
AGRARIAN DISTRESS: A CASE STUDY OF INDEBTEDNESS AMONGST FARMERS IN HARYANA STATE

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ABSTRACT

This study addresses the critical issue of farmer indebtedness as the primary cause of agrarian distress in Haryana, India. The pervasive challenge of debt negatively impacts farmers' livelihoods and agricultural sustainability, creating a cycle that hampers investment in modern farming technologies and sustainable practices. The study highlights the disproportionate access to credit, with institutional lenders favoring semi-medium, medium, and larger farmers, while small and marginalized farmers resort to non-institutional sources with higher interest rates. This unequal access perpetuates financial strain on the latter group. The findings emphasize the urgent need for government intervention and institutional support to assist marginalized and small farmers. The study advocates for comprehensive measures, including risk mitigation strategies, enhanced credit access, minimum support prices, and sustainable agricultural policies, to break the cycle of farmer debt and ensure the well-being of those crucial to our food systems.

Introduction

Farmers⁴ in the Indian state of Haryana have been struggling with debt because they have been taking on debt year after year in order to meet their needs. They are unable to pay

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4 A farmer is a cultivator, someone who rears animals (fish or cattle) or cultivates land or crops.
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off their loan in the amount of time that the lending company has specified. For marginal⁵ and small⁶ farmers, this means that their land holdings are small enough to support their agricultural output, which makes it impossible for them to repay the loan on time. Thus, borrowing money to produce agricultural goods is not a bad thing. The taking out of loans for farming purposes is necessary to keep farming running smoothly. In developed nations as well, farmers borrow money for farming. Repayment of their loan will come from the money made from farming operations. But for Indian farmers, repaying the loan on schedule is a difficult undertaking (Dandekar & Bhattacharya, 2017).

In India, the majority of farmers are deeply indebted. Farmers' debt was not the result of a single factor, but rather a variety of factors. Low prices for their agricultural output, crop failure, high input costs (machinery, high yield variety seeds, fertilizers, pesticides, etc.), high interest rates from non-institutional sources, small landholdings, irresponsible loan use, and old or inherited debt were the main causes they cited (Jakhar et al., 2022a). A farmer finds it extremely difficult to escape the debt spiral once they are caught by the combined effects of all these factors. Farmers took out loans also to cover their consumption needs, build a new home, and celebrate social events like weddings and anniversaries and sometimes take out new loans in order to pay off old debt, which adds to their overall debt load (Jakhar et al., 2023). Farmers are ensnared in debt as a result of the yearly rise in these debts. Under these conditions, they are unable to escape the debt cycle. Farmers' suicide caused by indebtedness is another big issue in India (Grover et al.; Kaur et al.; & Sonawane, 2016).

The decline and uncertainty in agricultural earnings, as well as increased reliance on purchased inputs, stimulate higher borrowing from institutional and non-institutional sources at higher interest rates. Consequently, they faced problems in repayments, which added to the agrarian (or farmer) distress (Patil, 2008). Because the cost of agricultural inputs has been rising faster than the return on their produce, farming is no longer a lucrative career. The majority of farmers work directly in the traditional crop cultivation sector. The primary obstacle to their adoption of modern production techniques is their small landholdings. Horticultural crops could not be substituted for traditional crops. The Indian government responded to this problem by launching the Kisan Credit Card Scheme (KCC) in 1998–1999, which encouraged the development of an inventive credit facility that would enable farmers to obtain the credit quickly and easily they need. The issue of farmer debt remains a challenge for policymakers and the government, though. Joel Salatin stated that know your food, know your farmers, and know your kitchen. Thus, agriculture is the root of all economic activities of this world.

Materials and Methods

The Indian state of Haryana served as the study's location. The state is close to Delhi, the capital of India, and is situated in the country's northwest. The state makes up 1.34

5 A cultivator with lands up to one hectare in size is referred to as a marginal farmer.

6 A cultivator with landholdings between 1.01 and 2.00 hectares is referred to as a small farmer.

percent of the country's total area with its 44 212 square kilometers. There are 22 districts in the state. According to the 2011 census, 25 351 462 people are living in the state, with 13 494 734 men and 11 856 728 women. Of the total population of the state, 8 842 103 (34.88 percent) lives in urban areas and 16 509 359 (65.12 percent) lives in rural areas. The state's net sown area is 3,601 thousand hectares. The state's land holdings average 2.22 hectares in size. The state of Haryana has a gross state domestic product (GSDP) of 780 612 crore rupees and a per capita income of 247 628 rupees. At constant prices, the agricultural and related sectors comprise 18.9% of the GSDP. Industry and services account for 30.2% and 50.9% of the GSDP, respectively (GoH, 2021; 2020).

Primary and secondary data served as the foundation for this investigation. Primary data have been gathered according to carefully thought-out timetables. Secondary data on farmer indebtedness have been taken from various reports published by the Reserve Bank of India (RBI) and the National Sample Survey Organization (NSSO). Based on cropping patterns and ecology, the state of Haryana has been divided into three agricultural zones (GoH, 2013). Furthermore, a purposeful selection was made for Haryana's second zone, which included the districts of Sirsa, Fatehabad, Hisar, Jind, Rohtak, Faridabad, and Palwal and covered 39% of the state's area. The state's second zone is a representation of its dry and wet regions. The principal crops grown in this zone are cotton, rice, and wheat. Moreover, the districts of Faridabad, Jind, and Sirsa have been chosen, respectively, based on the highest percentage of land covered by the crops of wheat, rice, and cotton. Two hundred responders were chosen using a proportionate sampling technique. Of the chosen farmers, 106, 48, and 46 were chosen to represent farmers growing wheat, rice, and cotton, respectively, from the districts of Faridabad, Jind, and Sirsa. The corresponding author has personally organized (ordered) the fieldwork. The author has taken complete care of objectivity during the fieldwork. With assistance from the Sarpanch, Panchayat members, and other well-known village residents, a list of farmers who are in debt has been created. For data analysis, average (or mean values) and percentage approaches have been employed. The responses provided by a sample of 200 respondents served as the basis for this study's findings. Diagrams and tables are created for the findings to be presented in an efficient manner.

Results and Discussion

The study's findings are broken down into two sections: section I and section II. The results based on NSSO reports are shown in the first section. A field survey has been carried out in the study's second section to illustrate the actual situation about farmer indebtedness. The study emphasized the amount of debt, the sources of the loan, the length of the loan, the goals of the loan, and the interest rates assessed by various lending organizations. On the problems of farmers' indebtedness large number of studies were conducted in Punjab state of India (neighboring state of Haryana) by Gill (2014), Singh (2006), Singh et al. (2008; 2012; 2014), Singh & Bhogal (2014), Singh & Tiwan (2016). One of the main issues facing Punjab and Haryana, two states in India, is farmer debt. The following are the study's findings:

Section-I: Indebtedness of agricultural households in Haryana and India

National sample survey organisation (NSSO) estimates income, expenditure, productive assets, and indebtedness of agricultural households (farmers) at the national (or state) level with the interval of ten years. Sahu (2018) and Padmaja & Ali (2018) also conducted a study on NSO data sets for India. Their findings supported this study. The last report was published in the year 2012-13. On behalf of published previous reports, the extent of indebtedness of agricultural households (farmers) in India and Haryana (state) is depicted as follows:

Table 1. Incidence of indebtedness amongst agricultural households

State	Percentage of indebted agricultural households					
	1971	1981	1992	2003	2013	2019
India	44.30	21.69	25.90	48.6	51.9	50.02
Haryana	34.90	11.61	28.40	53.1	42.30	47.50

Source: NSO reports (1976, 1986, 1996, 2005, 2013, 2019)

The incidence of indebted agricultural households in Haryana and India is depicted in table 1. In the Haryana state, 34.90 per cent of agricultural households were estimated as indebted agricultural households in 1971, followed by 11.16, 28.40, 53.1, 42.30, and 47.50 per cent in 1981, 1992, 2003, 2013, and 2019 respectively. The extent of indebted agricultural households had continuously been increased in the four decades, i.e., 1981, 1992, 2003, and 2019 but a 10.8 per cent decrement was reported between 2003 to 2013. At national level, 44.30 per cent of agricultural households were estimated as indebted agricultural households in 1971, followed by 21.69, 25.90, 48.6, 51.9, and 50.02 per cent in 1981, 1992, 2003, 2013, and 2019 respectively. The percentage of indebted agricultural households has continuously been increased since 1981 in India. Thus, overall, the extent of indebted agricultural households has been continuously increasing in Haryana. It indicates agrarian distress amongst the farmers or agricultural households. Hence, today farmer indebtedness is a crucial and sentimental political issue in India.

Table 2 shows the proportion of indebted agricultural households in India and Haryana as well as the average amount of outstanding loans per agricultural household. In India and Haryana, the percentage of agricultural households with debt was 50.02 and 47.50 percent, respectively. The average amount of outstanding debt per agricultural household in India was 74 121, while in Haryana it was 182 922. Between 2013 and 2019, the average amount of debt (in absolute terms) increased in India by 57.70 and in Haryana by 131.54%, respectively. As a result, the debt load keeps rising every year. Therefore, there is a pressing need to address farmer indebtedness in India as it is a significant problem.

Table 2. Indebted agricultural households and the average amount of outstanding loans per agricultural household

(Amount of debt in INR)

Farm-size categories (in hectares)		India				Haryana			
		Average amount of outstanding loan per agricultural household		Percentage of indebted agricultural households		Average amount of outstanding loan per agricultural household		Percentage of indebted agricultural households	
Year		2013	2019	2013	2019	2013	2019	2013	2019
Marginal farmers	<0.01	31 100	26 883	41.9	38.5	9 500	39 682	25.2	27.8
	0.01-0.40	23 900	33 220	47.3	40.8	19 200	61 567	33.0	35.8
	0.41-1.00	35 400	51 933	48.3	48.4	73 700	134 215	53.2	37.0
Small farmers	1.01-2.00	54 800	94 498	55.7	57.4	90 000	170 614	40.0	58.5
Semi- medium farmers	2.01-4.00	94 900	175 009	66.5	69.7	157 300	362 121	50.7	69.3
Medium farmers	4.01-10.00	182 700	326 766	76.3	79.3	116 200	716 519	39.7	78.6
Large farmers	10+	290 300	791 132	78.7	81.4	468 100	1 018 854	74.3	93.8
All Size		47 000	74 121	51.9	50.0	79 000	182 922	42.3	47.5

Source: NSS report No.576 and 587

As farms pivot from marginal to large farmer⁷, the amount of debt owed by agricultural households showed a consistent upward trend. Thus, in India, the amount of debt in percentage form increases with farm size by ownership. The average amount of outstanding debt per household in India's agricultural sector rose as well, from rupees 26 883 for marginal farmers to rupees 791 132 for large farmers. As a result, the large farm category was where the highest outstanding debt was reported. The state of Haryana in India presents a similar picture of farmer indebtedness. According to reports, the percentage of debt was highest in the large farm size category (93.8%) and lowest in the marginal farm size category (27.8%), respectively. In the large (or marginal) farm size category in Haryana, the highest (or lowest) average amount of debt per agricultural household was reported to be rupees 1 018 854 (or 39 682). All things considered; Haryana had a high average amount of outstanding debt per agricultural household. As such, it is an important and delicate matter in Haryana. Approximately 50 per cent of farmers are burdened by debt, and every other farmer faces difficulties related to debt. When it comes to employment, India's economy is based mostly on agriculture. Significant investments in rural areas can break the vicious cycle of debt by generating jobs in the economy's hinterland.

⁷ A large farmer is a cultivator who owns more than 10 hectares of land.

Section-II: A case study of indebtedness amongst farmers in Haryana state

The amount and burden of debt borne by farmers in Haryana have been quantified through a case study. Farmers in India have historically been heavily indebted, so this is not a recent issue (Siwach et al., 2022). The case study's conclusions are shown here in the following manner:

Extent of debt (Measurement of debt burden)

The amount of debt has been divided into three categories, namely the average debt per sampled farmer, owned acre, and operated acre. Table 3 shows the amount of debt owed by farmers in relation to various farm size categories. The average outstanding debt for each farmer in the sample, each owned acre, and each operated acre was 603 830, 85 226, and 69 048 rupees, respectively. The medium⁸ and marginal farm-size categories revealed the maximum and minimum extent of debt, or the average amount of debt per sampled farmer, respectively. The real debt burden on farmers is measured by the average amount of outstanding debt per owned acre. The real burden of debt on farmers increases with the average debt load per acre of land owned. For farm sizes classified as marginal, small, semi-medium⁹, medium, and large, the average amount of outstanding debt per owned acre is 76 110, 95 780, 154 420, 77 882, and 19 524 rupees, respectively. Farmers in the semi-medium category bear the brunt of persistent debt. Approximately thirty percent of the farmers (semi-medium and medium) surveyed obtained sixty-nine percent of the total amount of outstanding loans. On the other hand, only 27 per cent of the loan amount was obtained (struggling with) by roughly 67 per cent of the surveyed marginal and small farmers. Small and marginal farmers require funding, but they are unable to obtain the desired level of credit due to their small landholdings. They deserve more recognition for diversifying their revenue streams. However, semi-medium and medium-sized farmers have a greater potential for debt accumulation and have taken out a greater number of loans from various sources. However, they are also caught in a never-ending cycle of debt due to their inefficient use of the loan amount. Large amounts of debt are directly used in non-productive activities by semi-medium and medium-sized farmers; of the total loan amount, 49.07 and 37.27 per cent share are directly used in non-productive activities by semi-medium and medium-sized farmers (Jakhar et al., 2023).

8 A cultivator with landholdings ranging from 4.01 hectares to 10.00 hectares is classified as a medium farmer.

9 A cultivator with landholdings between 2.01 and 4.00 hectares is classified as a semi-medium farmer.

Table 3. Extent of debt amongst the farmers: category-wise*(Amount of debt in INR)*

Sr. No.	Farm-size categories	Landholdings in hectares by ownership of farmers	No. of sampled farmers	Total amount of debt	Average amount of debt		
					Per sampled farmer	Per owned acre	Per operated acre
1.	Marginal farmers	Up to 1.00	96 (48.00)	18 038 000 (14.94)	187 896	76 110	27 880
2.	Small farmers	1.01 to 2.00	38 (19.00)	14 367 000 (11.90)	378 079	95 780	53 809
4.	Semi-medium farmers	2.01 to 4.00	36 (18.00)	45 863 000 (37.97)	1 273 972	154 420	128 828
4.	Medium farmers	4.01 to 10.00	24 (12.00)	37 617 000 (31.15)	1 567 375	778 82	100 045
5	Large farmers	Above 10.00	06 (3.00)	4 881 000 (4.04)	813 500	19 524	47 388
6.	All sampled farmers	-----	200 (100.00)	120 766 000 (100.00)	603 830	85 226	69 048

Source: Primary data

Small and marginal farmers' stories are similar to those of semi-medium farmers. Their ownership of small landholdings prevents them from being able to pay off their loan on time. Large and medium-sized farmers are also in debt, but because they own substantial amounts of land, they can afford to repay the loan on schedule. For large farmers, the average amount of outstanding debt per owned acre is sufficiently low to be paid off promptly through agricultural output. In general, debt is a trap for farmers across all farm size categories. Marginal, small, and semi-medium farmers in particular are heavily indebted. Farmers' debt suggests that farming is not an economically viable sector in Haryana. The main factor contributing to farmer debt is small land holdings (Darling, 1925). Nonetheless, 2.25 hectares is the average size of land holdings in the state of Haryana (GoH, 2021). Sharma (2018) claimed that marginal and small farmers in Punjab were caught in a never-ending cycle of debt. However, large, and medium-sized farmers are also caught in a debt spiral. It happened in Haryana as a result of rising input costs, low harvest season prices, and inefficient use of the loan amount (Jakhar et al., 2022a).

Sources of debt

Debt is incurred from two different sources: institutional and non-institutional. Among institutional sources, commercial and cooperative banks are the two main ones. However, the main non-institutional sources of debt are relatives and friends,

commission agents¹⁰, or arhtiyas, and professional money lenders¹¹ (Yadav, 2017). Table 4 shows the average debt incurred from various sources for the various farm-size categories. Of the total debt, 66.71 per cent came from institutional sources, while the remaining 33.29 per cent came from non-institutional sources for all of the farmers in the sample. Moreover, commercial banks have incurred 51.38 and 15.33 per cent of the institutional debt, respectively, out of the total of 66.71 per cent. In comparison to commercial banks, the share of cooperative banks in Haryana is very low. Because, the lack of adequate funds and poor loan recovery is main constraint in the proper functioning of co-operative banks/ societies (Singh et al., 2022).

The loan disbursement share of cooperative banks and societies was raised in prior years, according to Singh et al. (2021). However, of the 33.29 shares of non-institutional debt, commission agents or arhtiyas, professional money lenders, and friends and family accounted for 20.80, 11.27, and 1.22 per cent of the total debt, respectively. In his research, Duggal (2017) found that 52.6 per cent of the debt was obtained from non-institutional sources of credit and 47.4% came from institutional sources in the Sonapat district of Haryana. This study was supported by his findings.

Table 4. Debt incurred from different loan sources: category-wise

(Mean values in INR)

Sr. No.	Sources of debt	Marginal farmers	Small farmers	Semi-medium farmers	Medium farmers	Large farmers	All sampled farmers
A.	Institutional sources						
1.	Commercial Banks	84 125 (44.77)	174 579 (46.17)	584 722 (45.9)	982 250 (62.67)	452 667 (55.64)	310 250 (51.38)
2.	Co-operative Banks/ societies	21 260 (11.31)	84 711 (22.41)	238 056 (18.68)	151 000 (9.63)	177 500 (21.82)	92 595 (15.33)
	Sub-total	105 385 (56.09)	259 290 (68.58)	822 778 (64.58)	1 133 250 (72.3)	630 167 (77.46)	402 845 (66.71)
B.	Non-institutional sources						
1.	Commission agents or arhtiyas	63 875 (34)	71 447 (18.9)	199 500 (15.66)	343 125 (21.9)	141 667 (17.42)	125 570 (20.80)
2.	Professional money lenders	14 469 (7.7)	42 710 (11.30)	242 389 (19.03)	78 042 (4.98)	00	68 055 (11.27)
3.	Relatives & friends	4 167 (2.21)	4 632 (1.22)	9 305 (0.73)	12 958 (0.82)	41 666 (5.12)	7 360 (1.22)
	Sub-total	82 511 (43.91)	118 789 (31.42)	451 194 (35.42)	434 125 (27.7)	183 333 (22.54)	200 985 (33.29)
	Total	187 896 (100)	378 079 (100)	127 3972 (100)	1 567 375 (100)	813 500 (100)	603 830 (100)

Source: Primary data (Figures in the parentheses represent percentages)

10 Commission agents, a link between farmers and buyers of crops on the market. They arrange for the auction and delivery of harvested crop to the buyers. They are also working as moneylenders.

11 A person who lends money in exchange for someone's valuables.

In the state of Haryana, commission agents, or arhtiyas, are the primary providers of non-institutional debt, while commercial banks are the primary providers of institutional debt. The results of this investigation are corroborated by Singh et al. (2008). They found that when farm size (measured by landholdings) shifted from marginal to large farmers, the amount of debt per sampled farmer increased in the Indian state of Punjab. The same findings were reported in the Indian state of Haryana by this study. The study discovered that the amount of outstanding debt (in percentage form) incurred from institutional sources has increased and decreased among non-institutional sources as farm-size categories varied from marginal to small, semi-medium to medium, and medium to large.

Small and marginal farmers thus rely more on non-institutional lending sources than do medium-sized and large farmers. Due to their small landholdings under ownership, their agricultural production is likewise quite low. In order to meet their financial needs, they must borrow money at a higher interest rate from non-institutional sources. As a result, the Indian state of Haryana has been actively financing agriculture through non-institutional lending sources. Farmers continue to be responsible for about one-third of the debt, which comes from non-institutional sources. This does not bode well. When it comes to institutional loans, medium-sized and larger farmers have easier access than marginal or small farmers. Azam et al., (2021) also reported that educated, large scale and financially sound farmers more benefited from institutional sources. For increasing the share of institutional loan, government should provide hassles free loan to farmers. No loan without surety, complicated and time-consuming process of granting loans, bank officials are not cooperative in advancing loans, bribes, and ambiguous terms and conditions are the main constraints in seeking loans from institutional sources in Haryana (Jakhar et al., 2022b).

Tenure of debt/loan

There are three different types of debt/loan tenure: short-term¹², medium-term¹³, and long-term¹⁴. In Table 5, it is shown. Short-term, medium-term, and long-term loans account for 46.14, 39.48, and 13.88 per cent of the total amount of outstanding debt, respectively. The percentage of short-term debt incurred by marginal, small, and medium-sized farmers is higher than that of medium- and long-term loans.

12 A short-term loan is one that is taken out for a maximum of fifteen months to cover an immediate need for a farmer, such as buying seeds, fertilizer, and pesticides.

13 This type of loan is taken out for a period of fifteen months to five years in order to buy a tractor, farm equipment, dig a borewell, etc.

14 A long-term loan is one that is taken out for a period longer than five years, usually to finance cropping pattern modifications and land reforms.

Table 5. Tenure of Debt amongst the Farmers: Category-wise*(Mean values in INR)*

Sr. No.	Farm-size Categories	Short-term Loan	Medium-term Loan	Long-term Loan	Total
1.	Marginal Farmers	90 865 (48.36)	61 937 (32.96)	35 094 (18.68)	187 896 (100)
2.	Small Farmers	216 605 (57.29)	138 316 (36.59)	23 158 (6.12)	378 079 (100)
4.	Semi-medium Farmers	377 444 (29.63)	734 417 (57.65)	162 111 (12.72)	1 273 972 (100)
4.	Medium Farmers	1 057 500 (67.47)	376 750 (24.03)	133 125 (8.50)	1 567 375 (100)
5.	Large Farmers	66 667 (8.20)	166 667 (20.49)	580 166 (71.31)	813 500 (100)
6.	All Sampled Farmers	281 610 (46.64)	238 415 (39.48)	83 805 (13.88)	603 830 (100)

Source: Primary data (Figures in the parentheses represent percentages)

Moreover, large farmers incur a higher percentage of debt over the long term compared to the medium and short terms. Semi-medium farmers have racked up the most debt under the category of medium-term loans. As a result, rather than taking out long-term loans or debt, most farmers have taken out short- and medium-term ones. The greatest amount of outstanding debt was discovered to be rupees 1 057 500 (67.47 per cent by medium farmers), 734 417 (57.65 per cent by semi-medium farmers), and 580166 (71.31 per cent by large farmers) under the categories of short-term, medium-term, and long-term loans. About 50 per cent of the total debt has been incurred as a short-term loan to cover farmers' immediate needs, such as buying fertilizer, seeds, insecticides, and manure. Additionally, a portion of this loan amount is utilized for non-productive endeavours that do not add anything to the overall production of agriculture. Farmers become trapped in a vicious cycle of debt as a result of these unproductive loans and debts. Once they were caught in this spiral, there was no way out. Investment in the state's hinterland can give rural households access to additional revenue streams. However, with careful planning, farmers' reliance on formation can be decreased. This is the final answer to the issue at hand.

Types of Debt/Loan

Three categories have been established for debt/loan types: inherited¹⁵, cash¹⁶, and kind¹⁷. Table 6 shows the numbers (mean values) associated with debt. According to the study, 74.49 per cent of debt was incurred as a cash loan, 16.42 per cent as a kind loan, and the remaining 9.09 per cent was incurred as inherited debt among farmers.

15 The total amount of loans that a son inherited from his father following his passing.

16 A cash loan is one in which the loanee, a farmer, receives the entire loan amount upfront.

17 It is a type of loan in which the loanee farmer receives agricultural inputs like seeds, fertilizers, pesticides, insecticides, etc., for the smooth operation of farming.

The average debt held by each farmer in the sample is Rs. 54 845, 449 800, and 99 145 in the form of kind, cash, and hereditary loans, respectively. The investigation revealed that small farmers (rupees 102 631) and marginal farmers (rupees 25740) received the highest and lowest average amounts of hereditary loans. The average loan amount for small farmers (rupees 40 474) and semi-medium farmers (rupees 268 833) has been determined, as well as the minimum and maximum amounts. For medium farmers (rupees 1 320 500) and marginal farmers (rupees 121 427), the maximum and minimum cash loan amounts have been determined. Therefore, of the debt among the farm-size categories, about 75 per cent has been paid for with cash, and only 9.09 per cent is inherited or ancestor debt. Farmers in Haryana are not particularly fond of this type of loan. A lot of farmers obtained loans in cash.

Table 6. Types of Loans amongst the Farmers: Category-wise

(Mean values in INR)

Sr. No.	Farm-size categories	Hereditary loan	Loan contracted in cash	Loan contracted in kind	Total
1.	Marginal farmers	25 740 (13.70)	121 427 (64.62)	40 729 (21.68)	187 896 (100)
2.	Small farmers	102 631 (27.15)	234 974 (62.15)	40 474 (10.70)	378 079 (100)
4.	Semi-medium farmers	60 333 (4.74)	944 806 (74.16)	268 833 (21.10)	1 273 972 (100)
4.	Medium farmers	83 917 (5.35)	1 320 500 (84.25)	162 958 (10.40)	1 567 375 (100)
5.	Large farmers	70 000 (8.60)	611 500 (75.17)	132 000 (16.23)	813 500 (100)
6.	All sampled farmers	54 885 (9.09)	449 800 (74.49)	99 145 (16.42)	603 830 (100)

Source: Primary data (Figures in the parentheses represent percentages)

Purposes of Loan

Loan purposes fall into two categories: productive purposes and non-productive purposes. Table 7 shows the average debt/loan amount for each category (for various purposes). 36.45 per cent of the total debt was incurred for non-productive reasons, while 63.55 per cent of the debt was incurred for productive purposes. The large farm-size category (98.03%) and marginal farm-size category (55.36%) have been found to have the highest and lowest percentages of debt (in terms of dollars) incurred for productive purposes.

Table 7. Debt Incurred for Different Purposes: Category-wise*(Mean values in INR)*

Sr. No.	Farm-size categories	Productive purpose	Non-productive purpose	Total
1.	Marginal farmers	104 021 (55.36)	83 875 (44.64)	187 896 (100)
2.	Small farmers	275 526 (72.87)	102 553 (27.13)	378 079 (100)
3.	Semi-medium farmers	733 333 (57.56)	540 639 (42.44)	1 273 972 (100)
4.	Medium farmers	1 046 250 (66.75)	521 125 (33.25)	1 567 375 (100)
5.	Large farmers	797 500 (98.03)	16 000 (1.97)	813 500 (100)
6.	All sampled farmers	383 755 (63.55)	220 075 (36.45)	603 830 (100)

Source: Primary data (Figures in the parentheses represent percentages)

Conversely, the categories of marginal farm size (44.64%) and large farm size (1.97%) have been found to have the highest and lowest amounts of debt incurred for non-productive purposes, respectively.

Thus, to install new tube wells, buy heavy machinery, and implement fruitful land reforms, the majority of large farmers took out loans. Conversely, marginal, small, semi-medium, and medium-sized farmers borrowed money for both beneficial and detrimental reasons. Their surplus, if any, is likewise minimal because they (primarily marginal and small farmers) have small landholdings and low agricultural production. While it is not morally wrong to accumulate debt for non-productive uses, farmers are burdened with debt because of these non-productive expenses. According to Singh's (2006) research, Punjabi farmers in India spend an excessive amount of their loans and debts on what are non-productive (consumption) purposes. Thus, the main reason behind agrarian distress in India, especially in Haryana, is debt or loans used for non-productive purposes.

Rate of Interests

Three categories have been established for the interest rate: 0 to 15, 16 to 24, and 25 to 36. Table 8 shows debt according to annual interest rate. According to the study, the total amount of debt incurred by all of the sampled farmers was 67.63, 22.42, and 9.95 per cent, or 0–15 percent, 16–24 percent, and 25–36 percent annually, respectively. No debt has been taken on that carries an interest rate higher than 36% annually. Due to their small landholdings, which they must mortgage against the loan, marginal farmers must incur debt or loans at higher interest rates to meet their basic needs.

Table 8. Debt According to Rate of Interests: Category-wise*(Mean values in INR)*

Sr. No.	Interest rate (percent, per annum)	Marginal farmers	Small farmers	Semi-medium farmers	Medium farmers	Large farmers	All sampled farmers
1.	0-15	107 990 (57.47)	263 000 (69.56)	827 222 (64.93)	1 146 208 (73.13)	671 833 (82.59)	408 405 (67.63)
2.	16-24	58 667 (31.22)	79 342 (20.99)	252 361 (19.81)	353 750 (22.57)	141 667 (17.41)	135 360 (22.42)
3.	25-36	21 239 (11.31)	35 737 (9.45)	194 389 (15.26)	67 417 (4.30)	00	60 065 (9.95)
	Total	187 896 (100)	378 079 (100)	1 273 972 (100)	1 567 375 (100)	813 500 (100)	603 830 (100)

Source: Primary data (Figures in the parentheses represent percentages)

Conversely, because the average amount of debt held by semi-medium farmers is high, these farmers have incurred loans and debt at higher interest rates. As a result, they must obtain a loan at a higher annual interest rate from non-institutional sources. Furthermore, the extent (amount) of debt incurred up to 15% of the annual rate of interest has increased (in percentage terms) from 57.47 to 69.56, 64.93, 73.13, and 82.59, respectively, as farm sizes have varied from marginal to small, semi-medium, medium, and large farmers. Conversely, as farm sizes shifted from marginal to large, the amount of debt taken on at interest rates ranging from 16 to 24 percent annually decreased. As a result, it showed that the amount of debt taken on at a low-interest rate increased with farm size and vice versa. Interest-free loan options may lessen the need for debt relief programs (Jain & Raju, 2011). Such a policy could break the cycle of indebtedness and lessen the burden of debt on farmers.

Conclusions and Suggestions

Farmer indebtedness is not a new concept, it has had a long history. Indian farmers were born in debt, lived in debt, and died in debt (Darling, 1925). The current study demonstrated that the amount of debt is rising annually. Throughout time, the amount of debt has been steadily rising. For policymakers, skewed debt access is another significant obstacle. Government policies should assist marginalized and small farmers in their efforts to improve their lot in life. Significant investment in the state's hinterland could lessen farmers' reliance on agriculture. Their income should be boosted through new job opportunities in rural areas. The study also discovered that the main factors contributing to agrarian distress, especially for marginal and small farmers, are the size of debt incurred from non-institutional sources and the higher interest rate on that debt. The amount spent on non-productive expenses directly increases the amount of debt held by each sampled farmer; the lower the socioeconomic standing of farmers, the higher the amount of debt per owned acre. Farmers are therefore ensnared in debt. To minimize the amount of money lent out for unproductive purposes, the government and social institutions ought to organize awareness campaigns.

Farmers in Haryana and throughout India no longer find farming to be an economically viable occupation because of the ongoing strain that population growth is having on the agricultural sector. India's farm households have very low marginal physical productivity. One of the most effective ways to solve the debt issue is to shift the population's reliance from agriculture to other economic sectors. The main factor leading to debt is low agricultural income. Therefore, in order to lower farmer debt in the state of Haryana, the government should encourage and support non-agricultural activities.

Conflict of interests

The authors declare no conflict of interest.

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