JOURNAL OF INDIAN ECONOMY AND BUSINESS
Vol. 1, No. 1, 2024, pp. 27-41 • ISSN: 3048-5789

URL: http://www.pbjournals.com/jieb
Publisher of Open Access Journals

SOURCE OF RURAL CREDIT, INDEBTEDNESS AND ITS DETERMINANTS IN RURAL MADHYA PRADESH (INDIA)

Trsish Singh Tomar[1*], Sonpreet Kaur[2] and Poonam Gurjar[3]
[1]*Assistant Professor, Govt. College, Batiyaghar, Damoh, Madhya Pradesh.*
[2]*English Mistress, Govt. High School, Amritpur Rajewal, Kapurthala, Punjab.*
[3]*Assistant Professor, Swami Vivekananda Govt. P.G. College, Harda, Madhya Pradesh.*
**Corresponding author; E-mail: tomartrisha@gmail.com*

Article History
Received : 15 February 2024; Revised : 14 March 2024; Accepted : 19 March 2024; Published : 30 June 2024

Abstract: Rural indebtedness is an issue even today when the state has initiated a large number of measures to financially include all the citizens and also to increase the access to credit especially for the rural masses. Though there are contrarian views regarding the role of credit in agriculture and rural economy, the fact cannot be denied that one of the primary reasons for agricultural distress is the lack of credit. Farmer suicides are a reality in India with the primary reason being indebtedness. The state of Madhya Pradesh has economically grown over the last two decades mainly because of improved agricultural production and productivity. However, the state also features highly when it comes to the distress of farmers and their indebtedness. This paper looks at the agricultural distress from the lenses of rural indebtedness and attempts to find its determinants. The analysis has been carried out on the unit level data of NSSO for a period of ten years, taking ten explanatory variables to explain rural farm credit. The paper concludes that farm inputs, farm size, access to financial instruments are the key determinants of agricultural credit in the state of Madhya Pradesh.

Keyword: Indebtedness, NSSO, Rural Credit, Tobit Model, Madhya Pradesh.

INTRODUCTION

"The Indian peasant is born in debt, and dies in debt" (Malcolm Darling, 1947). The 70th round of NSSO (2013) confirms to this statement which shows the enervation of institutional credit in the last eight decades. The leitmotif

To cite this paper:
Trsish Singh Tomar, Sonpreet Kaur & Poonam Gurjar (2024). Source of Rural Credit, Indebtedness and its Determinants in Rural Madhya Pradesh (India). *Journal of Indian Economy and Business*. 1(1), 27-41.

of the banking reforms carried out since 1991is to promote institutional credit for farmers and the other marginalized sections of the society. The framework of institutional credit was laid down in 1870s when farmers hit by drought were provided with finance (Mihir Shah et al, 2007). In the early years of the twentieth century, certain initiatives for the formalization of credit were taken like, Cooperatives Act (1904) was passed, and in 1912 the rural credit societies were recognized. The Machlagen Committee (1915), Royal Commission on Agriculture (1926-27), Malcolm Darling report (1935) were all directed towards making agricultural credit accessible and formalized. Post-independence too, the state made its intensions clear when Section 54 was inserted in the RBI Act 1935, which was specifically on Cooperative Societies. The Cooperatives Act, 1951, earmarked 33 percent credit for agriculture. There were several other steps initiated by the government to support agricultural credit and to free the farmers from the clutches of usurious money lenders. In 1966, the All India Rural Credit Review Committee chaired by B Venkatapiaah suggested that the Scheduled Commercial Banks had to work besides the cooperatives to make them successful. In 1969 when banks were nationalized, priority sector lending was introduced whereby 18 percent of the 40 percent earmarked for priority sector had to be given to agriculture. RRBs, NABARD were some major steps to formalize the credit market in the rural areas. Juxtaposing the present on the financial and banking system of the eighties show that a lot has changed and a lot remains the same.

There are contradictory views regarding the impact of structural reforms of the nineties. D N Reddy and S Mishra (2006), P Satish (2007), Nirupam Mehrotra (2011), Jean Derez *et al.* (1997), Ashima Goyal (2017) amongst others show that liberalization of finance and the flow of the international finance capital has been detrimental to the interest to the interest of the farmers and rural areas. Basel norms have been blindly followed to fall in line with Uncle Sam. The percentage of rural banks was just 17.6 percentages in 1969 which moved up to 58.2 percentages in 1998 but by 2005-06, the numbers came down to 44.8 percentages. Anjani Kumar (2010), Ratan Lal *et al.* (2014) have presented a contrary view as they believe that institutional credit has increased in the post reforms period. Micro finance has played a major role in aiding rural credit. In spite of the claims made by these economists, the present situation distress of farmers and of the rural sector

shows that blockages in the flow of credit has been one of the primary factors for their condition. Prabhat Patnaik (2017) have reiterated the crisis of neo liberal capitalism and the basic feudal nature of the state does not allow the capital to move to rural areas and gives rise to distress.

The 1991 policy reforms called for the retraction of primary sector lending but due to political pressures the government did not withdraw the policy. However, economists claim that even though the nationalization of banks and thereafter the policies regarding rural and agricultural credit have been given special status but banks wanting to earn profits would not like to venture into areas where higher priority needs to be attached from a social and political view (K N Krishna,1974; Sahu and Rajasekhar, 2005). Stiglitz and Weiss (1981) wrote on similar lines and said that profit maximizing banks will be reluctant for credit rationing and providing surplus to social interest areas. Access to credit is still an issue in rural areas in spite of financial inclusion programs initiated by the government (Meenakshi Rajiv *et al.* 2011) and the same author suggests that documentation is still a major challenge because of which gold and jewelry are being hypothecated (Meenakshi Rajeev and Pranav Nagendran, 2018). Vyas (2004), Jodhka (2018) talked about the distress in the agricultural sector and how the vulnerable sector needs to be protected by initiating alternative policies. Rakesh Mohan (2006) emphasized the role of credit stating that a policy change is required so as to now have initiative in different segments of agriculture like sericulture, horticulture, pisciculture, aquaculture and others. A Vaidyanathan (2006), Srijit Mishra (2007) have added that it is not only indebtedness and credit crisis which has led to the worsening of situations of the farmers and their suicides but there are other critical issues like social structure, income from non-farm sectors which need to be addressed.

This paper looks at agricultural distress from the lenses of rural indebtedness and attempts to find its determinants. The study area chosen is Madhya Pradesh, firstly because negligible amount of academic work has been carried out on the state and secondly the government of Madhya Pradesh has been announcing its intentions of making agriculture a business of profit which makes the study exigent. Two types of data sets have been used to validate our hypothesis- the NSSO survey of 2003 (59th round) and 2013(70th round) to extract the preliminary data. Unit level data has been taken to further find the determinants using Tobit regression model. The

data has been made comparable by converting the values of 2002 to 2012 prices using CPI-AL price index and index value of 2012 is taken as 100.

DATA AND METHODOLOGY

In this study, we used the unit level data of Debt and Investment Survey carried out by National Sample Survey Organization (NSSO) during 59th Round (2003-04) and 70th round (2012-13). The Debt and Investment survey is generally carried out once in 10 years, in all most all the Indian states and provides information on different dimensions of credit and indebtedness. The determinants of rural households' factors of debit amount have also been analyzed by using 70th round NSSO data.

GROWTH RATE ANALYSIS

The compound growth rate of selected variables are calculated for selected periods of time. Compound growth rate was estimated with the following exponential model.

$$Y = ((V_t / V_{t-n})\text{^}(1/_{n-1})-1) * 100$$

Where,

Y= compound Annual Growth rate,

V_t = Value of selected variable at 't' time,

V_{t-1}= Value of selected variable at 't-n' previous time, and

$1/_{n-1}$ = 1/ no of gap year.

TOBIT REGRESSION MODEL SPECIFICATION

To identify the factor which effects debt amount of the household we applied the Tobit (Tobin, 1958) regression because some household was free from debt and values were censored. Debt amount (Rs.) is depended variable, and age, education, sex, livestock, agricultural equipment's, family size and KCC and Bank account are independent variable in the model. In the model, farm-specific characteristics and demographic factors were regressed against the debit amount payable by the household. The standard Tobit model can be defined as follows for observation (farmer) that is:

$$Y_i^* = X_i\beta + \mu_i$$

$$Y_i = \begin{cases} Y^* \ if \ Y^* > T \\ T_y \ if \ Y^* \le T \end{cases}$$

In this Tobit model we assumed T= 0 (zero) i.e. the data are censored at 0. Thus, we have

$$Y_i = \begin{cases} Y^* \ if \ Y^* > 0 \\ 0 \ if \ Y^* \leq 0 \end{cases}$$

where u ~N(0,Σ2), X and β are vectors of explanatory variables and unknown parameters, respectively. The y* is a latent variable and y is the debit amount. In the present study we use the functional form of the censored tobit model as below:

$$DEBIT\_AMT = \beta_0 + \beta_1 AEG + \beta_2 SEX + \beta_3 HHTYPE + \beta_4 EDUCATION + \beta_5 FAMILYSIZE + \beta_6 KCC + \beta_7 LIVESTOCK\_NO + \beta_8 TRACTOR + \beta_9 LAND + \beta_{10} BANK\_ACC + \mu_i$$

Where

DEBIT_AMT (Rs) = Debit amount payable by the household

AGE = Age of household head (year)

SEX = Sex of household head (male-1, female-0)

HHTYPE = whether household is a general (General- 1, other- 0)

EDUCATION = Education of household head (in schooling year)

FAMILYSIZE = Family size (number of person in household)

KCC = whether household have Kisan credit card (If yes- 1, otherwise-0)

LIVESTOCK_NO = Number of livestock in household

TRACTOR = whether household have tractor (If yes- 1, otherwise-0)

LAND = Operated land area (in ha) of the household

BANK_ACC = whether household have bank account (If yes- 1, otherwise-0)

$\beta_0, \beta_{1\text{-}7}$ and μ_i are constant, regression coefficients and error terms respectively.

RESULTS AND DISCUSSION

Madhya Pradesh and its Agricultural Sector

Madhya Pradesh is the second largest and highly diversified state (Singh *et al.*, 2018; Singh *et al.*, 2019) of India in terms of area and sixth in terms of population as per the 2011 census. High portion of the state workforce was engaged in agriculture (Singh *et al.*, 2020) and living in rural areas. However,

when it comes to the ranking of the state in terms of its HDI (it ranks 14 currently) or other developmental parameters, the results are not very assuring. Being an agrarian state the results in the past five years have been exuberating as it had won the Krishi Karman award continuously for five years, especially in the production of wheat and pulses. The state government has marketed this fact very well and has reaped rich political dividends out of it, but there are certain chinks in these claims as the report on crimes paints a very sad picture. In 2014, 826 farmers committed suicide (National Crime Bureau Report, 2014)[12] of which most were small and marginal farmers, moreover most of the suicides were because of indebtedness. In 2015, this figure came down to 581which was way above the figures for the economically developed states like Gujarat (57), Punjab (100), West Bengal (0) and even Bihar had zero farmer suicides. These two statistics from the state are contrarian in nature as a state getting awarded continuously for agriculture production should not have such high numbers of farmer suicides that too mainly because of indebtedness. There is either fudging up of the data or the inequalities are so high that the small and marginal farmers are left out of the ambit of agricultural growth. As the data has been published by the government sources which leaves little doubt on its authenticity, thereby, making it evident that inequalities are very high in the state as it receives production from particular geographical belts leaving out the other areas. There are 11 agricultural zones in the state having different production capacities.

Table 1: Growth Rate Analysis of Asset Valuation

Type of Assets	*Value of assets (Rs.)*		*Growth Rate %*
	2002 (at 2012 prices)	*2012*	
Land	334672	768241	8.66
Building	112404	159268	3.55
Livestock and poultry	6463	18586	11.14
Farm business equipment	7889	8161	0.34
Non-farm business equipment	1087	473	-7.98
Transport equipment	8267	23502	11.01
Shares etc.	107	9	-21.89
Deposit etc.	7007	6359	-0.97
Amount Receivable	133	649	17.21
Overall	478028	985249	7.50

Source: Author's estimation on the basis of NSSO Data

The state of agriculture in Madhya Pradesh can be analyzed with the help of the analysis of assets in the two time periods. The assets are both, physical and virtual so as to see the level of diversification in asset holding. Growth rate of the valuation of land has gone up which is obvious due to scarcity and renewed focus on land as the major investment destination. However, a matter of intrigue is whether all this land will be used for agricultural purpose in future or not. The increase in the growth rate of livestock and poultry is a very positive sign for the state as with proper forward linkages, this can be an area of major earnings for the farmers. The 0.34 percent growth rate in farm business equipment is a worrisome factor for the state as it reflects the lack of backward and forward linkages of agriculture with industry. Another aspect is growth of traditional agri-businesses which mainly falls under the category of cottage industry. The growth in transportation equipment is a positive sign as this leads to more mechanization in agriculture. Negative growth rate registered in shares, deposits etc. show that diversification is asset holding has not taken place in this decade and also that farmers do not have surplus income to invest in these portfolios. The overall growth rate is disheartening for a state like Madhya Pradesh which has received consecutive Krishi Karman awards for wheat and food grains production.

Comparative Analysis

Another comparison has been on the basis of the following variables which help to compare the value of assets and indebtedness (Table 2). The stark reality is that the value of assets per household and incidence of indebtedness (IoI henceforth), both have gone up but the margins are drastically different. There is 314 percent increase in overall average value of assets. This increase is much higher in non-cultivators than in cultivators, which shows that the policies of the state are skewed in favour of non-cultivators. The IoI has gone up in the decade between 2003 and 2013 for both the categories. One of the primary reason for this is the falling price of agricultural produce and the bigger share of the middlemen. The support system is poor, the technological inceptions are ineffective, increase in input prices which leads to higher costs, poor storage facilities, insensitive public institutions and overall lack of profitability has pushed the farmers in this quagmire.

Table 2: Comparative status of cultivator and non-cultivators in terms of Assets and Debit in Rural Madhya Pradesh

Particulars	*Cultivator*	*Non cultivator*	*Overall*
2002 (Value at 2012 prices)			
Average Value of Assets (Rs./ per household)	665331	174929	499092
Incident of indebtedness (IOI) %	40.9	27.2	36.6
Average amount of debt (Rs./ per household)	25716	5802	18965
Average amount of debit (Rs./ per indebted hh)	54023	12415	39848
Debit-Assets Ratio	3.9	3.3	3.8
2012			
Average Value of Assets (Rs./ per household)	2384284	346233	985249
Incident of indebtedness (IOI) %	40.89	17.31	24.7
Average amount of debt (Rs./ per household)	48723	8766	21294
Average amount of debit (Rs./ per indebted hh)	119164	50643	86205
Debit-Assets Ratio	2.04	2.53	2.16

Source: Key Indicators of Debt and Investment in India, NSSO, Ministry of Statistics and Programme Implementation, GoI

As per the National Crime Bureau Report (2015), there has been a 2 percent increase in the number of farmer suicides in the entire country between 2013 and 2015 and the primary reason in all these cases has been indebtedness. In Madhya Pradesh too, 16190 farmers committed suicides between 2001 and 2012. The increase in the average amount of debt per household has been phenomenal which shows the risk at which the farmers live. The debit assets ratio has come down marginally which is in the interest of the farmers but this needs to go down below one percent.

The analysis of IoI cannot be complete without looking at the sources of loan (look at Fig.1). The farming community of Madhya Pradesh is still dependent on the moneylenders as about one fourth of the total credit is given by them. One positive that comes out of it is the increase in the share of bank credit but analysis in totality shows that this increase is not due to the decrease in the share of moneylenders. On the other hand the contribution of cooperatives, government, traders and family has come down. The scheme of financial inclusion through branch expansion and Banking Correspondents adopted since 2006 has not really helped the state to bring the agricultural sector under their purview. More importantly the role of Micro Finance Institutions is not visible in the state.

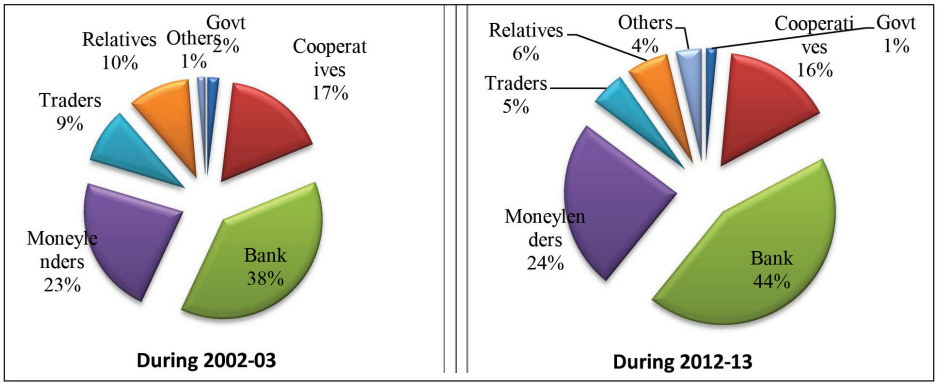

Figure 1: Distribution of household according to Source of loan in Rural Madhya Pradesh

Table 3 brings in a new dimension to the analysis as it can be seen that the amount of debt per indebted household of the non-cultivator segment have gone up as compared to the cultivator households. The increase in the value of assets of the cultivator households is a good sign as it shows that the debt taken is used for productive purpose, thereby justifying the demand for debts. The amount of debt per household remains more for the cultivator households as compared to the non-cultivator households thereby confirming the hypothesis that cultivators have poor income and they have to revert to debt for carrying out cultivation business.

Table 3: Comparative Growth rate of cultivator and non-cultivators in terms of Assets and Debt in Rural Madhya Pradesh

Particulars	*Growth Rate (in %)*		
	Cultivator	*Non cultivator*	*Overall*
Value of Assets (Rs./ per household)	13.61	7.07	7.04
Amount of debt (per household)	6.60	4.21	1.17
Amount of debt (per indebted household)	8.23	15.10	8.02

Source: Author's estimation based NSSO data.

The authors of this paper also analyzed the incidence of indebtedness coinciding with the various rates of interest. Two figures stand out in this table- the one is the number of people taking loan for less than 6 percent and ones taking between 25 to 30 percent. The first figure reveals that the exposure to banking system is good (30 percent) which corroborates with above statistics of percentage of loans given by the banking sector. The

Table 4: Incidence of indebtedness (IOI) of households by rate of interest in Rural Madhya Pradesh (as on 30.06. 2012)

Rate of Interest	*Per 1000 Number of Households Reporting Cash Loan Outstanding*	*Percent of Per 1000 Number of Households Reporting Cash Loan Outstanding*
Interest free	14	5.11
Less than 6	82	29.93
6-10	10	3.64
10-15	19	6.93
15-20	50	18.24
20-25	1	0.36
25-30	64	23.35
Greater than 30	34	12.41
Over All	274	100

Source: Key Indicators of Debt and Investment in India, NSSO, Ministry of Statistics and Programme Implementation, Government of India

second figure (23 percent) is worrisome as it confirms that a large part of the people taking debts still go to the indigenous money lenders who charge exorbitant interest rates.

Tobit Regression model results

This section deals with the interpretation and analysis of the Tobit model. The first table (No 5) is a description of all the explanatory variables of the model which explain the indebtedness of the farmers in Madhya Pradesh. Majority of the households in the sample belong to the general category showing that indebtedness is more in this category as they have more access to the resources. The figures regarding education show that the efforts of the government have paid off in terms of literacy as only 27.6 percent of the people are illiterate, however still in rural Madhya Pradesh, the number of people opting for higher education are low. The family size may be interpreted in two different ways as the family size is largest in the 5 to 7 member's category. One of the interpretation could be that the government initiative for birth control has not worked in rural Madhya Pradesh and the second interpretation could be that most of the families are joint families.

Table 5: Description of the Explanatory Variables

Variable	*Sub-Group*	*Household Reported (%)*
Age of household head	< 35	22.5
	35 - 45	26.1
	45 - 55	25.1
	> 55	26.3
Sex of household head	Male	94.34
	Female	5.66
Household type	General	62.4
	Other class	27.6
Education of household head	Illiterate	27.6
	Up to primary	27.8
	Up to middle	20.2
	Up to secondary	10.5
	Up to high secondary	11.1
	Diploma	0.1
	Up to graduation	2.1
	PG and above	0.5
Family size	< 3	13.9
	3 to 5	29.5
	5 to 7	35.6
	> 7	21.0
Kisan credit card	With	25.40
	Without	74.60
Number of livestock	< 3	50.4
	3 to 5	22.4
	5 to 7	10.8
	7 to 10	7.8
	> 10	8.6
Tractor	With	6.9
	Without	93.1
Operated land area	Landless	21.8
	Marginal (< 1 ha)	38.0
	Small (1-2 ha)	19.3
	Medium (2-4 ha)	13.7
	Semi-medium (4-10 ha)	6.1
	Large (> 10 ha)	1.1
Bank Account	With	70.9
	Without	29.1

Source: Author's estimation based on unit level data

The economic input figures of Kisan Credit Card (KCC) and tractors is very disappointing and shows the extent to which the state lags behind in spite of the awards and recognitions received by the state in the field of agriculture and also the promises made by the previous and current government to make agriculture a business of profit[i]. The livestock data shows that farmers are keeping them mainly for personal use and not for commercial purpose. This data may be used by the state as an indicator of potentialities of the state. There are still 21.8 percent of the farmers who are landless and cumulatively 57 percent of them are small and marginal farmers that is they have land holding of less than two hectares. The dependency on agriculture is still high and the landless category, may be used as labour for agro-business units and the small and marginal farmers may be consolidated for cooperative farming practices.

Table 6: Results of Tobit regression model

Particulars	*Coefficient*	*Std. Err.*	*T Value*	*P>|t|*
Dependent Variable = Amount outstanding				
Constant	-152355	41288.72	-3.690	0.000
Age of household head (year)	779	489	1.590	0.111
Sex of household head (male-1, female-0)	-40673	28019	-1.450	0.147
Household type (General- 1, other- 0)	68761	18298	3.760	0.000
Education of household head (in schooling year)	2582	1481	1.740	0.081
Family size	6978	2699	2.590	0.010
Kisan credit card (If yes- 1, otherwise-0)	151221	15328	9.870	0.000
Number of livestock	-1839	1117	-1.650	0.100
Tractor (If yes- 1, otherwise-0)	273969	25317	10.820	0.000
Operated land area ha	25988	3491	7.450	0.000
Bank Account (If yes- 1, otherwise-0)	72600	14720	4.930	0.000
Sigma	328954.2	4785.214		
Log likelihood	-35130.2			
Number of observation	3428			
LR chi2(10)	790.57***			

Source: Author's estimation

The last table shows the results of the Tobit Model revealing that eight out of the 10 explanatory variables taken are significant and the result of the Likelihood Ration Chi Square Test shows that the model is of best fit. The model confirms that indebtedness amongst the farmers of Madhya Pradesh

is mainly because of the farm inputs like tractors, access to banks and KCC, the livestock they hold, the size of the farm cultivated. Education and the family size coefficients are also significant showing the obvious relation that more educated households have less debt and so does a small family.

CONCLUSION AND POLICY SUGGESTIONS

The state of Madhya Pradesh has become one of the fastest growing states in recent times and it has also come out of the BIMARU state group, thus showing the achievement of its potentials. However, it still remains an agrarian economy which needs to change if it wants to be included in the top ranking states of the country. The industrial sector also needs to grow to attract investments so as to push the state ahead. In the agricultural sector the debt situation is not good as the banks have made an improvement but the usurers are still present in large numbers. The small and marginal farmers are still huge in number which should be a cause of concern as it increases inequality in the distribution of the resources and productivity of land also comes down. The government needs to bring about changes in their lending policy and also in the repayment policy if they are really serious about making agriculture a business of profit. State intervention is also required in terms of increasing the size of livestock as this can be an area where Madhya Pradesh can lead the other states as this will help in diversification in the field of agriculture. A pre requisite for this is that the Food Processing Industry needs to be developed and has to spatially diverse as currently most of the units are situated in the Malwa region. Crop diversification is a must as wheat and soybean alone cannot take the state forward with production of pulses coming down as the MSP of pulses have come down over the years. Horticulture is one area which may be explored by the state where social entrepreneurship model may be adopted which is very popular and successful in Maharashtra and Andhra Pradesh. This will generate extra income for the farmers and bring down the level of indebtedness. In case of farmer suicides, the government policy needs to be pro-active rather than being reactive as it is currently for which the help of Non- Governmental Organizations can be taken.

References

Darling, M.L. (1928). The Punjab Peasant in Prosperity and Debt, England: Oxford University Press.

Derez, J., Lanjouw, P., & Sharma, N. (1997). *Credit in Rural India: A Case Study*. Discussion Paper DEDPS/6, STICERD, London School of Economics. Retrieve from: http://sticerd.lse.ac.uk/dps/de/dedps6.pdf

Goara, R L., Singh, P., & Singla, S. (2014). Agriculture Credit in India: An Analytical Study. *International Journal of Latest Trends in Engineering and Technology*, 3 (3):326-335.

Goyal, A., & Verma, A. (2017). *Slowdown in bank credit growth: Aggregate demand or bank non-performing assets?*. Working Paper WP-2017-014, Indira Gandhi Institute of Developmental Research, Mumbai.

Jodhka, Surindher S (2018). Rural Change in Times of 'Distress. *Economic and Political Weekly*, 53 (26 & 27): 5-7.

Kumar, A., Singh, K.M., & Sinha, S. (2010). Institutional Credit to Agricultural Sector in India: Status, Performance and Determinants. *Agriculture Economics Research Review*, 23 (July-Dec): 253-264.

Meenakshi R., & Nagendran, P. (2018). Are Gold Loans Glittering for Agriculture?. *Economic and Political Weekly*, 53 (26 & 27):32-38.

Meenakshi R., Vani, B P, & Bhattacharjee, M. (2011). *Nature and Dimensions of Farmer's Indebtedness in India and Karnataka*. Working paper 267, The Institute for Social and Economic Change. Retrieve from: http://www.isec.ac.in/WP%20267%20-%20Meenakshi%20Rajeev%20and%20B%20P%20Vani_aug%202011.pdf

Mehrotra, N. (2011). Agricultural Credit: The Truth Behind the Aggregate Numbers. *Economic and Political Weekly*, 46 (42): 22-26.

Mishra, S. (2007). *Risk, Farmers' Suicide and Agrarian Crisis in India: Is There A Way Out?*. Working Paper WP-2007-014, Indira Gandhi Institute of Developmental Research, Mumbai. Retrieve from: http://www.igidr.ac.in/pdf/publication/WP-2007-014.pdf

Mohan, Rakesh (2006). Agricultural Credit in India: Status, Issues and Future Agenda. *Economic and Political Weekly*, 41 (11):1013-1021.

Patnaik, P. (2017). Neoliberal Capitalism and its Crisis. *Peoples Democracy*, 41 (45). Retrieve from: https://peoplesdemocracy.in/2017/1105_pd/neo-liberal-capitalism-and-its-crisis

Raj, K.N. (1974). *Monetary Management and Nationalization of Banking in India*. in A Mitra (edt.), Economic Theory and Planning: Essays In Honour of A K Dasgupta, Oxford University Press.

Reddy, D.N., & Mishra, S. (2006). Crisis in Agriculture & Rural Distress in Post Reforms India. S. Radhakrishnan (ed.), Indian Development Report, Oxford University Press.

Sahu, G.B., & Rajasekhar, D. (2005). Banking Sector Reforms and Credit Flow to Indian Agriculture. *Economic and Political Weekly*, 40(53): 5550-5559.

Satish, P. (2007). Agriculture Credit in the Post Reform Period: A Target of Systematic Policy of Coarctation. *Economic and Political Weekly*, 39(52): 2567-2575.

Shah, M., Rao, R., & Shankar, P.S.Vijay (2007). Rural Credit in the 20th Century India: Overview of History and Perspectives. *Economic and Political Weekly*, 42(15): 1351-1364.

Singh, J., Dutta, T., Rawat, A., & Singh, N. (2020). Changing role of agriculture in income and employment, and trends of agricultural worker productivity in Indian States. *Indian journal of economics and development*, *16*(2s), 183-189.

Singh, J., Singh, A., Singh, N., Tomer, T. S., & Sachdeva, H. (2018). Growth trajectory and Inter-Regional agricultural disparity a study of Madhya Pradesh. *Indian journal of economics and development*, *14*(3), 464-472.

Singh, J., Srivastava, S. K., Balaji, S. J., & Singh, N. (2019). Agricultural Growth Trajectory in Madhya Pradesh: Is It Sustainable?. *Singh et. al.(2019)," Agricultural Growth Trajectory in Madhya Pradesh: Is it Sustainable*, 27-35.

Stiglitz, J E, & Weiss, A. (1981). Credit Rationing in Markets with Imperfect Information. *American Economic Review*, 71 (3): 393-410.

Vaidyanathan, A. (2006). Farmers' Suicides and the Agrarian Crisis. *Economic and Political Weekly*, 41(38): 4009-4013.

Vyas, V S(2004). Agrarian Distress: Strategies to Protect Vulnerable Sections. *Economic and Political Weekly*, 39 (52):5576-5581.