

# Utilization pattern of agriculture crop loan by farmers in India with special reference to Karnataka

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## Abstract

**Background/Objectives:** The agricultural crop loan has to help farmers for purchase of high yielding inputs. Thus, the present study was undertaken to analyse the utilization and diversion pattern of agriculture crop loan by different categories of farmers.

**Methods/Statistical analysis:** Multistage sampling technique was adopted for the selection of sample farmers viz. 40 large farmers and 20 small farmers who had availed agriculture crop loan from each commercial (SBI) and co-operatives banks (PACS). Thus, the total sample size consisted of 120 farmers. The technique of tabular presentation includes percentages and averages were used to estimate the extent of utilisation and diversion of agriculture crop loan.

**Findings:** The average amount utilized for the said purpose by large farmers was noticed around 96.97 per cent which was found to be higher as compared to small farmers (76.78 %) borrowed from commercial banks for red gram production. Similar trend was noticed in case of cooperative banks borrowers but the average size of amount borrowed was almost one half of the amount of commercial banks borrowers. The small farmers for cotton production from commercial banks the amount utilized for said purpose accounting for 85.72 per cent lower than large farmers (95.51 %). Similar trend was noticed in case of cooperative banks borrowers. It is of interesting to note that across institutions the diversion of agriculture crop loan was more in case of small farmers as compared to large farmers in both commercial and co-operative banks for both redgram and cotton production. The size of crop loan amount disbursed by cooperative banks borrowers was almost one half of the amount of commercial banks borrowers.

**Application/Improvements:** Hence, financial institutions should also educate the farmers in utilizing of crop loan amount while disbursing the loan to the farmers.

**Key words:** Amount, Availed, Crop loan, Diversion, Production and Utilization.

**JEL Codes:** Q14

## 1. Introduction

Agriculture plays a crucial role in the development of the Indian economy. It accounts for about 14.6 per cent of GDP and about two thirds of the population is dependent on the sector [1]. The importance of farm credit as a critical input to agriculture is reinforced by the unique role of Indian agriculture in the macroeconomic framework and its role in poverty alleviation [2]. Recognizing the importance of agricultural 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.

The complex pattern of credit subsidy regimes was implemented in Karnataka during different points of time. Before April 2004, cooperative credit societies had provided crop loan at an interest rate of 12.5 per cent. The interest rate charged by public sector commercial banks was not low either and it was linked with prime lending rate which ranged between 9.0 to 12.2 per cent [3]. The government of Karnataka announced for the first time in 2004-05 state budget a scheme of interest subsidy on crop loan. Under this scheme, crop loan were made available at 6.0 per cent rate of interest to farmers through Primary Agricultural Credit Societies (PACS). The interest subsidy scheme was

implemented for farmers by the central government in 2006-07 [4]. Under the scheme a provision for crop loan was made available at 7 per cent to farmers through commercial banks and RRBs. Under the present scheme, the PACS provide loans to farmers at zero per cent rate of interest for a maximum amount of one lakh rupees, while commercial banks and RRBs at three per cent rate of interest for a maximum amount of three lakh rupees.

The lower interest on crop loan facility has played an equally significant role in enhancing the country's food grains production, which was 250.42 million tonnes in 2011-12. To gain insight into the functioning of agricultural credit, therefore present study was undertaken in Gulbarga district to study the utilization pattern of agriculture crop loan by farmers.

## 2. Data and methodology

North-East Karnataka region was purposively selected for the study since it is also the jurisdiction of UAS, Raichur. Multistage sampling procedure was adopted for the selection of sample farmers. In the first stage, the district was selected based on credit intensity, which was highest in Gulbarga district in North-East Karnataka region. From the selected Gulbarga district, Lead Bank and DCC Bank were chosen as representative banks for commercial banks and cooperative sectors respectively.

In the second stage, Gulbarga and Jevargi talukas were selected based on the same criterion. In the third stage, one branch was selected from each of commercial (SBI) and co-operatives banks (PACS) from each taluk. In the fourth stage, 20 large farmers and 10 small farmers who had availed agriculture crop loan were randomly selected from each branch of commercial bank and co-operative bank. Thus the total sample size consisted of 120 farmers.

The technique of tabular presentation was used to estimate the extent of utilisation of crop loan and also to know the diversion of crop loan. The utilisation and diversion of agriculture crop loan by various farm groups were computed and presented as percentages. The percentages and averages were computed and compared to obtain meaningful results.

## 3. Results and discussion

The utilization of agriculture crop loan by the farmers for redgram production is shown in Table 1. The average amount per acre availed by small farmers from commercial banks for redgram production was Rs. 8,294 of which the amount utilized for the said purpose was Rs. 6,368 accounting for 76.78 per cent. Payment of labour wages was the highest expenditure item (29.66 %) followed by expenditure on fertilizer (19.01 %) and plant protection chemicals (12.75 %). The results are in conformity [5] with the productive utilization of credit ranged from 65 per cent (IMZ) to 98 per cent (SBTZ). The extent of unproductive use of credit was higher in IMZ (34.7%) followed by TMZ (24.2%) and CAZ (5.9%). The average amount utilized for the redgram production by large farmers of commercial banks was Rs. 8976. The utilization was almost similar to that of small farmers. However, there was diversion of credit among small and large categories of farmers. The diversion of credit was only to the extent of three per cent in large farmers whereas in small farmers it was to the extent of 23.22 per cent. This was due to small farmers category is that they had to look after their basic minimum needs out of their meagre resources which in turn were insufficient.

The diversion of credit to the extent of 22.64 per cent was noticed among the small farmers, who had borrowed from cooperative banks. The utilization of credit for production purpose was around 93.26 per cent which was found to be higher among the large farmers as compared to small farmers. The average amount utilized among cooperative banks borrowers was almost one half of the amount of commercial banks borrowers because of size of amount given was half of the amount of commercial banks. The major items of expenditure for small farmers of cooperative bank borrowers were purchase of fertilizer and plant protection chemicals. Whereas for large farmers purchase of fertilizers (29.82 %) was the major items followed by payment of labour wages (24.49 %) and purchase of plant protection chemicals (16.32 %).

Table 1. Utilization pattern of agriculture crop loan for redgram production

Sl. No.	Particulars	Commercial Banks				Cooperative Banks			
		Small farmers (n=20)		Large farmers (n=10)		Small farmers (n=20)		Large farmers (n=10)	
		Average amount utilized	Percentage to total ACL	Average amount utilized	Percentage to total ACL	Average amount utilized	Percentage to total ACL	Average amount utilized	Percentage to total ACL
1	Purchase of manures	513	6.19	1355	15.09	586	12.20	459	11.76
2	Purchase of seeds	187	2.26	199	2.22	96	2.00	44	1.13
3	Purchase of fertilizer	1777	19.01	1991	22.18	1084	22.25	1164	29.82
4	Purchase of plant protection chemicals	1358	12.75	1622	18.07	987	20.54	637	16.32
5	Payment of labour	2460	29.66	2911	32.43	663	13.79	956	24.49
6	Marketing and handling charges	574	6.92	626	6.97	301	6.27	381	9.76
<b>Total credit utilized for production purpose</b>		6368	76.78	8703	96.97	3717	77.36	3641	93.26
<b>Total diversion of credit</b>		1926	23.22	272	3.03	1088	22.64	263	6.74
<b>Total agriculture crop loan</b>		8294	100.00	8976	100.00	4805	100.00	3904	100.00

Note : ACL- agriculture crop loan

It is interesting to note that across institutions, small farmers of commercial banks had spent more amounts on payment of labour wages than the small farmers of cooperative banks. The amount utilized towards handling charges ranged between 6 to 9 per cent for different categories of farmers and across institutions.

The utilization of agriculture crop loan by the farmers for cotton production is shown in Table 2. The average amount per acre availed by small farmers for cotton production from commercial banks was Rs. 8,462; of which the amount utilized for said purpose was Rs. 7,254 accounting for 86 per cent. Payment of labour wages was the highest expenditure item (30 %) followed by purchase of plant protection chemicals and fertilizer. Thus the credit diversion was to the extent of Rs. 1208 per acre, which accounted for around 14 per cent. Whereas, in case of large farmers, the average agriculture crop loan availed per acre was Rs. 8,520 with a meager diversion of 4.5 per cent. Large farmers are resourceful and able to meet their needs through their own farm earnings rather than diverting credit for unproductive purpose. Moreover large farmers get adequate credit, hence they utilize for the purpose for which they borrowed.

Table 2. Utilization pattern of agriculture crop loan for cotton production

Sl. No.	Particulars	Commercial Banks				Cooperative Banks			
		Small farmer (n=20)		Large farmer (n=10)		Small farmer (n=20)		Large farmer (n=10)	
		Average amount utilized	Percentage to total ACL	Average amount utilized	Percentage to total ACL	Average amount utilized	Percentage to total ACL	Average amount utilized	Percentage to total ACL
1	Purchase of manures	742	8.77	836	9.84	468	10.38	426	11.13
2	Purchase of seeds	698	8.25	894	10.52	259	5.75	579	15.13
3	Purchase of fertilizer	1205	14.24	1253	14.74	1046	23.21	1064	27.81
4	Purchase of plant protection chemicals	1768	20.89	1862	21.91	938	20.81	624	16.31
5	Payment of labour	2573	30.41	2927	34.44	957	21.23	986	25.77
6	Marketing and handling charges	268	3.17	346	4.07	0	0.00	0	0.00
<b>Total credit utilized for production purpose</b>		7254	85.72	8118	95.51	3668	81.38	3679	96.16
<b>Total diversion of credit</b>		1208	14.28	382	4.49	839	18.62	147	3.84
<b>Total agriculture crop loan</b>		8462	100.00	8520	100.00	4507	100.00	3826	100.00

Note :ACL- agriculture crop loan

The diversion of credit of around 19 per cent was found among the small farmers, who had borrowed from cooperative banks. The small amount of loan may be inadequate to utilize for farm operations and purchase of inputs in case of small farmers, inadequacy might have prompted them for diversion. This result was similar to that of [6] where the more diversion is seen in the marginal farmers category (25 %) followed by small (21%), medium (8%) and large (4%) farmers. It indicates that higher the size of landholdings, lesser will be the diversion of loan for unproductive purposes. The average amount utilized among cooperative banks borrowers was almost one half of the amount of commercial banks borrowers. The utilization of credit was around 96 per cent for the said purpose which was higher among the large farmers as compared to small farmers. Purchase of fertilizer was the highest expenditure item *i.e.* 21.23 per cent and 25.77 per cent for small and large farmers in case of cooperative banks.

Table 3. Diversion of agriculture crop loan by redgram growers

(Rs. /ac)

Sl. No.	Particulars	Commercial Banks				Cooperative Banks			
		Small farmers (n=20)		Large farmer (n=10)		Small farmers (n=20)		Large farmer (n=10)	
		Average amount	Percentage to total ACL	Average amount	Percentage to total ACL	Average amount	Percentage to total ACL	Average amount	Percentage to total ACL
1	Total agriculture crop loan	8294	100.00	8976	100.00	4805	100.00	4805	100.00
2	Total credit utilized for production purpose	6368	76.78	8703	96.97	3717	77.36	3641	93.26
3	<b>Total diversion of credit</b>	1926	23.22	272	3.03	1088	22.64	263	6.74
	a. Credit utilised for other crops	426	5.14	159	1.77	201	4.18	263	6.74
	b. Household consumption	1500	18.09	113	1.26	887	18.46	-	-

**Note** :ACL- agriculture crop loan

The results of the credit diversion by redgram growers shown in Table 3 indicated that the diversion of credit was 23.22 per cent among small farmers who had borrowed from commercial banks while the credit diversion of 22.64 per cent was notice among the same category of farmers who had borrowed from co-operative banks. Whereas, the credit was a meager 3.03 per cent and 6.74 per cent among the large farmers who had borrowed from commercial and co-operative banks respectively, the expenditure towards consumption was the major item of diversion among small farmers. Whereas, diversion of agriculture crop loan towards other crops was noticed among large category of farmers as shown in Figure 1.

Table 4 presents the diversion of credit among cotton growers who had availed loan from commercial and cooperative banks as shown in Figure 2. The diversion of credit was 14.28 per cent among small farmers who had borrowed from commercial banks while the credit diversion of 18.62 per cent was notice among the same category of farmers who had borrowed from co-operative banks. Whereas the credit was a meager 4.49 per cent and 3.84 per cent among the large farmers who had borrowed from commercial and co-operative banks respectively the expenditure towards consumption was the major item of diversion among small farmers. Whereas, diversion of agriculture crop loan towards other crops was noticed among large category of farmers. Small farmers are not spending the credit in a planned way which can be avoided and used for purchase of yield increasing inputs [7].

Table 4. Diversion of agriculture crop loan by cotton growers (Rs. /ac)

Sl. No.	Particulars	Commercial Banks				Cooperative Banks			
		Small farmer (n=20)		Large farmer (n=10)		Small farmer (n=20)		Large farmer (n=10)	
		Average amount	Percentage to total ACL	Average amount	Percentage to total ACL	Average amount	Percentage to total ACL	Average amount	Percentage to total ACL
1	Total agriculture crop loan	8462	100.00	8520	100.00	4507	100.00	3826	100.00
2	Total credit utilized for production purpose	7254	85.72	8118	95.51	3668	81.38	3679	96.16
3	<b>Total diversion of credit</b>	<b>1208</b>	<b>14.28</b>	<b>382</b>	<b>4.49</b>	<b>839</b>	<b>18.62</b>	<b>147</b>	<b>3.84</b>
	a. Credit utilised for other crops	392	4.63	382	4.49	386	8.56	147	3.84
	b. Household consumption	816	9.65	-	-	453	10.06	-	-

Note : ACL- agriculture crop loan

Figure 1. Diversion of agriculture crop loan for different purpose by redgram growers

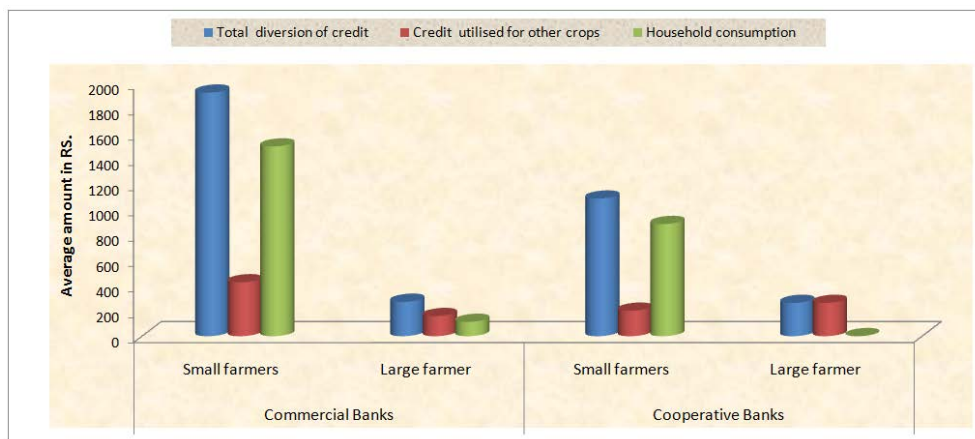
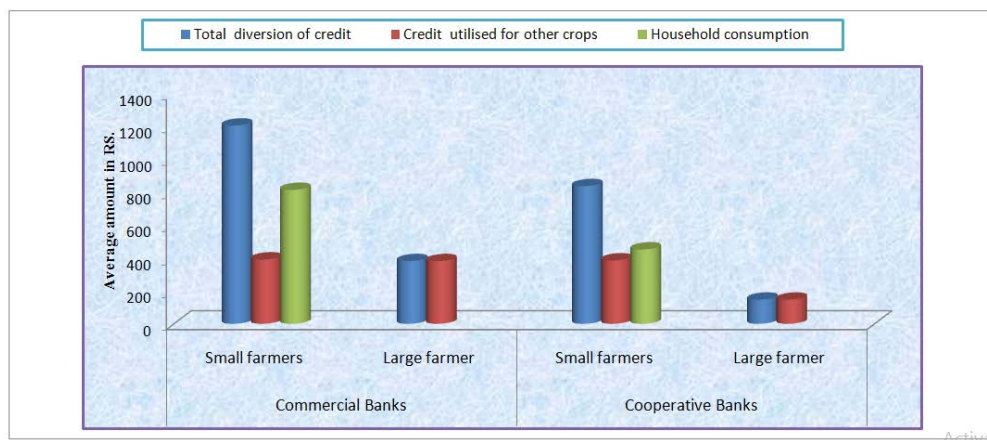


Figure 2. Diversion of agriculture crop loan for different purpose by cotton growers



#### 4. Conclusion

Large farmers utilized agriculture crop loan more efficiently when compared to small farmers in both commercial and co-operative banks. The diversion of agriculture crop loan was more in case of small farmers as compared to large farmers in both commercial and co-operative banks for both redgram and cotton production. The reasons for diversion in small farmers category was that they had to look after their basic minimum needs out of their meagre resources which in turn were insufficient. It is interesting to note that across institutions, small farmers of commercial banks had spent more amounts on payment of labour wages than the small farmers of cooperative banks. Hence, financial institutions should also educate the farmers in utilizing of crop loan amount while disbursing the loan. This indicates that the large farmers have utilized the credit for increasing the crop production. The size of crop loan amount disbursed by cooperative banks to the farmers was almost one half of the amount of commercial banks borrowers. Therefore, there is a need to increase size of amount by the cooperative banks.

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*The Publication fee is defrayed by Indian Society for Education and Environment (www.iseeadyar.org)*

**Cite this article as:**

Ravindra Chavan, Amrutha T. Joshi, Suresh S. Patil, G.M. Hiremath. Utilization pattern of Agriculture crop loan by farmers in India with special reference to Karnataka. *Indian Journal of Economics and Development*. Vol 4(12), December