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Magnitude and Determinants of Indebtedness among Dalit Woman Labour Households in Rural Punjab

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Dharam Pal, Gian Singh, Veerpal Kaur, Gurinder Kaur & Jyoti (2022). Magnitude and Determinants of Indebtedness among Dalit Woman Labour Households in Rural Punjab. *Indian Journal of Applied Economics* and Business. 4(1), 121-138. Abstract: The present study reveals that 96.33 per cent of the Dalit woman labour households are under debt in the rural areas of Punjab. The average amount of debt per indebted household as well as per sampled household is recorded at Rs.54342.98 and 52378.03, respectively. This amount of debt may appear to be little, but its burden is quite unbearable for these Dalit woman labour households. Because of this debt, these households have to face many serious consequences. Further, these poor households, on an average, owe 80.40 per cent of total debt from the non-institutional sources and the remaining, i.e., 19.60 per cent from the institutional sources. It is deplorable to note that 69.04 per cent of the total debt is incurred at more than 24 per cent rate of interest per annum in the rural areas of Punjab.

INTRODUCTION

Women are the backbone of agricultural workforce, but world-wide their hard work has been mostly unpaid. They perform the most tedious and significant tasks in agriculture, animal husbandry, and homes (Kaur, 2008). However, the multiple roles played by the woman workers in the income generating activities and domestic chores are neither recognised, nor recorded. The woman workers constitute the most neglected class in the Indian rural structure. Their income is low and employment irregular. Since they possess no skill or training, they have no alternative employment opportunities either. Socially, a large number of woman labourers belong to Scheduled Castes and Scheduled Tribes. Therefore, they are a suppressed

class. They are not organised and literate. They cannot fight for their rights. Because of all these reasons, the government policies have failed to improve their economic conditions even after more than six decades of planning.

As per the Census 2011, 62.51 per cent of people of Punjab reside in the rural areas and the remaining 37.49 per cent live in the urban areas (GoI, 2011). Most of the rural population of the state is still dependent on agriculture for their livelihood. The phenomena of underemployment, underdevelopment, and surplus population are simultaneously manifested in the daily lives and living of the agricultural labourers (Padhi, 2007). They usually get low wages; conditions of work put an excessive burden on them; and the employment which they get is extremely irregular (Raju, 2017). Rural labour households are characterized by declining earning, low income, low consumption, and high debt (Mahapatra, 2007). Employment in agriculture is casual, irregular and tentative; and labourers find it most difficult in making both ends meet at the consistently low level of living (Singh, 2009). Factors like meagre wages, lack of employment avenues during the slack season, sickness, social expenditure, etc. often plunge the agricultural woman labourers into debt (Kavita and Kumar, 2013). Woman agricultural labourers are helpless in different ways by balancing themselves between the daily domestic chores and rendering their labour outside. They are not free to migrate unlike men (Raj, 2016). As the income levels of the woman labour households are very low to meet the day-to-day expenses, saving is rather extremely difficult for these households. In fact, these households have to take loans to maintain a minimum level of consumption (Pal and Singh, 2015). As a result, the problem of indebtedness among the Dalit woman labour households is very acute which moves from one generation to another with a wider intensity.

In the present study, an attempt has been made to estimate and analyse the debt position of Dalit woman labour households in rural Punjab. More specifically, the aims are:

- 1) to estimate and analyse the extent of debt position of Dalit woman labour households:
- 2) to investigate and analyse the debt level according to the sources, purposes, and rate of interest; and
- 3) to analyse the factors influencing indebtedness among the Dalit woman labour households.

DATA AND METHODOLOGY

The present study, based on multi-stage systematic random sampling technique, is related to the year 2016-17. For the purpose of present study,

four districts have been selected from the three geographical regions of Punjab, viz. Majha, Doaba and Malwa. Majha and Doaba comprise four districts each whereas Malwa forms a major part of the Punjab state and consists fourteen districts. Amritsar district has been selected from the Majha region; Jalandhar district from the Doaba region; whereas two districts, viz. Mansa and Fatehgarh Sahib, have been selected from the Malwa region. At the next stage, one village from each Community Development Block of the selected districts has been chosen on the basis of random sampling technique. From these villages, 927 Dalit woman labour households have been randomly selected and investigated by taking 20 per cent households from the total number of Dalit woman labour households. Out of these 927 respondent households, 340 households belong to Malwa, 243 to Doaba and 314 to Majha. The required primary data have been collected from the sampled households through the well prepared questionnaire. Since the majority of the Dalit woman labourers were illiterate, it was decided to fill questionnaires-cum-schedules through the interview method. The results have been analysed by using the mean values and percentages. Multiple regression model has also been used to support the findings.

RESULTS AND DISCUSSION

Extent of Debt

The extent of indebtedness among the Dalit woman labour households in Punjab is exhibited in Table 1. The table shows that 96.33 per cent of the Dalit woman labour households are under debt in Punjab. The average amount of debt per indebted household as well as per sampled household is recorded at Rs.54342.98 and 52378.03 respectively. This corroborates with the results of another research study (Kavita and Kumar, 2013) which reveals that 94 per cent of agricultural woman labour households are indebted.

Table 1: Magnitude of Indebtedness among Dalit Woman Labour Households

Particulars	Malwa	Doaba	Majha	Punjab
Sampled households (number)	370	243	314	927
Indebted households (number)	361	230	302	893
Percentage of indebted households	97.57	94.65	96.18	96.33
Average amount of debt per sampled household (in Rs.)	56036.22	48819.75	50821.12	52378.03
Average amount of debt per indebted household (in Rs.)	57433.24	51579.13	52840.50	54342.98

Source: Field Survey, 2016-17

This amount of debt may appear to be little, but its burden is quite unbearable for these Dalit woman labour households. Because of this debt, these households have to face many serious consequences. It is clear from the fact that sometimes their children have to even leave their study for leasing out their labour. As a result, they do not get any other option than to perform the same labour work of their parents for the whole life. The Dalit woman labour households also remain engaged in the care of shecalves of cows/buffaloes of the large farmers in order to get a small share of milk for their day-to-day consumption. But, when these calves grow up and become cows/buffaloes, these large farmers take them back by paying a small amount to the Dalit households. The Dalits have to do so under the compulsion of debt. In some cases, under compulsion they work as bounded labourers; and the Dalit women and their young girls have to face sexual exploitation/harassment. The field survey has clearly brought out that these households remain overburdened with debt. They have to take a new loan to repay the old one; and this vicious circle continues for many generations. They live in perpetual indebtedness with its net widening from one generation to another.

The table reveals that the highest proportion of households under debt is in Malwa (97.57 per cent), followed by Majha (96.18 per cent), and Doaba (94.65 per cent). The amount of debt per sampled household is the highest, i.e., Rs. 56036.22 in Malwa, and the lowest, i.e., Rs. 48819.75 in Doaba. However, this amount is Rs. 50821.12 in Majha. The amount of debt per indebted household has also shown a similar trend. It is the lowest, i.e., Rs. 51579.13 in Doaba, and the highest, i.e., Rs. 57433.24 in Malwa. The corresponding figure in Majha is Rs. 52840.50. The average amount of debt per indebted household as well as per sampled household in Malwa is relatively higher than the other two regions. This may be because of two reasons. Firstly, people are relatively more connected with one another in Malwa; and secondly, relatively more contractual labour is engaged in the agricultural sector in this region. It indicates that large farmers and landlords; and money-lenders have a significant role in advancing loans to the labour households in this region.

The analysis shows that the average amount of debt per indebted household and per sampled household has increased from Doaba to Malwa with an increase in the value of average propensity to consume in these regions. It indicates that these households have to avail loans to meet their basic needs (Table 2).

SOURCE-WISE DEBT

The average amount of debt incurred by the Dalit woman labour households from various institutional and non-institutional sources has been exhibited

Table 2: Average Propensity to Consume of Dalit Woman Labour Households

Region	Annual average income (in Rs.)	Annual average consumption expenditure (in Rs.)	Average propensity to consume
Malwa	75116.21	85456.44	1.14
Doaba	80113.53	88218.21	1.10
Majha	72919.62	82090.14	1.13
Punjab	75682.14	85040.14	1.12

Source: Field Survey, 2016-17

in Table 3. An average Dalit woman labour household in Punjab owes Rs.42114.83 to non-institutional sources, and Rs.10263.20 to institutional sources. This shows that the non-institutional sources have a greater role in providing loans to the Dalit woman labour households as compared to the institutional sources. Among the non-institutional sources, large farmers and landlords are the chief source of debt for all the Dalit woman labour households, followed by grocers and small traders, money-lenders, relatives and friends, and milkmen. Among the institutional agencies, micro-finance institutions, commercial banks, and co-operative societies/banks have played an important role in providing loans to the Dalit woman labour households in Punjab. The region-wise analysis shows that the average amount of debt incurred by the Dalit woman labour households from the non-institutional sources is the highest, i.e., Rs. 45871.35 in Malwa and the lowest, i.e., Rs. 37510.70 in Doaba. The amount of debt from the noninstitutional sources is Rs. 41251.42 in Majha. However, the amount of debt from the institutional sources is the highest, i.e., Rs. 11309.05 in Doaba and the lowest, i.e., Rs. 9569.69 in Majha. The Dalit woman labour households have incurred debt of Rs. 10164.86 from the institutional sources in Malwa.

The percentage shares of the various sources of debt reveal that the non-institutional sources are the major source of debt, providing on an average, 80.40 per cent of the total debt to the Dalit woman labour households in Punjab, whereas the institutional sources have only a share of 19.60 per cent. The table further shows that amongst the non-institutional sources, the Dalit woman labour households, on an average, are found to be more indebted to large farmers and landlords representing 30.37 per cent of the total debt, followed by grocers and small traders, money-lenders, relatives and friends, milkmen, and brick-kiln owners and others with the share of 21.70, 20.15, 6.27, 1.41 and 0.50 per cent respectively. The research study conducted by Kavita and Kumar(2013) also produced the similar result that majority of the woman labourers were under the debt of large farmers and landlords. Agricultural woman labour households approach

Table 3: Debt incurred by Dalit Woman Labour Households from Different Sources (Mean Values in Rs.)

S. No.	Source of Credit	Malwa	Doaba	Majha	Punjab
(A)	Non-institutional sources				
1.	Money-lenders	11205.40 (20.00)	9954.32 (20.39)	10250.96 (20.17)	10554.15 (20.15)
2.	Grocers and small traders	10590.27 (18.90)	11910.29 (24.40)	11863.56 (23.34)	11367.60 (21.70)
3.	Large farmers and landlords	19205.41 (34.27)	12453.09 (25.51)	14692.68 (28.91)	15906.80 (30.37)
4.	Relatives and friends	3829.73 (6.83)	2638.68 (5.40)	3147.44 (6.19)	3286.40 (6.27)
5.	Milkmen	1040.54 (1.86)	554.32 (1.14)	529.26 (1.04)	739.90 (1.41)
6.	Brick-kiln owners and others	0.00 (0.00)	0.00 (0.00)	767.52 (1.52)	259.98 (0.50)
	Sub-total (A)	45871.35 (81.86)	37510.70 (76.84)	41251.42 (81.17)	42114.83 (80.40)
(B)	Institutional sources				
1.	Co-operative credit societies/ banks	3232.43 (5.76)	2274.48 (4.66)	2668.42 (5.25)	2790.27 (5.33)
2.	Commercial banks	2351.35 (4.20)	3697.12 (7.57)	2964.97 (5.83)	2911.97 (5.56)
3.	Microfinance institutions	4581.08 (8.18)	5337.45 (10.93)	3936.31 (7.75)	4560.96 (8.71)
	Sub-total (B)	10164.86 (18.14)	11309.05 (23.16)	9569.70 (18.83)	10263.20 (19.60)
	Total (A+B)	56036.22 (100.00)	48819.75 (100.00)	50821.12 (100.00)	52378.03 (100.00)

Source: Field Survey, 2016-17

Note: The figures given in parentheses indicate percentages.

the large farmers and landlords for loans in times of their need, and seek financial assistance by pledging their labour. They often find it difficult to repay their loans to the large farmers and landlords, thus remain trapped in their vicious net. They offer loans only to those who can be their easy victims. The landlords exploit not only these labourers, but also other members of their family. Amongst the institutional sources, micro-finance institutions are the most important source of debt for the Dalit woman labour households contributing 8.71 per cent of the total debt. The commercial banks are the second important source of debt from which an average Dalit woman household has incurred 5.56 per cent of the total debt, followed by the co-operative societies/banks contributing 5.33 per cent.

The region-wise pattern of debt depicts that the proportion of debt from non-institutional sources is the highest, i.e., 81.86 per cent in Malwa, and the

lowest, i.e., 76.84 per cent in Doaba. However, a reverse trend has been observed in the case of institutional sources. The proportion of debt from institutional sources is the highest, i.e., 23.16 per cent in Doaba, and the lowest, i.e., 18.14 per cent in Malwa. In Majha, the Dalit woman labour households, on an average, have incurred 81.17 per cent of the total debt from the noninstitutional sources, while 18.83 per cent from the institutional sources. Large farmers and landlords appear to be the largest contributor towards debt in all the three regions. The proportion of debt from this source is the highest in Malwa (34.27 per cent), followed by Majha (28.91 per cent), and Doaba (25.51 per cent). Grocers and small traders appear to be the second largest contributor towards debt in Doaba and Majha with 24.40 and 23.34 per cent respectively. Money-lenders by contributing 20.00 per cent of the total debt to the Dalit woman labour households in Malwa appear at the second rank among the non-institutional sources, while this source has the third rank in Doaba, and Majha with 20.39 and 20.17 per cent respectively. Relatives and friends appear at the fourth rank in proving loans to the Dalit woman labour households in all the three regions of Punjab.

Among the institutional sources, micro-finance institutions are the main important source of debt in all the three regions. The Dalit woman labour households have incurred, on an average, 10.93, 8.18 and 7.75 per cent of the total debt in Doaba, Malwa, and Majha respectively. The commercial banks appear at the second place in providing debt to these households in Doaba, and Majha with 7.57 and 5.83 per cent respectively. However, this source appears at the third place in providing debt to the respondent households in Malwa with 4.20 per cent of the total debt. Co-operative societies/banks contributing 5.76 per cent of the total debt in Malwa appear at the second rank among the institutional sources, while this source has the third rank in Majha and Doaba with 5.25 and 4.66 per cent respectively.

It has been observed during the field survey that the Dalit woman labour households find it easy to incur debt from non-institutional sources; and they hesitate to incur debt from institutional sources. This is because of the following reasons:

- The Dalit woman labour households do not hold any such type of asset against which they can incur debt from institutional sources;
- Being illiterate, they are unable to understand the formalities and procedures to be followed for incurring debt from institutional sources;
- They also feel disappointed by the indifferent attitude of the officials of the institutional sources; and
- Under the feudal thinking, which still prevails largely in the rural areas, large farmers and landlords easily provide loans to the labour

households with the aim of exploiting them. Their interest lies in ensuring the supply of labour during the peak season when the demand for labour is quite high.

PURPOSE-WISE DEBT

Table 4 exhibits the data showing debt incurred by the Dalit woman labour households for the different purposes. The table clearly depicts that the Dalit woman labour households, on an average, have incurred a debt of Rs. 39942.27 for productive purposes, and Rs.12435.76 for non-productive purposes in rural Punjab.

Table 4: Debt incurred by Dalit Woman Labour Households for Different Purposes (Mean Values in Rs.)

S.No.	Purpose of Debt	Malwa	Doaba	Majha	Punjab
(A)	Productive				
1.	House construction, addition of rooms	7379.97	6035.32	6466.19	6717.97
	and major repairs	(13.17)	(12.36)	(12.72)	(12.82)
2.	Healthcare	8887.34	7246.48	7696.33	8053.79
		(15.86)	(14.84)	(15.14)	(15.38)
3.	Purchase of non-durables	3065.18	3831.86	4134.58	3628.39
		(5.47)	(7.85)	(8.14)	(6.93)
4.	Purchase of motorcycle/scooter/	5732.50	6455.87	8089.28	6720.43
	moped/bicycles/ rickshaw/ autorickshaw	(10.23)	(13.22)	(15.92)	(12.83)
5.	Redemption of old debt	4695.83	3856.09	3994.23	4238.05
	1	(8.38)	(7.90)	(7.86)	(8.09)
6.	Purchase of livestock	3289.33	2421.99	4886.62	3603.01
		(5.87)	(4.96)	(9.62)	(6.88)
7.	Education	1215.99	1509.14	597.14	1083.21
		(2.17)	(3.10)	(1.17)	(2.07)
8.	Immigration/migration	2773.79	6555.25	4202.63	4249.03
	-	(4.95)	(13.43)	(8.27)	(8.11)
9.	Crop-failure	4129.87	0.00	0.00	1648.38
		(7.37)	(0.00)	(0.00)	(3.15)
	Sub-total (A)	41169.81	37912.00	40067.00	39942.27
		(73.47)	(77.66)	(78.84)	(76.26)
(B)	Non-productive				
1.	Marriages and other socio-religious	12400.81	10776.60	10532.01	11342.03
	ceremonies	(22.13)	(22.07)	(20.72)	(21.65)
2.	Litigation	2168.60	0.00	0.00	865.57
		(3.87)	(0.00)	(0.00)	(1.65)
3.	Miscellaneous	296.99	131.15	222.12	228.16
		(0.53)	(0.27)	(0.44)	(0.44)
	Sub-total (B)	14866.41	10907.75	10754.12	12435.76
		(26.53)	(22.34)	(21.16)	(23.74)
	Total (A+B)	56036.22	48819.75	50821.12	52378.03
		(100.00)	(100.00)	(100.00)	(100.00)

 $\it Source: Field Survey, 2016-17 Note: The figures given in parentheses indicate percentages.$

The region-wise analysis shows that the Dalit woman labour households in all the three regions have incurred a major amount of the total debt for productive purposes. This amount is the highest, i.e., Rs. 41169.81 in Malwa, followed by Majha (Rs. 40067.00), and Doaba (Rs. 37912.00). The amount of debt incurred for unproductive purposes is again the highest, i.e., Rs. 14866.41 in Malwa, followed by Rs.10907.75 and 10754.12 in Doaba, and Majha respectively.

The analysis of proportionate shares of debt incurred for the different purposes shows that the Dalit woman labour households, on an average, spend 76.26 per cent of the total debt for productive purposes and the remaining 23.74 per cent for the non-productive purposes in rural Punjab. Amongst the productive purposes, 15.38 per cent of the total debt is incurred for healthcare, followed by purchase of motorcycle/scooter/moped/ bicycles/rickshaw/autorickshaw; house construction, addition of rooms and major repairs; immigration/migration; redemption of old debt; purchase of non-durables; and purchase of livestock with 12.83, 12.82, 8.11, 8.09, 6.93, and 6.88 per cent respectively. Only 2.07 per cent of the total debt is incurred for the education of children. The Dalit woman labour households have incurred 3.15 per cent of the total debt to lease in land for cultivation. But unfortunately, due to crop-failure they were not able to pay the loan. On the other hand, in the case of non-productive purposes, marriages and other socio-religious ceremonies are the main motive of debt for which the Dalit woman labour households have incurred a substantial share, i.e., 21.65 per cent of their total amount of debt. This is followed by litigation representing 1.65 per cent, and miscellaneous purposes 0.44 per cent.

The region-wise analysis brings out that the Dalit woman labour households, on an average, are spending the maximum proportion of debt for productive purposes in all the regions under study. This proportion is the highest, i.e., 78.84 per cent in Majha, followed by Doaba, and Malwa with 77.66, and 73.47 per cent respectively. It implies that 21.16, 22.34, and 26.53 per cent of the total debt is spent on unproductive purposes in Majha, Doaba, and Malwa respectively. Among the productive purposes, the Dalit woman labour households in Malwa have incurred a major proportion of the total debt for healthcare (15.86 per cent), followed by house construction, addition of rooms and major repairs (13.17 per cent), purchase of motorcycle/scooter/moped/bicycles/rickshaw/autorickshaw (10.23 per cent), and redemption of old debt (8.38 per cent). The Dalit woman labour households in Doaba haveincurred a major proportion of the total debt for the healthcare (14.84 per cent), followed by immigration/migration (13.43 per cent), purchase ofmotorcycle/

scooter/moped/bicycles/rickshaw/autorickshaw (13.22 per cent), house construction, addition of rooms and major repairs (12.36 per cent), and redemption of old debt (7.90 per cent). In Majha, the Dalit woman labour households have incurred a major proportion of the total debt for the purchase of motorcycle/scooter/moped/bicycles/rickshaw/autorickshaw(15.92 per cent), followed by healthcare (15.14 per cent), house construction, addition of rooms and major repairs (12.72 per cent), purchase of livestock (9.62 per cent), purchase of non-durables (8.14 per cent), and redemption of old debt (7.86 per cent).

In the case of non-productive purposes, the Dalit woman labour households spend a major proportion of debt on marriages and other socio-religious ceremonies in all the three regions. This proportion is 22.13, 22.07, and 20.72 per cent in Malwa, Doaba, and Majha respectively. The Dalit woman labour households have incurred 3.87 per cent of the total debt for litigation purposes in Malwa only. The Dalit woman labour households haveincurred less than one per cent of the total debt for miscellaneous purposes in all the three regions.

The above analysis clearly shows that the Dalit woman labour households have used a major proportion of debt for their family requirements. The deficient income to the consumption expenditure compels them to borrow from different sources to meet their day-to-day needs.

DEBT ACCORDING TO RATE OF INTEREST

The data showing debt according to rate of interest is exhibited in Table 5. It is deplorable to note that the Dalit woman labour households, on an average, have incurred the maximum proportion of the total debt, i.e., 46.61 per cent at the exorbitantrate of interest, i.e., 36 per cent and above per annum. This is followed by the range of 24 to 36;18 to 24;6 to 12;less than 6; and 12 to 18 per cent per annum with the proportion of 22.43, 13.36, 10.77, 4.42, and 2.41 per cent of the total debt respectively.

The region-wise analysis shows that the Dalit woman labour households have incurred maximum proportion of the total debt, i.e., 84.20, 83.42, and 78.19 per cent at more than 18 per cent per annum rate of interest in Majha, Malwa, and Doaba respectively. This is due to the fact that the Dalit woman labour households have to incur debt at a higher rate of interest from the non-institutional sources since they are unable to provide adequate security or surety demanded by the institutional sources for funding at low rate of interest. In all the three regions, the Dalit woman labour households have incurred a small proportion of the total debt at less than 6 per cent rate of

Table 5: Debt of Dalit Woman Labour Households according to Rate of Interest (Mean Values in Rs.)

Rate of interest (%)	Malwa	Doaba	Majha	Punjab
Less than 6	2929.73	2238.68	1647.63	2314.30
	(5.23)	(4.59)	(3.24)	(4.42)
6 to 12	5168.75	7290.68	4920.42	5640.87
	(9.22)	(14.93)	(9.68)	(10.77)
12 to 18	1189.45	1116.36	1465.84	1263.92
	(2.13)	(2.29)	(2.88)	(2.41)
18 to 24	7811.11	6153.33	6693.86	6998.10
	(13.94)	(12.60)	(13.18)	(13.36)
24 to 36	13023.46	10285.33	11373.62	11746.85
	(23.24)	(21.07)	(22.38)	(22.43)
36 and above	25913.72	21735.37	24719.75	24413.99
	(46.24)	(44.52)	(48.64)	(46.61)
Total	56036.22	48819.75	50821.12	52378.03
	(100.00)	(100.00)	(100.00)	(100.00)

Source: Field Survey, 2016-17Note: The figures given in parentheses indicate percentages.

interest. This proportion is 5.23, 4.59, and 3.24 per cent in Malwa, Doaba, and Majha respectively.

DETERMINANTS OF INDEBTEDNESS

The amount of debt at a point of time is influenced by several economic and non-economic factors such as family size, educational level of the head of the family, total household income, expenditure on socio-religious ceremonies, total value of household assets, proportion of non-institutional debt, andage of woman to start work as a labourer. The following Multiple Regression Model has been used to find out the relationship between the magnitude of indebtedness and the different factors mentioned above.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \mu_1$$

Where,

Y = Amount of debt (in Rs.)

 X_1 = Family size (in number)

 X_2 = Educational level of the head of the family

 X_3 = Total household income (in Rs.)

 X_4 = Expenditure on socio-religious ceremonies (in Rs.)

 X_5 = Value of total household assets (in Rs.)

 X_6 = Proportion of debt from non-institutional sources

 X_7 = Age of woman to start work as a labourer (in years)

 α_1 to β_7 = Regression coefficients of independent variables

 μ_1 = A random error term

The hypotheses related to these factors and their validity on the basis of regression coefficient values have been tested and presented in Table 6 as under:

Table 6: Factors affecting Debt among Dalit Woman Labour Households (Results of Multiple Regression Analysis)

S. No.	Factors	Regression coefficient			
		Malwa	Doaba	Majha	Punjab
1.	Family size (X ₁)	1.7407* (2.66)	2.8444* (2.53)	1.8432* (3.81)	1.9341* (3.79)
2.	Educational level of the head of the family (X ₂)	-1.4020 (0.24)	-0.8346* (2.47)	-0.7734* (2.48)	-0.6379 (0.26)
3.	Total household income (X ₃)	-1.6543* (2.29)	-0.8933* (2.90)	-1.2931* (2.89)	1.8518* (2.63)
4.	Expenditure on socio-religious ceremonies (X_4)	0.4823* (1.29)	0.1528* (1.43)	0.3062* (2.05)	0.2637* (3.57)
5.	Value of total household assets (X ₅)	0.1228 (0.69)	0.4164* (3.19)	0.2851 (0.43)	0.2247 (0.98)
6.	Percentage of non-institutional debt (X_6)	0.2013* (2.86)	0.7961* (2.92)	0.5812* (2.17)	0.6832* (2.92)
7.	Age of woman to start work as a labourer (X_7)	-1.0058 (0.44)	-0.4566* (1.65)	0.2247 (0.28)	-0.7940 (0.39)
8.	R^2	0.78	0.75	0.71	0.74

Source: Field Survey, 2016-17

Note: The figures given in parentheses indicate t-values.* Significant at five per cent

1. Larger the family size, greater is the magnitude of indebtedness:

The table reveals that the regression coefficient of the factor, viz. family size is significant at five per cent level of probability in Punjab as a whole and in all its three regions. It indicates that there is a positive relationship between the factors 'family size' and 'indebtedness'. This is because of the fact that there are more dependent members in the large family. An increase in family size leads to more expenditure on the household activities, marriages and other social ceremonies, construction of house, etc., whereas the employment opportunities in agriculture and non-agriculture sectors have not increased over the period of time. After the adoption of liberalization and globalization in the early 1990s, the

number of labour households has increased in India. This is because of the stagnation or slow growth in the agriculture sector and jobless growth registered in the non-agriculture sector (Singh and Pal, 2011). The labour absorption capacity of the agriculture sector is limited, and the rural labourers are migrating from farm to nonfarm activities (Vaidyanathan, 1986). The off-farm activities are predominantly the domain of males. The non-farm sector appeared to offer relatively a few real opportunities for women (Haffiset al., 2005). Hence, the hypothesis stands proved.

- Higher the education level of the head of the family, lesser is the **indebtedness:** The analysis provides that the regression coefficient of the factor, viz. 'education level of the head of the family' is found to be negative in Punjab as a whole and in all its three regions. It is statistically significant in Doaba and Majha only. The negative coefficient establishes an inverse relationship between 'education level of the head of the family' and 'indebtedness' in Punjab as a whole and in all its three regions. It leads to the fact that as the education level improves, the level of indebtedness decreases. It proves the hypothesis that higher the education level of the head of the family, lower would be the indebtedness. Education is considered as the largest determinant of socio-economic transformation. An educated head of the family, with his greater information and awareness, can arrange an institutional loan at a lower rate of interest, and can also encourage family members for subsidiary occupations to supplement the household income, resulting in low magnitude of indebtedness (Kaur and Singh, 2010).
- 3. Higher the level of total household income, lesser is the magnitude of indebtedness: The analysis reveals that the regression coefficient for the factor, viz. 'total household income' is negative, but statistically significant at five per cent level in Punjab as a whole and in all its three regions. The negative coefficient indicates that as the total household income increases, it helps in curtailing the indebtedness. Hence, it proves the hypothesis that higher the level of total household income, lower would be the magnitude of indebtedness.
- 4. Expenditure on socio-religious ceremonies and magnitude of debt are positively related: The table shows that the regression coefficient of the factor, viz. 'expenditure on socio-religious ceremonies' is positive and statistically significant at five per cent level of probability in Punjab and in all the three regions. Hence, the hypothesis that the expenditure on socio-religious ceremonies

and magnitude of indebtedness are positively related has been found to be valid. It is also generally said that *Punjabis* spend too much on socio-religious ceremonies, but this is not true in the case of labourers who keep on struggling to meet even their basic needs of life, viz. food and clothing. They have to spend some of their income on socio-religious ceremonies as per their status. Various studies have pointed out that such families bear the large expenses on healthcare, and death and marriage ceremonies in India by availing loans on high interest rates from the non-institutional sources which push them into poverty and indebtedness (Krishan *et al.*, 2003; Krishan, 2003; and Jodha, 1988).

- **5.** The value of total household assets owned by a woman labour household is directly related to the magnitude of debt: The regression coefficient of the factor, viz. 'value of total household assets' is positive in Punjab and in all the three regions. It is significant in Doaba only. However, it is found to be statistically insignificant in Punjab as whole, and Malwa and Majha. It indicates that the respondent woman labourers have to avail more loans for the purchase of household assets. Among the respondent Dalit woman labourers, more than 60 per cent of the total value of household assets is swallowed only by their dwelling house. It has been observed during the field survey that they are unable to get their house repaired without taking loans. The other durable assets in their houses include the used items given by the relatively rich households where they work.
- 6. Non-institutional debt and magnitude of indebtedness are positively related: As explained earlier also, non-institutional sources have greater reach in providing loans to the woman labour households in the rural areas of Punjab. The Dalit woman labour households, on an average, have incurred a large proportion of the total debt, i.e., 81.86, 81.17, and 76.84 per cent from non-institutional sources in Malwa, Majha, and Doaba respectively at exorbitant rates of interest. The analysis provides that the relationship between the factors such as 'proportion of non-institutional debt' and 'magnitude of indebtedness' is found to be positive and statistically significant at five per cent level in Punjab and in all the three regions. It establishes that the magnitude of indebtedness increases with an increase in the proportion of non-institutional debt increases.
- 7. Lesser the age of woman to start work as a labourer, lower is the indebtedness: The regression coefficient of the factor, viz. 'age of the woman to start work as a labourer' is negative, but statistically

insignificant in Punjab. It indicates that the magnitude of indebtedness is more in those households in which women start to workas labourers at an early age. Hence, it doesn't prove the hypothesis that lesser the age of woman to start work as a labourer, lower is the indebtedness. Many studies (Goswami, 2013; Srivastava and Srivastava, 2010; Kelkar, 2011; and Jain *et al.*, 1997) have concluded that the economic distress compels poor women to work as labourers in the unorganized sector at very low wages. The region-wise results show that the regression coefficient of this factor is negative in Malwa and Doaba. However, it has a positive value in Majha. The negative value explains that no relationship exists between this factor and level of indebtedness. On the other hand, the positive value indicates that woman labourers' earnings help in curtailing the level of their debt to some extent.

The value of R^2 indicates that the explanatory variables explain 74 per cent variations in the dependent variable, i.e., indebtedness among the Dalit woman labour households in the rural areas of Punjab. The values of R^2 are found to be 78, 75, and 71 in Malwa, Doaba, and Majha respectively.

CONCLUSIONS AND POLICY IMPLICATIONS

The results of the study and field survey conducted in the rural areas of Punjab have the following important implications:

- A very large majority, i.e., 96.33 per cent of the Dalit woman labour households is under debt and the average amount of debt per indebted household as well as per sampled household is recorded at Rs.54342.98 and 52378.03, respectively. This amount of debt may appear to be little and insignificant, but its burden is quite unbearable for these Dalit woman labour households. Because the repaying capacity of these poor households is nil as the value of APC exceeds unity. One disturbing fact in this regard is that more than four-fifths, i.e., 80.40 per cent of the total debt is incurred from the non-institutional sources which charge exorbitant rates of interest from this poor section of the rural society. To overcome these problems, institutional credit should be made easily available to Dalit woman labourers in order to save them from the exploitation of large farmers and landlords, village money-lenders and the like.
- The value of average propensity to consume is greater than unity for these households in all the three regions. The deficient income to the consumption expenditure compels them to borrow from

different sources to meet their day-to-day needs. To tackle this problem, the income levels of these households need to be raised. For this purpose, the central and state governments must take strong initiatives for creating sufficient employment opportunities and should effectively implement the policies for improving the economic conditions of the Dalit woman labour households in the rural areas of Punjab. The agro-based small-scale industries should be established in the rural areas on priority basis. There is an urgent need to regularly launch awareness campaigns among the Dalit woman labourers about employment programmes meant for them. The government should provide loans to the Dalit woman labour households at very low rate of interest for establishment of various income generating ventures. Both the government and the nongovernment organisations need to take the necessary steps to organise skill development programmes for the economic upliftment of Dalit woman labourers. Quality education should be provided to the children of the Dalit woman labourers so that they may get jobs in the non-agricultural sector also, which may ultimately lead to improve in the economic conditions of their families.

- As the study brings out that average propensity to consume (APC) for Malwa is the highest, thereby, depicting its miserable condition as compared to the other regions, hence, the government policies must be region-specific especially focusing on increasing income levels of the Dalit woman labourers of Malwa.
- The last, but the most important implication of the present study is based on the fact that all the Dalit woman labourers under study are landless. Therefore, the study highlights the need for land reforms in favour of the Dalits which have had been neglected since the ages. Land reforms in favour of the Dalits can really change their life. The practical example can be seen in Balad Kalan village of Sangrur district. In this village, under the aegis of Zameen Prapti Sangharsh Committee, the success of Dalit households' protests is to take control of common land despite having many opposing forces. Because the Dalit households have succeeded in leasing in common land, they are practicing co-operative farming and have acquired a feeling of self-respect. Now the Dalit women have not to go in the fields of large farmers to collect fodder for their milch animals, and vegetables and foodgrains for self-consumption. This successful struggle by the Dalit households has resulted in elimination of many types of exploitation of the Dalit woman labourers in rural Punjab.

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