CHAPTER II
REVIEW OF LITERATURE

The problem of indebtedness has attracted the attention of many researchers and policy-makers throughout the world. Researchers from almost all the streams including Economics, Sociology, Political Science and Law, have extensively scanned the problem of indebtedness from their own perspective. Consequently, a very rich and diverse literature has been generated, covering various dimensions of the problem. The coverage of all these studies cannot be within the scope of a research work like the present one. Therefore, we have chosen review of a limited number of studies, directly related to our subject matter. We have included Indian as well as International studies. Besides gaining insights of different aspects, a review is likely to help us to frame various hypotheses and to understand the mechanisms related to various forces and factors, leading to the debt trap for some and enabling others to escape it.

We have divided available studies into three groups depending upon the issues related to the problem of indebtedness. These include:-

1. Studies related to the nature and extent of the debt problem.
2. Studies related to the borrowing and repayment behaviour of indebted households.
3. Studies related to determinants of indebtedness.

1. Studies related to the nature and extent of the debt problem.

Darling (1925) in his study has estimated the extent of indebtedness and has also examined the factors responsible for it. The study is based on a primary survey conducted by the author in 1922 in the erstwhile province of Punjab. The author has discovered that the debt and prosperity go hand in hand.
Dealing with the factors of indebtedness, the author found that the debt problem had increased mainly due to the small size holdings, lack of irrigation facilities, litigation, fluctuations in the prices of farm products and the power of the moneylenders. Apart from these factors, the author noted that the fluctuations in peasant income were also responsible for the huge cycle of indebtedness through which the peasantry of the area passed in the first half of the 20th century. He has also found that 89 per cent of the households were in debt in the state and the average debt per household was Rupees 500 in 1922.

Panikar (1963) has examined the extent of indebtedness in absolute size, to test whether the burden of debt has increased over the time and to check whether the wasteful expenditure is the root cause of the problem. Based on data compiled by the All-India Rural Credit Survey 1950-51, the author has found that the absolute size of debt was not very high among Indian farmers. He rejected the opinion generally held that the burden of indebtedness rose gradually. By analyzing the ceremonial expenditure of the rural households, the author refutes the often-cited accusation that the extravagance or indulgence in wasteful expenditure was the major cause of indebtedness. Regarding various acts, legislation and agrarian reforms enacted to tackle the problem of rural indebtedness, the author concluded that such policies adversely affected the operations of moneylenders and perhaps created a vacuum in the rural money market. He argued that indebtedness was not the malady but only its possible symptom. The study suggested that salvation of the Indian peasantry lies in the technological transformation of agricultural production which need additional credit supply to support the process of such transformation.

Benjamin (1971) in his paper has measured the extent of indebtedness in India during the British rule and has also tested various factors that were generally considered to be responsible for it. The period of study was 1850-1900. From a brief review of the existing studies, the author has found that the problem of agricultural indebtedness was fairly extensive in the pre-British
period. However, it assumed serious dimensions during the British rule as agricultural indebtedness accounted from one-third to one-half of the total earnings of the Indian peasants. The author found that the main reasons for growing indebtedness during the British rule were the policies of the state regarding land revenue assessment, development of modern judiciary and proprietary rights over agricultural land. He also found that the extent of indebtedness was about three hundred crore rupees at the end of the 19th century. By examining the available evidence, the author rejected any direct relationship between indebtedness and prosperity, which was considered to be responsible for the growing indebtedness in British India. By examining various policies, the author concluded that the problem assumed serious dimensions, as the British government had not played an active role in solving the accumulated problem of agriculture indebtedness.

Singh and Mehrotra (1973) have analysed the magnitude and sources of indebtedness among the landless labourers and various categories of farmers. The study is based on a primary survey conducted by the author in Ballia district of Uttar Pradesh. The author has discovered that as the size of holdings increased, the percentage of the households in debt decreased and vice-versa. However, the size of debt per household increased with the increase in size of holdings. The author also observed that marginal farmers and landless labourers were highly indebted households among the rural households. Regarding the source of indebtedness, the author found that the village moneylender was the main source of finance for the landless labourers. However, marginal and small farmers borrowed around 80 per cent from the institutional sources, like the government agencies and co-operative societies. The author also found that large farmers obtained the highest borrowings (around 96 per cent) from the institutional agencies.

Vijayagopalal (1976) has studied the extent of rural indebtedness among the small farmers, landless labourers and weaker sections in the state of Tamil Nadu. By using data from ‘All-India Debt and Investment survey’ of 1961-62 and 1971-72, the author found that the average amount of borrowing per
household increased at compound rate of 2.6 per cent per annum in the case of cultivating households. On the contrary, it decreased in the case of non-cultivating households. He also analysed that there was a direct relation between average borrowings and size of holdings. Regarding its extent, he found that total indebtedness of the small farmers and agricultural labourers to the moneylenders constituted Rupees 158.25 crores. The author suggested that the existing lending policies of the financial institutions should be suitably amended so that the weaker sections could obtain reasonable consumption credit from them.

Ashakant (1977) has made a study of the changing pattern and nature of the rural debt by comparing three decennial All-India Rural Credit/Debt and Investment Surveys 1951-52, 1961-62 and 1971-72. She concluded that the share of debt for consumption had increased during the decade 1951-1961. But it declined in the next decade that is, 1961-1971. She also found that the share of institutional source had improved whereas that of non-institutional sources declined for financing the projects of farmers during the decade. The study underlined the need for the reorientation of the credit policies in favour of the weaker sections of the rural society in the country.

Mandal (1977) has conducted a study of Kalipur village in Nadia district of West Bengal. The main objective of his study is to know the nature of indebted households. The author observed that the households borrowed both from institutional and non-institutional sources but the major portion of the borrowings is from the non-institutional source. The author also found that they used most of the borrowed funds for unproductive purposes. But they also wanted to clear the informal debts first because of exorbitant interest rate charged by these sources.

Panda (1985) has conducted a district level study to analyse the utilization and factors associated with the overdues of the borrowing farmers. The study is based on a primary survey of 202 farmers conducted by the author during 1980-81 in Puri district of Orissa. He found that a clear cut bias in the supply
of credit by the financial institutions in favour of medium and large farmers and more productive irrigated regions. The small poor farmers and those located in more risky unirrigated areas were being discriminated and compelled to borrow from private sources at unfavorable terms and high rate of interest. Contrary to the general impression, the author found that the problem of overdues was more serious among the medium and large farmers, who also happened to divert borrowing for unproductive purposes.

Mitra (1987) has examined the extent, correlates and consequences of indebtedness on the productive and distributive performance on the rural economy. The study is based on a primary survey of 101 households conducted by the author among the tribal population in the rural areas of Assam. The author has collected information from four tribal villages of North Lakhimpur (Assam). The author has used various measures to probe indebtedness. These include per capita loan as a ratio to the repaying capacity of the household, loan as a ratio of assets owned by the household, per capita interest payment by the household and per capita amount of the loan taken by them. By using the productive and distributive effects of indebtedness, the author was discovered that indebtedness leads to decline in agricultural productivity and captivation of productive resources. It further aggravates the problem of inequalities in the rural community. He has also observed that unproductive expenditure is one of the main determinants of indebtedness and it leads to poor repaying capacity of the borrower. The author has suggested that farmers be motivated to minimize their conspicuous consumption.

Rao (1990) has examined the cost of borrowing funds of the household sector for both rural and urban households. Using data from the All-India Rural Debt and Investment Survey 1981-82, the author has found that the share of debt and average rate of interest (including institutional and non-institutional debt) are both high in case of rural households as compared to urban households. The interest rate shows a gradual decline with the increase in the size of
asset holdings. The author has also concluded that there is an inverse relationship between interest rate and share of institutional debt.

Ramaiah and Manohar (1992) have studied the problem of indebtedness among the dominant tribes in the Telangana region of Andhra Pradesh. By analysing the problem of indebtedness, the authors have found that the farmers invested own funds in farming activities whereas borrowed funds were mainly utilized for meeting the expenditure on social and religious ceremonies. The dominance of non-institutional lenders aggravated the problem of indebtedness. The authors concluded that the main cause of indebtedness was the nature of exploitation in the procurement of minor forest produce collected and sold by the tribal households.

Shergill (1998) has examined the nature, extent and burden of farmers’ debt and borrowing and repayment behaviour of the different segments of the cultivators in the state of Punjab. The study is based on primary survey of 260 cultivating households selected at a random from 13 villages of Punjab conducted during October/November, 1997. Findings of the study revealed that 89.29 per cent of farmers in Punjab borrowed loans for short-term productive purposes. As many as one third (34.43 per cent) of them borrowed short-term loans to repay the past borrowings. This implies that about one-third of the cultivators in Punjab were caught in the vicious circle of indebtedness. The author also found that burden of short-term debt was more serious among the small and marginal farmers as 70 per cent of them were not able to repay the crop loans. The study estimated Rs.5700 crore as the total debt of farmers in the state of Punjab during 1997. 54.72 per cent of debt was borrowed for short-term purposes, 25.39 per cent, and 12.77 per cent for long-term productive and non-productive purposes respectively. Almost half (46.32 per cent) of the total outstanding debt was due to the commission agents only. In terms of farmers’ own views about the causes of indebtedness, the study found that 36.10 per cent of them attributed the problem to their excessive consumption and social ceremonial expenditure, 30.80 per cent attributed it to high cost of input and 18.50 per cent felt that the
problem arose out of fluctuating income and crop failures besides fluctuations of yield of major crops in the state.

Narayanamoorthy (2001) has examined the incidence and extent of indebtedness of agricultural labour households belonging to Scheduled Castes. The author has drawn information from the Rural Labour Enquiry reports pertaining to five time points that is, 1974-75, 1977-78, 1982-83, 1987-88 and 1993-94. The author found that the incidence of indebtedness is high in agriculturally advanced states than the least developed states like Orissa, Assam, Maharashtra and Gujarat. Nevertheless, the incidence of indebtedness is found to have declined from 1974-75 to 1993-94 in all states. By using regression analysis, the author has found that the incidence of indebtedness is higher in those states which are having high population of Scheduled caste labour households to agricultural labour households and gross irrigated area per agricultural labour household. Regarding extent of indebtedness, the author has found that the average debt per hectare among Scheduled caste labour Households (SCLHS) has increased from Rs.556 in 1974-75 to Rs.860 in 1993-94 at the all-India level.

The author has concluded that the both incidence and extent of indebtedness among them is found to be higher in agriculturally advanced states in comparison with agriculturally poor states. He attributed the phenomena to better employment avenues and wage earnings available in the agriculturally advanced states.

Sharma and Meher (2001) have conducted a study to examine the problem of indebtedness among rural households in terms of major characteristics at an all India level in 1981 and 1991. The authors have gathered the information from the All-India Debt and Investment Survey 1981-82 and 1991-92. By comparing the two surveys, they have found that the average debt per household is higher in case of cultivator households in both the periods as compared to non-cultivator households. The authors have found that debt per household is positively associated with the agricultural labour productivity and
inversely related with the incidence of poverty. Moreover, the proportion of households reporting cash loans has also increased from 19.4 per cent in 1981 to 23.4 per cent in 1991. They have also concluded that the debt is higher in better-off states and lower in the backward ones. The study has also supported the contention that the debt is no longer evil, rather it helps in development.

**Sharma (2002)** in his paper has examined the nature and extent of indebtedness among the tribals and non-tribals in the state of Himachal Pradesh. The author has used primary data collected from the district of Chamba and taken 300 households (120 tribals and 180 non-tribal households). The author has found that in case of tribals, the repaying capacity is higher among the small size holders in absolute terms. But relatively, the burden of debt on tribals is increasing continuously as they repay loans to village moneylenders taken at an exorbitant rate of interest. On the contrary, non-tribals finance their major projects from banks and co-operative societies only. Further, as the size of holding increases, the per capita debt burden shows a decreasing tendency among the non-tribals in Assam.

**Borbora and Mahanta (2005)** have assessed the extent of rural indebtedness and flow of institutional credit among rural households in Assam. The authors have observed that though the incidence of indebtedness is very less as compared to other major states of India, still the use of credit for productive purposes is found to be as low at 7.8 per cent. Consequently, land productivity is not much improved in this state. Institutional credit to agriculture in this state is also not satisfactory and has been declining over the years. The authors have recommended that there is a need for development of effective non-governmental organizations in the region which may help in the growth of micro-finance thereby increasing the credit delivery to the state as well as North-Eastern region.
Kareemulla (2005) has identified the reasons for farmer indebtedness in Jhansi district of Uttar Pradesh. Using secondary information compiled from various secondary sources, the author has found that the major reasons of indebtedness are vagaries of the weather and diversion of funds for non-productive purposes. Further, both capital expenditure and crop loans accounted for 60.9 per cent loan amount to the farmers. The author has suggested that some measures should be taken to widen the crop insurance coverage. Further, post-finance guidance should be provided so that one can utilize the credit properly.

Singh and Toor (2005) have analysed the socio-economic factors affecting the problem of indebtedness in the state of Punjab during the agricultural year 2002-03. The authors have used primary survey from the three well-defined agro-climatic regions in the state of Punjab namely, semi-hilly region, Central region and South-Western region. The authors have chosen a sample of 55,120 households from three different regions. They have found that the average amount of debt per sampled farm households was highest in South-Western Region with Rs. 1,25,616 followed by the Central Region with Rs. 85,128 and the semi-hilly Region with Rs. 62,946. Further, the average amount of debt per acre was also found to be the highest in the South-Western Region despite having highest farm size. This was due to cotton crop failure in the state of Punjab. The share of commission agents was also found to be the highest in outstanding debts. The authors have also found that the small and semi-medium farmers spent the highest portion of their debt to maintain the family, health care and education of their family. On the other hand, the medium and large farmers incurred the debt money for marriages of their children and to purchase machinery. By using regression analysis, the authors found that indebtedness is positively related to family size, ratio of credit from non-institutional sources to institutional sources and expenditure on unproductive purposes and negative related to farm size among the small, marginal and semi-medium farmers. This is due to large unproductive expenditure on family maintenance and social ceremonies in the families. Nevertheless, among the large farmers, the coefficients of income from
subsidiary occupation, unproductive expenditure and farm size were statistically significant. The authors suggested that the need for the availability of easy credit, development of non-farm sector, especially dairy, institutional support, marketing network should be developed by the government and it should also educate the farmers. There is also a need for launching the mass campaign against intoxicant intake, the conservative social values and the symbol of social status as these variables impose unbearable expenditure on non-productive purposes as marriages and social ceremonies.

Satish (2006) has analysed the problem and extent of rural indebtedness and the relationship between institutional credit, indebtedness and suicides in Punjab. The study is based on the primary survey conducted by the author in Sangrur district in 2002. The author has found that indebtedness is one of the major causes for suicides but it is neither the only cause nor the main cause. He has also found that there is no direct causal relationship between institutional credit, indebtedness and suicides in rural Punjab. The author has also analysed that the problem of indebtedness has increased in the state because a large part of the debt has been utilized for non-productive purposes rather than productive purposes.

The author has suggested that viable and modern technologies need to be propagated in agriculture and allied sectors. Civil Society institutions have to come forward to sensitise and educate rural Punjab against social evils like conspicuous consumption, ostentatious expenditure on social functions, dowry problem, alcoholism, drug addiction and declining work ethic of the youth.

Rao et. al (2001) have analysed the nature and pattern of indebtedness among the rural and urban households in terms of their major characteristics during the year 1981 to 1991. The authors have gathered information from the All-India Debt and Investment Survey 1991-92. The authors have found that the ratio of indebtedness among rural households has increased during 1981 to 1991. Even in 1990s, non-institutional agencies have been playing a
dominant role in the rural areas inspite of wide expansion of banking networks. The authors have found that the share of debt engaged in productive purposes has declined in rural areas during the decade 1981-1991.

Lenka (2005) has examined the nature and extent of indebtedness among rural farmer households in India. The author has found that nearly half of the rural farmer households in the country are indebted in various degrees. The large number of indebted farmer households belong to the agriculturally prosperous states as compared to the least prosperous states. Small and marginal farmers and disadvantaged social groups such as Scheduled tribes, Scheduled castes and other backward classes are the most indebted farmer households. The author has also revealed that indebted households borrow almost 60 per cent loans for agricultural pursuits and 40 per cent for unproductive purposes. The author has concluded that even after a decade of economic reforms, the professional moneylenders still occupy predominant position as a source of lending to the farmers.

The author has suggested that the government must gear up the machinery to protect farmers from the clutches of the professional moneylenders. Further, adequate finance should be provided mainly to the poor farmer.

2. Studies related to borrowing and repayment behaviour of indebted households

Government of India (1928) The Royal Commission on Agriculture appointed by the government of India in 1928 examined the reasons for borrowing among cultivators. The study revealed that the main reasons of borrowing were smallholdings and defective system of accounts kept by debtors and lack of saving habits among cultivators. The study examined all
acts enacted during the period of the study and concluded that no substantial improvement in agriculture could be possible unless cultivators improved themselves. The study recommended that the Rural Insolvency Act should be carefully considered in every territory of India. The provision of cheap and abundant credit could solve the problem further.

Pani (1966) has analysed the borrowing behaviour of cultivators' credit regarding rate of interest and certain other expenditures. The author has used secondary information from the All-India Rural Credit Survey 1951-52 and found that the average cultivators' demand for credit is not wholly interest inelastic. There is an indirect relation between rate of interest and the borrowing of an average cultivator, other variables held constant. However, there is a broad relation between borrowing and interest rate; curvi-linear being concave towards origin. The upper part of the curve with low average interest rate and high marginal propensity belongs to credit operator cultivators having large holdings or those cultivators living in relatively developed agricultural regions whereas the operations of cultivators with relatively small holdings or cultivators in subsistence areas reflects the lower portion of the curve. During the period of 1956-60, the rise in capital expenditure shows an increase in their cash loans for upper part of cultivators but changes in family expenditure do not significantly influence their borrowing. However, lower part of cultivators influenced significantly by the changes in family expenditure. The value of assets is a significant variable in explaining the borrowing behaviour of cultivators.

Long (1968) has made an attempt to study the borrowing behaviour of farmers through the risk preference portfolio, expected returns and expectations about the uncertain future. Drawing information from All-India Rural Credit Survey 1950-51, the author found (a) Outstanding debt and borrowings have been incurred to finance investments (b) Those farmers whose income is unexpectedly low borrow more (c) As the size of land holdings increase, farmers borrow more (d) Large proportion of debt by the farmer goes to unplanned ex-post variety due to lack of good investment
opportunities. The author suggested that government should arrange lending to farmers at a low interest rate in both developed and developing regions.

Adams and Nehman (1979) have analysed the demand of rural credit for small and new borrowers of formal lending agencies. The authors have used farm level information from three different countries namely, Bangladesh, Brazil and Colombia and have taken 2500 farmers as sample from Bangladesh, 150 farmers from the state of Sao Paulo (Brazil) and 63 farmers from Colombia. The authors found that high borrowing transaction costs was a very important factor to discourage small and new borrowers from using formal loans in low income countries. According to them, the borrower transaction cost is of three types: (a) loan charges collected by the lender beyond rate of interest payments like application fees, service fees, compensatory balances and closing costs. (b) The potential borrowers have to pay expenses (bribes and gifts) to the technician for visit and inventory of the borrower’s farm operation (c) The most important transaction cost is borrowers’ time and travel expenses involved in the loan transactions. Borrowing cost is defined as nominal interest payments plus borrowing transaction cost plus changes in the purchasing power of money. However, borrowing cost is the least important for large and experienced borrowers as they are more sensitive to nominal interest rate and expecting changes in the purchasing power of money. The authors suggested that borrower transaction costs must be reduced by group loan, mobile banks and locating small branches of banks in small villages itself.

Bagi (1983) examined the short term and long-term borrowing behaviour of 89 farm households in Western Tennesse in the United States of America. By applying maximum likelihood estimates of the logit model, the author found that the rate of return to farm investment is inversely related to the probability of using short-term credit whereas relationship is other way round in case of long-term credit. The study also shows that there is a direct relationship between the probability of using credit and the length of farming experience, level of formal education, frequency of contact with the extension agent,
number of children below 14 years and farm size. However, the probability of using credit is inversely related to the rate of interest.

Iqbal (1988) has investigated the borrowing behaviour of farmers by using panel data of three thousand farm households in India for the years in 1968-71 conducted by the National Council of Applied Economic Research. The author found that there is a direct relation between technical change and demand for funds. Demand for funds is also directly related to age of household head and household size and indirectly related to wage rate, proportion of irrigated land, total area of land and interest rate. The government can develop rural finance market by generating and diffusing improved investment opportunities like the Green Revolution Technology.

Olomola (1992) has provided empirical information regarding the magnitude, components and determinants of the transaction costs of borrowings by Nigerian households. Using data collected from 200 borrowers, the author has shown that the loan amount and borrowers’ distance from loan office is the most important determinant of borrowing transaction per loan. Elasticities of transaction cost with loan amount and borrowers distance from loan office are 0.253 per cent and 0.284 per cent respectively. However, transaction cost increase at a decreasing rate as loan size increases. The borrowing transaction cost is positively related to distance; loan amount, farm size and disbursement lag and inversely related to the borrowing experience.

The author suggests that there should be reduction in cost of transportation so that borrowers will be able to participate in loan scheme. Further, there should be a credit centre in each local government areas so that formal credit should be easily accessible to the rural farmers.

Khunt et. al (1994) have examined the repayment behaviour of the rural households and impact of Agricultural and Rural Debt Relief Scheme 1990 on the rural households. The authors found that the allocation of agricultural credit increased significantly during the period of 1985 to 1993 with the advent
of high-yielding varieties and new- capital intensive farm technology. The authors also observed that the problem of overdues and indebtedness in the farming and rural sector has become more acute since the tendency of borrowers to delay the repayment of loan has increased with the passage of time. The authors recommended that planning authorities should reform the existing credit policy and renounce the new relief measure in the future credit policy to save the banking industries from becoming paralyzed.

Purkayastha (1996) assessed the magnitude, incidence and repayment behaviour of 300 agricultural labourers in Tinsukia district of Assam during 1991-92. The author found that around 79 per cent households are indebted. There is a negative link between the level of poverty and incidence of indebtedness. Schemes like Indira Awas Yojana and the Minimum needs programmes failed to reduce indebtedness. The author also found that there is a positive association between the volume of debt and the size of land holdings and between the level of income and size of the family. The author found that there was a very poor rate of repayment of loans taken by the labour households from institutional sources.

Bhaumik (2000) has estimated demand for crop loans and analysed the repayment behaviour of institutional borrowing by 264 households drawn from 40 villages of Nadia and Jalpaiguri districts of West Bengal for the period of January-December, 1998. The author has found that the transaction cost is a significant element when the rural households borrow from institutional sources for long-term investment. Regarding loan liability and loan repayment behaviour of rural households for crop loans, the author found that the total loan liability constituted nearly 32 per cent of farm business income in Nadia and 41 per cent in Jalpaiguri. Regarding repayment behaviour of the rural households for institutional loans, the author has found that the households are unable to repay the entire crop loans in time. Because of high interest rate on non-institutional loans, borrowers give second priority to repayment of institutional loans. Repayments are particularly low for minor irrigation loans.
Regarding determinants of the demand for crop loans, the author has found that the value of security is the most important determinant of demand for crop loans. Other important determinants of crop loans in West Bengal are the operated area (in acres), education, gross cropped area (in acres), modern inputs and farm business income.

Singh (2001) has made an attempt to know the creditor-borrower relationship in informal credit market. The study is based on primary data collected from 510 households from Muzaffarnagar, Lakhimpur-Kheri, Azamgarh, Almora and Lalitpur districts of Uttar Pradesh. The author has observed that the majority of the borrowers borrow from the moneylender on a regular basis to meet the credit demand especially for his consumption requirements. Many factors like, easily accessibility, locally availability and no need of collateral and low transaction cost make it most preferable source of borrowings. In some cases, the institutional borrower approach moneylenders due to inadequacy or rejection of institutional loan. However, moneylender charges high rate of interest, exploits the poor people due to his high social status, exploits lower castes and cheats the borrowers. Inspite of all these, the author concludes that borrower consider moneylender as a friend at the needed time.

Briones (2002) has examined the demand and borrowing behaviour of the small rice farmers in Philippines. He has gathered information from a small purposive sample of participants in government lending programs. By applying Tobit Model, the author has observed that the demand for crop loans is positively related to value of owned land, proportion of farm land under share tenancy and value of farm assets. However, it is negatively related to interest rate of formal credit, interest rate of informal credit and the farmer borrowings from co-operatives. There is no evidence in which small farmers respond more to an increase in the premium or formal cost of credit compared to the average farmer. The author rejects the hypothesis that the farmers’ credit demand is inelastic to the interest rate.
Ravi (2003) has studied the borrowing behaviour of 720 rural households drawn from 21 villages of Kerala and Uttar Pradesh during 2002. He has observed that Uttar Pradesh households have a higher predicted probability of approaching informal sources than Kerala households. Moreover, Uttar Pradesh households used to approach friends and relatives whereas Kerala households approach co-operative societies. The author has also analysed that the predicted probability of approaching friend and relatives in Uttar Pradesh and approaching co-operative societies in Kerala for all three types of loans, namely, consumption, production and medical loans, are affected similarly by farm size, annual income and education level of the household head.

Joshi et. al (2005) have studied the borrowing and repayment behaviour of 220 farm households of Punjab during 1999-2000. They have found that farmers borrowed mainly from commercial banks, followed by co-operative banks and moneylenders. There is a direct relationship between loan required and farm size. Regarding repayment, the authors found that the farmers were unable to repay loans due to the accumulation of the farmers' indebtedness over time.

The authors have suggested that there is a need for redirecting the commercial banks to extend loan facilities liberally to the farmers. It would be helpful in reducing the role of non-institutional agencies and enabling them to escape from the clutches of the moneylenders.

Pandey et. al (2005) have studied the social factors responsible for borrowing of institutional and non-institutional credit, loans outstanding, overdues and extent of loan diversion across categories of borrowers/ defaulters. A case study is based on primary survey conducted by the authors, taking 70 borrowers as sample from Hisar district (Haryana). The authors found that the majority of borrowers were non-chronic defaulters of general category, literate with earning adults in family, irrigated land and small size land holdings. The borrowers made different combinations for borrowing from institutional and
Ravi (2005) has analysed the effect of inability to save on loan repayment behaviour and on credit contracts. The data has been obtained from a primary survey conducted by author from 700 rural Indian households from two states, Uttar Pradesh and Kerala. The author has shown that the income frequency of a household is a positive and significant determinant of the repayment frequency of a loan. Further, income frequency and transaction cost negatively affected the repayment frequency. The results also showed that when loans are secured against collateral, households prefer to repay faster. The author has also made clear that households have more savings, are likely to repay loans slowly. He has concluded that those households, who do not save, repay their loans from the income schedule and pay higher interest rate.

Sharma and Gupta (2005) have studied the extent of borrowing and repayments, cost of borrowings, overdues and the determinants affecting borrowing behavior in 360 farmer households of Himachal Pradesh. They have shown that the farmers availed of loans for productive purposes from institutional sources and they approached friends and relatives for consumption, social and medical loans as they charged no interest on borrowings. The rate of interest was found to be high in case of traders/commission agents due to high risk of production under rain fed agriculture. The cost of borrowing was found to be the highest in case of non-institutional sources whereas banks had minimum (hidden) cost of borrowing per farm. The burden of debt was high because of low income and more consumption. Regarding repayment, the authors have found that only those farmers, who were in regular service, were able to repay on time. The overdues were the highest in case of loans borrowed for building irrigation structure and buying farm implements but were lowest in case of borrowing for crop production. Non-farm income of the farmer, education level, age of
the head of family, access to financial institutions are the important determinants explaining the repayment behaviour of the borrowers.

The authors have suggested that there is a need for developing the co-operative sector in hilly areas for input supply as well as for credit facilities.

Shivappa (2005) has conducted a study to examine credit utilization pattern and its repayment performance of the borrowers in Chitradurga Gramin Bank in Davangere district of Karnataka. The study is based on a primary survey of borrowers during 2004-05. The author found that 75 per cent of them borrowed from the Gramin Bank as well as private sources and the remaining 25 per cent only from banks. The delay in renewal of loan, under lending and non-availability of loan for domestic purpose forced the farmers to depend on private sources. The major factors responsible for the regular repayment include desire for getting loan enhanced in the future, persuasion by the bank personnel and minimisation of loan burden. Nevertheless, the main reasons for non-repayment of loan in time are: crop failure, low yield, low income, difficulty in repaying the whole loan and interest at a time, heavy domestic expenditure and unremunerative prices.

The author has suggested that the government should open more regional rural banks so that it can provide cheap, adequate and timely credit to the needy farmers.

Thorat et. al (2005) have tried to evaluate the factors influencing the borrowings from co-operatives. The study is based on a primary survey of 30 borrowers and 30 non-borrowers conducted by authors in Dopali tehsil of Ratnagiri district. The authors have shown that the percentage of irrigated area and farm income of borrowers was higher than that of non-borrowers. The main reason for low amount of borrowings from co-operatives is that loans are only taken for rice production in the region. The authors also found that the input utilization on borrowers’ farms is higher than non-borrowers except family labour. Nevertheless, there was positive and direct relationship
between amount borrowed and size of holdings, proportion of irrigated area and size of farm income.

Sale et al. (2005) have examined the utilization and repayment pattern of borrowers and the major constraints inhibiting the lending and borrowing of loans. The data have been taken from the District Central Co-operative Bank and the offices of co-operative societies. The authors have shown that direct relationship between per hectare requirement and per family borrowing with the size of land holdings. Misutilisation of crop loan was more by the small and medium group of farmers. Regarding repayment, the authors observe that the average repayment of crop loan was to the extent of 63 per cent. Among the size group of holdings, the proportion of the amount repaid was the highest in the medium size group followed by small and large holders. The large holders had repaid lower amount of loan as compared to other groups. The authors have made it clear that the main reasons for non-repayment of loan were: - low income, non-remunerative prices and crop failures due to natural calamities.

They have suggested that there should be proper appraisal of loan proposal, follow-up and supervision after the disbursement. The willful defaulters should be forced to repay the loans through proper legal action.

Satish (2005) has identified the characteristics that distinguished borrowers of Commercial Bank and Co-operative sector. Using information from a sample of 160 households surveyed in Punjab during 2002, the author found that comparatively better off households having large farm land, farm machinery, cattle shed, financial assets, four wheel transport vehicles and other consumer durables in the rural areas borrow from commercial banks than the co-operative bank borrowers. Even in the case of subsidiary activities commercial bank borrowers are better off than co-operative bank borrowers.

Rannade et. al (2007) have examined the repayment behaviour of poor farmers in the Hoogly district of West Bengal. The authors have used the field
survey conducted in Hoogly district during 1985-86 to 1990-91 and have taken 150 households as sample. By applying Game-theoretic Model, the authors have found that poor farmers having no funds make the repayments. They care more about their reputation and to build credibility in the presence of imperfect information, they opt for prompt repayments of loans. On the other hand, rich farmers have automatically attained trust from the lender due to high paying capabilities, reputation and high financial status. So they care less for their reputation and can afford to be comparatively lax in repayment.

Nguyen (2007) has analysed the role of credit, determinants of credit choices and measured the impact of borrowing activities on borrowers’ consumption in Vietnam rural areas. The author has used the information of Vietnam Living Standard Survey (VLSS) conducted in 1992-93 and 1997-98 by the Government of Vietnam and funded by Limited Nations Development and World Bank and taken 4800 households from VLSS1993 and 6,000 households from VLSS1998 as a sample. The author has found that the credit participation is significantly influenced by the size of the household, self-employment status of the household, gender of the head and size of land holdings. However, higher education does not determine credit participation and age of the household has a negative effect on borrowing propensity.

Swain and Swain (2007) have made an attempt to study the borrowing and repayment behaviour of 139 farmers from Balangir district of Orissa. The reference period is 1962-1963 to 2002-2003. The authors have found that there is a direct relation between land holding size and the proportion of farmers accessing institutional credit but for consumption and urgent needs, they are still depend on non-institutional sources. On the contrary, the poorest of the poor like landless, marginal and small farmers still rely upon non-institutional sources who charge the exorbitant rate of interest in the drought-prone region. Regarding purpose and utilization of rural credit, the author says that farmers borrow mainly for production and cultivation purposes but out of extreme poverty, they diversify loan for current consumption. The authors have also observed that the main reasons of delay in repayment and default
of loan are the crop failure/low harvest followed by the diversion of income towards current conspicuous consumption, hope of a loan waiver, little hope to get another loan in future. The authors have suggested that there is a need for simplification of banking operations and providing specific fiscal incentives to the banks for taking up high cost lending since the poverty problems are much more complex and serious in the drought-prone areas.

Kasarjyan et. al (2007) have investigated the role of both cognitive and structural social capital in explaining the repayment performance of individual members under joint liability. The authors have used primary data collected 86 rural Armenia households during 2006 and taken 86 observations as a sample. By estimating Logit model, the authors have found that higher level of farm productivity and social capital enhances the capacity and the willingness of an individual to repay the loans in time.

Bendig et. al (2009) have examined the demand for loans, savings and insurances of 350 rural Ghanian households for 2008. The authors have found that the poorer households are less likely to participate in the formal financial sector than well off households. The demand for loans, savings and insurance depends not only on the socio-economic status of the households but also on the various other factors like risk assessment and the past shocks. The authors have also observed that there is no life-cycle effect for savings but do much effect on demand for loans and insurance. Similarly, the households exposed to more risk are less likely to demand for financial services. The farmers who have more land holdings are more likely to borrow from the financial institutions for investment purposes.

3. Studies related to determinants of indebtedness

Moore (1953) has made an attempt to examine the role of ceremonial expenditure as a contributory cause of indebtedness of the Indian peasant during 1927-1936. Drawing upon information from various secondary sources
and by correlating data on actual cash expenditure and consumption of home produced goods on ceremonial occasions, the author has showed that the ceremonies play an important contributor to the burden of debt of Indian peasants. The ceremonial expenditure accounts for more than ten percent of rural income. However, such expenditure, author argued cannot be eliminated as they are some sort of inducement for more production.

Mukerjee (1949) has investigated the nature, extent and causes of indebtedness in the undivided state of West Bengal during the first half of the 20th century in general and during 1943, 1944 and 1946 years in particular. By analysing information from various surveys conducted for the period 1908-1946 in Bengal, the author has concluded that the average debt per family, which showed a considerable decline in the post-depression period, increased after the famine of 1943. This rise in indebtedness was mainly due to food shortage, war and inflation. Regarding the burden of indebtedness, the author is agreed that although the volume of debt tends to rise with income, the debt per family bears heavy burden in case of small farm holders in contrast to the rich farmers. By comparing the 1943 and 1944 surveys, the author has found that the proportion of indebted families among the non-cultivating owners was lower than the cultivators in both the periods because cultivators owed both for productive as well as non-productive loans. The author has observed that the active intervention of the provincial government through enacting various legislation and institutions, constitution of the 'Debt Settlement Boards' along with social and economic changes substantially reduced the burden in Bengal in the post-depression period. Consequently, the extent of debt burden in Bengal in 1945-1948 relapsed into the same position as it was during the pre-depression period.

Singh (1993) in his doctorate thesis (unpublished) has examined the magnitude and determinants of rural indebtedness among the weaker sections in rural Punjab namely, agricultural laborers, marginal and small farmers. It also covers the economic conditions, level and pattern of income and consumption among the weaker sections. The study is based on primary
survey of 450 weaker section households conducted by the author during the agricultural year 1990-91. The author has shown that 67.56 per cent of the weaker sections in rural Punjab are under debt and the amount of debt per indebted household is Rs.6019. There is a positive association between debt per household and productive level of the region. Regarding magnitude of indebtedness in absolute terms, the author has found that every weaker section is indebted because the major part of debt is financed by the non-institutional sources, particularly by the moneylenders. However, the extent of outstanding loan is high for those sections that used to divert their borrowings for the social ceremonies. According to author, the main determinants of indebtedness are: - (i) The ratio of credit from non-institutional sources, (ii) Income from subsidiary occupations and (iii) Expenditure on unproductive purpose. By estimating the determinants of indebtedness, the author has concluded that income from subsidiary occupations is helpful to reduce the magnitude of indebtedness.

He has suggested that the government should exercise a strong check on the function of non-institutional agencies and must provide institutional facilities at a low interest rate with easy installments. The government must promote the rural industries which generate employment opportunities for the weaker sections of the Punjab.

Hooda and Turan (1994) have analysed the pattern, magnitude and determinants of indebtedness among 2860 households in rural Haryana. They have analysed that only 2109 of 2860 households were indebted. The authors have also found that the higher household incomes are associated with higher magnitude of indebtedness. Further, the magnitude of indebtedness (both in absolute and relative terms) is the highest among big farmers and the lowest among small farmers. The use of new farm technology (mechanisation, irrigation, use of fertilizers) is the most important and the dominant factor leading to the indebtedness. The incidence of indebtedness is higher among the marginal farmers than the small farmers. The debt-asset ratio is also high in case of large farmers and the lowest in case of small farmers. The
commercial banks play a major role in debt financing whereas the extent of indebtedness is negligible due to the regional rural banks. Moreover, both large and small farmers rely upon organized sector for the debt financing but small farmers still depend on an unorganized sector.

Iyer and Manick (2000) have touched the problem of indebtedness and suicides in rural Punjab. Their study is based on a primary survey of 80 farmers who committed suicides in Sangrur district of Punjab. They disclose that the main reason for suicides was extreme poverty and indebtedness. The other reasons included crop loss, severe economic distress and the constant pressure by the lending agencies to clear the loan. However, the ratio of committing suicides was higher among landless labourers and small and medium farmers than the cultivators with larger holdings. The authors have recommended that there should be simplification of procedures for obtaining loans; diversification of crops and cut the interest rate by 50 per cent.

Deshpande et al (2001) have analysed the reasons for indebtedness among agricultural labourers from the depressed castes. The authors have observed that indebtedness among scheduled castes agricultural labourers is high across all states in India even among West Bengal, Kerala, Haryana and Punjab in spite of using advanced technology and relatively better in implementing policy of land reforms. Authors attributed it to marginalization in the land market as well as extremely weak bargaining position in the labour market. Further, these groups have been neglected by the formal credit institutions in distribution of loans. This aggravated the situation of these groups and increased their debt burden.

Purkayastha (2001) in his study has examined the reasons for indebtedness in the state of Assam during 1991-2000. He has used All-India Debt and Investment Survey 1991. Apart from this, the author has also made a survey of 256 households of Assam. The author found that the major states of India had showed a big fall in informal sources in the recent past. But in Assam, sample villages were still showing the dependence on informal sources in the
post-liberalization period. The main reasons were the decline in the co-operative credit infrastructure and the failure of development schemes implemented in the state by the successive governments. He has suggested that there should be participatory approach of development for solving the problem. Moreover, co-operative credit agencies should be expanded and restructured. Strong base should be provided to them so that they can play efficient and dominant role in rural scenario of the state of Assam.

Kumari (2005) has studied the extent and identified the factors of rural indebtedness in the state of Andhra Pradesh. The study is based on primary survey of 165 farmers from Adilabad, Karimnagar, Nizamabad and Warangal districts of Northern Telangana zone of Andhra Pradesh in the agricultural year 2002-03. The author has found that out of four districts, the farmers in Nizamabad are heavily indebted with Rs.30,564 per hectare than other three districts. There is a direct relationship between farm size and demand for credit. The author has found that the main reasons of non-repayment of loan were the crop failure, low yields, lack of irrigation facilities, low income, lack of technical knowledge and increasing biotic and abiotic constraints like pests and diseases, soil health problems and high input costs. The author suggested that there should be improvement of irrigation like micro irrigation, arrangement of sufficient credit from institutional sources. There should be a provision of remunerative prices, storage facilities, quality inputs and creation of strong Agriculture Technical Advisory System.

Narayanamoorthy and Kalamkar (2005) have examined the trends and determinants of indebtedness of farmers’ households across states by using NSSO report on Indebtedness of Farmer Households January-December, 2003 and All-India Debt and Investment Survey (AIDIS) 1991-92. The authors have observed that the incidence of indebtedness and average debt per household is the highest in agriculturally advanced states like Andhra Pradesh, Punjab, Tamil Nadu, Karnataka and Haryana during 1991 and 2003. Nevertheless, the extent of indebtedness has also increased across the states during 1991 and 2003. By comparing debt on the basis of gross cropped area,
the authors found that the average debt per household is reduced among all the states and Kerala stands first with Rs.7600 and then followed by Tamil Nadu (Rs. 4537), Andhra Pradesh (Rs.3295) and Punjab (Rs.2982). By using regression analysis, the authors have shown that the availability of credit per hectare of net sown area is the main determinant of indebtedness.

Sidhu and Gill (2006) have investigated the degree of indebtedness and factors leading to indebtedness and suicides at an all-India level. The authors have found that the proportion of indebted farmers is highest in agriculturally developed states practicing commercial agriculture like Punjab, Haryana, Maharashtra, Karnataka and Andhra Pradesh. Similarly, these states also report high level of per farmer debt. The main reasons are crop failure due to droughts/ floods, pest attacks or use of spurious insecticides and productive loans. The cases of suicides were reported from more advanced and front runners in commercial agriculture like Andhra Pradesh, Karnataka, Kerala, Maharashtra and Punjab.

Mishra (2007) has examined the problem of indebtedness and recent agrarian crisis in India. Based on information from the Situation Assessment Survey of Farmers conducted by the National Sample Survey Organisation in the year 2005, the author analysed that there are two main reasons for the socio-economic malaise in rural India. First is the low return from cultivation and second is absence of non-farm employment opportunities. The author has also observed that the farmer faces multiple risks in agriculture like low income, poor yield, high input prices, and low credit and resultantly, the problem of high indebtedness is faced by the farmers. Yield loss is the main risk faced by farmers due to vagaries of weather, attack of pests and disease of plants and spurious quality of inputs.

The author has suggested that risk management in agriculture should be adopted regarding yield, price, credit, income and weather related uncertainties.
Jeromi (2007) has identified various reasons and extent of farm indebtedness and farm crisis in the state of Kerala from 1970-71 to 2005-06. The study is based on both primary and secondary sources of data. Primary data include various surveys conducted by the researchers and Non-Government Organizations (NGOs). Secondary data cover reports of the State government, Reserve bank of India (RBI), National Bank for Agriculture and Rural development (NABARD), National Sample Survey Organisation (NSSO) and various commodity boards. The author has found that the major reasons of agrarian crisis and indebtedness were trade liberalization, deficient rainfall, huge concentration on export oriented crops, fall in prices, decline in production and productivity. He has found that the major suicide victims were those who had land holdings below one acre and average loan liability was Rs.72, 000. The author has also analysed various relief schemes followed by the Government of India to reduce the debt like one time settlement scheme (OTS), waiver of interest on loans taken from co-operatives, cash assistance schemes to the family of deceased farmer up to Rs.50, 000 but all these schemes served limited purpose. The major reasons of failure of schemes found by the author were- 1. Lack of efforts to minimise the debt problem 2. Money spent for ad hoc schemes 3. Delay the implementation of schemes by banks and increase the debt burden etc. The author suggested that there should be an introduction of incentivized loan repayment schemes for small farmers and reduction of interest on all agricultural loans.

Apart from this, there is a ample literature available which suggest that the problem of indebtedness is also one of the major causes for the present agrarian crisis and suicides in India. So we have concentrated on the following few studies that are related with the problem of suicides and agrarian distress in a country.

Shameem (1998) has studied the cases of suicides committed by cotton farmers in Warangal district of Andhra Pradesh in the years 1980-1998. The author has observed that the main reasons of farmers’ committing suicides are the growing indebtedness of the farmer to the moneylender-cum-trader,
heavy fluctuations in prices of cotton and high operation cost. Besides these, some social reasons for the problem are the disintegration of social relations and decline in the occupation pursued by the backward caste group.

Revathi's (1998) further explored some missing links of the Shameem's (1998) study. The author has found that credit is available not only through moneylenders but also through commission agents, dealers and sub-dealers of pesticides. Even they exploit the farmers by charging exorbitant rate of interest. The main purpose of farmers’ borrowing is to spend on digging wells which ultimately leads to the heavy debt burden, he adds.

Assadi (1998) has examined the reasons for the suicides committed by farmers in the state of Karnataka in 1985-1998. Crop failures and mounting indebtedness have been found to be the main reasons for such suicides. However, the large proportion of farmers who committed suicides was the growers of tur dal, chillies and tomatoes in northern Karnataka. He has noted that the state government has callously described them as isolated incidents.

Bhalla et. al (1998) in their study have investigated the nature and causes of suicides in rural Punjab. As many as 53 cases of suicide victims have been taken as a sample from 14 villages. The authors conclude that there are multiple causes for suicides in rural Punjab, which includes crisis of overall stagnation of economy, decline in share of landless labourers and small and marginal farmers in asset and income distribution, domestic disputes, alcohol and drug abuse and mental disorder. The main reasons behind indebtedness, according to the authors, are the use of borrowed funds for non-productive purposes by small and marginal farmers. The author suggested that there should be drawing up of special assistance plans for crop failures and crop diversification, credit card schemes, psychiatric assistance.

Vasavi (1999) has analysed the problem of suicides in Bidar district of Karnataka. By examining various aspects, the author has noticed that the spate of suicides depend upon various types of crisis like ecological crisis,
economic crisis and social crisis. The author has said that there is no doubt that commercialization in agriculture, climatic changes, loss of seeds are the reasons for suicides but among the economic crisis, the main reason of suicide is heavy debt. Moreover, most agriculturists even incur heavy debts in order to commercialise agriculture. The author has also found that small and marginal cultivators still depend on non-institutional agencies to finance their debts as loans are not easily available for them at institutional agencies. Moreover, they are not able to repay the loans by non-institutional lenders because of crop failures (due to both deficit and unseasonable loans and the appearance of pests or diseases) and high rate of interest.

Deshpande (2002) in his paper seeks to highlight the reasons of farmers' distress and suicides in the state of Karnataka during the year 2002. The author has noted that the main reasons for the farmers' distress and suicides are the heavy burden of debt, loss of crops and heavy fluctuations in agricultural prices. The author suggested that the state must come out with strong safety measures to solve the problem.

Mohanty and Shroff (2004) have analysed the problem of suicides in the state of Maharashtra. The authors have pointed that the farmers' suicides depend not only on economic factors but also on social factors. Economic factors include - indebtedness, crop losses, market imperfections and higher cost of cultivation. The non-economic reasons include social functions, death, old age, illness, drinking, gambling, divorce or separation and unexpected loss of income from agriculture, investment in business etc. Regarding rate of indebtedness, the author found that the large farmers have a higher rate of indebtedness as compared to small and medium farmers. Moreover, the proportion of indebted household is higher in case of medium farmers. The study also shows that the small farmers had committed suicides, mainly due to loss of agricultural income and indebtedness.

Sarma (2004) examined the nature and factors associated with the farmers' suicides in the state of Andhra Pradesh. The author has noted that the factors...
associated with the farmers’ suicides are indebtedness and poverty. The author found that many reasons are responsible for the problem of indebtedness, which includes: - expenditure on health and bore-well, discriminatory housing schemes, absence of efficacy of the existing network of institutions, expensive IT education. The author concludes that the farmers’ suicides represent only the tip of the iceberg and government both central and states should check these agricultural crisis soon.

Mishra (2006) has analysed the problem of suicides by the farming community in Maharashtra. The study is based on field survey of 111 suicide cases and 106 non-suicide control households from 105 villages in Amravati division. The author found that the Suicide Mortality Rate (SMR) for farmers has increased from 15 in 1995 to 57 in 2004. However, it is the highest in Amravati division where SMR for male farmers was 116 during 2001-04. The author also observed that profitability of the farmers has declined due to dumping in the global market by the U.S., low import tariff to India and failure of the Monopoly Cotton Procurement Scheme in Maharashtra. The other factors were – the declining public investment in agriculture, poor government agricultural extension service and declining role of formal institutions in the rural financial markets. Resultantly, farmers depended more on the input dealer for advice and supply of inputs and on non-institutional agencies for credit. In econometric analysis, the author found that the suicide risk was higher among households having higher outstanding debt, lower ownership of bullocks and liquid assets, access to basic amenities, large family size and lower value of produce. The author concluded that both micro and macro socio-economic factors are responsible for agrarian crisis in Maharashtra.

The author suggested that there should be availability of affordable credit by revitalization of rural credit, improvement of agricultural extension service and availability of water which would facilitate diversification of cropping pattern. Further, there must be strong check on regulation of private credit and input markets.
Mohanakumar and Sharma (2006) have assessed the reasons of agrarian crisis and farmers’ distress in Kerala. From the survey of 35 families of suicide victim from Wayanad district of Kerala, the author has pointed out that the main reason of agrarian distress in Kerala is the neo liberal regime implemented in the country and concentration on input-oriented crops such as coffee and pepper. As a result, the worst affected are small farmers as they are more vulnerable to crop losses and price fall.

Rao and Suri (2006) have investigated the reasons of farmers' suicides and agrarian distress in Andhra Pradesh. The authors have conducted a primary survey from two villages namely, Nadendla and Karalapadu in Guntur district of Andhra Pradesh by using systematic random sampling method and have taken 75 farmer households. The authors have observed that the main reasons of agrarian distress are changing cropping pattern and concentration on commercial crops like cotton and chillies. The cost of cultivation of these crops is high and is also rated as high risk crops. Hence, farmers heavily depended on external sources and inputs to overcome the high cost. Along with this, some other factors identified by the authors that lead to the problem of agrarian crisis and indebtedness are:- spurious seeds and pesticides, non-remunerative prices for their produce, low literacy rate, breakdown of joint family system and collapse of other social institutions.

Conclusion

Foregoing review of rich literature on the agrarian indebtedness conclusively establishes the serious nature of the problem not only in India but other parts of the globe as well. Researchers have undoubtedly touched various dimensions like incidence, pattern, extent and causes of the problem. However, like any other problem, many gaps are yet to be filled on various aspects of the problem of indebtedness. Some of these are as follows:
1. Most of the studies on the rural indebtedness have been selected from a few households in a limited number of districts. Information on temporal and spatial pattern, incidence and nature of indebtedness and its growth over time from 1951 till the date is not available at one place.

2. Temporal and spatial information on issues raised in previous one is also not available separately for cultivator and other segments of the rural society.

3. There are a few studies examining the borrowing and repayment behaviour of the rural households. In fact, most of the studies in this context, have examined the problem for a few villages or a district at the most. Scarcely, any comprehensive micro household level analysis of the borrowing and repayment behaviour exists for the country as a whole.

4. There is a dearth of studies examining the causes and correlates of the problem of indebtedness for all rural households in the country. Most of these studies have limited spatial coverage. Given wide inter-region disparities in the country in level of livings, availability of rural infrastructure facilities including coverage by rural financial institutions, level of agricultural development, variations in agro-climatic conditions and variations in the living levels, poverty and employment; finding from such studies may lack wider generalisation.

5. As there is a lack of generalisation of ground realities on various aspects of indebtedness and its various dimensions, policy implications to tackle the problem recommended by studies pertaining to various
parts, similar it may also lack in the generalisation for the country as a whole.

These critical gaps in any literature motivated us to make a humble attempt to fill the gaps by undertaking an in-depth study of various issues raised above by utilising comprehensive information pertaining to 91,192 rural households collected by National Sample Survey Organisation during the All India Debt and Investment Survey in the agricultural year 2002-2003.