# **EXTENT AND NATURE OF AGRICULTURE DEBT IN HARYANA: A CASE STUDY**

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Abstract: The demand for credit is increasing rapidly under the impact of agricultural transformation. Adoption of modernization in agriculture and economic expansion takes place as financial intermediaries both banking as well as non-banking play a vital role in growing requirements of credit poses a challenge for its supply. A wide variety of agencies, institutional as well as non-institutional, operate in order to meet this challenge. The institutional agencies namely government, co-operatives and commercial banks to a large extent satisfy the requirements of a sound agricultural credit system. As despite the several efforts made in order to create and strengthen an adequate institutional framework, non-institutional agencies plays a small role in the supply of farm credit in district. The chief sources of non-institutional credit in this area are private moneylender, commission agents, friends/relatives, which co-operatives, commercial banks and government, constitute the institutional sources of indebtedness. The present study has assessed the magnitude of agriculture debt purpose-wise, source-wise and categories-wise and examines the progress of institutional as well as non institutional agricultural credit in Haryana.

Keywords: Farm debt, institutional agencies, non institutional agencies, magnitude

## **INTRODUCTION**

The present study has been divided into two parts: Part I and Part II part I concerned with the magnitude of indebtedness and brings out and analyses the source-wise & purpose-wise composition of farm indebtedness. The main objective is to have an assessment of the magnitude of debt and brings out inter-farm category variations in respect of the debt. The magnitude of debt examined in three ways: one, in terms of absolute amount of the outstanding debt, second in terms of the per household amount of debt which we shall refer to as the household-wise intensity of debts and three in terms of per acre amount of debt, to be referred to as the acre-wise 'density' of debt. Part II is discusses the composition of farm debt in terms of its two broad sources, namely, Formal and Informal, categories. It also discusses the composition of farm debt in terms of its two broad uses namely

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'Productive and Unproductive' uses. For this purpose the researcher choose the district Sonepat in Haryana state for this study. Haryana came into existence in Nov. 1966. Haryana is located in the north-west part of the country. Its climate is arid to semi-arid with average annual rainfall to 455 mm. District Sonepat comprises of three sub-divisions namely Gannaur, Sonepat and Gohana and district Sonepat has an area of 2,13,080 Hectare. The River Yamuna runs along the eastern boundary of the district and separates it from Uttar Pradesh. Sonepat occupies an area of 2,13,080 hectares. Sonepat is the largest Tehsil in the District followed by Gohana.

## **SOME CONCEPTS**

Cash Loan: All loans taken in cash are considered as cash loans, irrespective of whether those loans are repaid or proposed to be repaid in cash or in kind. Cash loans, generally, covered borrowings at specific rate of interest for a specific period of time.

Kind Loan: All loans taken in kind like (fertilizers, seed etc.) irrespective of whether those were already repaid or yet to be repaid in cash or in kind were considered as kind loans payable.

Source of Loan: For each loan liability, the agency to which it is due is considered as the source of loan. The sources are categorized in two broad categories formal viz. Banks, Cooperative Societies/Banks, Government) and non formal (agriculturist, professional, moneylenders, traders, relatives/friends and others.

*Purpose of Loan:* For each loan liability, the purpose for which the loan was taken by the households has been considered as the purpose of loan. Four purpose categories were made: fixed expenditure in farm business, working expenditure in farm business, non-farm business and non- productive expenditure.

## **MAGNITUDE OF FARM DEBT**

A higher rate of technological change of continuous nature in the agriculture sector raises the demand for increased capital. The chronic high level of underemployment of labour in agriculture combined with small farm size, lack of education, low income and inadequate capital resources make agriculture in underdeveloped countries like India very difficult in terms of resource development. High level of unemployment and low capital per worker gives low productivity per worker and persistent low farm income.

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Table 1
Category-wise and Tehsil-wise Magnitude of Farm Dent in the District

(Amount in Rs.)

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Categories of	Sonepat	Gohana	Gannaur	Kharkhoda	Total
the farmers					indebtedness
Marginal	1764185(23)	3292480(42)	1708068(22)	998550(13)	7763283(100)
					[23]
Small	1415500(29)	1954600(40)	767000(15)	776000(16)	4913100(100)
					[15]
Medium	1616500(22.5)	3479000(48.5)	1051000(15)	1016000(14)	7162500(100)
					[21]
Large	2617000(26)	4931000(50)	1446192(15)	887000(9)	9881192(100)
					[30]
Agricultural	1424097(39)	1195428(32)	575251(16)	462960(13)	3657736(100)
Labour					[11]
All categories	8837282	14852508	5547511	4140510	33377811
indebtedness	[26]	[45]	[17]	[12]	[100]

Source: Field Survey

Note: Figures given in brackets show the percentage.

The table presents a tehsil-wise distribution of the absolute debt across the four categories of farmers and agriculture labour. The all categories of tehsil index in the last row of the table reveals the inequalities in the distribution of debt across the four tehsils. Tehsil Gohana with 45 percent points occupies the first place, followed by tehsil Sonepat with 26 point, tehsil Gannaur 17 points and tehsil Kharkhoda 12 points.

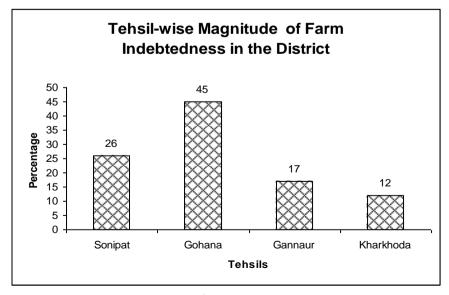


Fig. 1

**Category-wise Magnitude of Farm Debt** 35 30 30 25 Percentage 21 20 15 15 10 5 0 Marginal Medium Large Small Agri, Labour Categories

Fig. 2

A column-wise consideration of the table brings out the distribution of debt across four farm categories and agricultural labour in each tehsil and in the district as a whole. The combined debt share of the medium and large class farmers in tehsil Sonepat and Gohana is around 70 percent while that of the marginal and small farmers class is around 30 percent. The situation in respect of tehsil Gannaur and Kharkhoda is however differ to it where the combined debt share of the medium and large class farmers is around 28 percent and that of the marginal and small class farmers is around 35 percent. These figure do not compare well with the corresponding figures for the entire district, which are 51 percent and 38 percent, indicating wide disparities in the category-wise distribution of debt across the four tehsils.

Table 2
Category-wise and Tehsil-wise Per Acre Farm Debt

(Amount in Rs.)

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Category of the Farmers	Sonepat	Gohana	Gannaur	Kharkhoda	District
Marginal	13891(127)	17991(183)	24057(71)	14265(70)	17213 [451]
Small	19000(74.5)	17850(109.5)	19175(40)	18476(42)	18470 [266]
Medium	13876(116.5)	26674(141)	18121(58)	19352(52.5)	19463 [368]
Large	14085(164.5)	25418(194)	20086(72)	10435(85)	19168 [515.5]
All farm categories	15364 [482.5]	21764 [627.5]	19929 [241.5]	15269 [249.5]	18569 [1600.5]

Source: Field Survey.

Note: Figures in the brackets show the number of acres by each category.

Table 2 presents a tehsil-wise profile of the per acre farm debd in district. As indicated by the all categories tehsil index in the last row, tehsil Gohana has the highest per acre debt, i.e. Rs. 21764 followed by tehsil Gannaur Rs.19929, tehsil Sonepat Rs. 15364 and tehsil Kharkhoda Rs. 15269 and at the district level medium farmers across the other farm categories occupies Ist position with Rs. 19463 followed by small with Rs. 18470, marginal with Rs. 17213 and large farmers with Rs. 17168 and at distinct level all farm categories indebtedness per acre is Rs. 18569.

Table 3
Category-wise and Tehsil-wise Per Farm Households Debt

(Amount in Rs.)

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Categories of farmers	Sonepat	Gohana	Gannaur	Kharkhoda	District
Marginal	30417(58)	41156(80)	53377(32)	33285(30)	38816(200)
Small	78639(18)	75177(26)	85222(9)	77600(10)	77986(63)
Medium	101031(16)	173950(20)	131375(8)	127000(8)	13740(52)
Large	193083(12)	379307(13)	289238(5)	177400(5)	282319(35)
Agriculture labour	23735(60)	29886(38)	20545(28)	19290(24)	24384(150)
All categories	53885	83912	64433	52474	66755
indebtedness	[164]	[177]	[82]	[77]	[500]

Source: Field Survey.

Note: Figures in the brackets show the number of households

Table 3 depicts the tehsil-wise per household magnitude of debt i.e. tehsil-wise intensity of debt. As is made clear by all categories in the last row, tehsil Gohana has the highest debt per household i.e. Rs. 83912, followed by tehsil Gannaur Rs. 64433 tehsil Sonepat with Rs. 53885 and lowest tehsil Kharkhoda with Rs. 52474. It further presents that the column of the table shows large farm class has the highest per household debt i.e. Rs. 282239 and lowest in the marginal farm class i.e. Rs. 38816. It concludes that the landholdings and debt has appositive relationship because per household debt is increasing according to their landholding or farm-category. At the district level per household debt is Rs. 66755.

It can be said that demand for debt is derived from the needs of farmer in the context of overall development of agriculture sector based on growth and equity. The distinction

between productive debt and non-productive debt is not the same thing as a distinction between productive use and unproductive use of debt. All the same, demand for debt for production and investment is healthier signal than demand for family expenditure in the context of incorporating ability to repay.

In general, the need for debt increases with the modernization of agriculture. Transformation of traditional agriculture involves an extensive use of modern technology and inputs most of which need to be obtained from outside the farm. These inputs involve heavy financial investments. Debt is an important component in maintaining high levels of production in modern agriculture. Modern agriculture is frequently capital intensive and farmers, like industrialists, need to borrow, especially for capital inputs such as farm machinery. The more highly developed the agriculture sector, the greater the amount of debt needed.

The demand for agriculture debt depends on the level of agricultural development of a country and its structure.

### SOURCE-WISE COMPOSITION OF FARM DEBT

The various sources of debt of the agriculture sector have been clubbed into two broad categories, viz. formal and informal. The formal sector includes institutional agencies such as commercial banks, co-operative banks/societies and government agencies etc. which are being controlled by the rules and regulations of RBI. The latter source includes the non-institutional sources such as private moneylenders, commission agents, relatives/ friends etc. where the RBI rules and regulations are inapplicable.

The analysis aims at priming out the relative role and relevance of the two sources in meeting the credit requirements of the farm households, agriculture labour households. The basic underlying belief in this context is that the formal sector-agencies provide loans on comparatively more convenient and less exploitative terms and conditions as against the informal sources which are generally inclined towards exploitative conditionalities for loans. In other words, a greater relative share of formal sector in total farm debt is taken to indicate, ceteris paribus, a more positive scenario and vice-versa.

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Table 4
Category-wise and source-wise composition of farm gross Debt

(Amount in Rs.)

Categories	Formal Sector			Informal Sector			Total
of the Farmers	C.B.	Со-ор.	Govt.	M.L.	C.A.	Relative/ Friends	
Marginal	1784698	3563999	833797	840372	426723	313694	7763283
	(23)	(46)	(11)	(11)	(5)	(4)	(100)
Small	1909500	1827600	206000	475000	125000	270000	4913100
	(39)	(37)	(4)	(10)	(2.5)	(7.5)	(100)
Medium	4757000	1649000	31500	155000	270000(4)	300000	7162500
	(66)	(23)	(0.5)	(2)		(4.5)	(100)
Large	7129415	2327853		28924	335000	60000	9881192
	(72)	(23.5)		(1)	(3)	(0.5)	(100)
All farm	15580613	9368452	1071297	1499296	1156723	1043694	29720075
categories	[52.5]	[31.5]	[3.5]	[5]	[4]	[3.5]	[100]
	Formal Sector		87.5	Informal Sector 12.5		100.00	

Source: Field Survey

Note: Figures in the brackets show percentage

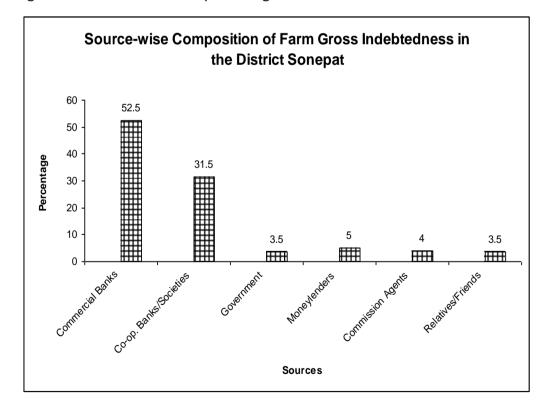


Fig. 3

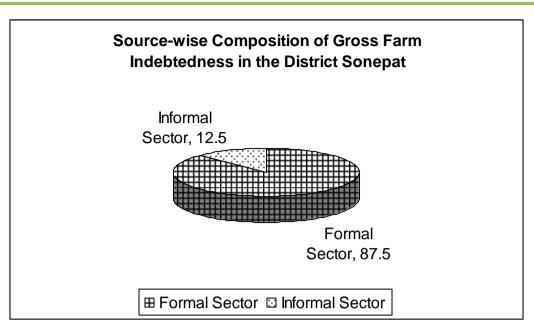


Fig. 4

Table 4 shows that all the four categories of farm households taken together, the share of the formal sector in the total farm debt in the district comes to 87.5 percent as against 12.5 percent share of the informal sector. This means that formal sector play a dominant role in the farm debt scenario in the district, catering, as it, does to more than 80 percent of farm debt incurred by the farmers. This may be because the formal sector institutions like banks and Co-operatives are either adequate or are accessible to the needy farmers, so that they find it necessary or more convenient to go to the formal sources like banks and cooperatives. One study by Sukhapal Singh and M.S. Toor "Agrarian Crisis with Special Reference to Indebtedness Among Punjab Farmers" in India Journal of Agricultural Economics" also shows that an average farm household in the state has Rs 53710 (58.13%) of debt from non-institutional credit agencies. The marginal farmers were under a debt of 74 percent from non-institution agencies and remaining 26 percent from institutional agencies. Small and semi-medium farmers were indebted from 69.86 and 60.12 percent to non-institution source and remaining with institution agencies. The medium and large farmers were 53.20 and 47.40 respectively with non-institutional and remaining with institutional.

The significance of this point comes out more fully when we analyse the comparative role of the two sources in term of the four size categories of the farm households. Thus, table 4 shows that the share of the formal sector in total debt is 80 percent for marginal and small

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farmers each, whereas it is 89.5 percent for medium and 95.5 percent for the large farmers. It further depicts that the share of the formal sector has positive relation with the categories of the farm class.

Table 5
Source-wise and Tehsil-wise compositions of farm gross Debt

(Amount in Rs.)

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Tehsils	Fo	ormal Sector	•	Inf	Total		
	C.B.	Со-ор.	Govt.	M.L.	C.A.	Relation/	
						Friends	
Sonipat	3804673	2659075	319760	248489	138264	242924	7413185
	(51)	(36)	(14)	(4)	(2)	(3)	(100)
Gohana	7013522	1200251	457248	780947	567925	308775	13657080
	(57)	(33)	(3)	(6)	(4)	(3)	(100)
Gannaur	2841882	1200251	187405	226110	334530	182082	4972160
	(57)	(24)	(4)	(5)	(7)	(3)	(100)
Kharkhoda	1920536	980463	106884	214826	144928	309913	3677550
	(52)	(27)	(3)	(6)	(6)	(8)	(100)
All Tehsils	15580613	9368452	1071297	1470372	1185647	1043694	29720075
	[52.5]	[31.5]	[3.5]	[5]	[4]	[3.5]	[100]
	Formal Sector 87.5			Informa	l Sector	12.5	

Source: Field Survey

Note: Figures in the brackets show percentage

The above shows the source-wise and tehsil-wise composition of farm debt in the district. The share of the formal sources in Sonepat tehsil is highest i.e. 91 percent as against only 9 percent from informal sector, whereas, in the Gohana tehsil it is 87 in Gannaur tehsil 85 and in Kharkhoda tehsil is 82 percent. The share of the formal sector varies 10 percentage points among the four tehsils. The share of the commercial banks in the total formal sector is half of the total debt i.e. approximately 51 percent. On the other hand most of the part of debt of informal sector provided by moneylenders i.e. 5 percent out of 12.5 percent.

The inter-tehsil comparison shows the formal sector accounts for the highest share 91 percent of the total debt in the case of tehsil Sonepat, and the lowest share 82 percent in case of tehsil Kharkhoda, with tehsil Gohana, 87 percent and Gannaur 84 percent coming in between. In other words, the farmers in tehsil Sonepat depend the least 9 percent on the informal sources and those in tehsil Kharkhoda depend 18 percent on this source.

A composite analysis of inter-tehsil and inter-size behaviour of the relative dependence on formal and informal sources of debt shows that there is definitive and consistent pattern when we look at the percentage share because the formal sources provide more than 90 percent of the debt among all the four tehsils. Interestingly, however, when we look at the absolute amount of debt provided by these two sources together, we find that in tehsil Sonepat, Gannaur, Kharkhoda, the marginal farmers category accounts for approximately the same quantum of debt viz. 22 lakhs as against in Gohana – 31 lakhs because the marginal farmers have big ratio to the categories in this tehsil. But, again, in percentage terms, we find that all the farm class in the four tehsils have the approximately equal distribution according to their size or class as well as in the tehsils.

Table 6

Source-wise and Tehsil-wise Composition of Agricultural Labour gross Debt

(Amount in Rs.)

Tehsils	F	ormal Sector	•	Inf	Informal Sector		
	C.B.	Со-ор.	Govt.	M.L.	C.A.	Relation/	
						Friends	
Sonipat	109656	615726	282338	416377			1424097
	(8)	(43)	(20)	(29)			(100)
Gohana	131497	358628	322766	334720		47817	1195428
	(11)	(30)	(27)	(28)		(4)	(100)
Gannaur	109298	258863	63277	115050		28763	575251
	(19)	(45)	(11)	(20)		(5)	(100)
Kharkhoda	41666	175925	120370	78703		40296	462960
	(9)	(38)	(26)	(17)		(10)	(100)
Total	392117	1409142	788751	944850		122876	365736
	[11]	[38]	[22]	[26]		[3]	[100]
	Formal Sect	or 7	'1	Informal Se	ctor	29	

Source: Field Survey

Note: Figures in the brackets show percentage

Table no. 6 presents the source-wise and tehsil-wise composition of indebtedness of agricultural labour at the district level. It shows that for all the tehsils taken together, the share of formal sector in the total labour debt in the district comes to 71 percent as against 29 percent share of the informal sector. It means that the informal sector continues to play a substantive role in the labour debt. It again depicts that the share of the formal sector in total debt is 71 percent for the Sonepat tehsil, and only 68 percent for the Gohana tehsil,

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where it is 75 percent and for Gannaur and 73 percent for the Kharkhoda tehsil. This means that more than one half of their total categories debt incurred, all the four tehsils have to depend on the informal sources. Whereas the formal sources have shown a pronounced bias in favour of the farmers class providing more than 80 percent of the total debt.

It could be inferred that agricultural labour are either hesitant to approach the formal sector sources or are not found credit worthy by them and turned away. As a result, they go to the informal sources which they find more accessible even though at a higher cost-both economic and social.

There is a necessity to supply credit in the right time and at the right cost. The non-institutional agencies have serious limitations both on production as well as equity grounds and therefore institutional credit has to step in. The supply of credit to small and medium farmers in catching up more equitably, but the overall rate of growth of institutional credit is not adequate to meet the full demand, particularly when some micro as well macro studies at different regions definitely show the importance of non-institutional agencies in agricultural finance.

### PURPOSE-WISE COMPOSITION OF FARM DEBT AFTER DIVERSION

This part studies the purpose wise composition of farm debt at the tehsil levels and district levels in terms of the four size categories of farm households and agriculture labour households. The various purposes for which debt has been incurred by a household have been grouped into two broad categories, viz. productive and unproductive.

- (A) The productive purpose includes debt incurred on:
  - (i) Fixed capital like tractors, trolley, thresher, tubewell etc.
  - (ii) Working capital items like fertilizers seeds, insecticides/pesticides, diesel, labour, etc.
  - (iii) Livestock including both milch cattle and draft cattle.
- (B) The unproductive purpose, on the other hand, includes debt incurred for expenditure on social ceremonies-marriage, festival, luxury goods and repairing of house etc.

Analysis of the purpose-wise composition of debt brings out the degree of economic motivation and commercial propensity of the borrower households. The underlying assumption here is that the greater the proportion of loan used for productive purposes, the

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greater its contribution enhancing farm productivity and returns. This, in turn would enhance a farmer's income level as also his debt repayment and redemption capacity, which in turn would help the lending agencies in recycling the rapid loans for further productive use. On the other hand, the portion of debt which is channelized into un-productive expenditure become a virtual waste and leakage from the repayment capacity of the debtor thereby depleting the recycling capacity of the lender, besides putting the debtor in a debt trap where he has to borrow afresh to repay the outstanding debt.

Table 7 Category-wise and Purpose-wise composition of farm Gross Debt (Amount in Rs.)

Categories of	Productive	Non-productive	Gross
farmers	indebtedness	indebtedness	indebtedness
Marginal	3852188 (49.5)	3911095 (50.5)	7763283 (100)
Small	2748100 (56)	2165000 (44)	4913100 (100)
Medium	4911500 (68.5)	2251000 (31.5)	7162500 (100)
Large	7488187 (76)	2393005 (24)	9881192 (100)
All farm	18999975 [64]	10720100 [36]	29720075 [100]
categories			

Source: Field Survey

Note: Figures in the brackets show percentage

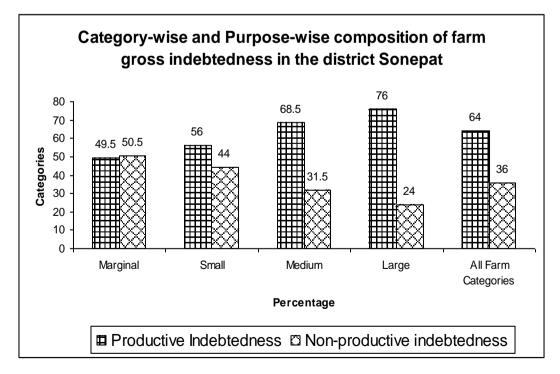


Fig. 3.5

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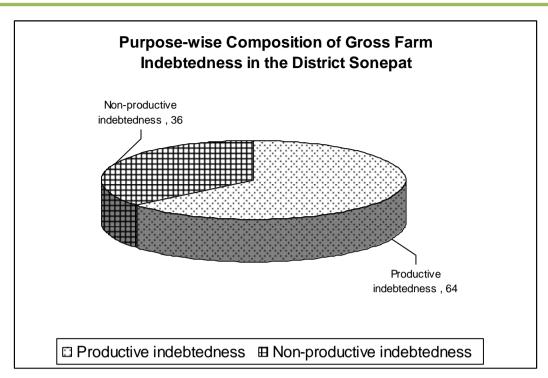


Fig. 5

The table 7 presents the category-wise and purpose-wise composition of farm debt at the district level. It shows that of the total debt incurred by the sample households taken as a whole, 64 percent was meant for productive purposes and 36 percent was meant for unproductive purposes. Category-wise analysis shows that marginal farmers incurred 50.5 percent of their total debt for unproductive purposes. The figures for other categories are 44 percent for small farmers, 31.5 percent for medium farmers and 24 percent for large farmers. Clearly the proportion of unproductive use of loans increases as we move from large to marginal size categories. This pattern conforms to the expected behaviour. It would seem that rather poor and resourceless marginal farmers find it unavoidable to incur some debt in order to meet a part of their consumption and social requirements. On the other hand, the large farmers, being already relatively rich and resourceful, incur debt mostly for productive purposes and marginally for unproductive consumption and social requirements. Almost same study by Lenka titled "Indebtedness of Rural Farmers Households: A profile of Major States in India" in Indian Journal of Agriculture Economics shows that in spite of fact that about 60 percent of the indebted households have borrowed for agricultural pursuits as high as 40 percent of them have availed loans for unproductive purposes. The most important findings is that even after a decade of economic reforms, the professional moneylenders are the predominant source of lending for the rural farmers.

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It would be worthwhile at that this juncture to have a composite view of the purpose-wise and source-wise composition of farm debt. Thus, it would be noticeable that the marginal and small farmers not only borrow more from informal sources, but also channelize a relatively higher proportion of their debt into unproductive use.

Table 8

Tehsil-wise and Purpose-wise composition of agricultural labour gross Debt

(Amount in Rs.)

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Tehsils	Productive	Non-productive	Gross
	Indebtedness	indebtedness	indebtedness
Sonipat	594868 (42)	829229 (58)	1424097 (100)
Gohana	529662 (44)	665766 (56)	1195428 (100)
Gannaur	245439 (43)	329812 (57)	575251 (100)
Kharkhoda	181108 (39)	281852 (61)	462960 (100)
All Tehsils	1551077 [42]	2106659 [58]	3657736 [100]

Source: Field Survey.

Note: Figures in the brackets show percentage

Table 8 shows the tehsil-wise and purpose-wise composition of agricultural labour debt at the tehsil level. At the tehsil level, the proportion of the total labourer debt for productive purposes is 42 percent as against 58 percent for non-productive purposes. Sonepat tehsil occupies first place for the productive purpose with 68 percentage point because Sonepat is an industrialized tehsil, and lowest in Kharkhoda tehsil with 39 percentage point. The respective figures in Gohana is 44 percentage point and Gannaur with 43 percentage point. It is a puzzling scenario.

The district has ample natural and human resources. Despite the progress mode so far there is a great potential for development both in the agricultural and non-agricultural sectors of the economy. Institutional agencies such as co-operative, commercial banks and governments are called upon to reorient, revitalize and expand their credit. Commercial banks are to be increasingly involved in farm finance.

#### **CONCLUSION**

The study concludes that the marginal and small farmers borrowed relatively more from the informal sources because these informal sources provide such loans without much hesitation, though at the higher cost. The formal sources do not normally provide loans for non-productive purposes because the farmers diverted their credit towards non productive

purposes. The medium and large farmers borrowed mainly form formal sector due to their credibility of paying the debt in stipulated time. Because these categories of farmer have more sources of revenue than that of marginal and small farmers.

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