



Smallholder farmers: Agricultural credit in India performance and challenges

■ VENKATESWARLU YERUKALA

Author for Correspondence:

VENKATESWARLU YERUKALA

Department of Economics, University of Hyderabad, HYDERABAD (TELANGANA) INDIA ABSTRACT:: This paper intends to retrospect the agriculture credit policy in India since from independence. Paper particularly looks the role of different agricultural credit institutions such as, Regional Rural Banks (RRBs), National Bank for Agriculture and Rural Development (NABARD and other Scheduled Commercial Banks (SCBs) and analyses the issues and challenges in ensuring agricultural credit facility to the farmers. This paper also gives us an understanding about the importance of formal agricultural credit to the smallholder farmers for ensuring the farmers subsistence life and agricultural stability. Finally, paper compares the institutional and non-institutional credit in terms of credit accessibility, dependence and farmers welfare. The methodology of the paper is based on both primary and secondary data. Secondary data has been taken from different government organizations. The primary data has been taken from Andhra Pradesh in order understand the farmers dependence on institutional and non-institutional sources at household level.

KEY WORDS: Smallholder farmers, Agricultural credit, Credit institutions, Credit accessibility, Farmers welfare, JEL Code: H81, Q14, O16

Paper History:

Received : 24.10.2016; **Revised** : 22.01.2017; **Accepted** : 01.02.2017 How To CITE THIS PAPER: Yerukala, Venkateswarlu (2017). Smallholder farmers: Agricultural credit in India performance and challenges. *Internat. Res. J. Agric. Eco. & Stat.*, 8 (1): 88-95, DOI: 10.15740/HAS/IRJAES/8.1/88-95.

INTRODUCTION:

Agricultural credit has been playing its pivotal role in Indian agriculture ever since from the independence. The Agricultural credit has been broadly classified into institutional and non-institutional credit. Indian farmers have been leading their lives with bare minimum income and sometimes even left with dis-savings, which is difficult and further necessitating them to depend on other means for their livelihoods. Agricultural credit in rural areas can be obtained from the village money lender, co-operative organizations and by the Government. Marketing credit is obtained from the traders, indigenous banks and joint-stock banks. In order to protect the farmers from the

high interest trap of money lenders, the Government of India has been sincerely exerting many efforts by providing credit to smallholder farmers though different institutions. With these efforts, Rural Credit Survey Committee had formulated in 1954 to look in to the challenges associated with agricultural credit, subsequently policy initiatives like Nationalization of major commercial banks (1969 and 1980), establishments of RRBs (1975) and NABARD (1982), financial reforms (1991) onwards, special agricultural credit plans (1994-95), launching of Kisan Credit Cards (1998-99) and agricultural debt waiver and debt relief scheme (2008) etc. All these initiatives played significant role in reducing the role of informal agencies in rural credit market.

In spite of all these developments, the persistence of non-institutional agencies and increasing farmer's reliance on money lenders in rural societies are still a major concern. Apart from the successes of the institutional credit, we must not forget that, these successes are not to the extent of desired possible levels. The reasons are majorly, credit facilitators are failed to understand comprehensiveness and reality of agricultural credit along with the socio-demographic factors which includes education, family size, farm size, occupation of households, caste and poor awareness among the farmers.

If we see the smallholder farmers (Marginal farmers, having less than one hectare and small farmers, having less than two hectares); According to agriculture census 2010-11 the number of marginal farmers (in '000') increased from 36200 (50.97 %) in the year 1970-71 to 92826 (67.09 %) in the year 2010-11. The small farmers increased from 13432 in the year 1970-71 to 24779 in the year 2010-11, whereas medium farmers decreased from 7932 (11.17 %) in the year 1970-71 to 5875 (4.24 %) in the year 2010-11. Large farmers decreased from 2766 (3.89 %) in the year 1970-71 to 973 (0.70 %) in the year 2010-11. This signifies that India is the land of smallholder famers.

Average size of holdings in India also declined from 2.3 ha in 1970-71 to 1.33 ha in 2000-01. Based on the Tendulkar Committee Report, cultivators having 0.8 ha or less than that of land area is needed to keep a farm family under below poverty line, based on this around 62 per cent of farmers in India own less than 0.8 ha of cultivable land. Smallholder farmers, having small patches of land with low net returns are not enough to have at least minimum secured life with basic necessities like food, health, housing and education etc. Despite having these vulnerabilities they contribute larger to the nation by producing major food crops and other important crops. They are also having significant contribution in overall economic growth by performing other agricultural allied activities like, poultry, livestock, milk etc. they are also maintaining strong hold towards building the nation by providing labour at lower rates.

Hence, it is imperative to protect smallholder farmers by facilitating one of the important inputs which is institutional credit at comprehensive level with low rate interest if possible no interest rates. Credit policies need to be skewed more toward smallholder farmers and must ensure with equity, transparency and accountability in it.

In this backdrop, the study was proceeded to (i) analyze and assess Agricultural Credit Policy in India at macro level, and (ii) study the issues and challenges associated with agricultural credit towards smallholder farmers.

MATERIALS AND METHODS:

The study is majorly based on secondary data taken from different sources like, Reserve Bank of India (RBI), Ministry of Agriculture, Government of India (GoI), different National Sample Survey of India (NSSO) Rounds level data and data taken from NABARD etc. Along with the above secondary data, primary data also conducted with sample study in the village NAGASAMUDRAM in Anathapur distict of Andhra Pradesh.

Agricultural credit policy:

The agriculture credit system had started way back in colonial rule itself. The Deccan Agriculturalists Relief Act was passed in 1879, it was initially intended to confine Bombay province, but later some of its sections were implemented throughout India. On the recommendations of Indian Famine Commission 1882, two acts were passed, The Land Improvements Loans Act of 1883 and the Agriculturists Loans Act of 1884, under which the government assumed responsibility for providing credit to the farmers. Likewise, there were many initiatives undertook by British India in order to overcome from famines and deep agricultural crisis in order to ensure their self-interests.

Agricultural Credit in post Independent India has witnessed several structural changes, Grow-More-Food Enquiry Committee appointed by government of India placed the figure at 8,000 million, on the basis Rs. 60 had provided for wet lands and Rs. 20 for the dry lands.

Dantwala (1952) an eminent scholar in his words, the role of primary producer is very crucial in the building of new society. To this end, the relationship of the producer with factors of production must be made more intimidate and stimulating. The farmer cannot reasonably have expected to give of his best in the task of production as long as he thinks that the fruits of his efforts will not accrue either to himself or community as a whole, but will be appropriated by a few privileged individuals. Hence, the need for social change which will release the genuine producers from their passive role and accord

them as status of active partnership.

He also argues that, under laissez- faire system, credit is extremely class conscious and plays an important role in perpetuating and even widening inequalities. In many times, it is so oriented and organized that it helps only those sectors of the community that are economically sound and ignores those that, from its point of view, are not credit worthy.

According to the Rural Credit Survey Committee (RCSC), Agricultural Credit is a problem when it cannot be obtained. It is also a problem when it can be had but in a such a form that on the whole it does more harm than good. The committee majorly investigated the main problems of rural credit, causes for these problems, what extent these problems can be solved and finally success rate of remedial measures recommended by the various committees. It also suggested that rural credit should be market based. The vision of the agricultural credit is to lift poor from Below Poverty Line to Above Poverty Line and to ensure the farmers with minimum secured livelihood.

After the nationalization of major commercial banks, government started setting up new institutions such as Regional Rural Banks (RRBs) and National Bank for Agriculture and Rural Development (NABARD) to facilitate institutional credit and to eliminate role of informal credit system in India.

RRBs (1976) to provide sufficient banking and credit facility for agriculture and other rural sectors. The Regional Rural Bank were owned by the Central Government, the State Government and the Sponsor Bank (There were five commercial banks, Punjab National Bank, State Bank of India, Syndicate Bank, United Bank of India and United Commercial Bank, which sponsored the Regional Rural Banks) who held shares in the ratios as follows Central Government-60 per cent, State Government- 20 per cent and Sponsor Banks- 20 per cent Earlier, Reserve Bank of India had laid down ceilings on the rate of interest to be charged by these RRBs.

Apart from the success of RRBs in achieving objectives, critics have come up by saying that, there is inbuilt 'non viability' and other weaknesses in RRBs. Converting RRBs into subsidiaries of their sponsored banks is "self-defeating in purpose" and external factors like, socio-political environment has been major hindrance for the development of RRBs.

NABARD (1982) with its mission to promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives. NABARD's total refinance operations grew to Rs. 1,02,089 crores during the year 2013-14, an effective growth rate of 24 per cent over the previous year. The long term refinance given against medium and long term loans, which is an indicator of capital formation in the agricultural sector, stood at Rs. 21,482 crores, displaying a growth rate of 21.50 per cent over the previous year.

NABARD disbursed Rs. 17,353 crores under Rural Infrastructure Development Fund during 2013-14, a growth of 6.51 per cent over the previous year. A total of 3706 dry warehouses, cold storages and bulk milk cooling units were sanctioned during the year under Warehousing Infrastructure Fund (WIF), fully utilizing the allocation of Rs. 5000 crores. There is still required dire need for the rationalization and prioritization of subsidies.

In spite of all these developments, "the credit provided formal institutions is less than the 9 per cent of rural credits needs in India. Money lenders, traders and rich landlords accounted for more than 75 per cent of rural of rural credit" (All India Rural Credit Survey).

Flow of institutional credit to agricultural sector:

Farmers access to the institutional credit majorly determined by the, availability of funds with financial institutions, prevailing rate of interest, Government policies towards Agricultural Credit and finally, the socioeconomic conditions prevailing in the economy.

Credit has been directly given to the cultivators, which was called as direct finance. Within direct finance to agriculture, a short term credit or a credit for seasonal agricultural operations has accounted for a significant share. The crop loans are provided as cash or in kind, such as the supply of fertilizers and seeds etc. Apart from this it also includes medium and long term investment in agriculture. On the other side indirect finance includes loans to input dealers for their role in the provision of agricultural inputs and loans to electricity boards for supplying power to cultivators, later others provisions were included in the list. which does not go to cultivators directly but goes to the institutions in order to support the agriculture growth.

As we have seen, indirect finance to agriculture expanded at a rate of about 33 per cent per annum since the late 1990s, thus aiding significantly the growth of total agricultural credit. But an increase in indirect finance is necessary to improve the capacity of farmers to absorb more direct finance. However, the promotion of indirect finance should not lead to an undermining of direct finance. This leads banks neglect direct finance for agricultural production, which may jeopardise the goal of achieving annual growth of 4 per cent in agricultural production" (Ramakumar and Chavan, 2008).

In order understand the credit structure in agriculture, it is necessary to see flow of institutional credit towards agriculture. The institutional credit shares in total agricultural credit supply had been increased from 7 per cent in 1951 to 66.3 per cent in 1991, after that, there is a slight decline in its share and reached 64.3 per cent in 2002-03.

RESULTS AND DATA ANALYSIS:

The Table 1 depicts the flow of institutional credit to agricultural sector from TE 1972-73 to TE 2008-09. The analysis of the table reveals that scheduled commercial banks (SCBs) share in total institutional credit had increased from 1.9 per cent in TE 1972-73 to 72.6 per cent in TE 2008-09, the increase is quite high after the nationalization of commercial banks. RRBs share in institutional credit had increased from 4.7 per cent in TE 1981-82 to 10 per cent in TE 2008-09. The co-operative banks which were the primary source of institutional credit to agriculture had witnessed sharp decline in its share from 84.5 per cent in TE 1972-73 to 17.5 per cent in 2008-09. Despite these successful initiations led by the different institutional agencies and Government, still there are greater chances available to money lenders to exploit the poor farmers.

Investment credit:

Investment credit also termed as development credit. This credit is given to the farmer mainly to make investment for the purchase of land, implements, farm machinery, irrigation, digging canals, construction, piggery, poultry etc.

The investment credit plays crucial role for the long

Table 1 : Institutio	(Rs. in crore)			
Year (TE)	Co-operative banks	Region rural banks	Scheduled commercial banks	Total
TE 1972-73	824 (86.5%)	0 (0.0%)	18 (1.9%)	952
TE 1981-82	2109 (59.4%)	168 (4.7%)	1245 (35.0%)	3553
TE 1991-92	4763 (46.3%)	526 (5.1%)	4988 (48.5%)	10277
TE 2001-02	20923 (39.0%)	4082 (7.6%)	28709 (53.4%)	53713
TE 2008-09	42162 (17.5%)	23866 (9.9%)	174775 (72.6%)	240803

Note: During TE 1972-73, remaining 11.6 per cent of total loan was issued by the state government

Source: (a) Economic Survey and NABARD Databank (various issues)

- (b) Reserve Bank of India
- (c) Kumar et al. (2010)

Table 2: Share of investment credit to total agricultural credit (%)	Table 2 : Share	of investment	credit to tota	al agricultural	credit ((%)
--	-----------------	---------------	----------------	-----------------	----------	-----

Table 2. Share of investment credit to total agricultural credit (70)						
Year (TE)	Co-operative banks	Region rural banks	Scheduled commercial banks	All		
TE 1985-86	11.2	39.5	22.6	14.4		
TE 1991-92	16.3	62.1	18.3	17.6		
TE 1995-96	15.8	44.7	15.9	16.1		
TE 2001-02	17.7	28.4	7.5	11.7		
TE 2005-06	11.8	14.1	3.2	6		

Source: (a) NABARD databank (various issues)

(b) Kumar et al. (2010)

Table 3: Prevalence rate of indebtedness b	v farm size	All India 2003	(Percentage)
Table 3. I I evalence rate of indebtedness b	y rariii sizc	, Ali Illula 2003	(I CI CCIICAge)

Land size (ha)	Formal	Informal	Both	Total
<=0.40	12.7	30.3	3.5	46.5
0.41-1.00	18.8	21.7	4.6	45
1.01-2.00	25.9	17.9	7	50.8
>2.00	34.7	14.4	8.6	57.8
Total	20.4	23	5.3	48.6

Source: Computed using NSSO unit level data 59th Round on situation Assessment Survey of Famers 2003.

term agricultural growth, it generates savings and accelerates economic growth at a socially desirable rate. If we see the trends in Table 2, there has been sharp decline of the share investment credit from the total agriculture credit. RRBs and SCBs share of investment credit had been continuously declined whereas Cooperative Banks share is relatively unchanged.

Agricultural credit and smallholder farmers: issues and challenges:

Smallholder farmers are most vulnerable in terms of accessibility of agricultural credit. Having small patches of land for the cultivation is not enough to secure their lives with minimum basic needs. They almost always left with dissaving and indebtedness. Hence, they are very much needy for the credit to lead their lives and to invest for their future agriculture.

In these situations, money lenders take strong advantage from the small holder farmers to squeeze the more interest by lending the money, despite having this knowledge, situations of the small holder farmers are compelling them to barrow money for high interest rates.

Repayment of loans are subjected to the net returns of the agriculture, which determined by the availability of land, rainfall, irrigation, labour, input prices, cost of cultivation and prices of their produce. In order to clear their debts, they perform the agriculture very aggressively. This often results bad returns to the farmers, finally this further aggravates conditions of small holder farmers.

The Table 3 reveals the indebtedness is not higher in the case of smallholder farmers from the formal institutional sources whereas from the informal sources indebtedness is higher compared to the large farm holders. This indicates smallholder farmers are less accessible to institutional credit compared to the large farm holders and they are also dependent more on money lenders

From the Table 4, it has been again clearly declared that the dependence of money lender is highest for the smallholder farmers. Within the institutional credit, except from government remaining all other sources are extending less credit to the smallholder farmers compared to the large farm holders.

The most important beneficiaries of the increase in direct credit advances since the late 1990s were the big cultivators (who possessed land above five acres). The share of number of loans outstanding to big cultivators under direct finance increased between the mid-1990s and 2004-05, and the loan per account of big cultivators increased phenomenally since the late 1990s. There is little evidence to argue that the major beneficiaries of the revival in agricultural credit in the recent years have

Source of loan	•			
Source of foan	<=0.40	0.41-1.00	1.01-2.00	Above 2.00
Government	3.9	3.8	1.7	1.4
Co-operative society	14.1	17	2.5	22.8
Bank	24.4	32	35.4	42.6
Total: Institutional	42.4	52.8	57.6	66.8
Agricultural/ Professional money lender	32.4	30.8	25.9	20
Trader	4.9	4.6	4.2	6
Relatives and friends	15.2	9.1	8.8	5.2
Doctor, lawyer and other professional	1.4	0.7	0.8	0.8
Others	3.6	2	2.6	1.2
Total: Non-institutional	57.6	47.2	42.4	33.2

Source: Computed using NSSO unit level data 59th Round on situation Assessment Survey of Famers 2003.

Table 5 : Institution	(Value in Rs.)			
Category	Households	Formal credit	Informal credit	Total credit
BC	78	2031400 (53)	1802000 (47)	3833400
Others	21	814000 (54.41)	655000 (44.58)	1469000
SC and STs	21	703000 (35.06)	1302000 (64.93)	2005000
Total	120	3548400 (48.55)	3759000 (51.44)	7307400

Source: Field Survey Data, 2014.

Note: Figures in brackets are in percentages

been the small and marginal farmers (Ramakumar and Chavan, 2008).

According to NSSO data the dependence of smallholder farmers on informal sources is high even in the states like Andhra Pradesh, Punjab and Tamil Nadu. For example, smallholder farmers in Andhra Pradesh have to depend on 73 per cent to 83 per cent of their loans from informal agencies.

Agricultural credit analysis of smallholder farmers in Nagasamudram village:

Nagasamudram is a village in Guntakal mandal of Ananthapur district. The village is a place for largest number of smallholder farmers. Majority are groundnut cultivators and some are cotton, Guwar bean and rice cultivators. As mentioned earlier, smallholder farmers always live in dissavings and they don't have sufficient income to have their basic livelihoods like, health, education, housing, clothing and nutritional food etc. there is trade-off between their basic necessities. If farmers want to have minimum food requirements, he has to forgo some other necessities such as, health, education, rent of the land, interest rate for their borrowings etc. even they don't have any income for their future agricultural investments, which compelling them either barrow from institutional sources or non-institutional sources.

Over a period from 2010 to 2013, Rs. 1,425 billion will have been disbursed by all banks to farmers under the heading of agricultural credit. This is not a small sum, and if we take into account the bonanza due to doubling of agricultural credit from 2004 to 2006 and the Agricultural Debt Waiver and Debt Relief (ADWDR) scheme in 2008, farmers should be a very happy lot. But small and marginal farmers and agricultural labourers who deserve subsidised credit rarely get it. It is being diverted to corporates and big and medium farmers (Karmakar, 2012).

Sample study of 120 households are classified into different social categories like 78 households are BCs and 21 households of each social category of Others and SCs and STs. The overall dependency on the credit is more in the case of SC and STs, this is shown in the Table 5. The dependence on the informal agencies for credit is also more by the SCs and STs. This reveals there is glaring disparities in distribution of institutional credit with in the social categories. It is argued that the benefits of institutional credit have largely reached to the relatively prosperous sections of society. Hence, there is need for more attention towards the socially disadvantaged sections of the society.

Agriculture is always associated with high risk. It is difficult to ensure minimum returns from agricultural investment, because the crops may be in between inflicted with unseasonal rainfall, some crop failures etc. and there no guarantee that farmer will be ensured with reasonably fair prices for their produce. In these high risk ending situation farmer left with no hope to repay their loans. The barrowed money is cumulating every year and becoming tough to pay back their loans and the rate of interest, finally farmers are bankrupt with no hope to think about their future deeds, resulting them to commit suicides with huge pressure.

Requisites for a good agricultural credit system:

Credit need to be distributed in short, medium and long run as well as in kind and cash. Credit always need to be available to the farmer at right place and right time. The vision of the credit must able to generate saving and accelerate economic growth at socially desirable rate. The credit system always should be in comprehensive manner, where credit agencies must fallow up the barrower and help him at handling the difficult situations and reach out till the effective marketing of the agricultural output of the barrower. The credit agencies should be in a position to interlink with marketing agencies for the full recovery of loans. The rate of interest charged from the farmers should be relatively low. A special attention is required on smallholder farmers to extend full-fledged credit. Efficient finance system would not confine its areas of operation to a particular crop, the lending agencies should be geared to finance the entire farming system, which includes crop loans, livestock loans, agro-forestry loans etc. There is a dire need of government intervention in agricultural credit system to eliminate informal agencies from agriculture and also to ensure complete institutionalization of agricultural credit towards welfare and empowerment of farmers. The credit agencies need to encourage farmers to adapt new technologies. The agricultural credit must be disbursed in different phases and in different ways, like development credit, production credit, marketing credit and consumption credit based on the different situations. It is very important to impart knowledge about institutional credit regarding procedure and formalities and there should be single window clearance while disbursing agricultural credit to the farmers, it should be more easy to the illiterates and less educated persons.

Conclusion:

Agricultural credit is one of important factor for the development of agriculture and for overall economic growth. Different institutional agencies have played significant role to decrease the chances of exploitation of farmers by the informal agencies. In spite of all these efforts prevalence of informal agencies of agriculture credit is still a major concern. Evidences shown that investment credit has been declining, this is one of the major hindrance for the improvement of agriculture. However, institutional agencies live, RRBs, SCBs, Cooperative banks played significant role in supporting the farmers for their agriculture and livelihood. Within the agriculture, Smallholder farmers lives in most vulnerable conditions. They constitute nearly 80 per cent in the farming community, but they have very less accessibility to the agricultural credit. Despite having the knowledge of exploitation of money lenders, prevailing difficult situations of their lives are enforcing them to barrow money for high rate of interests from money lenders. Policies have played negligible role towards development of small holder farmers, now it is high time to protect the livelihoods of smallholder farmers through the comprehensive, rational and pragmatic institutional credit framework. It is necessary to protect smallholder farmers not because they contribute big to the overall development of nation but it is an ethical duty to protect without expecting much from them.

LITERATURE CITED:

- All India Report on Number and Area of Operational Holdings Agriculture Census (2010-11). Agriculture Census Division Department of Agriculture and Co-Operation Ministry of Agriculture Government of India 2014.
- Chavan, Pallavi (2013). Credit and capital formation in agriculture: A growing disconnect", Social Scientist, **41**(9/10): 59-67.
- Dantwala, M.L. (1952). Agricultural credit in India-The Missing Link, Pacific Affairs, 25 (4): 349-359.
- Dev, S. Mahender (2012). Small Farmers in India: Challenges and opportunities", Indira Gandhi Institute of Development Research, Mumbai, WP-2012-014.
- Directorate of Economics and Statistics, Agricultural Statistics at Glance, (Annual issues from 1970-2008) Ministry of Agriculture and Cooperation, Govt. of India, NEW DELHI,

INDIA.

- Elias, Samuel, Ahmad, Isah Musa, and Patil, B.L.(2015). The Determinants of access to Agricultural credit for small and Marginal Farmers' in Dharwad district, Karnataka, India Res. J. Agric. & Forest. Sci., 3(5): 1-5.
- Food and Agriculture Organization of the United Nations (2002). Smallholder farmers in India: Food security and agricultural policy, Regional Office for Asia and the Pacific Bangkok, Thailand, RAP Publication: 2002/03.
- Karmakar, K.G. (2012). Agricultural credit: Squeezing out the small farmers. Inclusion Mainstreaming the Marginalised, issue: No One Killed Agriculture.
- Kumar, Anjani, Singh, K.M. and Sinha, Shradhanjali (2010). Institutional credit to agriculture sector in India: Status, performances and determinants. Agric. Econ. Res. Rev., **23**: 253-264.
- Mathur, Archana S., Das, Surajit and Sircar, Subhalakshmi (2006). Status of agriculture in India: Trends and prospects, Econ. & Politi. Weekly, 41 (52): 5327-5336.
- Matkar, Sharmishtha and Jadhao, Anil Keshav (2015). Agricultural credit in India: Status and problems, Res. Front, 3 (2): 125-132.
- NABARD (1982). Databank (various issues) National Bank for Agriculture and Rural Development, Mumbai (M.S.) INDIA.
- NSSO (2003). Unit Level Data of NSSO, 59th Round Situation Assessment Survey of Farmers, Ministry of Statistics and Programme Implementation, Govt. of India, NEW DELHI, INDIA.
- Patnaik, Utsa (1972). Economics of farm size and farm scale: Some assumptions re-examined. Econ. & Politi. Weekly, 1613-1624.
- Patnaik, Usta (2007). Neoliberalism and rural poverty in Inda, Econ. & Political Weekly, 42 (39): 3132-3150.
- Ramakumar, R. and Chavan, Pallavi (2008). Revival of agricultural credit in the 2000s: An explanation, Econ. & Politi. Weekly, 42 (52): 57-63.
- Reserve Bank of India(2008) Handbook of statistics on Indian Economy, 2007-08, Mumbai (M.S.) INDIA.
- Shivamaggi, H.B. (1993). Problem of rural credit in India, Econ. & Politi. Weekly, 28 (26): 1361-1368.
- Singhal, A.K. (2000). 'Poor Indian Farmers' Plight and Liberalization: an over view", Land Forms in India: Volume 12, Agrarian Crisis and Farmer Suicides.
- Some Aspects of Operational Land Holdings in India, 2002-03 NSS 59th Round (January-December 2003) National

Sample Survey Organisation Ministry of Statistics & Programme Implementation Government of India August 2006.

Sriadhibatla, Vidyasagar (2014). Voices of Unheard: A Socio, Economic and Political Investigation in the country side, Kalpaz Publications, ISBN: 978-93-5128-049-1.

$W_{\hbox{\footnotesize EBLIOGRAPHY}}$

Rangarajan (2007). An Approach Paper to Eleventh Five Year Plan, Planning Commission, Government of India, www.planningcommission.nic.in.

oth Year ★★★★ of Excellence ★★★★