



## Evaluating the gap in demand and supply of institutional lending for paddy cultivation in Thiruvvarur district of Tamil Nadu, India

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### ABSTRACT

Institutional banking system in India is strengthened through nationalization of banks and many innovative initiatives such as Self Help Group (SHG) - Bank Linkage Programme, Kisan Credit Card (KCC) Scheme and Financial Inclusion. However, many studies conducted in Tamil Nadu, have pointed out several issues such as inadequacy of crop loan amount owing to lower scale of finance and minimum focus on long term agricultural advances that are hampering the banking services directed towards agricultural development. In order to address these issues, an attempt was made in the present study to assess the causes for and consequences of credit gap in the disbursement of short term / crop loan to the sample farm households; Results of the study indicated that the credit gap I (Credit requirement - Scale of finance) and Credit Gap-II (Credit Requirement - Credit Sanctioned) per ha of paddy were lesser in ST borrower farms, which indicated that though the scale of finance for paddy has been fixed at higher level, i.e., well above the credit requirement, the actual credit disbursement was far lesser than the credit requirement. The working capital, in general, enhances the productivity of the crop and the external financial assistance could help farmers in purchasing the necessary farm inputs in adequate quantities and thereby the farm productivity could be improved. But the scale finance itself was far lesser than the working capital required for cultivating paddy in all categories of farms and this resulted in the wider credit gaps in the different farm categories.

**Key words:** Credit gap, Rural credit, Scale of finance, Working capital.

### INTRODUCTION

India has a strong net work of rural credit institutions owing to rapid development of credit co-operatives over a period of one hundred years, i.e., from 1904 onwards, and commercial banks since their nationalization in 1969. The commercial banks have supplied 73.37 per cent of total institutional agricultural credit flow through 37.2 per cent of their branches located in rural areas during 2012-13. The co-operatives and RRBs had the share of 16.84 per cent and 9.79 per cent to the total credit flow to the agricultural sector respectively (RBI, 2014-15). The flow of agricultural credit in India has shown a significant increase of more than ten times from Rs.0.53 lakh crore in 2001-02 to Rs.6.07 lakh crores in 2012-13 (NABARD, 2013-14). In view of all these efforts, the share of institutional credit agencies in the outstanding amount of cash dues of the cultivator households had increased from 32 per cent in 1971 to 64 per cent in 2013 (AIDIS, 2013). However, about 56 per cent of the rural households were indebted to institutional agencies and 44 per cent to non-institutional agencies (National Sample Survey Organization (NSSO, 2013). This would highlight that the non institutional lending agencies like professional money lenders, land lords, traders, friends and relatives still play a dominant role in rural areas.

Institutional banking system in India is strengthened through nationalization of banks and many innovative initiatives such as Self Help Group (SHG) - Bank Linkage Programme, Kisan Credit Card (KCC) Scheme and Financial Inclusion. However, many studies conducted in Tamil Nadu, have pointed out several issues such as inadequacy of crop loan amount owing to lower scale of finance and minimum focus on long term agricultural advances that are hampering the banking services directed towards agricultural development.

**Objective of the study:** In order to address a wide ranging issues relating to agricultural credit delivery mechanism discussed above, the present study has been attempted with the following specific objectives:

(i) to assess the causes for and consequences of credit gap in the disbursement of short term / crop loan to the sample farm households; (ii) to identify the lacunae in credit delivery mechanism followed by rural credit institutional agencies; and (iii) to suggest strategies for strengthening rural credit system through the reduction of agricultural credit gap.

### MATERIALS AND METHODS

The main focus of the study was to assess the magnitude of the credit gap which was considered to be one

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of the major criticisms against the institutional lending agencies by the farmer-borrowers. Therefore, it was decided to study the short term borrowers and long term borrower households in Thiruvarur district of Tamil Nadu. Paddy crop was largely cultivated in Thiruvarur district. Forty five short - term, i.e., crop loan borrowers of both commercial banks and the Primary Agricultural Co-operative Credit Societies (PACS) were randomly selected for the present study. Apart from these crop loan borrowers, in order to study the issues relating to disbursement and recovery of term loans, 15 agricultural term loan borrowers were interviewed for the study. Further, 30 non institutional borrowers at the rate of 30 per crop were selected for studying the constraints faced in getting institutional finance and / or the reasons for not availing institutional finance by them. Agricultural credit helps farmers to go for short-term credit for purchase of high cost inputs and other services and for making investment on capital assets with the support of long term credit facility. Further, adoption of new technological inputs obtained through farm finance helps in enhancing farm productivity (Rajeshwari and Neelakanta Shastri 2011).

Inadequacy of credit influences adversely the adoption of modern technology and private capital investments, which in turn lowers the productive capacity of the agricultural sector and results in lower productivity and production, and also pushes the farmers to borrow from non-institutional sources. Consequently, the demand for agricultural credit for short and long-term purposes is dampened (Devaraja, 2011).

Investments on farm assets and supporting infrastructure provided by large scale financial activities entail increased farm income and livelihood status of the farmers. Thus agricultural credit not only enhances farm productivity but also strengthens forward and backward linkages in agricultural production (Mohan, 2004).

Sidhu and Gill (2006) in their study conducted at Punjab assumed that while marginal and small farmers required 100 per cent of their operational cost as short-term credit, the proportion varied from 50 per cent to 100 per cent under different scenarios for the medium and large farmers. They estimated the demand for short term crop loan assuming that the whole variable expenditure for small and marginal farms, 75 per cent for medium farms and 50 per cent for large farms, depending on their income and saving levels, were assumed to be the demand for credit for the different farm categories. In the present study, 90, 70 and 50 per cent of the working capital incurred on the cultivation of crops were assumed to be the credit requirement or the demand for credit for marginal, small and medium and large farmers respectively.

Although the scale of finance or the credit ceiling for different crops was fixed by the committee of experts considering the cost of cultivation prevailing in the different

districts, farmers often make a complaint that the scale of finance was quite inadequate to meet the actual cost of cultivation. Also, there is a marked difference between the scale of finance and the actual crop loan amount disbursed to the farmers. This difference is owing to many reasons: first, the farmers always wanted to minimize the huge interest liability they had to repay along with their borrowed amount and more often borrowed to the extent of cultivation expenses which could not be met out with their savings; and second, in spite of the fact that the Kisan Credit Card scheme provided for supplying the entire short term and long term credit requirement of the farmers, most of the banks, especially the co-operatives, provided loan amount usually for one and rarely for two of the selected irrigated crops or specific high revenue - generating farm investments depending upon the regular repayments made in the past by the concerned borrower.

Hence, two types of credit gaps prevailed at present. The Credit Gap I refer to the difference between the scale of finance as fixed by the banks and the credit requirement. The credit requirement was estimated by multiplying the cost of cultivation, i.e., working capital for the paddy crop as estimated from the primary data collected from the sample farm households, and the factor which was to represent the income and savings levels of the borrowers, i.e., 90, 70 and 50 per cent for marginal, small and large farmers respectively. The Credit Gap II refers to the difference between the credit requirement and the actual credit amount supplied by the bank. Thus, the credit gap expressed in terms of percentage is estimated as follows:

$$\text{Credit Gap} = \frac{\text{Credit Requirement} - \text{Scale of finance (or) Crop Loan Amount Actually Supplied}}{\text{Credit Requirement}} \times 100$$

In Tamil Nadu, farmers also borrowed crop loan or the loan amount actually they were in need, especially for the cultivation purposes, by pledging gold jewels. The amount borrowed under such type of loan called 'Agricultural Jewel Loan (AJL)' varied with the value of the jewels pledged and it was not based on the scale of finance. Banks also easily sanctioned such loans as these loans were highly secured.

**Cost of capital:** The cost of capital, an important factor that determined the extent of demand for both short and long term loans, included not only the interest charged by the banks, but also the others costs like fees that were charged by the revenue authorities in order to provide documents like *chitta*, *adangal* and so on, transport and other contingencies incurred while getting the documents. Under KCC Scheme, these documents need to be provided to the banks once in 3-5 years subject to annual review. As an incentive for good performance, i.e., the prompt repayment of loan, the credit limits could be enhanced to take care of increase in costs, change in cropping pattern, etc.

In case of the term loans, more documents like 'No due' and 'No objection' certificates from the Primary Agricultural Credit Co-operative society, Certificate by the Sub-Registrar to show the existence or otherwise of encumbrances (NOC) on the land, Proforma in-voice (when the loan is meant for the purchase of pump-set, power tiller, tractor, implements, etc.), estimate of the work (when the loan is meant for sinking or deepening of well, construction of shed, etc.), affidavit from the farmer that he has not borrowed or mortgaged his land elsewhere and that he would not do so in future without the consent of the bank, if the loan is granted. For a composite loan, a detailed project report is necessary. Apart from these, the borrower needs to execute the documents like Deed of hypothecation, Mortgage deed in case of land, Guarantee letter (Surety letter), Installment letter and Authorization letter authorizing the bank to receive payments from the marketing agency on behalf of the applicant.

**Demand for crop loan:** The demand for crop loan is determined by factors like cost of cultivation, cost of capital which includes rate of interest, documentation charges, transport charges for visiting the banks and other institutions from their villages and other contingencies incurred for processing the loan application, farm size, cropping pattern, area under irrigation, income earned through off-farm and non-farm sources, family size, educational status and risk bearing ability of the farmers. More specifically, the cost of cultivation of paddy crop likely to be incurred in the ensuing season determined the quantum of crop loan amount.

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of shed, (etc)., affidavit from the farmer that he has not borrowed or mortgaged his land elsewhere and that he would not do so in future without the consent of the bank, if the loan is granted. For a composite loan, a detailed project report is necessary. Apart from these, the borrower needs to execute the documents like Deed of hypothecation, Mortgage deed in case of land, Guarantee letter (Surety letter), Installment letter and Authorization letter authorizing the bank to receive payments from the marketing agency on behalf of the applicant. Hence the present study attempted to evaluate the credit gap and its consequences. Using the primary data collected during survey the results of the study is as follows.

## RESULTS AND DISCUSSION

The results obtained from the analysis of data are presented in Table 1, to 9,. The composition of sample farm households, and age and farm experience and educational status of the sample respondents were analyzed and the results are presented in Table 1&2. The average asset position of the farmers, cropping pattern, demand and supply of credit, constraints in borrowing are presented in Table 3 to Table 9.

Size of the holdings or the family size indirectly influences the generation of farm income and expenditure and thereby the repaying capacity of the farmers..

As could be seen from Table.1, the average family size of all borrower households was slightly lesser (4.73) than that of non-borrower farm households (5.0). The average size of the short term borrower households was found to be larger (4.82) than that of long term borrower households (4.47). The farming efficiency measured in terms of farm profitability is expected to be more in the farms managed by farmers who have a longer farm experience. In terms of farm experience, borrowers were having more experience (18 years) than that of non borrowers (17 years).

**Table 1:** General profile of the sample farm households (Average Nos.)

Crops / Family Particulars	Short Term Borrowers	Long Term Borrowers	All Borrowers	Non Borrowers
Adult	2.84	2.53	2.77	2.90
Children	1.98	1.94	1.96	2.10
Family size	4.82	4.47	4.73	5.00
Age (years)	46.44	45.60	46.23	45.53
Farming Experience (years)	19.13	17.87	18.82	17.73

**Table 2:** Educational status of the sample households

Educational status / Crop particulars	ST borrowers	LT borrowers	All borrowers	Non borrowers
Illiterates	3 (6.67)	0 (0.00)	3 (5.00)	1 (3.33)
Primary	23 (51.11)	11 (73.33)	34 (56.67)	17 (56.67)
High school	13 (28.89)	4 (26.67)	17 (28.33)	7 (23.33)
Higher secondary	2 (4.44)	0 (0.00)	2 (3.33)	1 (3.33)
Graduation	4 (8.89)	0 (0.00)	4 (6.67)	4 (13.33)
Total	45 (100.00)	15 (100.00)	60 (100.0)	30 (100.00)

Educational status of the individuals also influences their ability to have an access to the banking system. As could be seen from Table.2, LT borrowers were more literates (100 per cent) than the ST borrowers (97 per cent).

The asset position of the sample farmers per ha of owned land was estimated and the results are given in Table 3. The asset value was more in borrower farms (Rs 466149 per ha when compared with that of non borrower farms (Rs 420351 per ha of owned farm land) and the difference between these two categories of farms was due to more land and machinery value in non borrower farms. The value of assets per ha was more in large farms (Rs 470062) followed by small farms (Rs 463514) and marginal farms (Rs 444471) and the same trend could be observed in non borrower farms also.

**Cropping pattern:** The cropping pattern also decided the quantum of credit demanded by the farmers. Therefore, the cropping pattern in the selected district where the selected crop was predominantly cultivated is discussed below.

The area under different crops cultivated per ha by the sample farms is given in Table 4. The gross cropped area was larger in the borrower farms (3.74 ha) than that of the non – borrower farms (2.26 ha). The area under paddy was also larger in borrower farms (62 per cent of the gross cropped area) than that of the non borrower farms (55 per cent). Among the borrower farms, the proportion of paddy area to the gross cropped area was higher in Short Term (ST) loan borrower farms (63 per cent) than that of the Long Term (LT) loan borrower farms (60 per cent).

**Demand for credit:** The demand for credit for paddy cultivation was mainly determined by the cost cultivation and therefore, the costs of cultivation of paddy and other crops cultivated by the farmers – category wise and borrower wise are given in Table 5. As could be seen in Table 5. the working cost for paddy cultivation per ha was higher in ST borrower farms (Rs. 37,968) followed by LT borrower farms (Rs. 36,489) and Non borrower farms (Rs. 33,682). This was due to larger amount of crop loan availed by the ST borrowers and the usage of adequate quantity of farm inputs for cultivating the crop than that of the LT loan borrower farms. This higher crop loan amount availed by ST borrowers had resulted in higher paddy yield realized (4,671 kgs per ha) than that of the LT borrower farms (4,479 kgs per ha) and Non borrowers farms (4,380 kgs per ha).

The credit gap I (Credit requirement - Scale of finance) and Credit Gap-II (Credit Requirement - Credit Sanctioned) per ha of paddy were lesser in ST borrower farms, i.e., - Rs.5,589 and Rs.10,613 respectively than that of LT borrower farms (-Rs.11,353 and Rs.12,434). This would clearly indicate that though the scale of finance for paddy has adequately been fixed at higher level, i.e., well above the credit requirement, the actual credit disbursement was far lesser than the credit requirement. As discussed earlier, the availing of Agricultural Jewel Loan which was far lesser than the scale of finance had been the major reason for the wider credit gap. Creation of awareness among the farmers about the Kisan Credit Card Scheme and sanctioning of adequate amount of crop loan considering the cost of cultivation prevailing in the area would narrow down the credit gap.

**Table 3:** Average asset value –Borrower wise and farm category wise

Crop/ Farm	Short term borrowers					Long term borrowers				
	Land	Buildings	Machinery & Tools	Livestock	Total	Land	Buildings	Machinery & Tools	Livestock	Total
Marginal	278429	77925	39801	48317	444471	0	0	0	0	0
Small	350155	63141	29826	19605	462728	355206	72277	32741	11645	471868
Medium & Large	296520	48891	19980	7345	372736	377918	46913	121624	9868	556322
Total	317328	59285	27127	18587	422327	356922	44306	114867	9319	525415
<b>% to total</b>	<b>75.14</b>	<b>14.04</b>	<b>6.42</b>	<b>4.40</b>	<b>100.00</b>	<b>67.93</b>	<b>8.43</b>	<b>21.86</b>	<b>1.78</b>	<b>100.00</b>

Contd....

**Table 3:** Average asset value (Rs per ha of net Owned Area)

Crop/ Farm	All borrowers					Non borrowers				
	Land	Buildings	Machinery & Tools	Livestock	Total	Land	Buildings	Machinery & Tools	Livestock	Total
Marginal	278429	77925	39801	48317	444471	268402	84696	45245	33998	432340
Small	350590	63927	30077	18920	463514	304528	51799	33587	25213	415128
Medium & Large	334308	45000	82261	8493	470062	296520	56833	19768	34100	407221
Total	334159	52918	64425	14647	466149	292168	62926	36644	28613	420351
<b>% to total</b>	<b>71.69</b>	<b>11.35</b>	<b>13.82</b>	<b>3.14</b>	<b>100.00</b>	<b>69.50</b>	<b>14.97</b>	<b>8.72</b>	<b>6.81</b>	<b>100.00</b>

Table 4: Cropping pattern-farm category wise and borrower wise

District / Crop	(ha per Farm)															
	ST Borrowers				LT borrowers				All borrowers				Non borrowers			
	Margi-nal	Small	Medium & Large	Total	Margi-nal	Small	Medium & Large	Total	Margi-nal	Small	Medium & Large	Total	Margi-nal	Small	Medium & Large	Total
Paddy	0.93	1.63	3.92	1.82	0.00	1.62	4.16	3.82	0.93	1.63	4.07	2.32	0.85	1.55	2.23	1.25
Black gram	0.64	0.68	2.28	0.95	0.00	1.62	2.09	2.02	0.64	0.75	2.16	1.22	0.61	1.11	2.23	0.91
Green gram	0.03	0.00	0.00	0.01	0.00	0.00	0.16	0.13	0.03	0.00	0.10	0.04	0.00	0.00	0.00	0.00
Groundnut	0.03	0.09	0.00	0.05	0.00	0.00	0.40	0.35	0.03	0.08	0.25	0.13	0.06	0.11	0.00	0.08
Coconut	0.00	0.06	0.00	0.03	0.00	0.00	0.01	0.01	0.00	0.06	0.00	0.03	0.01	0.02	0.00	0.02
Banana	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
Bamboo	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00
GCA	1.62	2.48	6.20	2.87	0.00	3.24	6.83	6.35	1.62	2.54	6.59	3.74	1.53	2.79	4.45	2.26
NOA	0.91	1.45	4.14	1.76	0.00	1.62	4.19	3.84	0.91	1.46	4.17	2.28	0.78	1.46	2.23	1.17
CI (%)	177.78	171.03	149.85	163.27	0.00	200.00	163.01	165.09	177.78	173.59	158.03	164.04	196.30	191.39	200.00	193.47

**Supply of credit:** Although the scale of finance for paddy cultivation has been fixed at Rs.30,000 per ha in Thiruvavur district, the actual loan amount disbursed for paddy accounted for only Rs. 13,798 per ha in case of Short Term (ST) loan borrowers and Rs.6,213 per ha in Long Term (LT) loan borrowers (Table 6). The marginal farmers received a crop loan amount of Rs 17,297 per ha which was far lesser than that of the scale of finance, and they were followed by small (Rs.16,910) and medium and large (Rs.8,641). Co-operatives provided more loan for cultivating paddy (Rs.14,360 per ha of paddy) than that of the commercial banks (Rs.12,240 per ha). Among 45 ST borrowers, 14 farmers (about one-third of the total ST borrowers) received Agricultural Jewel Loan accounting for Rs.4,220 per ha of area under paddy. In case of LT borrowers, only 11 out of 15 borrowers received crop loan and out of these 11, two farmers received Agricultural Jewel Loan accounting for Rs. 1,647 per ha of area under paddy. These jewel loans were obviously based on the value of the jewels pledged and not based on the scale of finance for any of the crops grown by the farmers. Therefore, the amount borrowed was far lesser than the scale of finance fixed for paddy cultivation.

As far as the long term loans are concerned, marginal farms did not borrow any LT loans owing to their smaller farm size and lesser scope for either own use or custom hire service of machineries like tractor, power tiller and paddy harvester which were purchased with the LT loan amount. Among the lending agencies, only commercial banks provided the LT loans as they were more resourceful for long term lending than that of the co-operatives (Table 7). In Thiruvavur district, more tractor loans (eight) were given followed by the loans for the purchase of power tiller (six) and harvester (one). The average LT loan amount per farm was higher in the small farms (Rs.2,25,000) than that of the medium and large farms (Rs.1,80,769) owing to the larger share of owned capital from their savings in the case of medium and large farms. The average long term loan amount received per sample farm was Rs.1,86,667.

**Constraints faced by the sample farmers in availing farm credit:** The farmers in general and small and marginal farmers in particular preferred to borrow from institutional lending agencies owing to better terms of credit – more specifically, the lower interest rate, flexibility in repayment period, easy access to crop insurance, waiver of loan in case of crop damage due to natural calamities and so on. However, farmers expressed several problems in availing loan amount from institutional agencies. Many of these problems were more of general in nature and in a very few cases, they were with reference to the specific branch offices with which the farmers were having financial transactions. The problems indicated by short and long term borrowers were separately analyzed and the results are presented in Table 8.

**Table 5:** Cost of cultivation (Rs per ha) of paddy and other crops

Particulars	Marginal Farms		Small Farms		Medium & Large Farms		All farms	
	Paddy	All Crops	Paddy	All Crops	Paddy	All Crops	Paddy	All Crops
<b>i) Short Term Loan Borrowers</b>								
Working Capital	32391	20309	36850	30356	41605	27810	37968	27620
Total Cost	53403	35089	55884	46141	60447	42442	57242	42787
Productivity (kgs/ha)	4540	-	4555	-	4863	-	4671	-
Gross Return	56864	42853	59723	56404	64498	50380	61102	51721
Net Return	3461	7763	3839	10263	4051	7938	3861	8934
Credit Requirement	29152	18278	25795	21249	20802	13905	24411	17914
Scale of Finance	30000	-	30000	-	30000	-	30000	-
Credit Supplied	17297	17297	16910	16910	8641	8641	13798	13798
Credit Gap -I	-848	-11722	-4205	-8751	-9198	-16095	-5589	-12086
	(-2.91)	(-64.13)	(-16.30)	(-41.18)	(-44.21)	(-115.75)	(-22.89)	(-67.47)
Credit Gap-II	11855	981	8886	4340	12162	5265	10613	4115
	(40.67)	(5.37)	(34.45)	(20.42)	(58.46)	(37.86)	(43.48)	(22.97)
<b>ii) Long Term Loan Borrowers</b>								
Working Capital	-	-	35602	19826	36542	26835	36489	26358
Total Cost	-	-	58009	33831	52452	39863	52766	39452
Productivity (kgs/ha)	-	-	4411	-	4483	-	4479	-
Gross Return	-	-	60107	42702	56349	49728	56562	49250
Net Return	-	-	2098	8871	3897	9865	3796	9797
Credit Requirement	-	-	24921	13878	18271	13418	18647	13449
Scale of Finance	-	-	30000	-	30000	-	30000	-
Credit Supplied	-	-	16062	16062	5384	5384	6213	6213
Credit Gap -I	-	-	-5079	-16122	-11729	-16582	-11353	-16551
	-	-	(-20.38)	(-116.17)	(-64.19)	(-123.59)	(-60.88)	(-123.07)
Credit Gap-II	-	-	8860	-2183	12887	8033	12434	7235
	-	-	(35.55)	(-15.73)	(70.53)	(59.87)	(66.68)	(53.80)
<b>iii) Non Borrowers</b>								
Working Capital	32861	21179	33991	22112	34853	19545	33682	21648
Total Cost	57344	38198	51644	34636	53511	31207	53573	35539
Productivity (kgs/ha)	4352	-	4391	-	4421	-	4380	-
Gross Return	58411	48713	54876	46513	56779	40688	56116	46827
Net Return	1067	10515	3232	11877	3268	9482	2544	11288

**Table 6:** Crop Loan Availed by short and long term borrowers – bank wise and Farm Category wise

Bank / Category	Crop	Short term borrowers					Long term borrowers – Crop loan				
		Marginal	Small	Med. & Large	All Farmers	Total	Marginal	Small	Med. & Large	All Farmers	Total
Co-op	Paddy	17650	19014	8397	14360	0	16062	5384	6213	0	6213
Com.Banks	Paddy	14826	13203	9575	12240	0	0	0	0	0	0
Total	Paddy	17297	16910	8641	13798	0	16062	5384	6213	0	6213

**Table 7:** Term Loan Availed by long term loan borrowers

Type of Loan/ Category/Bank/	No./Amt.	Medium & Large					All Farmers					
		Marginal	Co-op	Commercial	Total	Rank	Co-op	Commercial	Total	Rank	Total	
Tractor	No.	0	0	0	1	1	0	7	7	0	0	8
	Amt.	0	0	250000	250000	1	0	114286	114286	0	0	131250
Power Tiller	No.	0	0	1	1	1	0	5	5	0	0	6
	Amt.	0	0	200000	200000	0	0	250000	250000	0	0	241667
Harvester	No.	0	0	0	0	0	0	1	1	0	0	1
	Amt.	0	0	0	0	0	0	300000	300000	0	0	300000
All Purposes	No.	0	0	2	2	2	0	13	13	0	0	15
	Amt.	0	0	225000	225000	0	0	180769	180769	0	0	186667

**Table 8 :** Constraints faced by the sample beneficiaries in availing farm credit

Constraints	Short term loan borrowers		Long term borrowers	
	Mean Scores	Rank	Mean Scores	Rank
Repayment schedule was not flexible	80.66	1	80.3	1
Loan provided by Co-operatives was in terms of kind (fertilizer)	47.91	2	-	-
Inordinate delay in sanctioning the loan	46.95	3	66.7	2
Complex loan sanctioning procedure with many documents	39.08	4	40.2	4
Cost of credit was higher	32.79	5	27.1	6
Interest subsidy was not available	32.55	6	39.6	5
Inadequacy of loan amount	32.47	7	40.7	3

The borrowers were insisted upon prompt repayment of loan and this was partly because of the fact that the bank officers were more concerned about the overdue or Non Performing Asset (NPA) problem. Therefore, the borrowers felt that the repayment period could not be extended even in cases of genuine reasons like delay in harvesting the crop or delay in payment by sugar mills, in case of sugarcane loan. The ST loan borrowers who borrowed from co-operatives felt that there was a considerable delay in sanctioning the loan amount and a part of it, in terms of fertilizers, was provided after the appropriate time of application of fertilizers. Farmers also found it difficult to secure the relevant documents from revenue authorities in time and this also was one of the causes of delay in sanctioning the loan amount. Costs of acquiring these documents including transport and other contingency or incidental expenditure incurred in getting these documents were also higher. This problem was all the more serious in case of long term loan borrowers who were required to enclose the land documents, surety letter, and so on. Farmers who borrowed from commercial banks expressed that the interest subvention as in the case of co-operatives was not available to them and because of this reason, they felt that the cost of capital was higher. Surprisingly, the ST loan borrowers felt that the inadequacy of the loan amount was not a major problem. However, the LT loan borrowers expressed that the loan amount was inadequate and it was a third major problem experienced by them. This was due to the fact that only a few LT borrowers could avail the crop loan. Farmers also had a conservative outlook in borrowing huge loan amount such that it covered the entire working capital requirement. It was also observed that none of the sample respondents was the beneficiary under the initiative of 'financial inclusion' and all the sample borrowers were regularly borrowing crop loan every year for a period of more than 3 – 8 years.

The reasons for not availing institutional credit by the sample non borrowers are presented in Table 9.

**Table 9:** Reasons for not availing institutional credit by non borrowers

Reasons	Mean Scores	Rank
Loan borrowed from other sources was cheaper	90.81	1
Cost of institutional credit was higher	52.68	2
Do not require external financial assistance / Capable of managing with owned funds	52.57	3
Inadequate security to offer for getting loan	51.41	4
Complicated procedure in availing loan	42.35	5

The farmers who were not availing institutional credit managed to mobilize funds for taking up cultivation through many different ways. Some non borrowers borrowed from friends and relatives for low / no interest rate. Non borrowers also felt that the cost of capital which would

include not only the rate of interest but also the cost of documents to be acquired and enclosed along with the loan application was relatively higher and it prohibited them in availing institutional credit. Non beneficiaries were also averse of the complicated processing of loan application and official procedures for sanctioning and the resultant delay in getting the loan amount. The non borrowers could also be broadly divided into two groups: one group of farmers who had different sources of income including larger crop income, could take up cultivation on their own - not depending on any other financial sources; and another group had a very poor resource base to offer adequate security for getting loan, i.e., a small land holding with rainfed farming and these two groups of farmers managed farming with their own resources.

The sample farmers in the present study did not demand the entire working capital required for cultivating all crops grown in their farms and they often tried to manage mostly with their owned funds. These farmers were considered to be risk averse in nature and they did not wish to expose their assets to the liability and take an extreme risky situation of becoming defaulters due to reasons beyond their control, which sometimes would force them towards the sale of asset for settling the loan amount. Both the farmers and bankers did not consider the dry land crops and crops cultivated in the smaller area, i.e., less than one acre or so for financial assistance. This situation was more prevalent in case of PACS. As there was a mismatch between the demand and supply of credit, farmers availed the agricultural jewel loan in order to bridge the credit gap. Bankers also preferred to provide more jewel loan as it was found to be more secured one. As the jewel loan was not based on any scale of finance, the credit gap became wider. Further, the interest rate subvention for crop loan was available only upto the extent of Rs.three lakhs, and because of this reason, the large farmers having more than 15 acres did not prefer to borrow more in spite of their huge capital requirement.

**Policy implications:** The following policies that emanated from the above results and discussions would be more useful to the policy makers involved in rural lending:

The banking sector might consider all the crops cultivated by the farmers while fixing the loan amount in order to bridge the credit gap. The scale of finance needs to be fixed considering the costs of cultivation for different crops which vary across time and space. The scale of finance may be fixed based on the estimates of the cost of cultivation survey - similar to the present study - to be taken up every year covering all the major crops in all the districts. The repayment schedule might be made flexible wherever the crop is affected by the natural calamities. The interest rate subvention may be uniform and it should be extended to all categories of farmers without any capping on the loan amount.



**REFERENCES**

- Devaraja, T.S. (2011). An Analysis of Institutional Financing and Agricultural Credit Policy in India, Working paper supported by a grant from the University Grants Commission of India
- Mohan R. (2004). Agricultural Credit in India: Status, Issues and Future Agenda, *RBI Bulletin*, November, Mumbai: Reserve Bank of India.
- Moorthy, N.A. and Kalamkar, S.S. (2005). Structure and factors determining indebtedness, *Indian Journal of Agricultural Economics*, **60**:288-301
- NABARD, (2014). Annual Report, 2013-14. Mumbai: National Bank for Agriculture and Rural Development Mumbai.
- NSSO, Government of India, (2013). Key indicators of debt and Investment in India, Government of India.
- Sidhu, R.S. and S.S. Gill. (2006). Agricultural Credit and Indebtedness in India: Some Issues, *Indian Journal of Agricultural Economics*, **61**: 11-35.
- Rajeswari, S. and Neelakanta Sastry. (2011). Impact of External Finance on Farm Returns and Employment in Kadapa District, Andhra Pradesh, *Financing Agriculture*, **43**: 6
- Reserve Bank of India, (2014-15). Handbook of Statistics on the Indian Economy, 2013-14, Mumbai.
- AIDIS (2013) Report of All India Debt & Investment Surveys (Various Issues), NSSO.