm Business	Non-Farm Business	Consumption Expenditure	Marriage and Ceremonies	Education	Medical /Health	Other Expenditure
Haryana	36	26.2	6.8	4.8	14	0	2	10.3
India	30.6	27.8	6.7	8.8	11.1	8	3.3	10.8

Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

The study of loan utilization pattern is very important aspect in context of indebtedness measurement. Since, the level of debt burden on a person depends on the utilization pattern of debt. So, the study of loan utilization pattern of farmers is of great significance for the study. Figure 4 reveals the loan utilization pattern of farmers Haryana as well as in India. The figure clearly shows that jointly 62.20 per cent loan amount was used in farm activities [either capital or current expenditure] by Haryana farmers, while in case of India the ratio was 58.40 per cent in 2003. The figure also depicts that 6.8 per cent and 6.7 per cent amount of loan was used in non-farm business by Haryana and aggregate Indian farmer community in 2003. Figure 4 also expresses that, jointly 18.80 and 19.10 per cent amount of loan was used in consumption and marriage & ceremonies by Haryana and aggregate India farmers respectively during the same period. At aggregate level of India, 8 per cent amount of loan was used on education, while in case of Haryana the expenditure was nil during the period under consideration. In sum, we can say that 71 per cent amount of loan was utilized by farmers of Haryana in productive activities; while in case of India the ratio was 73.10 per cent. But, in context of aggregate India, the debt for productive purposes as a per cent of total debt declined from 72 per cent in 1981 to 63 per cent in 2002. Similarly, the share of debt used for farm business declined from 64 per cent in 1981 to 53 per cent in 2002. Within farm business expenditure, the share of capital expenditure declined from 45.3 per cent to 34.3 per cent. The increase in capital expenditure for non-farm business could not fully compensate the fall in farm business expenditure, which resulted into a fall in the share of overall productive expenditure between 1981 and 2002 [Radhakrishna: 2007]. Thus, we can say that the productivity of loan in aggregate India has somewhat better as compared to Haryana.

Figure 5

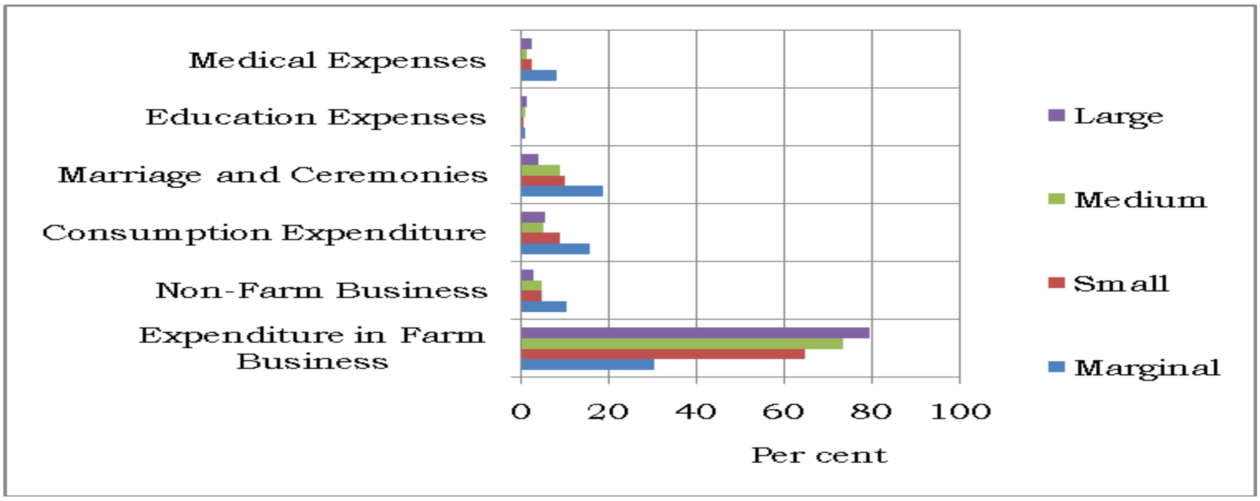
Size of Land Holding and Loan Utilization Pattern in Haryana



Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Figure 6

Size of Land Holding and Loan Utilization Pattern in India



Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Figures 5 and 6 reveal the association between size of land holding and purpose of loan taken by farm households of Haryana as well as of India. The figures 5 and 6 shows that the farm expenditure (capital and current) was the common purpose of loan taken by different size of land holding farmers in Haryana along with India. The next important purpose of loan taken by marginal [23.70 per cent], small [20.70 per cent] and large [8.50 per cent] farmers was marriage and ceremonies, while other expenses [9.70 per cent] was important purpose of loan taken by medium farm households in Haryana in 2003. In case of India, the next important purpose of loan taken by marginal [18.60 per cent], small [90.90 per cent] and medium [8.90 per cent] farmers was also marriage and ceremonies except large farmers [5.35 per cent to total loan was taken for consumption] in same period.

Table 5

Debt Burden on Farm Households: According to different Monthly Per Capita Expenditure Classes

MPCE Class	Haryana	India	Col. [2] - Col. [3]
Col. [1]	Col. [2]	Col. [3]	Col. [4]
0-225	4489	4446	43
225-255	2701	6127	-3426
255-300	14812	8591	6221
300-340	23237	8544	14693
340-380	16629	9100	7529
380-420	10764	9510	1254
420-470	25159	12873	12286
470-525	32248	15178	17070
525-615	20195	16529	3666
615-775	35289	20537	14752
775-950	34586	27630	6956
950+	26109	39058	-12949

Source: NSS Report No. 498: Indebtedness of Farmer Households, 2003

Table 5 expresses the debt burden on farm households [in Rs.] according to different Monthly Per Capita Expenditure[6] [MPCE] classes of farmers in Haryana as well as in India. Debt burden on farmers {0 to 225 MPCE Class} has been lowest MPCEC less in India and 225 to 255 MPCE Class of Haryana. Further, the table 5 shows that the debt burden on Indian and Haryana farm households has been more belong to 950+ and 615 to 755 MPCEC respectively. The debt burden according to the per cent of average MPCE[7] has been more on those belonging to 300-340 MPCEC and minimum on 225-255 MPCEC in the State, while in case of India maximum was observed in 950+ and minimum in 380-420 MPCE classes. The Pearson correlation coefficient was found positive and significant between high debt burden on farmers and high MPCE class in India as well as in Haryana. In addition to that there was

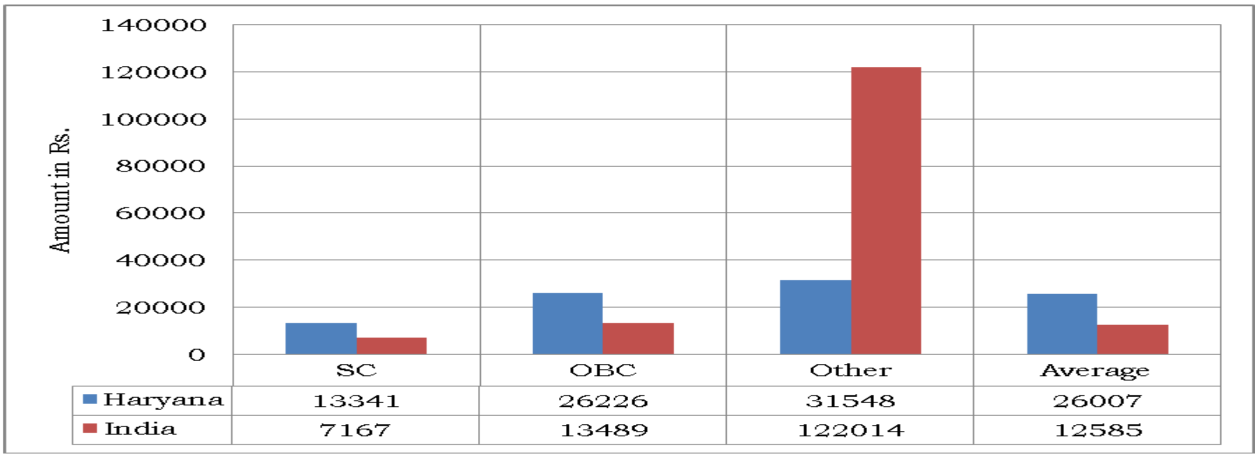
[6] Typically, Monthly Per Capita Expenditure [MPCE] class expresses as the level of total consumption expenditure of a households for one month.

[7] It is calculated by debt burden is Rs. divided by AMPCE and AMPCE was calculated through sum of upper and lower limit of MPCE and divided by 2.

no significant difference found between debt burden on farmers according to different MPCE classes between Haryana and India. It is clear from column 4, the status of Haryana farmers is best as compared to aggregate India belonging to 225-255 and 950+ MPCE classes in the milieu of debt burden in both terms [amount in Rs. and per cent to AMPCE]. To show the clear picture of debt burden on farmers of Haryana as compared to aggregate level of India, t-test was also applied. The calculated value of t-test is 2.226, while tabulated value is 2.09. Therefore, to conclude, we can say that there is no statistically significant difference between debt burden on Haryana and aggregate Indian farmers, but the problem of indebtedness of Haryana farmers is somewhat worse as compared to aggregate farmers of India.

Figure 8

Average Debt Burden on Farm Households Haryana and India: According to Social Group



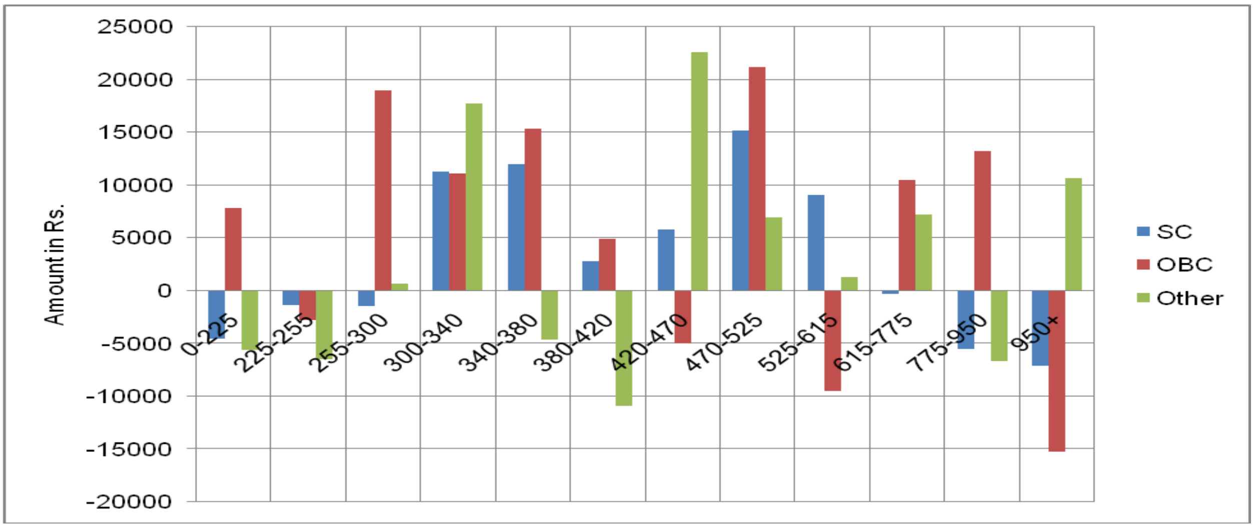
Source: NSS Report No. 498: Indebtedness of Farmer Households, 2003

Figure 8 illustrates the average debt burden on various social groups' farmers of Haryana along with India. It is clear from figure 8, the status of Scheduled Caste [SC] and Backward Class [BC] farmers are not better, while Other Class [OC] farmers was better as compared to same social group of aggregate Indian farmers in context of debt burden in 2003. The major explanation behind the worse status of SC and BC farmers is utilization of loan in unproductive activities [i.e. marriage, consumption, etc.]. The SAS [2003] data shows that 19.00 and 21.10 per cent loan was used in marriages and ceremonies by SC and BC farmers respectively of the State, while in case of aggregate India, 17.30 and 12.10 per cent respectively loan was used in same head by same social groups of farmers. Further, SAS [2003] also reveals that 26.40 and 62.0 per cent loan was used by SC and BC farmers in productive activities [either farm business or non-farm business] in Haryana, while in case of aggregate India, the same ratio of SC and BC farm households was 50.0 and 62.20 per cent respectively during the period under consideration. Further, the SAS [2003] depicts that the maximum debt burden was on SC, BC and Other social group of farmers belonging to 470-525, 775-950 and 0-225 MPCE class respectively, while minimum debt burden was on SC, BC and Other social group of farmers belonging to 470-425, 775-950 and 615-775 MPCE class respectively in the State. In case of India, the maximum and minimum debt burden on farmers, according to same social groups belonging to 225-255, 0-225 & 0-225 respectively and 950+, 950+ and 775-950 MPCE Class, respectively.

Figure 9

+/- Burden of Loan on Haryana Farm Households

[In Rs.]

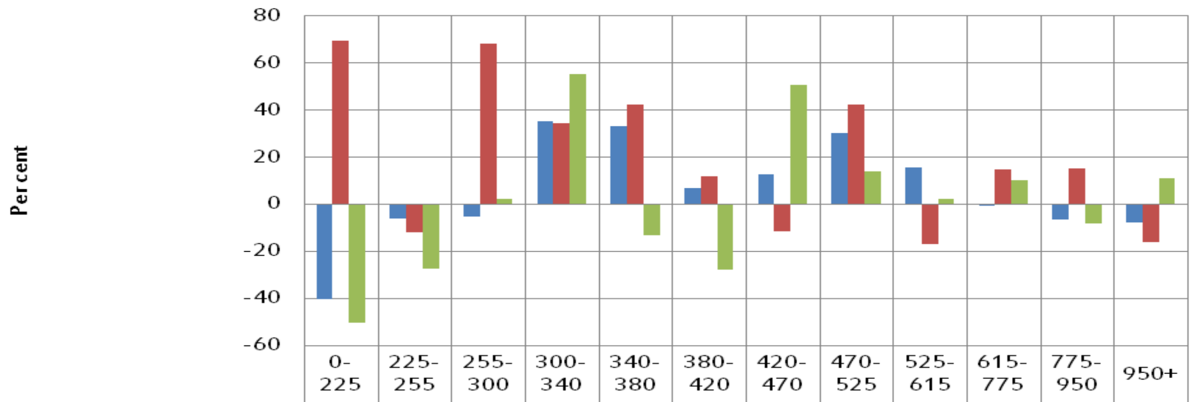


Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Figure 10

+/- Burden of Loan on Haryana Farm Households

[As per cent to AMPCE]



	0-225	225-255	255-300	300-340	340-380	380-420	420-470	470-525	525-615	615-775	775-950	950+
SC Farm Households	-39.8	-5.68	-5.2	35.32	33.41	6.927	13.06	30.50	15.86	-0.40	-6.37	-7.49
OBC Farm Households	69.56	-11.6	68.53	34.72	42.63	12.23	-11.0	42.60	-16.6	15.13	15.33	-15.9
Other Farm Households	-49.9	-27.1	2.407	55.50	-12.7	-27.3	50.89	14.00	2.321	10.46	-7.75	11.27

Source: Calculation by Authors from NSS Report No. 498: Indebtedness of Farmer Households, 2003

Figure 8 shows the excess/low debt burden on farm households in the State according to their social groups of farmers as compared to aggregate India in terms of Rs. while, Figure 9 shows the excess/low debt burden on farm households in the State according to their social groups of farmers as compared to aggregate India in terms of per cent to AMPCE[8]. It is clear from figure 8 and 9, the loan burden on Scheduled Caste farmers belonging to 0-225, 255-300, 615-775, 775-950 and 950+ MPCE Classes was found to be low, and OBC community farmers' loan burden was found low those belonging to 225-255, 420-470, 525-615 and 950+ MPCE Classes as compared to aggregate India. It is also observed from figure 8 and 9 that other farmer community belonging to 0-225, 225-255, 340-380, 380-420 and 775- 950 MPCE Class the loan burden was low as compared to aggregate India. To conclude, we can say that the debt burden is low in terms of Rs. on Haryana farm households of all social groups, but it is very high as per cent to average per capita monthly expenditure [APCME].

[8] In this study, we assume that there are five members in a family of farm households. Therefore, there is no difference in total monthly expenditure of farm households in the State.

MAJOR FINDINGS

Through the study, we analyzed the problem of farmers indebtedness in Haryana in detail and also compare the status of Haryana farmers to aggregate Indian farmers in the milieu of indebtedness with the help of Situation Assessment Survey [2003] data along with appropriate statistical tools and techniques. The data shows that jointly 62.20 per cent loan amount was used in farm activities [either capital or current expenditure], while total 71 per cent loan to total loan taken was used by Haryana farmers in productive activities [i.e., farm and non-farm activities]. But, the ratio was low as compared to aggregate India [73.10 per cent]. Definitely, farm expenditure (capital and current) was the common purpose of loan taken by different size of land holding farmers in Haryana, but, marginal and small farmers used a significant amount of loan in marriage and ceremonies expenditure, that was 23.70 and 20.70 per cent respectively to total amount of loan taken. Further, the debt burden on farm households belonging to 950 + MPCEC in India has been more, while in case of Haryana, it has been high among 615 to 775 MPCEC farmers. The Pearson correlation co-efficient conformed a positive and significant relation between high debt burden on farmers and high MPCE class in India as well as in Haryana, although there is no significant difference was found between debt burdens on farmers of Haryana and India according to different MPCE Classes. The status of Scheduled Caste [SC] and Backward Class [BC] farmers are not better, while Other Class [OC] farmers of Haryana were found to be better as compared to same social group of aggregate Indian farmers in case of debt burden. The NSS Report No.496: 'Some Aspects of Farming' {2003} reveals that 74 per cent male and only 31 per cent female farmers in India are educated, but the rank of Haryana is 3rd in male farmer education and 9th in female farmers. The report further shows that only 9, 62 and 12 per cent farmers are not aware about the bio-fertilizer, MSP and WTO respectively in the State. In addition, 69 per cent farmers are not the members of Co-operative in Haryana. Moreover, 41 per cent farmers are not aware about crop insurance and 42 per cent said that the facility of crop insurance has not been available. The study also found that the average size of land holding and informal credit lending are negatively associated, while due to population growth and single family trends, the average size of land holding has been decreasing in the State as well as in aggregate India, which is a matter of concern.

SUGGESTIONS

On the basis of foregoing analysis we suggest that: 1] the State government should monitor the informal mechanism of credit, 2] increase the awareness among farmers in general and marginal and small in particular, about the disadvantages of utilization of loan in unproductive activities, and 3] strengthen the Co-operative movement in the State. In addition, 4] the government should also strengthen the self help group moment in the State, as only one per cent of farmer households belong to a self-help group (SHG) while, indebted farmer households holding land up to 2 hectare are seventy per cent in the state. Moreover, 5] the government should boost the dairy farming in the State as it is more suitable to marginal and landless farmers in support of income generation. 6] Banks should implement low-cost financial products through the generalized use of electronic payment methods, which enable financial institutions to improve their efficiency ratios, facilitate the use of low-cost distribution channels and enable application of credit risk monitoring system that decrease the default rate, 7] the State government should take strict action against who do not disburse 100 per cent agriculture credit limit in the State in a prescribed year, 8] the state government should also set up credit counselling centre with the help of commercial banks for advising public on gaining access to financial systems. Income, Expenditure and Productive Assets of Farmer Households Survey [2003] reveals that farmers belonging to the lowest monthly expenditure class or the poorest category have only 31 buffaloes per 100 households, whereas the highest monthly expenditure class has 113 buffaloes per 100 households in India. Therefore, 9] the government of the State should also boost the animal husbandry as a profession among poorest people through providing better atmosphere, subsidized cattle food, better health treatment for animals, better training of animal husbandry, etc. in the State. 10] The state government should also boost the Non-Farming Activities in the state for enhancing the income of farmer-households for sustainable livelihood. 11] The farmers' grief and sorrow can be visualized by adding one more invisible factor in the form of daily wages {Rs. 179 per day per person in Haryana under MNREGA} according to which a farmer can earn Rs. 64,440 per annum or 17,900 for 100 days which they never count/receive while calculating their cost of produce; accordingly a family of five persons is under a loss of Rs. 3, 22,200 p.a. or 89,500 p.a. for 100 days. Therefore, we suggest that a minimum of Rs. 17, 900 p.a. per person {an unemployed major who works on fields} should be given a to farmer family under MNREGA to relieve the family from the debt and for a sustainable smooth life capable of capitalizing the available resources rather than consuming them.

CONCLUSION REMARK

Today, the farmer community faces many challenges [i.e., marketing, cost of cultivations, indebtedness, an adequate supply of money at affordable cost, climate, surge in food grains prices, reduced per capita food grain availability etc.] and out of these factors provision of proper supply of credit is one of the most important issues for the sustainable development of the sector [Chhikara and Kodan: 2011; Golait: 2007]. So, the rural credit delivery system must be compatible with the goal of higher growth with better equity [Kainth: 2007].

REFERENCES

1. Agriculture Statistics at a Glance [2008].
2. Balasaheb, Vikhe Patil [2008] 'Agriculture Indebtedness: Crisis and Revival', EPW, February 2, 2008.
3. Census of India & Haryana [various issues].
4. Chavan, Pallavi (2005): 'How 'Inclusive' Are Banks under Financial Liberalization?', Economic & Political Weekly, October 22, pp 4647-49.
5. Chavan, Pallavi (2007): 'Access to Bank Credit: Implications for Rural Dalit Households', Economic & Political Weekly, August 4, pp 3219-23.
6. Chhikara, Kuldip S and Kodan, Anand S [2010] 'Status of Financial Inclusion in Haryana: An Evidence of Commercial Banks' [Forth Coming], Management and Labour Studies, XLRI Institute, Jharkhand (India).
7. Chhikara, Kuldip S and Kodan, Anand S [2011] 'Co-operative Dairy Development in Haryana: An Assessment, April 2011, Vol. 32, No. 4, Udyog Yug, Haryana Industries and Commerce, Haryana (India).
8. Chhikara, Kuldip S and Kodan, Anand S [2011] 'Financial Inclusion, Development and Its Determinants: An Evidence of Indian States', Vol. No., April 2011, Asian Economic Review, Andhra Pradesh (India).
9. Chhikara, Kuldip S and Kodan, Anand S [2011] 'Growth of Kisan Credit Scheme and its Determinants: A Cross State Analysis', January-June 2011, Vol. 1, No. 1, Haryana School of Business Research Review, GJUS&T, Hisar, Haryana (India).

10. Chhikara, Kuldip S, Kodan, Anand S and Kaidan, Narender [2011] ‘Agriculture Credit in Post WTO Period: Trends, Composition, Issues and Challenges’, ELK Journal of Finance and Risk Management, March, Ghaziabad (UP).
11. Economic Census of Haryana [1998 & 2005].
12. Golait, R [2007] ‘Current Issue in Agriculture Credit in India: An Assessment’, Reserve Bank of India, Occasional Paper, 28 [1].
13. Johnson, Susan and Max Nino Zarazua [2011] ‘Financial Access and Exclusion in Kenya and Uganda’, Journal of Development Studies, Vol. 47, No. 3, 475-496, March 2011.
14. Kainth, Gursharn Singh [2007] ‘Rural Finance in India’, Yojana, February, 2007.
15. Kodan, Anand S and Chhikara, Kuldip S [2011] ‘Priority Sector Credit in India: Bank Group Wise Study’, Matrix Business School, July-September, Pune, Maharashtra (India).
16. Kodan, Anand S and Chhikara, Kuldip S [2011] ‘Supply of Agriculture Credit by Commercial Banks in India: with Special Reference to Haryana’, Vol. 1, No. 2, October, 2010, MD University.
17. Kodan, Anand S and Deswal, Jasbir [2010] ‘Role of RRB’s for agriculturists’, January 2010, Vol. 48, No.17, Southern Economist, Andhra Pradesh (India).
18. Kodan, Anand S, Ahlawat, Narander and Mehra, Sandeep [2010] ‘Spatial Pattern and Challenges of Co-operative Dairy Farming in India’, Co-operative Perspective, July-September, Vol. 45, No. 2, Pune, Maharashtra (India).
19. Kodan, Anand S, Garg, Narander and Kaidan, Sandeep [2011] ‘Financial Inclusion in Northern-Eastern Region-Status, Issue, Challenges and Policy Response’, Financial Economic Journal, ICFAI Publication, April-June, Hyderabad (India).
20. Kodan, Anand S, Kumar Rajesh, Deswal, Jasbir, Mehra, Shalindera [2011] ‘Micro Finance-Through Self Help Groups in India’, March-June 2011, Vol. 56, No. 1, Economic Affair, New Delhi (India).
21. Kodan, Anand Singh, Kumar Rajesh, Mehra, Sandeep and Yadav, Amit [2011] ‘Regional Inequality of Kishan Credit Card Scheme in India: An Analytical Study’, Agriculture Development in India, Book Edited by Vijayalakshmi. V and Published by Southern Economist Journal, May 1, 2011, Bangalore.

22. Kumar, Kush and Singla, Surender Kumar [2010]'Various Facets of Loan Among Small and Marginal Farmers in Punjab', Man and Development, March, 2010.
23. National Crime Record Bauru [various issue].
24. Pujari, Y D [2011] 'Rural Indebtedness: Causes and Consequences', Vol. 1, Issue. 1, February 2011, pp. 124-127.
25. Radakrishna, R [2007] 'Report of the Expert Group on Agriculture Indebtedness', Ministry of Finance, GOI, July, 2007.
26. S Mahendra Dev [2008] 'Agriculture: Absence of A Big Push', EPW, April 12, 2008.
27. Sainath, P [2008a] '17060 Farm Suicide in One Year, The Hindu, January 31.
28. Satish, P [2007]'Agriculture Credit in the Post-Reform Era: A Target of Systematic Policy Coarctation', EPW, June 30, 2007.
29. Shetty, S L (2006): 'Policy Responses to the Failure of Formal Banking Institutions to Expand Credit Delivery for Agriculture and Non-farm Informal Sectors: The Ground Reality and Tasks Ahead', Revised Version of the Seminar Paper, Monthly Seminar Series on India's Financial Sector, ICRIER, New Delhi, November 14.
30. Singh Sukhpal, Kaur Manjeet and Kingra, H S [2008] 'Indebtedness Among Farmers in Punjab', EPW, June 28, 2008.
31. Situation Assessment Survey of Farmers [2003] 'Some Aspects of Farming', NSS 59th Round, (January–December 2003), National Sample Survey Organization, Ministry of Statistics and Programme Implementation, Government of India, July 2005, Report No. 496(59/33/3).
32. Situation Assessment Survey of Farmers [2003]'Indebtedness of Farmer Households' NSS 59th Round, (January–December 2003), National Sample Survey Organization, Ministry of Statistics and Programme Implementation, Government of India, May 2005, Report No. 498(59/33/1).
33. Situation Assessment Survey of Farmers [2005] 'Income, Expenditure and Productive Assets of Farmer Households', NSS 59th Round, (January–December 2003), National Sample Survey Organization, Ministry of Statistics and Programme Implementation, Government of India, December 2005, Report No. 497(59/33/5).