# **Research Article**

# AGRICULTURAL CREDIT TO THE FARMERS IN ANDHRA PRADESH: AN ECONOMIC ANALYSIS OF EXTENT AND MAGNITUDE IN VISAKHAPATNAM DISTRICT

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Received: October 31, 2019; Revised: November 26, 2019; Accepted: November 27, 2019; Published: November 30, 2019

Abstract: The problem of indebtedness is age-old and the disheartening aspect is; it has been aggravated further in the recent years. Borrowings and indebtedness are the two sides of the same coin, while borrowing is the cause, indebtedness is the result. Increase in borrowings need not increase the indebtedness, unless persistent problems affect the agricultural prospects. The present study was carried-out with specific objectives; assessing the extent and magnitude of agricultural credit, estimating the composition of agricultural credit, calculating the targets and achievement of agricultural credit and suggesting possible ameliorative measures. Secondary data for the period 2013-14 to 2017-18 pertaining to total agricultural credit advanced, credit targets and achievements by the major financial institutions in the district were collected from Debt and investment survey reports of RBI etc. Tabular analysis viz., Averages and Percentages, were used to analyse the data.

Results reveal that, Credit supply by institutional agencies to total agriculture had increased from 2013-14 to 2016-17. In crop loans and agricultural term loans; the share of commercial banks and co-operative banks were increased, whereas, other banks decreased from 2013-14 to 2016-17. Majority of banks nearly (>90%) had achieved their targets in plain areas; whereas, they are still struggling to achieve their targets in tribal and hill areas. The role of cooperative sector vis-à-vis commercial sector is low; this needs immediate strengthening of co-operative institutions on war-footing. The cumbersome procedure for availing loans from institutional sources should be simplified and further adequate loans should be provided at affordable rates of interest.

**Keywords:** Indebtedness, Agricultural credit, Commercial banks, Co-operative banks and Visakhapatnam

Citation: Amrutha S. and Rama Rao I.V.Y. (2019) Agricultural Credit to the Farmers in Andhra Pradesh: An Economic Analysis of Extent and Magnitude in Visakhapatnam district. International Journal of Agriculture Sciences, ISSN: 0975-3710 & E-ISSN: 0975-9107, Volume 11, Issue 22, pp.- 9205-9208.

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Academic Editor / Reviewer: Dr Vijayachandra Reddy S, Pushpendra Singh, Dr Prakash Chand Yadav

## Introduction

Agriculture is one of the oldest and most important occupations of mankind. In majority of countries almost half of the economic status directly or indirectly depends on agriculture. In economic development of any nation, contribution from agriculture is crucial. Like other industries, Agriculture also requires capital. One of the most important lessons of universal agrarian history is that the agriculturist must borrow, due to the fact that his capital is locked up in his lands and stocks. The output from agriculture depends upon the quantity and quality of inputs used. Application of required quantity and quality of inputs requires cash, which is lacking with the farming community in India. For stimulating the tempo of agricultural production, farmers require adequate and timely credit. There was one saying that "Indian farmer is born in credit, lives in credit and dies in credit". This situation is owing to resource poorness of the farmers. In India, after independence a number of institutions have been promoted to provide farm finance. High interest rate for agriculture credit has caused serious exploitation resulting in farmers' indebtedness causing serious concern over a century. However, the same credit may become catastrophic when it is employed for nonproductive purposes other than for agricultural production. A critical examination by Patel (2009) revealed that, 76.1 percent of borrowed capital is being used for non-productive purposes [1]; share of non-institutional borrowers was 68.4 percent in total borrowings at national level. These gives rise to a situation known as indebtedness, which has become one of the dreaded tribulations in the life of households living in rural India. The problem of indebtedness is age-old; and the disheartening aspect is that, it has been aggravated further in the recent years.

The major reasons for the persistence of indebtedness among the rural farmers in India are excessive dependency of agriculture on vagaries of monsoons, continuous mounting of cost of cultivation, distress sale, involvement of large number of middle men, excessive dependency of farmers on non-institutional credit sources, diversion of crop loans and term loans towards unproductive purposes. These led to farmers to depend on non-institutional credit even though the rate of interest is high [2]. Borrowings and indebtedness are the two sides of the same coin, while borrowing is the cause, indebtedness is the result. Increase in borrowings need not increase the indebtedness on the part of farmers, unless persistent problems affect the agricultural prospects. Informal credit had certainly declined as a percentage of total debt and simultaneously the institutional credit flow of agriculture has increased over the years with the institutional agencies venturing into the rural areas [3].

As the percentage of indebtedness among farmer's households were highest in Andhra Pradesh (82% of total indebted farmers) as reported in [4], it took due attention on the part of the investigator to conduct a research study in the state of Andhra Pradesh [5]. The present study is an attempt in this regard and will serve a base for future policy makers, social scientists. Hence, the present investigation has been conducted with the following specific objectives:

To assess the extent and magnitude of agricultural credit to the farmers
To estimate the composition of agricultural credit to the farmers
To calculate the targets and achievement of agricultural credit to the farmers
To suggest possible ameliorative measures

International Journal of Agriculture Sciences

Table-1 Institutional credit disbursements under Agriculture and allied activities in Visakhapatnam district of Andhra Pradesh during 2013-14 to 2016-17, (Amount in`Lakhs)

Particulars	2013-14			2014-15			2015-16			2016-17		
	Crop loans	Agriculture Term Loans	Total Agricultural credit									
Commercial	1,12,500	32,800	1,45,300	54,846	16,853	71,699	1,38,243	60,191	1,98,434	1,64,315	79,200	2,43,515
banks	-67.65	-97.91	-72.72	-69.39	-44.02	-61.11	-79.15	-64.49	-74.04	-80.29	-70.7	-76.9
Co-operative	16,500	600	17,100	20,747	215	20,962	23,976	1,066	25,042	26,873	779	27,652
banks	-9.92	-1.79	-8.56	-26.25	-0.56	-17.87	-13.73	-1.14	-9.34	-13.13	-0.7	-8.73
Other	37,300	100	37,400	3,447	21,219	24,666	12,443	32,080	44,523	13,456	32,040	45,496
sources	-22.43	-0.3	-18.72	-4.36	-55.42	-21.02	-7.12	-34.37	-16.61	-6.58	-28.6	-14.37
Total	1,66,300	33,500	1,99,800	79,040	38,287	1,17,327	1,74,662	93,337	2,67,999	2,04,644	1,12,019	3,16,663
	-100	-100	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in parentheses indicate percentage to respective column total, Source: NABARD, Visakhapatnam district.

## **Review of Literature**

Ramakrishna (2016) reported that the present system of agriculture credit in S.P.S.R. Nellore district comprises two sectors, such as institutional or formal sector and non-institutional or informal sector [6]. The share of institutional agencies in the current borrowings of the farmers and debt outstanding are 58.82% and 47.85% in delta village whereas the corresponding figures for nondelta villages are 47.32 % and 39.34% respectively. It is clear that in non-delta village, non-institutional credit is predominant with 52.68% on current borrowings and 60.66% in debt outstanding. Anjani et al. (2015) [7] analysed that the changes in structure of rural credit delivery and inclusiveness of rural credit flow across states and social groups, along with identification of factors that influence the choice of credit source by taking the unit level data of All India Debt and Investment Survey carried out by 70th round of NSSO during the year 2013 [8]. They found that the structure of credit market had changed over time and the share of institutions credit has increased. Radhakrishna (2007) [9] committee revealed that, about half of them were in debt and three-fifths of their debt was owned to institutions sources. A major share of farmer's debt (more than 60%) was for productive purposes. Besides these, natural calamities like floods, droughts, acute pests and disease infestation, use of spurious inputs etc. are having significant role with the farmers, duly affecting the agriculture production prospects and thereby, making the farmers to end up in a debt trap. This led to some of the farmers to commit suicides in many states including agro-potential states like Andhra Pradesh, Punjab, Tamil Nadu, Karnataka etc. Debt trap is the main cause of committing suicides which tightened up because of the agrarian crisis and inaccessibility of institutional credit. Rakesh (2006) agriculture credit has played a vital role in supporting farm production in India. Though the outreach and amount of agriculture credit have increased over the years, several weaknesses have crept in which have affected the viability and sustainability of these institutions [9]. Jagannath (2005) revealed that about 60% of indebted households have borrowed for agricultural pursuits, as high as 40% of them have avoided loans for unproductive purposes. The most important is that professional money lenders were the predominant source of lending for rural farmers [10]. Gautam (2001) [11] reported that the percentage share of commercial banks in outstanding debt was found to be almost one-third of the total, followed by friends and relatives (25%) and moneylenders (24%). These three sources together constituted about four-fifths of the total borrowings. The sources like Government (5%), employers (5%), shopkeepers (4%), Co-operative societies (4%) and others (0.4%) together contributed about 18 %.

## **Material and Methods**

Andhra Pradesh was formed on 02/06/2014, with 13 districts. Out of which Visakhapatnam district was selected based on the number of farmers covered with bank loans. The major sources of data were Annual Credit Plan (2017-18) [12], Hand Book of Statistics (2016) [13] and Debt and investment survey reports of RBI etc. Secondary data for the period 2013-14 to 2017-18 pertaining to total agricultural credit advanced, credit targets and achievements by the major financial institutions in the district were collected. Tabular analysis viz., Averages and Percentages, were used to analyse the data.

# Results and Discussion

# Extent and magnitude of agricultural credit to farmers

The growth in agricultural credit started mainly after banks nationalization and since then growing continuously [Table-1] and [Fig-1to 3]. This has resulted in a

Table-2 Mandal wise Agricultural credit Targets and Achievement for the year 2017-18 of Visakhapatnam district as on 31.03.2018

Name of the Sub	Mandal	Target	Achieved	%				
Division								
Chodavaram	Chodavaram	14,374.00	14,200.40	98.79				
	Devarapalli	5,556.00	5,377.20	96.78				
	Cheedikada	8,210.00	7,942.40	96.74				
	Butchaiahpeta	7,602.00	7,330.30	96.43				
	K.Kotapadu	6,894.00	6,624.50	96.09				
Yellamanchali	Rambilli	6,336.00	6,212.50	98.05				
	S.Rayavaram	8,308.00	8,132.40	97.89				
	Yellamanchali	10,214.00	9,847.20	96.41				
	Atchutapuram	6,190.00	5,875.20	94.91				
Visakhapatnam	Sabbavaram	4,080.00	3,974.60	97.42				
	Pendurthi	8,262.00	7,977.20	96.55				
	Parawada	2,278.00	2,175.00	95.48				
	Visakhapatnam	554	512	92.42				
Bheemunipatnam	Bheemunipatnam	7,402.00	7,123.40	96.24				
·	Anandapuram	7,098.00	6,792.30	95.69				
	Padmanabham	5,252.00	4,937.50	94.01				
Payakaraopeta	Payakaraopeta	3,534.00	3,379.20	95.62				
, ,	Nathavaram	4,544.00	4,339.00	95.49				
	Nakkapalli	5,458.00	5,125.40	93.91				
	Kotauratla	5,720.00	5,311.20	92.85				
	Makavarapalem	5,238.00	4,840.20	92.41				
Narsipatnam	Narsipatnam	9,182.00	8,830.10	96.17				
'	Rolugunta	6,034.00	5,793.20	96.01				
	Golugonda	4,924.00	4,718.00	95.82				
	Madugula	6,822.00	6,177.40	90.55				
	Ravikamatam	4,496.00	3,892.50	86.58				
Anakapalle	Kasimkota	6,506.00	6,120.00	94.07				
'	Munagapaka	7,752.00	7,232.20	93.29				
	Anakapalle	16,700.00	15,400.00	92.22				
Chintapalli	Chintapalli	2,914.00	2,456.20	84.29				
'	Koyyuru	4,244.00	3,526.20	83.09				
	G.K. Veedhi	2,202.00	1,801.20	81.8				
Arakuvalley	Anantagiri	2,424.00	2,150.00	88.7				
,	Dumbriguda	1,880.00	1,523.50	81.04				
	Arakuvalley	2,532.00	2,050.00	80.96				
	Hukumpeta	1, 854.00	1, 479.20	79.78				
Paderu	Paderu	3,940.00	3,252.50	82.55				
	G. Madugula	1,830.00	1,475.20	80.61				
	Pedabayalu	1,176.00	925.4	78.69				
	Munchingput	2,156.00	1,600.20	74.22				
Grand Total		2,22,672.00	2,08,432.10	93.6				
Source: MARADD Visakhanatnam district								

Source: NABARD, Visakhapatnam district

A perusal of [Table-1] reveals that the institutional sources of agricultural credit flow have undergone a structural change. The share of Commercial Banks (CBs) in total agricultural credit has decreased from 72.72% during 2013-14 to 61.11% to 2014-15 and increased to 74.04% in 2015-16 and 76.90% during 2016-17. The share of co-operative banks has increased from 8.56% in 2013-14 to 17.87% in 2014-15 and then decreased consistently to 9.34% in 2015-16 and 8.73% in 2016-17 as depicted in [Fig-1].

The share of other banks had increased from 18.72% in 2013-14 to 21.02% in 2014-15 and has decreased consistently to 16.61% in 2015-16 and to 14.37% in 2016-17, by recording 58.49 % increase in three years. Thus, in the institutional sources major player was commercial bank, as its share increased by 14 % in three years period, whereas, Co-operative banks share was stand still during the reference period. These findings were in conformity with the results obtained by Gautam (2001), who reported that the percentage share of commercial banks in outstanding debt was found to be almost one-third of the total.



Fig-1 Share of different banks in institutional credit to total agricultural credit

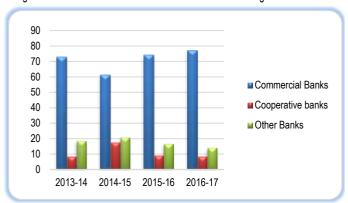


Fig-2 Share of different category of banks in institutional credit towards the crop loans

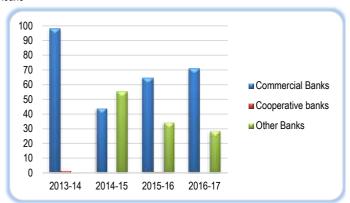


Fig-3 Share of different category of banks in institutional credit towards agriculture term loans

## Composition of agricultural credit to farmers:

The agricultural credit in toto comprises; crop loans and agricultural term loans. **i) Crop Loans:** Regarding the crop loans [Fig-2], the share of commercial banks increased from 67.65% in 2013-14 to 69.39% in 2014-15 and 79.15% in 2015-16 to 80.29% in 2016-17. Share of co-operative banks increased from 9.92% in 2013-14 to 26.25% in 2014-15 and decreased to 13.73% in 2015-16 and 13.13% in 2016-17. The share of other banks had decreased from 22.43% in 2013-14 to 4.36% in 2014-15 and decreased consistently from 7.12% in 2015-16 to 6.58% in 2016-17. Thus, commercial banks dominating role in the lending the money to

crop loan

**ii) Term Loans:** Towards agricultural term loans [Fig-3], the share of commercial banks in credit flow was decreased from 97.91% in 2013-14 to 44.02% in 2014-15 and then increased to 64.49% in 2015-16 to 70.70% in 2016-17. Share of cooperative banks was decreased from 1.79% in 2013-14 to 0.56% in 2014-15 and then increased from 1.14% in 2015-16 to 0.70% in 2016-17. The share of other banks had increased from 0.30% in 2013-14 to 55.42% in 2014-15 and has decreased consistently from 34.37% in 2015-16 to 28.60% in 2016-17. The trends were similar in agricultural term loans and total agricultural credit.

## Agricultural credit Targets and Achievement for the district

Visakhapatnam district comprises of 43 mandals: grouped into 10 Sub-divisions. During the year 2017-18, agricultural credit flows in Visakhapatnam district of Andhra Pradesh were placed in the [Table-2]. In Visakhapatnam district the total target amount was '₹ 2, 22,672 lakhs and achieved was '₹ 2, 08,432.10 lakhs *i.e.*, 93.60%. Among the sub-divisions, Chodavaram sub-division was ranked first, followed by Yellamanchili, Visakhapatnam and followed by others, last was Paderu. Out of the 10 sub-divisions, four subdivisions are located in Tribal and Hilly areas, in which there was much gap noticed between the agricultural credit targets and achievements. With regards to the mandals, target achieved was highest (98.79%) in Chodavaram with target of '₹ 14, 374 lakhs and achieved was '₹ 14, 200.40 lakhs, whereas, Munchingiputtu was lowest (74.22%) with target of '₹ 2,156 lakhs and achieved was '₹ 1,600.20 lakhs.

#### Conclusion

Credit supply by institutional agencies to total agriculture had increased from 2013-14 to 2016-17. In crop loans and agricultural term loans; the share of commercial banks and co-operative banks were increased, whereas, other banks decreased from 2013-14 to 2016-17. Majority of banks nearly (>90%) had achieved their targets in plain areas; whereas, they are still struggling to achieve their targets in tribal and hill areas

## **Policy Implications**

The role of cooperative sector vis-à-vis commercial sector is low. This needs immediate strengthening of co-operative institutions on war-footing. The cumbersome procedure for availing loans from institutional sources should be simplified and further adequate loans should be provided at affordable rates of interest.

**Application of research:** Study of economic analysis of extent and magnitude in Visakhapatnam district

Research Category: Agricultural Economics

**Acknowledgement / Funding:** Authors are thankful to Acharya N.G. Ranga Agricultural University, Lam, Guntur, 522034, Andhra Pradesh, India

# \*Research Guide or Chairperson of research: Dr S. Amrutha

University: Acharya N.G. Ranga Agricultural University, Lam, Guntur, 522034 Research project name or number: MSc Thesis

Author Contributions: All authors equally contributed

**Author statement:** All authors read, reviewed, agreed and approved the final manuscript. Note-All authors agreed that- Written informed consent was obtained from all participants prior to publish / enrolment

9207

Study area / Sample Collection: Visakhapatnam district

Cultivar / Variety / Breed name: Nil

Conflict of Interest: None declared

**Ethical approval:** This article does not contain any studies with human participants or animals performed by any of the authors. Ethical Committee Approval Number: Nil

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