

## Impact Agriculture Finance on Crop Production in Sangli District

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### Abstract

**Purpose:** Agriculture is major sector of Indian economy. Finance or credit is basic input for agricultural development. It is understood that the various farmers of the Sangli district are borrowing fund different type sources. The present study is related to investigation of availability and flow of institutional agricultural finance, need of institutional agricultural finance, and impact of agriculture finance on crop production and productivity.

**Design of research:** In this paper, sample size of farmer is selected on the basis of proportionate but randomly selected from each village.

**Finding Part:** They have selected the agriculture finance source for low interest charged. Public and cooperative banks as traditional source of agricultural finance fulfilling the need of crop loan. With Public sector and Cooperatives sector, private sector banks are also coming into this agricultural finance sector. Private sector banks portion is very less in crop loan to agricultural. Recently, since 2018-19 small finance bank are entered into agricultural sector in sangli district

**Practical Applicability:** This study is important to policy maker who are doing rural policy. Even though Bankers seek information regarding to agricultural finance state. Banking sector is expanding in rural area.

**Keywords:** Agriculture Finance, Crop loan, Impact of Crop Loan , Agricultural Production and Productivity

### Introductions

Agriculture is major sector of Indian economy. Before independence, first attempt was made by starting Primary Agricultural Credit Cooperative Society (PACS) at primary level in 1904. After 1935, RBI established a Agriculture department in Reserve Bank of India. Then 14 major Bank nationalization was done in year 1969. NABARD came into the picture 12 July 1982. Kisan Credit Card became important innovation for solving the agriculture finance problem. But agriculture financial crunch is not mitigated. One side agriculture is depending on monsoon rain. Agriculture sector is a gamble of monsoon. Another side agriculture sector is financed through rural money lenders whose interest rate was very excessive and this is not reliable in view of farmer economic condition.

Agricultural condition is deteriorating and farmer's distress is increasing. So the present study is related to agriculture finance of Sangli district. In this paper small attempt is done to study the credit delivery system for agriculture in Sangli District and to analyze the impact of agricultural finance on crop production and productivity in Sangli District. This study is important to policy maker who are doing rural policy.

### Review Of Literature

Sangwan Sher Singh (2015) in his research article, namely 'More Credit for Agriculture Households? NSSOs 70 th Round on Indebtedness' According to his article an increase in indebtedness in agriculture between 2003 to 2013 not necessarily mean that growth in debt. That has debilitated the cultivator. According to him higher indebtedness may also refer more enabling process the increased availability of institutional credit. Shanmuga S. (2017) in this

thesis all categories covered by researcher Commercial bank, Cooperative bank, Regional rural bank which is known as Multi Agency Approach and progress of each in India, Karnataka and Mysore. He studied the disbursement of institutional agriculture credit flow and factor responsible for increasing use of agriculture credit. He studied the agricultural finance socio-economics of on specifically household farmers in this area. He noted that money lender is major concern to bureaucrats and farmers. His major finding are those increase the share of commercial bank in study area, Majority of farmers completed primary education but few are able to complete the higher education level. Majority of framers depends upon bore well for irrigation for their agriculture land. Naidu C. V.(2007) In his work, he has kept the objective which is the role financing agriculture by Commercial bank –a study in the post reform period and second objective is to evaluate the performance of Commercial bank in credit. He came to know the different problems of borrowers of commercial bank. Suryanwanshi S.D. (2016) in his study, “Effectiveness of agriculture loans: A Case Study of Sholapur District” he analyzed the effectiveness of crop loan and found that cropping intensity was declined by 3.37 percent. It is also found that share of priority sector lending is raised from 66.86 to 81.23 percent and remarkable use of irrigation technology like drip irrigation is increased in study area. His major recommendation is crop loan products should be planned according to need of farmer. Timely crop loan vital in activities, delay in approval and distribution. Talule Dnyadev (2013) in his paper ‘Political Economy of Agricultural Distress and Farmer’s Suicide in Maharashtra’ The researcher evaluated the economic condition of the firm households of Maharashtra “Decline in productivity and negative return from Vidhrbha region into debt trap” much of the debt was a consequences of gap between agricultural expenses and return from it (Suri2006, Talule 2011) Debt, value of asset, distress, safe of land and animal, comparative share of provincial and institutional credit in total credit, rate of interest rate these variable are studied by researcher for associating the success with indebtedness..

We found the research gap from above review of literature. In the above research work no one has studied the impact of agriculture finance on crop production at district level. So the researcher has discussed in this paper the impact crop loan on crop production and productivity in Sangli district of Maharashtra state.

### **Research Methodologies**

Firstly, In present study 5 tahasil were selected purposefully as per cluster sampling and agro climatic condition, physical structure and irrigation sources. We have selected 43 villages (10 percent) of these 5 tahsils of total 419 villages in Sangli district. From each village the sample respondents are selected on the bases appropriate representation of economic and social status of farmer that are marginal, small and big categories of land holding. Total 434 farmers who have taken loan are randomly selected. Hence, the study covers 434 samples respondents. The researcher has used the technique before and after method for analysis of Impact on production of crops in Sangli district, Interviews and observation technique are used know the facts regarding the institutional finance in study area. Secondary data is collected from Sangli district Socio-economic survey reports by DES Govt. of Maharashtra Mumbai. Various reports of State Banker Committee, Pune, data published by central government, RBI Reports, NABARD Reports, Reports of state government of Maharashtra and Reports from website of Sangli district collector office. Various lead bank credit plans since 2011 to 2021 of Sangli district.

### Disbursement of Institutional Agricultural Finance to Agricultural Sector in Sangli District during 2011-12 to 2020-21

Agricultural sector is important sector in Sangli district. Comparatively, the progress of disbursement in institutional finance should be explained in percentile which is very important to understand the overall seen of agricultural finance. That is why progress of disbursement in institutional finance is brought to limelight the fact in this table.

**Table: 1**

### Disbursement of Institutional Agricultural Finance to Agricultural Sector in Sangli District during 2011-12 to 2020-21

Sr. No	Banks	Public Sector Commercial Banks	Private Sector Commercial Banks	Cooperative Banks	W.K.Gramin Banks	Total Agricultural Finance
1	2011-12	84027 ( 50.53)	21412 (12.87)	60775 (36.54)	93 (0.06)	166307 (100)
2	2012-13	103627 ( 53.96)	32564 (16.96)	55664 (28.99)	183 (0.10)	192038 (100)
3	2013-14	77720 ( 40.4 )	42943 (22.34)	71362 (37.12)	212 (0.11)	192237 (100)
4	2014-15	94069 (48.01)	29429 (15.02)	72166 (36.83)	255 (0.13)	195919 (100)
5	2015-16	126796 (47.74 )	57205 (21.54)	81346 (30.63)	253 (0.10)	265600 (100)
6	2016-17	149338 (45.16)	69285 (20.95)	111762 (33.80)	280 (0.08)	330665 (100)
7	2017-18	96308 (38.80)	60669 (24.44)	91126 (36.71)	122 (0.05)	248225 (100)
8	2018-19	99456 (26.38)	92230 (24.64)	185195 (49.12)	130 (0.03)	377011 (100)
9	2019-20	85857 (35.28)	70557 (28.99)	86901 (35.71)	38 (0.02)	243353 (100)
10	2020-21	109661 (35.61)	72407 (23.51)	125485 (40.75)	395 (0.13)	307948 (100)
	Total	1026859 (40.75)	548701 (21.77)	941782 (37.38)	1961 (0.08)	2519303 (100)

Source: Lead Bank Reports of Sangli District (2011-12 to 20-21)

Note: Figures within brackets indicate percentage to total

The table indicates the disbursement of institutional agricultural finance by commercial bank's including public sector banks, private sector banks, Cooperative banks and regional rural banks to agricultural sector in Sangli District. In year 2011-12 out of total agricultural finance public sectors banks disbursement was 50.53 %, It became 35.61 % in year 2020-21 and private sectors banks disbursement was 12.87 % and it became 23.51 % in the year 2020-21. Cooperative sector banks disbursement was 36.54 % which became 40.75 % in year 2020-21 but the contribution of regional rural bank increased from 0.06 to 0.13 %. Over all in year 2011-12 to 2020-21 the contribution public sectors banks to agricultural finance disbursement is 40.75 %,

and private sectors banks contribution in disbursement is 21.77 % and. Cooperative sector banks disbursement is 37.38 % but the contribution of regional rural bank is only 0.08% in total agricultural finance. Regional rural bank contribution is less because numbers of branches of Regional Rural Banks are very limited. Private sector banks are lending money to agricultural but their concentration is on irrigated area like Miraj, and Tasgaon. Private sector banks are not lending money to drought prone area. like Atapadi and Jat. Public sector banks and Cooperative sector banks performance in lending is very good because of farmer are familiar with these the agencies.

### Comparative Analysis of Impact of Agricultural Finance on Production and Productivity of Crops in Sangli district

Table No 2 (Area in Acre)

Sr.No.	Crops	Change Area (Acre)	% Change Area (Acre)	Change Total Production (Quintal)	% Change Total Production (Quintal)	Change Average Productivity (Per Acre) (Quintal)	% Change Average Productivity (Per Acre) (Quintal)
1	Jowar (Kharip)	-87	77.04	-724	83.89	1	108.33
2	Bajra	-40	82.14	-230	87.16	1.34	115.84
3	Maize	-13	89.68	-358	84.93	1	105.88
4	Wheat	-7	87.72	12	101.42	-1	88.89
5	Paddy	4	108.00	39	103.99	1	105
6	Gram	11	257.14	73	273.81	7	260.00
9	Sugarcane (Tone)	115	114.30	9743	125.42	3.47	107.05
7	Groundnut	3	120.00	40	127.97	2	120.00
8	Soyabin	2	101.67	33	103.20	-1	88.89
10	Grapes (Box/4kg)	12	104.40	18450	102.99	382	120.32
11	Pomegranate (Tone)	4	111.76	24	109.76	1	117.00

Source: Field Survey 2021-22

#### Result and findings:

**1** The total area under jowar crop was 379 acre and it became 292 acre. The total area of Jowar is declined by 87 acre (77.04 %). The Total production of jowar before agricultural finance as 4495 quintal and it became after agricultural finance 3771 quintal. Therefore the production is also declined by 724 quintal (83.89 %). The productivity of jowar inclined by average one quintal. Total area under bajara crop was 224 acre. It became 184 acre after agricultural finance. The total change is 40 acre (82.14 %).

**2** Total area under maize crop was 126 acres. It decreased and became 113 acre. The net area 13 acre (89.68 %) declined. The production of maize was 2375 quintal before agricultural finance. It became 2017 quintal. The net decline under this area is 13 acre (89.68 %).

3 The production and productivity of wheat is also affected by agricultural finance. The total production of wheat is increased by 843 quintals to 855. The percentage of growth in production is 101.42 percent. But the area under wheat cultivation is declined. The average productivity is declined from 17.76 to 16.29 quintal

4 The total production of paddy is increased from 977 quintal to 1016 quintal and total net increase in production of paddy is 39 quintal. It is observed that the production of paddy is increased by 103.99 percentage. Total area under gram production is increased from 7 acre to 18 acre and the net increase under this area is 11 percent. The percentage of the growth is 257.14 percent. The average productivity per acre is increased from 5.33 quintal to 12.50 quintal.

5 The area is increased and it became 18 acre. The production of groundnut is also increased from 143 quintal to 183 quintal. It means 40 quintal (127.97%) is net increase in production of groundnut. The productivity of groundnut is also increased. It increased from 10 quintal to 12 quintal per acre. The net increase in the productivity is 2 quintal (120 %) per acre. The production of soyabean is increased from 1031 quintal to 1064 quintal. The 33 quintal (103.20 %) is the net increase in production of soyabean. The total area under soyabean production is increased from 120 acre to 122 acre.

6 Total sugarcane cultivation area is increased from 840 acre to 119 acre. It means that the net area under sugarcane is increased by 115 acre (114.30%). The total production of sugarcane is also increased from 38322 tone to 48065 tones. The productivity of sugarcane is also increased. 49.25 to 52.72 tone per acre. It means farmer are induced to cultivate cash crops like soyabean and sugarcane instead of food grain crops. For cultivating cash crops the finance becoming very valuable output to them.

7 Total area under grape production is increased from 273 acre to 285 acre. It means grape farming is increased by 104.40 %. Total production of grape increased 616500 to 634950 boxes. It means grape production of study region is increased by 18450 boxes (102.99 %). The average productivity is also increased from 1880 boxes per acre to 2262 boxes per acre. The percentage of increase in boxes was 120.32 percent.

8 The pomegranate crop is cultivated in Atapadi taluka and Jat taluka. Total production of pomegranate is increased from 246 tones to 270 tones. Total increase in pomegranate is 24 tones. In percentage total production of pomegranate is increased by 109.76 percent. The productivity of pomegranate is also increased by 117 %.

With the field work observations and methods It is concluded that major part of agricultural finance is given by Cooperative banks and public sector banks. The private sector banks are also lending money to farm mechanization. The role of regional rural bank is very meager. Agricultural finance has positive impact on production of food-grain and cash crops. Also agricultural finance plays significant role in irrigation development as a result of agricultural crop production is increased in Sangli district.

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