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### A Study on Agriculture Credit by Commercial Banks in Thiruvallur District

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**Abstract :** The present study proposes to highlight the agricultural credit extended by the commercial banks in Thiruvallur District and analyses the repayment performance of the borrowers. The commercial banks aim at intensive coverage of selected areas for meeting the priority sector credit needs, especially the agricultural credit requirements and ensuring effective supervision over the use of loans. Thiruvallur district has a number of villages and possesses large areas of agricultural lands. Agriculture is the main occupation of the rural population in the district. So, an in-depth analysis of these problems and issues becomes essential. This is the reason for selecting the commercial banks in providing agricultural credit in Thiruvallur district.

**Keywords :** Crop loan, Commercial bank, Agriculture lands. Etc.

#### 1. INTRODUCTION

Nowadays Indian economy goes in a upper way. Indian economy development mostly depends on agricultural. Hence, agricultural plays major role for development of Indian economy. Most people live India for depending on agriculture. It helps to resolve the poverty and doing major role for Indian agriculture in macro economic framework. Recognizing the importance of agriculture sector in India's development, the Government and the Reserve Bank of India (RBI) have played a vital role in creating a broad-based institutional framework for catering to the increasing credit requirements of the sector.

Agricultural policies in India have been reviewed from time to time to maintain pace with the changing requirements of the agriculture sector, which is an important segment of the priority sector lending of scheduled commercial banks (SCBs) and a target of 18 per cent of net bank credit has been stipulated for the sector. The Approach Paper to the Eleventh Five Year Plan has set a target of 4 per cent for the agriculture sector within the overall GDP growth target of 9 per cent. In this context, the need for affordable, sufficient and timely supply of institutional credit to agriculture has assumed critical importance.

#### 2. IMPORTANCE OF INSTITUTIONAL CREDIT

Institutional agencies alone can assess the value of land and the exact financial needs and the repaying capacity of the farmers can be judged by qualified staff of the institutions.

Secondly, the money-lender's web can be avoided only through the fair practice in the institutions.

Thirdly, institutional agencies alone can supervise the use of loan and also avoid diversion of loans for unproductive channels.

Fourthly, institutional agencies look after the welfare of the farming community by encouraging them to save more and to increase their standard of living and.

Fifthly, institutional agencies have appointed extension officers. These officers make the credit programme successful and also enhance agricultural production. So, for the development of agriculture, the role of institutional agencies is essential.

**Table 1**  
**Institutional Credit To Agriculture**

Year	Institutions						Total	Percentage Share
	Co -op. Bank	Share (%)	RRBs	Share (%)	Commercial Banks	Share (%)		
1995-96	3874	55	—	—	3131	45	7005	—
1996-97	4207	52	—	—	3809	48	8016	14
1997-98	4420	52	—	—	4009	48	8429	5
1998-99	4851	53	—	—	4233	47	9084	8
1999-00	5082	52	—	—	4719	48	9801	8
2002-03	3408	39	—	—	5438	61	8846	-10
2003-04	5800	52	596	5	4806	43	11202	27
2004-05	9378	62	831	5	4960	33	15169	35
2005-06	10117	61	977	6	5400	33	16494	9
2006-07	9406	50	1083	6	8255	44	18744	14
2007-08	10479	48	1381	6	10172	46	22032	18
2008-09	11944	45	1684	6	12783	48	26411	20
2009-10	14085	44	2040	6	15831	50	31956	21
2010-11	15916	43	2538	7	18443	50	36897	15
2011-12	18363	40	3172	7	24733	53	46268	25
2012-13	20801	39	4219	8	27807	53	52827	14
2013-14	23604	38	4854	8	33587	54	62045	17
2014-15	23716	34	6070	9	39774	57	69560	12

- **Up to December 2015.**
- **Source: Economic Survey and NABARD, Various Issues.**

In 2000s' (8 percent) which is compared to 2008s (14 percent) and 2010s (around 21 percent) to realize the growth and decline of direct finance to agriculture and allied activities. Above comparison reveal that detail about long term credit in the total direct finance has not only been much lower but has also indicated ( from over 38 per cent to around 36 per cent), which has power to make impact on the agricultural investment for further future development process.

### **3. NATURE OF FINANCE NEEDED**

The farmer may need finance for short-term, medium-term or long-term purposes as mentioned below:

- Short-term Finance
- Medium - Term Finance
- Long Term Finance

### **4. SOURCE OF AGRICULTURAL FINANCE**

The effective demand for credit is evidently conditioned by the availability of credit and the amount and pattern of the demand for credit would be different, if the credit structure and conditions of loans were altered. Accordingly, an analysis of the supply side of credit also becomes imperative in connection with any survey of credit requirements.

In India there are various agencies, both private and institutional, giving credit to farmers for agricultural purposes. Money lenders and traders represent the most important private agencies. The two major institutional agencies are the co-operative and commercial banks, although the State Government's have also been financing farmers through various departments. Long-term credit has been primarily the function of agencies specializing in investment financing the co-operative land mortgage banks and land development banks. Commercial banks have also, of late, taken to long-term financing of agriculture.

#### **Benefits of the Scheme**

- Co-ordinated Development
- Joint Participation
- Creation of a Link
- Implementation of Government Programmes
- Identification of Potential Areas
- Rural Credit Facility
- Co-ordination of Development Programmes

However, to bring the Lead Bank Scheme effectively at the village level, the Government has introduced the 'Service Area Approach' to development. Under this scheme the plans are prepared village wise instead of district-wise.

#### **Statement of the Problem**

Every industry needs capital to begin the business. As it is agriculture also require capital like other industries. When small farmers and marginal farmers capital is locked up through loans and stock, they need credit to continue their business. Fund is need by them for their operational expenses as well as their credit level is also high in crop season. Most of the farmers depend marginal and subsistence farming. For the sake of low yield, even they are not in the place to get 'surplus for distribution or at times even to continue the successful and economical production process. For this reason they required more capital even normal operations in agriculture. They pay interest for their part of income. Thiruvallur district has a number of villages and possesses large areas of agricultural lands. Agriculture is the main occupation of the rural population in the district. So, an in-depth analysis of these problems and issues becomes essential. This is the reason for selecting the commercial banks in providing agricultural credit in Thiruvallur district.

## **5. REVIEW OF LITERATURE**

### **Agricultural Credit Review committee-1986**

A senior expert group was constituted in 1986 which was later known as Agricultural Credit Review Committee to make a comprehensive review of the agricultural credit system in the country. The committee made crucial review of the credit-institutions viz; Commercial banks, Regional Rural Banks, and the Co-operative banking system, including the Land Development Banks. Increased over dues resulting in restricted eligibility for lending, and reduced minor irrigation financing have been identified as some of the reasons for the poor performance of the banks.

### **Vyas Committee, (August, 2000)**

The Vyas Committee was appointed by NABARD in August, 2000 under the chairmanship of Prof.V.S.Vyas. The committee suggested measures to reduce the rate of interest on agriculture credit given by Commercial, Co-operative and Regional Rural Banks. The group studied the role of effectiveness of the Rural Infrastructure Development Fund Mechanism and suggested ways to improve the direct agriculture lending and it tries to identify the impediments in the flow of credit to the disadvantaged sections such as small and marginal farmers, tenant farmers, oral lessees and landless labourers and suggests measures to be taken by banks for providing financial assistance to them. These groups also studied the role of micro finance in poverty alleviation and adoption of the SHG approach in extending banks outreach to the disadvantaged sectors and examine the need to regulate micro finance institutions and to suggest appropriate regulatory model. It examined the norms relating NPA's in cases of crop failure when seasonality and uncertainty are not captured.

## **6. OBJECTIVES OF THE STUDY**

The specific objectives of the present study are:

- To study the trend and growth of the loans issued recoveries of loans, outstanding loans and over dues of commercial banks in the Thiruvallur district.
- To study the impact of credit on farm income distribution.
- To analyse the factors responsible for over dues position of farmers and
- To suggest suitable remedial measures for recovery of over dues.

## **7. LIMITATIONS OF THE STUDY**

No records were maintained in the farms studied. Hence, the cost and return particulars were obtained orally from the farmers. The accuracy was limited by their recall bias. However, to minimize the lapses of memory, suitable cross checks and rechecks were made so that the final figures arrived at were more or less dependable.

## **8. METHODOLOGY**

For a proper research require suitable methodology and proper analytical tools to analyze the research problem. In this part, an attempt has been used to describe the methodology which consist the reason for the choice of study area, sample design, period of study, method adopted for the collection of data, method of analysis and tools of analysis.

### **Sampling method**

This study was used by the simple random sampling method. This sampling research on the relationship between agricultural credit extended by the commercial banks in the present study were selected mainly on the basic

of various factors that significantly influences in the agricultural credit extended by the commercial banks and make a judgment of the post credit satisfaction of various classes of farmers confidence as a whole. The study is based on various socio-economic and investment profile factors.

### **Sample Design**

The stratified multistage random sampling technique has been adopted for the study taking Thiruvallur district as the universe, blocks as the stratum villages as the primary unit and the beneficiary farmers as the ultimate unit.

In Thiruvallur district, there are 248 commercial bank branches, which have been providing agricultural credit to the farmers under a Lead Bank Scheme namely Indian Overseas Bank. A list of the borrowers from each block was obtained from the records of Lead Bank for the year 2013-14. Fourteen blocks namely Ekkapuram, Gummidipoondi, Minjur, Puzhal, Poonamallee, Pallipet, Poondi, R.K.Pet, Sholavaram, Thiruvallur, Tiruvalangadu, Tiruttani, Villivakam in each block which have the highest number of beneficiaries was selected for primary data collection. A total of 600 borrowers were randomly selected from 13 villages by adopting the proportionate random sampling technique.

### **9. TOOLS OF DATA ANALYSIS**

The sources of data are primary as well as secondary. The data collected from the agriculture credit survey constitutes primary and information gathered through books, journals, magazines, reports, dairies are considered as the secondary source. The data collected from both the sources is scrutinized, edited and tabulated. The data is analyzed using statistical package for social sciences (SPSS). The following statistical tools are used in the study. Measures of central tendency and measures of dispersion, Kruskal Wallis test, One-way analysis of variance, Factor analysis, K-means cluster analysis. Multiple discriminate analyses, multiple regression analysis, Non-parametric chi-square analysis, and percentage analysis have been employed.

### **10. DATA ANALYSIS**

#### **Characteristics of the Sample Framers**

The socio-economic background of the sample farmers is the key factor that exerted the influence on the farmers to use credit into a productive form. Though there are many socio-economic factors, this study confines itself to age, education family size, operational holdings, cropping pattern and experience in farming.

#### **Age-wise Distribution of Sample Farmers**

The most important factor is the age of the head of the family who is normally engaged in agricultural operations. Table 2 shows the age-wise distribution of the sample farmers.

**Table 2**  
**Aget-Wise Distribution of Sample Respondents**

<i>Age (in years)</i>	<i>Large</i>	<i>Small</i>	<i>Total</i>
Less than 30	38 (10.33)	24 (10.35)	62 (10.34)
30 – 40	254 (69.02)	156 (67.24)	410 (68.33)
40 and above	76 (20.65)	52 (22.41)	128 (21.33)
Total	368 (100)	232 (100)	600 (100)

From the Table 2 it has been revealed that nearly 70 per cent of the respondents are in the age group of 30 to 40. The age group of 30 to 40 is relatively higher in the case of large farmers group (69.02 per cent) while it is only 67.24 per cent in the small farmers group to their respective total. The farmers below 30 years constitute only 10.34 per cent to the total. Those above 40 years form 21.33 per cent only.

### Literacy Level

Literacy levels of the farmers influence the rational use of credit. The distribution of sample respondents based upon their literacy levels are shown in Table 3.

**Table 3**  
**Literacy Level of Sample Respondents**

<i>Literacy Level</i>	<i>Large</i>	<i>Small</i>	<i>Total</i>
Illiterate	64 (17.39)	36 (15.52)	100 (16.67)
School Level	184 (50.00)	138 (59.48)	322 (53.67)
College Level	106 (28.80)	32 (13.79)	138 (23.00)
Professional and Others	14 (3.81)	26 (11.21)	40 (6.66)
Total	368 (100.00)	232 (100.00)	600 (100.00)

From the Table 3 it has been inferred that 53.67 per cent of the farmers in the study area have only school education, followed by those with college level education and illiterates namely, 23.0 and 16.67 per cent to the total. The school level education percentage is higher among small farmers group (59.48 per cent) than among large farmers group (50 per cent) in the case of college level education, the large farmers have a higher percentage (28.80 per cent) than those who are in the small farmers group.

### Family Size

The family size has been the most important factor in planning the capital requirements in farming operations. The family size of the farmers includes the total family members in the present set up whether they are in joint or nuclear family. Table 4 presents the family size of large farmers group and small farmers group.

**Table 4**  
**Family Size of Sample Respondents**

<i>Family Size</i>	<i>Large</i>	<i>Small</i>	<i>Total</i>
Less than 4	48 (13.04)	22 (9.48)	70 (11.67)
4 – 6	80 (21.74)	62 (26.72)	142 (23.67)
6 – 8	142 (38.59)	72 (31.04)	214 (35.66)
8 and Above	98 (26.63)	76 (32.76)	174 (29.00)
Total	368 (100.00)	232 (100.00)	600 (100.00)

It has been observed from the Table 4 shows that nearly 88 per cent of the farmers have a family size of more than 4 members while only 29 per cent of the farmers have a family size of more than 8. The major dominant family size in the case of large farmers group is 6-8 which constitutes 38.59 per cent to the total while in the case of large farmers group, it is above 8 members which constitute 32.76 per cent to total. The use of family labour was more in the case of beneficiaries' group when compared to the large farmers group.

### Number of Family Members Engaged in Cultivation

Family labour has been the most important factor that determines productivity. The reason is that they work hard and sincerely irrespective of the time spent on farms. It minimises the cost of production. The number of family members in sample farms engaged in cultivation is presented in Table 5.

**Table 5**  
**Number of Family Members Engaged in Cultivation**

<i>Number of Members</i>	<i>Large</i>	<i>Small</i>	<i>Total</i>
Below 2	172 (46.74)	112 (48.28)	284 (47.33)
2 – 4	106 (28.80)	80 (34.48)	186 (31.00)
4 –6	64 (17.39)	26 (11.21)	290 (15.00)
Above 6	26 (7.07)	14 (6.03)	40 (6.67)
Total	368 (100.00)	232 (100.00)	600 (100.00)

It has been revealed from the Table 5 that 47.33 per cent of the sample farms have utilised 1 to 2 members of their family in cultivation, of which 48.28 per cent worked in small farmers group and 46.74 per cent in large farms respectively and 31.00 per cent have utilised 2-4 members in cultivation, of which 28.80 per cent worked in large farmers group and 34.48 per cent in small farmers group. Large farmers group used more family labour than the small farmers group.

### Size of Operational Holdings in Sample Farms

The size of operational holdings is one of the major influencing factors on the decision regarding crop, the selection of buyers for the different crops produced and also optimum utilisation of resources. Table 6 shows the distribution of farms according to the size of operational holdings.

**Table 6**  
**Size of Operational, Holdings in the Sample Farmers**

<i>Size of Holding (in acres)</i>	<i>Large</i>	<i>Small</i>	<i>Total</i>
Less than 1	94 (25.54)	64 (27.59)	158 (26.34)
1 – 2	86 (23.36)	52 (22.41)	138 (23.00)
2 – 5	72 (19.57)	38 (16.38)	110 (18.33)
5 - 8	78 (21.20)	48 (20.69)	126 (21.00)
8 and Above	38 (10.33)	30 (12.93)	68 (11.33)
Total	368 (100.00)	232 (100.00)	600 (100.00)

It has been inferred from the Table 6 that 67.67 per cent of operational holdings are below 5 acres. The remaining 32.33 per cent belong to above 5 acres. Among the large farmers group, the dominant operational holdings are less than one acre which is 25.54 per cent followed by 1 – 2 acres. Small farmers group also have less than one acre which is 27.59 per cent to the total.

### The Analytical Framework

In order to analyse the trend and growth of the amounts of credit issued, recoveries made, outstanding debts and over dues, the following semi-log trend equation was been fitted.

### Trend and Growth of Agricultural Credit

The details regarding the amount of loans issued, recoveries made, outstanding dues and over dues for a period of eleven years from 2004-05 to 2013-14 by the Commercial banks in Thiruvallur district is shown in Table and Figure.

**Table 7**  
**Loans Issued, Recoveries, Outstandings and Overdues of the Commercial Banks during the Period 2005-06 TO 2013-14**

Year	Loan Issued	Recoveries	Out standings	Overdues
2004-05	237.15	90.15	39.69	147.22
2005-06	243.16	92.22	30.15	150.11
2006-07	239.24	95.14	32.42	146.14
2007-08	268.15	99.24	30.42	168.15
2008-09	299.24	113.42	37.46	186.16
2009-10	350.11	163.42	43.62	188.62
2010-11	349.26	137.11	44.21	212.64
2011-12	375.11	139.41	45.15	236.15
2012-13	398.14	153.14	47.24	245.14
2013-14	413.45	159.69	45.11	254.16
Mean	319.29	126.56	39.23	193.33
S.D	65.12	28.92	6.30	39.40
C.V. %	20.40	22.85	16.06	20.38

Table 7 shows that the loans issued by the commercial bank during the period 2004-05 to 2013-14 had steadily increased. The loans issued during the year 2004-05 was Rs. 237.15 lakhs and it had increased to Rs. 413.45 lakhs during the year 2013-14. Similarly, the recoveries, outstanding and Overdues had also recorded an increasing trend during the entire period of 10 years. Table 7 reveals that the average amount issued, recovery, outstanding and over dues over the period from 2004-05 to 2013-14 were found to be Rs.319.29 lakhs, Rs.126.56 lakhs, Rs.39.23 lakhs and Rs.193.33 lakhs respectively. A high fluctuation was found in recovery whereas low fluctuation was observed for outstanding over the period.

**Table 8**  
**Trends and Growth of Loans Issued, Recoveries Made, Outstandings and Overdues of the Commercial Banks during 2005-06 TO 2013-14**

Variable	Trend Co-efficient		R2	Compound Growth Rate (%)
	A	B		
Loans issued	5.37	0.0614* (12.66)	0.94	6.33
Recoveries	4.42	0.0632* (5.74)	0.76	6.53
Outstanding	3.43	0.0376* (3.40)	0.51	3.84
Overdues	4.88	0.0603* (15.72)	0.96	6.22

Figures in brackets represent *t* – values

\* Statistically significant at 5 per cent level



It has been inferred from the Table 7 that the trend co-efficient of loans issued and recoveries made were found to be statistically significant at the 5 per cent level. It implies that the loans issued and recoveries made had increased at the rate of 0.0614 per cent and 0.0632 per cent per annum.

The compound growth rate of loans issued and recoveries made was only 6.33 per cent and 6.53 percent.

As regards the, outstanding and Overdues, the trend co-efficient were also found to be statistically significant. The compound growth rate was found to be high in recovery amounts followed by the growth rate in loan issued. It could be inferred from this analysis that the financial institution, namely, Indian Overseas Bank (IOB) in the study area, had issued considerable amounts of loans to meet the growing financial needs of the farmers in the study area. Further, the recovery performance was also found to be satisfactory in the study area.

### **Investments on Draught Cattle and Milch Animals**

Farm livestock included drought cattle; and, milch animals namely cows, buffaloes calves and heifers. Table 8 shows the Investment on drought cattles and milch animals per farm during the period under study.

From the Table 9 it has been revealed that investments on drought cattle and milch animals per farm were made on the basis of the size of the farms. The total investments made on drought and milch animals by small farmers were found to be Rs.2072.15 which were higher when compared with the large farmers in the study area. Investments made on drought and milch animals by the small farmers were found to be Rs.676.11 and Rs.1396.04 respectively. In the case of large farmers, it worked out to Rs.739.99 and Rs.949.12 for the drought animals and the milch animals respectively.

**Table 9**

**Investment of Credit on Droutht Cattle and Milch Animals (Per Farm) by the Beneficiaries**

Size Group	Number of Farmers	Drought Cattle	Milch Animals		Total
			Cows	Buffaloes	
Large	232	739.99 (43.81)	949.12 (56.19)	—	1689.11 (100)
Small	368	676.11 (32.63)	1396.04 (67.37)	—	2072.15 (100)
Overall	600	735.99 (38.23)	1189.11 (61.77)	—	1925.10 (100)

### **The Capital Investment Scale**

**Table 10**

**Components of Capital Investment Scale and the Scores Assigned to each one of the Components**

Sl. No.	Component	Score
1.	Farm Land	10
2.	Land Improvement	10
3.	Digging and repair of wells	10
4.	Farm equipment, tools and machinery	10
5.	Investment in mechanical power	10
6.	Farm buildings, cattle sheds and the like	10
7.	Farm livestock	10
8.	Farm poultry	10
9.	Development of other irrigational sources	10
10.	Transport and storage facilities	10
	Total	100

Since there was no standard scale that was readily available for measuring the capital investment in agriculture, a scale, known as the 'capital investment scale' was constructed with the help of ten identified components of capital investment and a score of ten was assigned to each of the ten components. The following table is useful in this context.

The above table 10 indicates that details about component of capital investment scale and scores assigned to each on of the ten components. The score of ten of assigned for each components. The increase in the value of agricultural land was calculated, by assuming the previous year's value as 100 and the geometric mean for the growth for five years (2005-06 TO 2013-14) was calculated. The highest geometric mean was assigned ten scores.

## **11. SUMMARY OF FINDINGS, CONCLUSIONS AND SUGGESTIONS**

It was observed from the trend analysis made that the trend coefficients of the loans issued were found to be satisfactorily significant at the 5 per cent level. It could be noted that the commercial banks in the study area was performing well in issuing loans. The value of the compound growth rate had shown the positive growth rate (6.33 per cent). Regarding the recoveries made, outstanding and Overdues, there was no change in the trend over a period. Thus it, could be concluded from the analysis carried out that the commercial banks in the study area had issued considerable amount of loans to meet the ever growing financial requirements of farmers in the study area.

It was also observed that the percentage of area irrigated by the large farmers was higher compared to that of the small farmers. Tanks were found to be the major source of irrigation followed by pump sets and tube wells, in the study area. The analysis revealed that the cropping intensity was found to be higher in the case of large farmers compared to the small farmers. Thus it might be concluded that the higher cropping intensity for the large farmers had indicated a positive impact of agricultural credit on the land use pattern.

## **12. CONCLUSIONS**

Marginal farmers had performed well to invest in financial and physical assets, and also utilized the factors and inputs. Farmers do agriculture with getting agricultural credit, commercial bank credit and agricultural inputs to meet their various agricultural expenses. It helps the farmers to adopt with reasonable method of cultivation. This study helps to recover the performance which was found to be better, had in its turn induced the effective functioning of the Lead Bank in the study area.

## **13. SUGGESTIONS**

- Socially, economically and technologically backward people mostly belong to Agriculture in India. The inter-sectoral mobility of personnel, resources and technology was very limited and it had created a vicious cir
- The investment level which is made by the farmers in households need to be raised more in agricultural sector.
- It is suggested that investment of agricultural sector has to be improved by public sector, which has high motive level in private sector.
- Farmers need more training camps and programme to be conducted in all villages by regular intervals of time.
- There is need for simplification of procedures for recovery of Overdues of the commercial banks.
- There is need for collecting, compiling, tabulation of data relating to recovery of Overdues made from time to time. <sup>TM</sup>

- Farmer need more time to pay their loan amount and extension of repayment period in terms of successive crop failure due to natural calamities also is required.
- Fixing suitable due dates in relation to crop calendar ensuring timely disbursement and recovery of loans is advisable.

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