FARMER INDEBTEDNESS IN PUNJAB

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BY

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CERTIFICTION

This is to certify that Miss Baljit Kaur has completed her M.Sc. project titled "Dimensions of Regional inequality in India: A political economy approach" under my guidance and supervision.

The report is to fit for the submission and partial fulfilment of the condition for the award of M.Sc. economics.

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DECLARATION

I hereby declare that the project report titled 'Farmer Indebtedness in Punjab" is an authentic record of my own work carried out as the requirement for the award of M.Sc. in economics at lovely professional university, Phagwara, Punjab. The content in presented in the report has not been submitted in full to any university for the award of any degree with such a focus.

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LIST OF ABSRIVATION

NSSO: National Sample survey organisation
NSS: National Sampling and Survey
ICSSR: Indian Council of Social Sciences Research
GSDP: Gross State Domestic Product
GDP: Gross Domestic Product
NABARD: National Bank for Agricultural and Rural Development
GCA: Gross Cropped Area
SID: Simpson Index of Diversity
ST: Scheduled Tribe
SC: Scheduled Caste
OBC: Other Backward Class
NREGA: National Rural Employment Guarantee Act
NRLM: National Rural Livelihood Mission
MANREGA: Mahatma Gandhi National Rural Employment Guarantee Act
SHGs: Self-Help Groups

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ABSTRACT

Punjab is known as the bread basket of India. Punjab is also known for rich farmers, but the reality is far away. Farmers who have a big land live a luxury life, but the position of small and marginal farmers is not good. Most of the small farmers are under indebtedness. **Purpose of the study:** The purpose of the study is to identify the factor which causes indebtedness among the marginal and small farmers of Punjab and focus of the study is limited to farm households only. **Research methodology:** The method used for study is factor analysis and the factors are agrarian crisis, particularly to crop failure, inferior quality of seeds and pesticides, private money lending, less land, labour and market. **Findings:** The data for the study is collected via two sources: Primary data sources and secondary data sources. The primary data is collected by querying Questionnaire and the secondary data is collected from farmer's situation assessment survey census of Punjab and India (various issues), economic census of Punjab and agricultural statistics at a Glance (2008).There is a feeling of insecurity due to crop failure, land alienation and indebtedness. This has resulted in a spate of farmers' suicides in different parts of the Punjab. In view of the seriousness of the issue, the selection of the present study is need-based and fully justified. **Conclusion:** This research would be helpful in future schemes and policies of govt for farmer. So, as a result it would be a good for farmer as well as agricultural sector.

CHAPTER - I
INTRODUCTION

Punjab state comprising only 1.54 % of the total geographical area of India contributes 13-14% towards the total food grain production of the country. Till eighties the Green revolution sustained after which, the production of agriculture showed the signs of inactivity. Agriculture has a significant role to develop the Indian economy as it accounts near about 17 per cent of Gross Domestic Product (GDP) and 54.6 per cent of the total workforce in sector employment Agriculture is the most essential driver, contributing 20.65% to Gross State Domestic Product (GSDP), and around 39% of the working population is employed in this sector. Punjab is one of the richest state in order to get the food grains at the largest level. The State has already reached saturation level as almost 98.9% of cultivable land is under the plough.

In the mid-1960's the rural area of Punjab holds a goodness and richness in terms of land and a general spurt in their prosperity. Agriculture not only provides food but also provides raw material to the manufacturing sector. The green revolution strategy which brought a phenomenal growth in the agricultural sector and improved the economic conditions of the farming community during the 1970s and 1980s, seems to be growing dim with the passage of time. Punjab, the pioneer of green revolution in India, is no more a state of ever-booming agriculture as it is facing economic crisis During '80s. In the 1980's, the potentials of green revolution technology began to be spread which among the poor strata of peasantry and agricultural labourers generated pressure of economic stress on them. The impact of economic hardship along with the refusal of traditional social support system which was depend upon community support made then poor shelter less and helpless and made them unable to fend for themselves as individual families and as persons. Many poor farmer families had migrated to other countries, according to this report almost 2 million Sikhs have migrated from India to other countries. But still about 35 lakhs farmer who left a farming are unemployed in Punjab. The process of shifting of farmers from agricultural to non-agricultural sector for an another of livelihood. The most agonized are the smaller farmers who have been hit hard by the financial crisis arising out of rising cost of production, decreasing productivity and dropping returns. As farming turns out to be non-viable for these farmers, they are involuntarily maneuverer towards borrowing loan and hence, fall prey to the debt trap. About 89% of the farmers are under heavy debt. The strain of this debt trap is so rigid that of the total farmer suicides (1757 cases) committed in two districts of Punjab during 2000–2008, over 79% were small farmers. This phenomenon puts a question mark on the viability issues of small farmers. Many poor peasants and agricultural labourers broke and decided to get over with their lives due to non-existence of formal

and informal social support mechanisms. Since the mid-1980's the phenomenon of suicides by farmers has been discovered under economic hardships in rural Punjab. All the regions of the state had not observed this phenomenon equally. There are some areas with high rate of suicide such as Malwa region under cotton cultivation, while in other areas such as Doaba region under paddy and wheat rotation this phenomenon is little. As we know that in 2015 a lot of farmer committed suicide in Malwa. The reasons are whitefly attack, where by the cotton belt in Punjab especially the Malwa district has been affected the most on the cotton crop. This phenomenon has been noticed and observed in other states of India also even where agriculture is hugely commercialized sector. Government policies are modified as such to fulfil the increasing demand of credit for agriculture sector. Government agencies are working in this field. Agriculture sector in India has provided ample of production to meet the requirement of general food security feeding a population increasing 1 billion but is on back step due to various long term issues that is lowering the rate of agriculture production in the country. Those long-term issues are mechanism of pricing in market, exponential increase in food security and credit to farmers. The credit flow in the rural area is not up to the mark that is in degrading trend towards agriculture industry.

Besides, focusing on the concerns and issues related to disbursement of agriculture credit in India, the paper has examined the condition of farmer's indebtedness in Punjab. There is increase by 9% in the outstanding credits in 2013-13 according to survey conducted by National Sampling and Survey (NSS). The loans are given to farmers at easy instalments and securities but that was not the scenario as in 2000-01, 0.53 lakh crore increased to 6.25 lakh crore in 2011-12.

The total debt of the famer in the state has gone up to Rs 68,845 crore. Of this amount, Rs 66,851 crore was borrowed from institutions. By March 2013, the amount of money for institutional loans was Rs 52,000 crore.

This survey was conducted on behalf of the Indian Council of Social Sciences Research (ICSSR). Farmers' total debt in the state has gone up to Rs 68,845 crore. Of it, Rs 66,851 crore was borrowed from institutions. By March 2013, the amount of institutional loans was Rs 52,000 crore. This is a finding of a survey conducted on behalf of the Indian Council of Social Sciences Research (ICSSR). For semi-medium farmers with up to 10 acres, debt per household is Rs 6,84,649. In case of medium farmers owning up to 15 acres, debt per household is Rs 9,35,608 and in case of large farmers it is Rs 16,37, 473.Among marginal and small farmers, 83.3% and 88.64 % farmer households are under debt, respectively. In case of semi-medium and medium farmers are 89.06 % and 84.09 %, respectively. Nearly 82.61% of large farmers are under debt and the state average of households under debt being 85.9 per cent. The average debt per household is Rs 5,52, 064.A large number of landless labourers in the farm sector are under debt. The average household loan is Rs

68,330 with 80 % households of landless labourers under debt. Near 92% landless labourers secure loans from non-institutional sources.

It was observed that large farmers were not so heavily dependent on non-institutional loans. Against 8.16% large farmers, 40% marginal farmers take non-institutional loans. Temporarily, 30 per cent small farmers and 14.47% medium farmers take non-institutional loans. This is a danger for small farmers as private moneylenders charge exorbitant rate of interest and exploit them. farmers mortgaged more land almost every year to banks and other official institutions. However, the positive aspect was that the loan taken was by and large used for productive purposes.

1.3 Objectives of study

(A)To access the position of farmer's indebtedness in Punjab.

(B)To study the factors that cause Indebtedness among the farmers.

(C)To study the role of informal source of credit in determining the relationship between size of land holding and indebtedness of farmers.

1.2 Scope of study

This study emphasis on the situation of farmer indebtedness in Punjab. The purpose of the study is to identify the factor which causes indebtedness among the farmers of Punjab and focus of the study is limited to farm households only. To has current situation data has been collected from (National Sample survey organisation report 2015) 70th report.

CHAPTER - II
REVIEWS OF LITERATURE

In order to find out the difference in research, the literature already available pertaining to the problem is to be reviewed. The literature on farmer indebtedness in Punjab indicates about the books, compendia, theses, dissertations, study reports and articles published by academicians and researchers in various parameters. The review of this literature provides an idea to concentrate on the unexplored fields and to make the present study more distinct from rest of the studies. The literature available is presented below:

Sr. no	Author	Paper	Year	Objective of the study	Test Applied	Conclusion
1	Singh et al.	Indebtedness among Farmers in Punjab	2016	This paper focused on the overall farmer debt position in Punjab and also find the factors of indebtedness	Descriptive analysis is done. Tables are used in this paper	This paper conclusion that Punjab's farmers are severely trapped in the rules of indebtedness and also found that high indebtedness among Punjab farmer causes for concern for policymaker and academicians
2	Pathak	Swot analysis of Punjab agriculture	2016	This paper analyses the strengths, weaknesses, chances and pressures to Punjab Agriculture. In this way, the aim was why farmers forced to take large amount	Descriptive analysis is done.	At the end this paper find the strengths lie in having the cultivable land with record food grains production, the weaknesses lie in stagnant yield and post-harvest wastages. So here need to be made to face the pressures and exploit the available opportunities.

				of loans that are mostly found through informal sources.		
3	Ghuman	Socio-economic Crisis in Rural Punjab	2016	This paper *focus on agricultural, educational and health crimes that afflict Punjab	The data has been analysed using tables with the help of NSSO report	The result is found that Government support in all three areas has been falling. The state government is not doing enough to assemble available resources to improve public service
4	Narayana moorthy	State of India's Farmers	2016	The Objective of study is 1. Indebtedness of Farmer House- holds, 2. Access to latest Technology for Farming, 3. Some Features of Farming, 4. farmer's consumption and 5. Income, Spending and Productive Assets of	The data has been analysed using table in NSSO repot	The results of these surveys show that the terrible condition of farmer households, be it in income, expenditure or indebtedness of farming households.

				Farmer Households.		
5	Singh	Rural Healthcare and Indebtedness in Punjab	2016	To estimate the level of credit purchase for healthcare purposes by farmers in Punjab to measure the present scenario of public healthcare services in rural areas of Punjab.	The data has been analysed using table with Rural Health Statistics.	This study concludes that policy measures like increasing the share of state's expenditure on health-care, especially in rural areas, improving the existing healthcare facilities, filling up of unfilled posts in these institutions, frequent surprise visits by higher officials to check absenteeism, compulsory rural postings of staff and fixing accountability of employees are necessary to improve the rural health scenario in the state.
6	Satish	Institutional Credit, Indebtedness and Suicides in Punjab	2016	This no direct causal relationship between institutional credit, indebtedness and suicides in rural Punjab	Descriptive analysis is done. Tables are used in this paper	Its concludes that there is interrelationship between three phenomena discussed and also draws out the instructions for long-term mitigation of the problem.
7	Reetu	Agricultural indebtedness in India: A comparative analysis of	2015	The objective of study is 1.To find the indebted farmer in each	The data has been analysed using tables & graphs with the help of	The amount of indebtedness will be increased beyond one's repaying capacity, which will be detrimental to the interest of both, the lender and the borrower. So as

		NSSO 59th and 70th round		state. 2. To find outstanding credit per farmer. 3.To find outstanding credit by credit source.	NSSO 59th and 70th round	a result, suicide cases are taking more places with the coming days. Indian agriculture is backward and this stultifies all talks of agricultural improvisations.
8	Singh and Manisha	Crisis in agricultural heartland: farm suicides in Malwa region of Punjab, India	2015	The objective of study 1. To get the reason if there has been an in the incidence of suicide or self-killing specifically farmer's suicide in Punjab in the last 20 year. 2. To signify the distinctive socio-economic characteristics of the case of suicide. 3. To find out the relationship between	The tables are showing data with help of NSSO reports	To get the conclusion that agriculture has become a losing proposition in Indian Punjab, the farming heartland of South Asia for generations. In the present case, suicides among Punjab farmers have by all means become a public. Issue as these are so much longer as compare to isolated cases.

				indebtedness and suicide.		
9	Ibendahl	Farm Debt-to-Asset Ratios by Age	2015	To examines the debt to asset ratios and the interest expense ratios for the period of 2002 through 2013.	The correlation with age and net farm income as farmers.	This study found that the period from 2006 to 2012 was very beneficial for all most grain farms. As a result, most farms did not have any problems meeting operating expenses and paying debt. However, a period of lower grain prices could result in some farms facing problems with too much debt.
10	Sharma and Singh	Agricultural diversification and contract farming in Punjab	2013	The objective of study is 1. To assess the level of crop diversification in Punjab. 2. To determine the role of CF in promoting the crop diversification . and 3. To analyse the factors that are promoting the process of diversification .	The time-series data for the time period 1970-71 to 2008-09. different crops in Gross Cropped Area (GCA) has been calculated for each decade to show the cropping pattern in the state. Simpson Index of Diversity (SID). The time series OLS model has also been used for estimation.	The paper suggests that concrete efforts are much more needed by the side of government and the farmers so as to bring out substantial changes in the agricultural economy of the state.
11	Singh et al.	Indebtedness Among Farmers in	2014	Main factors influencing farmer	In Regression analysis, some variables are	To cover the loss of crop failure and damage, the crop insurance scheme must be implemented

		Punjab its Magnitude and Determinants		indebtedness are farm size, education level, non-farm income and non-institutional credit.	using like Total outstanding, a content terms, independent variables, regression coefficient, a random error term.	properly and to improve the condition of farmers primarily small farmers there is strict need to rethink over the issues.
12	Singh and Bhogal	Desensitization in a Punjab: status of farmers who left farming	2014	The study is originated from a field study in Punjab during the year of 2012–13, it was detected that 14.39% of the farmers had left farming since 1991.	The data has been analysed using tables & graphs. Percent Distribution and Tables	The study has found that is a need an hour to look into the viability of the farming sector and area or particularly and more specifically small farmers.
13	Rani	Impact of Rural Indebtedness: A Study in Patiala District (Punjab)	2014	This paper is to highlight the consequences of indebtedness among the farmers	Data was collected from a sample comprising of total 120 farmers in Patiala district (Punjab) and tables	Their attitude towards borrowings, positive effects of borrowings and negative effects of borrowings.
14	Dev	Small Farmers in India:	2012	To analyse the part and challenges of	The data has been analysed using	It is known that small farmers face several challenges in the access to inputs and marketing.

| | | Challenges and Opportunities | | tiny field agriculture in achieving agricultural growth, food assurance and livelihoods in the country. This paper also shows that market concerned with reforms are not sufficient enough and government intervention and other support are actually needed for small holdings in order to get the goals. | tables, graphs and charts. | They need a level playing field with large farms in terms of accessing land, water, inputs, credit, technology and markets. |

15	Kaur, Swarleen	Punjab ranks highest in per capita farm indebtedness	2009	The main Objective of report was why Punjab being as one of the richest state is facing farmer indebtedness at such a huge level.	Descriptive analysis is done in this paper.	(1) Results of report showed that Punjab farmers suffer from the malaise too. (2) The state holds the largest per capita farm indebtedness in the country, leading to a enlarging number of suicide cases in the region.
16	S. Mahendra Dev	Small Farmers in India: Challenges and Opportunities	2009	The purpose of this note is to bring the importance in notice of financial inclusion in improving the living situations of poor farmers, rural non-farm enterprises and other vulnerable groups arid discuss a few significant topics and issuers and challenge	Percentage of Indebted Farming. Percentage distribution of outstanding loan	To concluded that financial exclusion in terms of access to credit from formal institutions is high for small and marginal farmers and some social group.

17	Report of Agriculture, Forestry & Fisheries	Increasing farm debt amid decreasing interest rates: An explanation	2010	The main goal of the study is to identify the reasons and factors behind the increasing farm debt amid the decreasing interest rates.	The data has been showing with help tables and graphs	High inflation of farm inputs contributes to an increase in the farm debt by convincing the farmers to get the more loans in order to meet increasing production costs amid low agricultural commodity costs. Investments in agriculture, appropriately while times of low net farm incomes, are likely to have been financed through loans
18	Narayana moorthy and Kalamkar	Has agrarian crisis made any impact on agricultural wages and employment in India? an exploratory study	2006	1.To study the impact of agrarian crisis on the wage rate of skilled and unskilled agricultural labourers, and 2. To study the impact of agrarian crisis on the crop-wise employment (man hours/ha) of agricultural labourers.	The data has been analysed using tables	While labour use (man-hours/ha) in absolute terms has not declined uniformly in all crops, labour-yield ratio has declined in almost all crops and all the states under for analysis. The study suggests some policy measures to resolve the present agrarian crisis.

CHAPTER -III

RESEARCH METHODOLOGY

As we know that research is an orderly, systematic investigation and study of materials. The methodology is the particular way by which results are found out after specifying a particular problem or a specific matter. In this methodology has used a survey technique for collection of data.

3.1Sampling: The population of our study contained all rural households farm in Punjab region of India. A sample of 300 respondents served the purpose of the study. The sample size has been determined from the previous studies of the scholars. Convenience sampling has been used for collection of the data.

3.2Data Collection: The data for the study is collected via two sources: Primary data sources and secondary data sources. The primary data is collected by querying Questionnaire and the secondary data is collected from farmer's situation assessment survey census of Punjab and India (various issues), economic census of Punjab and agricultural statistics at a Glance (2008).

CHAPTER -IV

DATA ANALYSIS

In this chapter, an effort has been made to show the interlinkage between the agricultural credit and value added to GDP. Thereby, the present chapter has divided into four sections. Section I, to access the position of farmer's indebtedness in Punjab. Section II, to study the factors that cause indebtedness among the farmers. The role of informal source of credit in determining the relationship between size of land holding and indebtedness of farmers is study in section III.

## SECTION 1: TO ACCESS THE POSITION OF FARMER'S INDEBTEDNESS IN PUNJAB

In this chapter is explain NSSO 70th and 59th report. In the NSSO report conducted present 'situation Assessment Survey of Agricultural Households' in its NSS 70th round during January-December, 2013 as a repeat survey of 'situation Assessment Survey' of 2003. Apart from the Central sample canvassed by NSSO, most of the State Government also participated in this survey by canvassing a state sample of size matching to the Central Sample. This survey also aimed at capturing the condition of agricultural households in the rural areas of the Country in the context of policies and programs of Government of India. But in this chapter only on using Punjab related data.

4.1.1 Principal Source of Income

This sample based on village survey by NSSO in 70th round, that is known as central sample report. In this report total 4529 villages was targeting for this survey. each sample collected by state govt, who had participated in this survey report. Every state was targeting different no of villages for survey report. Like Punjab was targeting 94 villages for survey report. According to this report in Punjab total 94 village was targeting by Punjab government. In this 94 households, they found the principle source of income. In Punjab, main source of income is (a) cultivation: In cultivation, all activity including there are growing crop as plantation. It is related to production of crops. Cultivation is depending on quality of soil. In Punjab is different type of soil. In survey report Punjab targeting 1000 households there 45.6% households belong to cultivation directly or indirectly. That means most of population belongs to agricultural (NSSO 70th round report), (b) livestock: Livestock are activity their animal is used for source of income. In Punjab 9.2% household is belongs to livestock in Punjab from 1000 households (NSSO 70th round report), (c)

other agricultural activity: In other activities is included all activities like grow the plants, forest activities, fishing actives etc., (d) wage/salaried employment: In Punjab 31.9% household belongs to employment sector out of 1000 households (NSSO 70th round report), (e) non-agricultural enterprises: there are including pension, remittances, interest etc. and (i) others: In Punjab 7.4 % household are working in other sector that means 7.4% household not belongs to agricultural sector. We know that India is agricultural based county a lot of population belongs to agricultural directly and indirectly. Punjab is food basket of India but therefor Punjab is under heavy debt (NSSO 70th round report).

Figure 4.1.1: Principle Source of Income
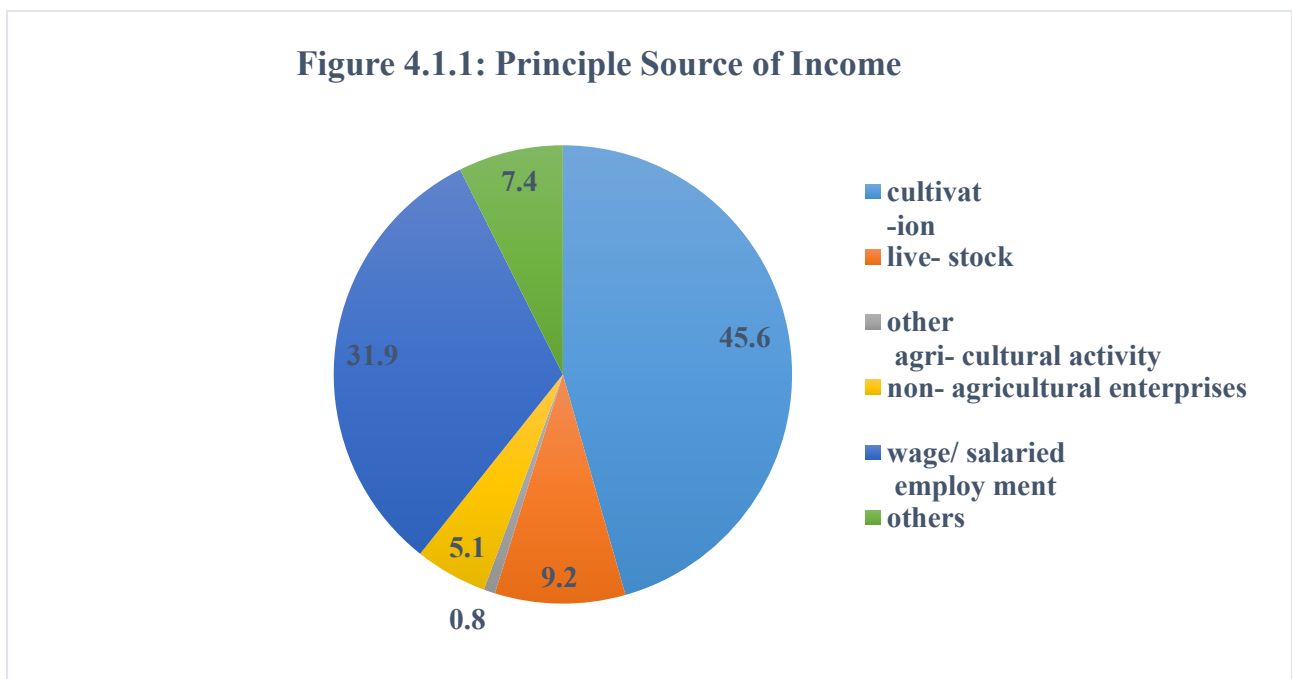
Source: NSSO 70th round report

4.1.2 Different social groups

We know that every state has a different type of social groups. Here ST means is scheduled tribe, SC means is scheduled caste, OBC means is other backward class and others means upper class households.

Figure 4.1.2: Agricultural household in some different soicial groups
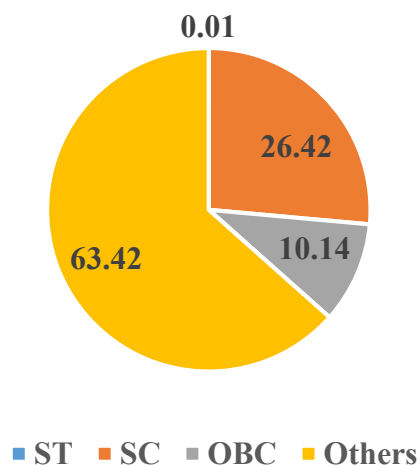
Source: NSSO 70th round report

Figure 3.2 shows that if we are share the estimate of different social groups of 14083 household samples then that was 0.01% in ST, 26.42% in SC, 10.14% in OBC and 63.42% in Others. At all-India level, 48.6% farmer households were indebted (NSSO 70th round report).

4.1.3 Indebtedness in different social groups

The farmer indebtedness is a big problem in Punjab. As we know that a lot of farmer under a heavy debt. If we are talk about India level there are 48.6% farmer households were indebted. Here if we are talk about Punjab farmer household rate of indebtedness in separate social groups was 4 households in ST, 315 household in SC, 163 household in OBC and 518 household in Others. This sample was collected Punjab government for NSSO report. Here government use a 1000 household sample for survey report. In Punjab, small and marginal farmer under a debt. In social groups, all type of farmer household counted.

Indebtedness in different social groups
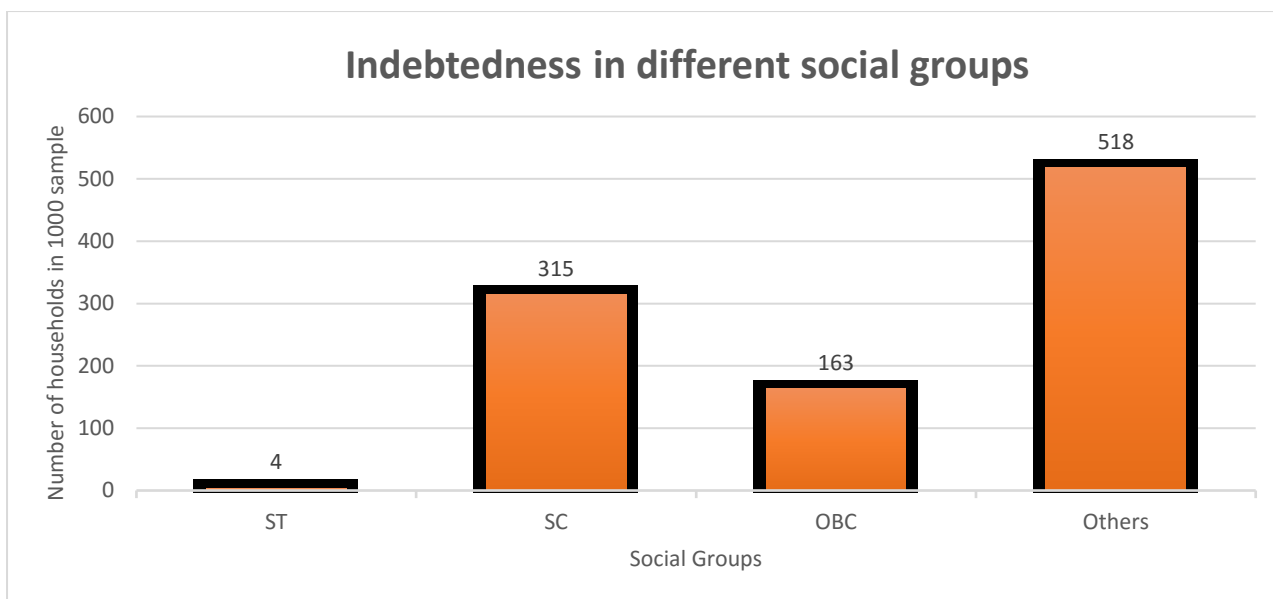
Source: NSSO 70ᵗʰ round report

4.1.4 Purpose of farmer households for loan:

As we know that India has some different social groups. The different social groups have a different type of purpose of loan. But in this survey, is showing only two most important purpose of loan in Punjab. the most of population in Punjab are taking a loan for 'capital expenditure in farm business' and 'current expenditure in farm business'.

Figure 4.1.4: Purpose of farmer houshold for loans
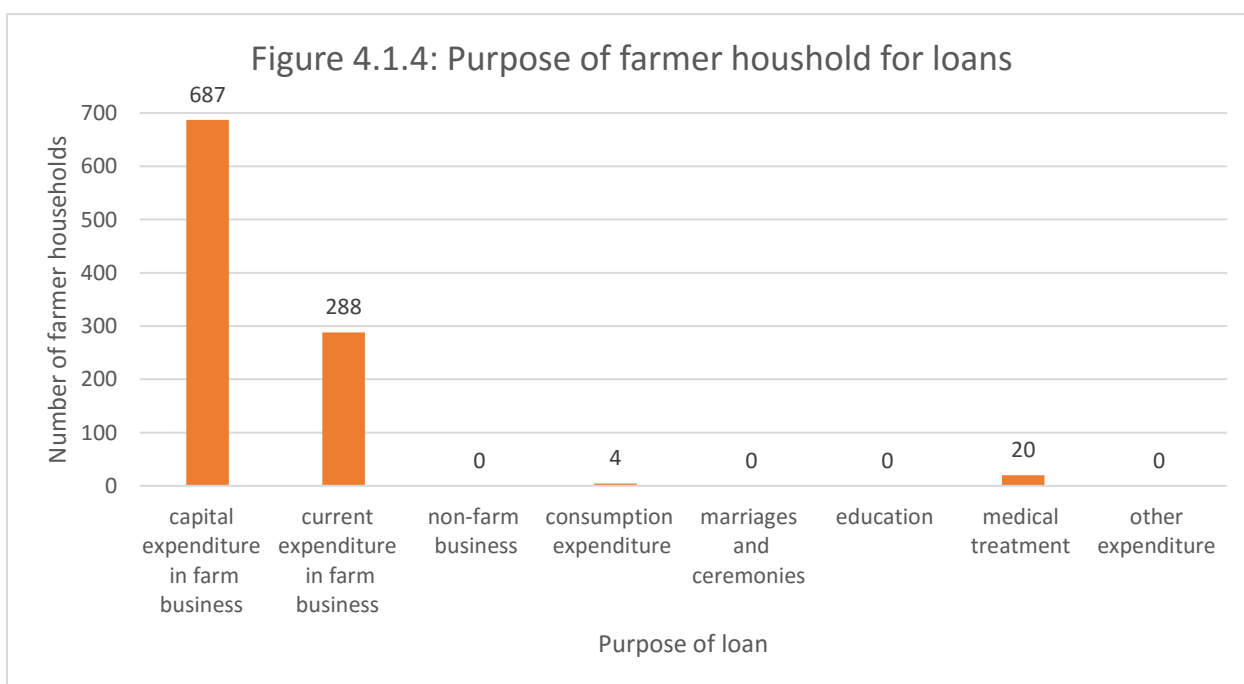
Source: NSSO 59ᵗʰ round report

The above shows that only two most important purpose of loan in in survey report. In this table687 households take a loan for capital expenditure in farm business and 288 households are taking a loan for current expenditure in farm business.

4.5Source of loan for farmer households

As we know that in Punjab most of farmer under a debt. They are taken a loan for different purpose for different sources. In this survey report are two most important source of loan. That are banks and money landers in agricultural field. In Punjab, most of farmer are not educated. They do not know about a government schemes and policies. As a result, they are preferring to take a loan from agricultural money lender or middleman. In this sample 363 farmer household take a loan from money lender and 284 famers take a loan from bank. Farmer do not return money to money lander. They are paying a loan with the help of crop production. So that is easy for farmer. Most of farmer take a loan for fertilizer and agricultural tools. In sample survey 176 farmers also take a loan from co-operative banks, 82 farmer household take a loan from trader, 63 farmer household take a loan relatives and friends, 19 farmer households take a loan from government and in this way farmer take a loan from doctors and lawyer.

Figure 4.1.5: Source of loan for Farmers
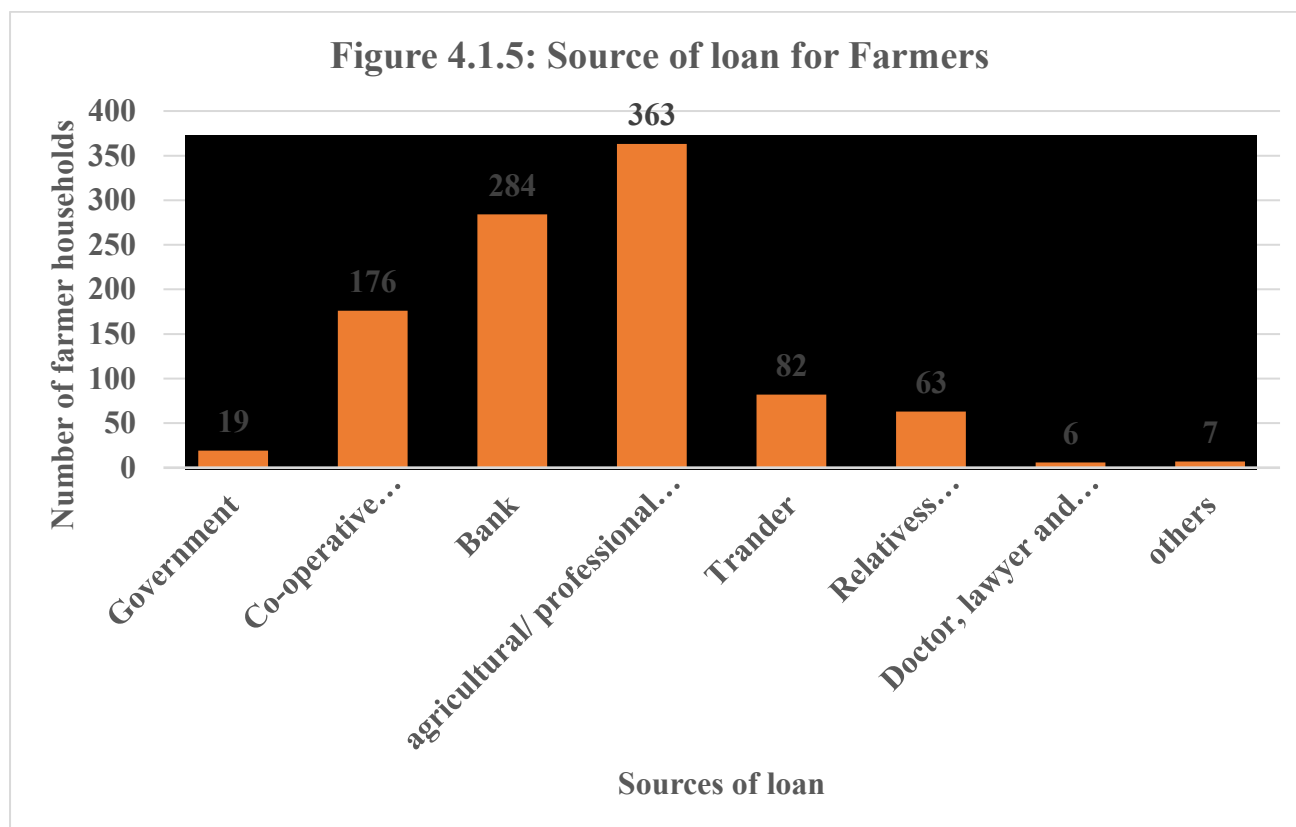
Source: NSSO 70th round report

SECTION 2: TO STUDY THE FACTORS THAT CAUSE INDEBTEDNESS AMONG THE FARMERS

This chapter was mainly based on primary. It is mainly focused on local's point of view, households, and the knowledge of the public is to identify significant categories of human experiences. The fieldwork was conducted in the 20 village of Doaba region between 2016 and 2017. This survey provided information on the current socioeconomic situation, small and large farmers relationship and farm laborer, and so on. This sampling for quantitative analysis was understand to find debt among the farmers in Doaba region. A sample size of survey is 300 of farm households was conducted. This sample on the basis of stratified sampling. The stratification was done on the basis of landholding capacity. Here we have only 6 factor out of 42 and each 6 factor collect a large percentage of variability this table shows that the actual factors that were removed.

4.2.1 Study Area

The research was conducted in the Doaba zone of Punjab. Punjab has divided into four regions that is Doaba, Majha, Malwa and Powadh. Over time, each region has divided into a different disticts. Doaba has 6 districts, Majha has 3 district, malwa has 13 district and powadh has also district. Every region has own environment, structure, social organization and cultural pattern. The study area was placed in the villages of Doaba zone. The Doaba zone was chosen of the cases of indebtedness and suicides were reported from this region. As we know that problem mostly in malwa resign but my study found that Doaba region also under heavy debt.

4.2.2 Factor influencing for indebtedness

Here we find out a factor who has responsible for indebtedness. As we know that Factor analysis isused to describe variability among observed as well as correlated variables in terms of lower number of unobserved variables is called factors. That analysis examinations for such joint variations in response to unobserved hidden variables.

4.2.3 KMO and Bartlett's Test

When factor analysis recommends suitable of the sample, that all find out with the help of KMO & Bartlett's Test of Sphericity The significant KMO is helpful to determines if the responses given the sample are adequate or not. Which value should be near than 0.5 for acceptable factor analysis

to proceed. Here KMO value is 0.9 that means its superb model (project guru). Here Bartlett's test has another method to strength the relationship between variables.As we know that if our Bartlett's test of p value is less than 0.05. So here factor analysis is use because both assumption are fulfilled.

Table 4.2.1: KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.909
Bartlett's Test of Sphericity	Approx. Chi-Square	4844.011
	Df	861
	Sig.	0.000
a. Based on correlations		

Source: Survey Result

4.2.4 Communalities

The communalities tables show that how much variance in the variables. In this table 80% of the variance in "less land is big cause of your indebtedness", "large land is sufficient source of your income", "govt. should organize camps for routine check-up of soul" and "know about the govt. scheme" is found for, in "through any training provided by govt. under any scheme" and "quality of land is important for your agricultural" is a 70% variance in this statement. In "availability of electricity for 8hrs is sufficient for farming" and less machines during the time of harvesting is the reason of indebtedness" is a 60% variance in both statements. A minimum variance is 20% of the in "electricity is essential for the farming"," govt. should take any action regarding damaged crops", "the crops are not sold in market on time is the reason for indebtedness", "the farmers are selling their crops equal to the market price of crops", "crop get damage in the market when not sold", "bought cultivating machines on bases of loan" , "the subsidy can reduce indebtedness", "chemical fertilizer is major cause of indebtedness", "chemical fertilizer is expensive as compare to organic fertilizer", "the chemical fertilizer is good for your land as compare to organic fertilizer", "the chemical fertilizer is good for your land as compare to organic fertilizer" into it.

Table 4.2.2: Communalities		
	Initial	Extraction
Do you think electricity is essential for the farming?	1.000	.279
Do you think that availability of electricity for 8hrs is sufficient for farming?	1.000	.685

Do you think that at time of rice crop electricity is essential?	1.000	.224
Do you think that excess expenditure is major cause of indebtedness?	1.000	.324
Do you think that govt. is helping in proper supply of electricity?	1.000	.529
Have you ever faced loss of crop due to fire by electric short circuit?	1.000	.336
Do you think that govt. must provide awareness related to the electric short circuit problems?	1.000	.355
Do you think that chemical fertilizer is important component for your land?	1.000	.378
Do you think that low seed quality is also affected badly on the crop cultivation?	1.000	.345
Do you think that chemical fertilizer is good for your land as compare to organic fertilizer?	1.000	.289
Do you think that chemical fertilizer is expensive as compare to organic fertilizer?	1.000	.248
Do you think that chemical fertilizer is major cause of indebtedness?	1.000	.270
Do you think that govt. should give subsidy on chemical fertilizer?	1.000	.344
Do you think that subsidy can reduce indebtedness?	1.000	.203
Do you think that land partnership good for you?	1.000	.381
Do you think that less land is big cause of your indebtedness?	1.000	.882
Do have think that a quality of land is important for your agricultural?	1.000	.771
Do you get a sufficient profit on a rented land?	1.000	.308
Do you think that large land is sufficient source of your income?	1.000	.839
Do you think farmer with less land are provided loans under special conditions by govt?	1.000	.515
Do you think loans provided under special conditions to the farmers with less land helps to reduce indebtedness?	1.000	.412
Have you ever faced any problem related to the availability of machines?	1.000	.279
Do you think that lesser availability of machines during the time of harvesting is the reason of indebtedness?	1.000	.685
Have you ever bought cultivating machines on bases of loan?	1.000	.224
Do you take machines on rent for the cultivation of crop?	1.000	.324

Do you think that rented machines are cause of indebtedness?	1.000	.529
Do you think that Transportation problem is a hindrance for the farmers to sell their crops in the market?	1.000	.336
Do you think that govt. should provide machines at lower cost to the farmers?	1.000	.355
Are you able to take your crop to the market on time?	1.000	.378
Are you able to sell your crop in the market on time?	1.000	.345
Do your crop get damage in the market when not sold?	1.000	.289
Do you think that crops are not sold in market on time is the reason for indebtedness?	1.000	.248
Do you think that Farmers are selling their crops equal to the market price of crops?	1.000	.270
Do you think that damaged crops are region indebtedness?	1.000	.344
Do you think that govt. should take any action regarding damaged crops?	1.000	.203
Do you know any name of govt. scheme for farmers?	1.000	.381
From where you get to know about the govt. scheme?	1.000	.882
Have you ever gone through any training provided by govt. under any scheme?	1.000	.771
Do you know about crop insurance scheme?	1.000	.308
Do you think that govt. should organize camps for routine check-up of soul?	1.000	.839
Do you think that govt. should provide info about proper usage of fertilizers?	1.000	.515
Do you think that govt. is providing info about uses of fertilizers and routine check-up of soul can control farmer indebtedness?	1.000	.412
Extraction Method: Principal Component Analysis.		

Source: Survey Result

4.2.5 Total Variance Explained

Eigenvalue is reflected the no. of extracting factor. There sum should be equal to no. of values which is part of factor analysis. First of all, the total variance explained table is divided in 3 parts. That is (1) Initial eigenvalue, (2) Extraction Sums of Squared Loadings and (3) Rotation Sums of Squared Loadings. But for interpretation, we are only on using extracted sums of squared loading. Here at total variance table the first factor account 23.740% variance the second factor account 4.246% variance, the third factor accounts for 3.938 variances, the fourth factor accounts 3.885%

variance, the fifth factor accounts 3.374% variance and in sixth factor 3.270% variance. So, as a result, we know that all the residual factor is not significant.

	Table 4.2.3: Total Variance Explained								
	Initial Eigenvalues			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**		
Component	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	9.971	23.740	23.740	9.971	23.740	23.740	9.955	23.702	23.702
2	1.783	4.246	27.987	1.783	4.246	27.987	1.686	4.015	27.717
3	1.654	3.938	31.925	1.654	3.938	31.925	1.686	4.014	31.731
4	1.632	3.885	35.810	1.632	3.885	35.810	1.582	3.766	35.497
5	1.417	3.374	39.184	1.417	3.374	39.184	1.505	3.583	39.080
6	1.373	3.270	42.454	1.373	3.270	42.454	1.417	3.374	42.454
7	1.290	3.071	45.525						
8	1.226	2.918	48.443						
9	1.161	2.765	51.208						
10	1.120	2.667	53.875						
11	1.110	2.642	56.518						
12	1.089	2.594	59.112						
13	1.074	2.558	61.669						
14	1.012	2.409	64.078						
15	.940	2.239	66.317						
16	.920	2.191	68.508						
17	.905	2.155	70.663						
18	.865	2.059	72.722						
19	.831	1.978	74.700						
20	.796	1.896	76.596						
21	.792	1.885	78.481						
22	.774	1.843	80.324						
23	.738	1.758	82.082						
24	.732	1.744	83.826						
25	.648	1.543	85.370						
26	.623	1.484	86.854						
27	.601	1.430	88.284						
28	.573	1.365	89.649						
29	.543	1.293	90.943						
30	.513	1.222	92.164						
31	.495	1.179	93.343						
32	.461	1.098	94.441						
33	.402	.957	95.398						
34	.383	.912	96.310						
35	.356	.848	97.158						

36	.297	.708	97.866						
37	.224	.534	98.400						
38	.199	.475	98.875						
39	.177	.422	99.297						
40	.121	.287	99.584						
41	.087	.208	99.792						
42	.087	.208	100.000						
Extraction Method: Principal Component Analysis.									

Source: Survey Result

4.2.6 Rotated Component Matrix

The rotated matrix is reducing the number of factors on which variable under more loading. Rotated matrix does not change any factors, but it is making interpretation of the analysis easier. Factor loading is showing the correlation between measure value and primary factor. If the value of component factor is positive, that means positive correlation between measure value and primary factor and if the value of component factor is negative that means negative correlation between measure value and primary factor. After the rotated component matrix, the next is to interpret and name the factors. It is known by looking the factor loadings of each variable in each of extracting factors. If values near to 1 that means it is more loading and if value near to 0 that means low holdings. The main task of the study is to find the variables which have a higher load on one factor, but low loadings on other factors (Nargundkar, 2008). In this table, total 42 rows, but there are only 19 iteration.

Table 4.2.4: Rotated Component Matrix		
Statement	Values	Factors
Do you think that availability of electricity for 8hrs is sufficient for farming?	0.855	Electricity Problem
Do you think that govt. is helping in proper supply of electricity?		
Do you think farmer with less land are provided loans under special conditions by govt?	0.585	Less Land
Do you think loans provided under special conditions to the farmers with less land helps to reduce indebtedness?		
Do you think that govt. is providing info about uses of fertilizers and routine check-up of soul can control farmer indebtedness?	0.586	Shortage of Quality Fertilizer

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Do you think that govt. should provide info about proper usage of fertilizers?		
Do you think that govt. should provide machines at lower cost to the farmers?	0.528	Non-Availability of Machines
Do you take machines on rent for the cultivation of crop?		
Are you able to sell your crop in the market on time?	0.526	Issues Related to Market
Do you think that crops are not sold in market on time is the reason for indebtedness?		
From where you get to know about the govt. scheme?	0.937	Government schemes
Do you know any name of govt. scheme for farmers?		
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization's		

Source: Survey Result

This table gives the six factor. There is factor 1: **Electricity problems** whichthe availability of electricity for 8hrs is sufficient for farming and alsothe govt. is helping in proper supply of electricity. Factor 2: **Less land,** the less land is provided loans under special conditions by govt and loans provided under special conditions to the farmers with less land helps to reduce indebtedness. Factor 3: **Shortage of Quality Fertilizer** were the govt. is providing info about uses of fertilizers and routine check-up of soul can control farmer indebtedness and govt. should provide info about proper usage of fertilizers. Factor 4: **Non-Availability of Machines** are those who look for the govt. should provide machines at lower cost to the farmers and machines on rent for the cultivation of crop. Factor 5: **Issues Related to Market** because able to sell your crop in the market on time and if crops are not sold in market on time is the reason for indebtedness. Factor 6: **Government schemes** represent of know about the govt. scheme and know any name of govt. scheme for farmers. The above six factors are the major influences of farmer indebtedness in Punjab as known from the survey so undertaken. All these factors are linked with farmer problem, therefore, the higher the Farmer indebtedness in Punjab, the greater is the level of indebtedness. With Farmer indebtedness are seen to be more problem in their govt. schemes and electricity. All these factors are showing farmer indebtedness mainly by way of govt. sector. From the table above, government schemes are seen to be having the highest value i.e. 0.937%, indicating that it has the highest impact on farmer indebtedness. Therefore, we can say that's observed factor which is cause of indebtedness in Punjab.

SECTION 3: THE ROLE OF INFORMAL SOURCE OF CREDIT IN DETERMINING THE RELATIONSHIP BETWEEN SIZE OF LAND HOLDING AND INDEBTEDNESS OF FARMERS

As we know that farmers were under great debt so they were taking loans from different sources. These sources are divided into two parts that were formal and informal sector. The formal sector includes government, cooperative societies and banks. The informal sector included the relatives, trader's doctors and lawyer. The farmers those range of land holdings was less than 0.01 they mostly depend upon informal sector for credit facilities and the situation is prevailing in the India. This situation arises because small and poor farmers were not having huge land that can kept for security purpose. this was the major reason recognised for the poor conditions of the farmers. The farmers those range of land holdings was between 0.40 to 1.00 they mostly depend upon formal sector for credit facilities.

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Table 4.3.5: Percentage of Different range of Landing and Indebtedness based on Source					
	Punjab			India	
Range of land holding	Formal	Informal	Total	Formal	Informal
<0.01	24.8	75.2	100	22.6	77.4
0.01 to 0.40	29.2	71	100	43.3	56.7
0.40 to 1.00	65.6	34.5	100	52.8	47.2
1.01 to 2.00	49.1	50.9	100	57.6	42.4
2.01 to 4.00	61.2	38.8	100	65.1	34.9
4.01 to 10.00	47.5	52.4	100	68.8	31.2
above 10.00	30.1	70	100	67.6	32.4

Source: NSSO 70th round report

Percentage of debt taken by farm households having different rang of land by different origin is shown by above table. Table 6 clearly depicts that in Punjab the informal system of credit supply

play an important role from the farm households having size of landholding u[to 0.40 acres and similar situation happens in India also.

Similar linear regression is used model is used to estimate the effect of average range of land holding on indebtedness considering informal sources. The model is $Y=\alpha + \beta X + E$ where Y is percentage of informal borrowing to total borrowing, X is average range of landholding and E is error term.

Table 4.5.6: Relationship between informal borrowing and size of land holding			
Ration of Informal Borrowing is taken as Depended variable			
Size of landholding in Punjab is taken as Independent Variable			
Time period: Year 2003, Types of Cross-Sectional Sample: 7 range of land size			
Details	Coefficient	T-Statistics	P-Value
Value of constant	1.982	77.882 .000	
R-Square	0.425/42.5		
Adjusted-R-Square	0.467/46.7		
F-Statistics	4.98	0.038SE of the Estimate	0.17702

Source: Author's Calculation from NSSO survey result

 The results reveal the negative relationship between average size of landholding with informal borrowing in Punjab. the value of R-Square is .467 or 46.7%. it means 46.7% variance in informal borrowing is raising due to the average size of landholding.

CHAPTER V

CURRENT STATUS

As we know that Punjab's agricultural sector is in disaster and viewing signs of illness as it suffers from sinking production and decrease revenues. One of the main reasons is the collapse of nuclear family in Punjab, which has affected the land holdings. There is severe slump in the earnings of the farmers, which is further adding to their debts. Now, the farmers view agriculture as a loss-making occupation, and the realization is causing intense pressure among them. Farmers are revolving under debt condition, and owed to low productivity, small farmers are leaving the farming. After few decade, population of labour sector are increasing around 28 % in market. Small farmers are working below economic limits. There are earnings of small farmer very low and they are under heavy debt and hence many are leaving the farming. Terribly, some reach a point where they are committing suicide. As we know that in the time period of green revolution strategy which brought a phenomenal growth in the agricultural sector and improved the economic conditions of the farming community during the 1970s and 1980s, seems to be growing dim with the passage of time. Punjab, the pioneer of green revolution in India, is no more a state of ever-booming agriculture as it is facing economic crisis. Over the past decade, the state has experienced deceleration of its economy and has slipped in the ranking of the prosperous states in the country. The crisis in agriculture has manifested itself in the form of stagnating productivity, rising cost of production, decelerating income, shrinking employment, mounting indebtedness and ecological imbalance1. One of the main consequences of this agrarian distress has been that the marginal and small farmers, who find it increasingly hard to sustain on farming, are getting pushed out from agricultural sector. These farmers are not being fully absorbed outside this sector due to the unfavorable nature and structure of the industrial sector in the state. Thus, a large chunk of 'reserve army of labour' is prevalent in the economy. It is estimated that about 35 lakhs persons are unemployed in Punjab, out of which about 24 lakhs belong to rural areas2. The fact remains that there is a decline in the proportion of cultivators in the total workforce of the state that has added to the unemployed or semi-employed force, and has put pressure on an already over-crowded agricultural labour market. The process of shifting of farmers from agricultural to nonagricultural sector for an alternate of livelihood is known as depeasantization. The most agonized are the smaller farmers who have been hit hard by the financial crisis arising out of rising cost of production, declining productivity. And reducing returns. As farming turns out to be non-viable for these farmers, they are involuntarily maneuvered towards borrowing loan and hence, fall prey to the debt trap. Still now about 89% of

the farmers are under heavy debt. The strain of this debt trap is so rigid that of the total farmer suicides (1757 cases) committed in two districts of Punjab during 2000–2008, over 79% were small farmers4. This phenomenon puts a question mark on the viability issues of small farmers. In view of these vital issues, the present article is planned to study the process of depeasantization in Punjab with special emphasis on the status of small farm families who have left farming in the state.

5.1 News related to farmer indebtedness

"In 2016 one assembly is passed that is Punjab Legislative Assembly for Punjab Settlement of Agriculture Indebtedness Bill, 2016. The Bill pursues to provide release to agriculturists, farm workers and others related on farming by providing them reasonable clearing of their debt interrelated arguments. It also contracts with expeditious purpose and clearing of agricultural debt. The main features of bill. It is establishing district level farming debt clearing opportunities and a state level farming debt clearing court to help farmers resolve and settle their debts. Govt. will propose a maximum rate of interest which can be charged by the creditors on non-institutional loans provided by them (General Knowledge Today)."

"The Punjab Congress policy had promised sacrifice of debt of growers and farm workers. According to govt. report however loans of farmer around Rs 9,500 crore availed from cooperative banks that could be occupied by the state government easily. According to this report 86% of loan is related to agricultural sector in rural area in Punjab." (the time of India)

"The govt. increase the accident insurance scheme 5 lakhs to 10 lakhs for farmer. In this scheme if any farmer met with an accident then they will get this scheme (Dainik Bhaskar).

"Agricultural Debt Waiver and Debt Relief (ADWDR) scheme in Budget 2008-09. The ADWDR was a recognition of the plight of the farmers suffering from an acute agrarian crisis and an attempt to provide some relief. The ADWDR scheme provided for full waiver on all 'eligible loans' overdue on December 31, 2007, for marginal (holding up to one hectares) and small (holding between one to two hectares) farmers, and a one-time settlement scheme for farmers holding more than two hectares of land under which a rebate of 25% was given against the payment of the balance 75% of the loan before June 30, 2009 (the wire)".

CHAPTER VI
CONCLUSION AND SUGGETION

6.1 Problem faced by farmer in Punjab

This study based on primary survey data. In this survey, we were collected data in Doaba reason. This field work was done in 2016 to 2017. The data for studying indebtedness there 300 farmer households targeted in 20 villages in Doaba reason. This study find a problem,

• **Crop failure:** Agricultural is based on monsoon in Punjab. Insufficient monsoon result is less productivity and drought. On other way, heavy rain is destroying the crop and some other reason like lake of irrigation, disease attack, seed is a part of crop failure. As we know that farmer is getting income only on agricultural production but that problem decrease the production.

• **Less land:** In less land holding production is not profitable. As a result, less income in agricultural. So, in this way small and marginal farmer are under heavy debt.

• **Water level:** Punjab mainly focuses on mono crop system that is when mainly produce wheat and rice. Rice need a lot water. As a result, ground water level is declining. If crop not get proper water as result they are facing drought condition. Like last time is not rainfall as a result farmer are using generator for irrigation. In this way, they are using diesel for generator. So that more use of diesel on higher prices is big cause of indebtedness in Punjab.

• **Less availability of machines:** At the time of harvesting and sowing of crop less availability of machines is big problem for farming sector. They face a lot of problem for it like they are not cutting a crop on time, transportation problem, high rent problem, etc. Due to less availability of machines, crop damaged in farm, which is decrease the less productivity as well less profit in farming.

• **Labour:** As we know that India is labour intensive county. So that labour is important factor in agricultural sector. As we know that Bihar, Uttar Pradesh etc. people are coming in Punjab for work as labour. After the Govt. schemes like NREGA, NRLM, Aajeevika, MANREGA etc., in this way the labourers are getting a work in own states. Due to this problem, the farmers are hired local labour on higher cost, which is cause of less profit in farming sector.

• **Market:** Market are important part informing sector. Farmer are not getting exact price of crop. Middlemen and traders are major junk in farming sector. Farmer cannot reach the consumer directly. Farmer have depending only on middleman.

- **Fertilizer, pesticides and seeds:** As we know that after green revolution Punjab is depending on fertilizers and pesticides. Farmer are not much preferring to organic productivity because they believe in pesticide and fertilizers for protection of disease attack as well as more production. But we know that uses of more fertilizer and pesticides land quality are losing so that soil is habitual for this fertilizer. But fertilizer and pesticides are costly. But without use of that fertilizer and pesticides productivity is less. So here prices of fertilizer and pesticide is big cause of less profit.

- **Lake of knowledge about govt schemes:** We know that the literacy rate in Punjab is 75.83%. Most of farmer are not educated. They are not knowing about govt. schema related to agricultural in Punjab. That's ways when they are losing the crop, not get any facility related to crop failure.

- **Effects of demonetization on farmer life:** In 2016, the Indian govt announced the demonetization. In demonetization, the govt announced the decision to supply of 500rup and 1000rup currency note worthless. So, as a result, 80% of the currency is shrieked in the circulation. As we know that demonetization has affected every people, but it has hit more the agricultural sector. Because we know that India has agriculture based country. In India 56% population belongs to agricultural directly or indirectly. So that   in demonetization farmer don't have a money to buy a seed, fertilizers, pesticides etc. for sowing. They were using only old seeds from the last harvest and not buying quality of seeds in market. If they were sowing that seeds then they don't have money for hiring a labour. In this time fruits and vegetable of farmer were badly affected. They need cash on regular basis to purchases pesticides, fertilizers and hired labours for harvest and also for transporting that products. So that lack of cash, farmer was getting less prices.

6.2 Economic aspects

In this survey study, the one area is selected in Punjab that is Doaba. In Doaba reason most of the population belong to agricultural sector directly or indirectly. In these areas selected farm households were large, small and marginal also. These areas also facing a lot of problem in agricultural sector. They are not much educated so that they are not know about govt. schemes. Most of farmer not know about a use of fertilizer in farming. Some farmer is over use of fertilizer in farming for more production that's not true. In this way soil is losing own quality. So that kind of problem like less availability of machines or labour, crop failures etc. are big leakages in farming sector.

6.3 Limitation and Scope of Study

- The study is based only on Doaba reason.
- The study is particularly only agricultural based.
- The study is based on farmer indebtedness.
- The time period of study is limited.

6.4 Suggestions for removing Rural Indebtedness

Several suggestions have been made for eradicating rural indebtedness. Of them, major ones are the following:

- Agriculture in Punjab suffers from mono-crop culture of mainly wheat and paddy. With this cropping pattern, farming itself is becoming an enviable occupation, due to rising fixed and variable input costs, and low remuneration leading to falling profit margins. Variable costs, increase due to rising prices of inputs like fertilizers, pesticides, weedicides, diesel, etc. And further fixed costs like installation and deepening of submersible pumps due to the dipping water table increase the financial woes of farmers. If a farmer does not use mono crop culture or sowing other crops in the farm as a result land growing power increasing, production rate high and less cost of production because of different crop.

- There is an urgent need to establish special agricultural zones where only farming and agricultural related activities should be allowed.

- Where the existing crops would not do well under drought and weather conditions the farmer should be helped to shift to cultivating crops that would be easy and economical to cultivate.

- Many farmers do not know about crop rotation. We know that in urban areas has improved a lot but in rural ignored by government. So, that in the rural area needs a special study for agricultural.

- Crop insurance is must and the clam should be under the supervision of the district collection. It's very helpful in natural disaster.

- In most cases, it's not the lake of water but the lack of management causes water shortages. Improved modern method of rainwater harvesting should be developed.

- The government should make arrangements for giving loans to the farmers at low rates of interest.

- In order to make loans available to the villagers, the formal procedure for the grant of loans in the co-operative societies and banks should be made as simple as possible.

- The laws preventing money-lender to take possession of farmer's land should be strictly put to practice.

- Efforts should be made to desist rurality's from undertaking unproductive and wasteful expenditure. Hence, they ought to be educated about the harmful consequences of unproductive debts.

- The govt. should provide electricity according to their needs. So that they don't to pay extra charges for electricity purpose.

- In order to reduce the dependence of the rurality's on local money-lenders, the network of institutional credit structure comprising cooperatives, commercial banks and regional rural banks should be rapidly expanded throughout the country to cater to the credit needs of the small farmers and artisans.

- There should be a check on the practice of private money lending. The account register of the moneylenders should be checked to find out how far they have increased their landed property during the period under review. Besides, only the registered and license holders should be allowed to advance loans.

In fine, the problem of rural indebtedness is linked with the larger issue of rural poverty. Poverty alleviation measures have to be taken up on a war footing to augment the income of the rurality's. Mobilization of local, social and economic resources, an equitable distribution of benefits of new agricultural strategy and establishment of a good number of co-operatives and commercial banks will go a long way in mitigating the magnitude of rural indebtedness from the rural social matrix.

6.5 Conclusion

The serious condition of farmers sets a big question on the idea of arrangement for agricultural development in the country. Agriculture is the sector which leads the national economy, but it is the greatest mistreated sector. No one can keep quiet to the growing cases of indebtedness on farmers. Both state and centre level government should take major steps regarding it. Loans should be provided to farmers easily available to save the farmers from authorities of financiers and instruction managers. The government should approve the strategy of Self-Help Groups (SHGs) to give low interest rate loans to the small and marginal farmers because these farmers are reliant on the financiers and instruction managers for their credit needs. Advertising of crops is a main matter to be resolved by government. Role and number of middlemen should be reduced to minimum so that the farmers should be getting large chunk of price given by consumers for their produce. Minimum support price has to be improvised and financial help should be given to farmers to purchase inputs. A complete 'Agricultural Insurance Scheme' should also be launched.

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Organic farming should be encouraged to avoid or minimalize the rate of pesticides and fertilizers. Agriculture policy needs to shift from its current bias of 'corporates first' to 'farmers first'. Farmers should be promoted to approve similar happenings like dairy farming, fisheries, bee-hiving, poultry farming etc. to lesser the problem of livelihood on agricultural sector only. Financial help and low interest rate loans should be given for these purposes. Special focus should be given to should be given to cover cash crops like cotton, sugarcane and edible oils.

The study is based on the state level data obtained from the 59th and 70th round survey of National Sample Survey Organisation (NSSO) conducted in agricultural. The study aims to analyse the pattern of indebtedness and causal factors behind it. The research concludes that in 70th report that is the major factors to access the position of farmer's indebtedness in Punjab and in 59th report to study the role of informal source of credit in determining the relationship between size of land holding and indebtedness of farmers. Statistically, the rising cost of cultivation and diminishing net returns came out to be significant with the incidences of indebtedness. The states having high level of agricultural development are characterized by high incidence of indebtedness. In this report farmer divide into different social groups. Most of the indebted farmers belong to the small and marginal categories but the states where the degree of commercialization is high, the incidence of indebtedness is found high among the semi-medium and medium farmers.

The main conclusion that arises from the factor analysis is that the factor analysis find the perfect factor for indebtedness. In this objective firstly collected data with the help of primary survey and to study the factors that cause Indebtedness among the farmers. These factors are directly related in the case of farmers 'indebtedness. On the other hand, these variable shows that the real factor with the help of primary survey.

Punjab has seen the brighter days of robust agriculture growth. Though, today the Punjab agriculture is on the at crossroads, efforts need to be done to regain the lost glory. Farmer indebtedness is a big problem in Punjab. A considerable proportion of marginal and small farmers are pushed out of agriculture because it is non-viable and majority of them have joined other sectors like wage labor. It is significant to note that about one-third of the marginal and small farmers were dissatisfied with their new occupations and wanted to shift to another profession. In such a situation, it is of utmost importance to address the problem of the small farmers who are leaving farming. There is a need to look into the viability of the farming sector, particularly small farmers. If government tries to provide focuses on natural fertilizer like in Jalandhar district Saint Baba Balbir Singh Seechewal focuses on water treatment plant and natural fertilizers. As a result, that area's crop production high as compere to another. This is thought good for Doaba area for crops. So, as a result government try to focuses on that kind of solutions.

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