

# ROLE OF INSTITUTIONAL FINANCE FOR AUGMENTATION IN AGRICULTURAL PRODUCTION IN RASGOVINDPUR BLOCK IN THE DISTRICT OF MAYURBHANJ IN ODISHA

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# Introduction

Agricultural finance assumes vital importance in the agro- socio economic development of the country both at individual level and aggregate level .Its catalytic role strengthens the farming business and augments the productivity of scarce resources. For instance, new potential seeds when combined with mechanized inputs like fertilizer and plant protection chemical in requisite proportion result in higher productivity of resources Application of new technological inputs obtained through farm finance provides inputs for agricultural productivity . Accretion to farm assets and farm supporting infrastructure provided by large scale investment activities entail increased farm income level, leading to the overall improvement in the standard of living of agrarian masses. Farm finance can also contribute to reduction in regional economic imbalances and conducive for mitigating the inter-farm assets and wealth variations.

According to Muniraj (1987): "Farm finance is the money extended to the farmers to stimulate the productivity of the limited farm resources. It is not a mere loan or credit of advance, it is an instrument to promote the well being of the society .Farm finance is not just a science to manage the money, but an applied science of allocating scarce resources to derive the optimum output .It is a lever with forward and backward linkages to the economic development both at micro and macro level".

# Objectives

- 1. To examine the Credit requirement of the farmers in Rasgovindpur block located in the district of Mayurbhanj.
- 2. To analyse the pattern of utilization of finances purveyed by the institutional agencies.

# Methodology

The present paper is based upon testing of hypotheses in respect of 8 research questions based on the information elicited from the informants in the process of primary data collected from Rasgobindpur Block in the District of Mayurbhanj covered under the State of Odisha.

Hypotheses have been tested by the application of  $\chi^2$  (chi) square test both at 5% and 1% level of significance.

# Hypotheses

- 1. Loan amount is spent for increase in agricultural production.
- 2. Repayment schedule followed by the banks is easy for obtaining loan.
- 3. Financial assistance disbursed by the commercial banks helps the farmers in augmenting agricultural output.
- 4. Monsoon failure has caused loan over dues.
- 5. Follow up action by the bankers is adequate for loan recovery.
- 6. Scale of finance provided by the commercial banks is adequate.
- 7. Banks have timely disbursement of loan to the borrowers.
- 8. Lending procedures adopted by the banks are amenable to the borrowers.

#### **Plan of the Study**

The entire study has been schematized into four sections. Section I. deals with introduction, objectives, methodology, hypothesis and plan of the study. Section II. incorporates statistical profile of the district of Mayurbhanj and Rasgovindpur block. Section III. entails chi-square test to verify the hypothesis. Section IV.



deals with findings of the entire study, conclusion and pragmatic suggestions, policy measures and own recommendation to improve agricultural output on the part of the farmers and references.

# Statistical Profile of the District of Mayurhanj

District of Mayurbhanj is located in the state of Odisha. It is the 1st district in terms of size and 3<sup>rd</sup> in terms of population. In terms of population per square kilometer Mayurbhanj is 16<sup>th</sup> densely populated district in the state. Mayurbhanj has 9<sup>th</sup> rank in terms of sex ratio in the state. There are 382 GPs and 26 blocks in this district. The district has no corporation; rather1 municipality and 3 N.A.Cs are functional. Area of the district is 10418 sq.km.22.22 lakh peoples live in this district. Headquarter is Baripada.No offire stations is 17.No of villages inhabited, unhabited are 3751,109 respectively. Total number of villages is 3860.There are 09 assembly constituencies in this district. Density of Population of the district as per 2011 census is 214.per sq km. There are 4 subdivisions in the districts viz. Baripada, Kaptipada, panchapirh and Bamanghati. The district is divided into 26 tahasils viz Bahalda, Rairangpur, Baripada Rasgovindpur ,Betnati, Barshi, udala, karanjia, Raruan, Tiring, Jamda, Bijatala ,Kusumi ,Bisoi, Samakhunta, Bangriposhi, saraskona, Kuliana, Suliapada, Muruda, Kaptipada, Gopobandhunagar, khunta , Jashipur, Thakurmunda, and Sukruli.

1	<b>Total Nos. of Branches</b>	257
2	Total Nos. of Rural Branches	181
3	Total Nos. of Semi UrbanBranches	76
4	Total Deposit (in cr.)	8145.62
5	Total Advances (in cr.)	2845.37
6	CD Ratio in %	34.93%
7	Total PS Advances (in cr.)	1116.36
8	% of PS Advance to Total Advance	68.73%
9	Agriculture Advance (in cr.)	699.28
10	% of Agriculture advance to total Advance	43.05%
11	SSI Advance Outstanding	282.48
12	Advance Under other Priority Sector (in cr.)	130.28

Table No. –I: Banks at a Glance in Mayurbhanj District as on 31/03/2017:

Source: Lead Bank, BOI statistics, Mayurbhanj.

SL.No.	Name of the Bank	Total Branches in the District
	COMMERCIAL BANKS	
1	Bank of India	51
2	State Bank of India	33
3	United Bank of India	15
4	Canara Bank	11
5	Syndicate Bank	07
6	Bank of Boroda	03
7	Andhra Bank	04
8	Indian Oversees Bank	02
9	Punjab National Bank	03
10	Allahabad Bank	01
11	Central Bank of India	01
12	UCO Bank	04
13	Union Bank of India	03
14	Indian Bank	01

Table No. –2 No. of Bank Branches



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15	Oriental Bank of Commerce	02
16	IDBI Bank	03
17	AXIS Bank	04
18	ICICI Bank	06
19	HDFC Bank	02
20	Corporation Bank	03
21	Federal Bank	01
22	Bandhan Bank	02
23	Vijaya Bank	01
24	DCB Bank	01
Т	otal Commercial Banks	164
	Regional Rural Bank	
01	Odisha Gramya Bank	78
Co-operative and other Banks:		
01	M.C.C BANK	15
	Grand Total	257

Source: Lead Bank, BOI statistics, Mayurbhanj.

# **Statistical Profile of Rasgovindpur Block**

Rasgovindpur block is under the jurisdiction of Mayurbhanj District. There are 15 numbers of GPs in Rasgovindpur block.No of villages are 177. Bank of India is having the highest number of bank branches among the nationalized banks in the district of Mayurbhanj. However Odisha Gramya Bank is having highest number of bank branches i.e. 78 in the district of Mayurbhanj.

In Rasgovindpur block total number of marginal workers are 27363, who live in rural area. Total no of mail male workers are 14,147 and no of female marginal workers are 13216. In this block no of cultivators are 2065. Among these 1440 are male workers and 625 are female workers. Total number of agriculture labours is 18,423. Among these 9722 are male and 8701 are female. Four types of nationalized banks have established their branches in Rasgovindpur Block, viz. Bank of India, Canara Bank, State Bank of India and United Bank of India. There are 3 branches of BOI, One CB, One SBI and two UBI branches are located in this block. One Regional Rural Bank also working in this Block named as OGB(Odisha Gramya Bank).

# **Hypothesis Testing**

Table-1 Loan Used Only For Agriculture Purpose				
Response	No. of. Respondents	Percent		
Agreed	166	55.33		
Strongly Agreed	13	4.33		
Disagreed	115	38.33		
No Opinion	6	2		
Total	300	100		

Source: Primary data

 $\chi^2$  Test of Hypothesis

H<sub>0</sub>: Loan Amount is not spent for increase in agricultural production.

H<sub>a</sub>: Loan amount is spent for increase in agricultural production.



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No of Respondents	<b>Observed Frequency(O)</b>	Expected	О-Е	$(\mathbf{O}-\mathbf{E})^2$	$(\mathbf{O}-\mathbf{E})^2/\mathbf{E}$
		Frequencies(E)			
166	166	75	91	8281	110.41
13	13	75	-62	3844	51.25
115	115	75	40	1600	21.33
6	6	75	-69	4761	63.48
N=300	N=300				$S(O-E)^2/E$
					246.47

Degree of freedomV=n-1=3. At 5% level of significance tabulated value is 7.815. At 1% level of significance tabulated value is 11.345. Computed value is > Tabulated value.  $H_0$  is rejected both at 5% and 1% level of significance. H<sub>a</sub> is accepted that loan amount is utilized for improvement in agricultural production.

Table-2 Reasonable Repayment Schedule					
Response	No. of Respondents	Per cent			
Agreed	210	70			
Strongly Agreed	15	5			
Disagreed	69	23			
No Opinion	6	2			
Total	300	100			

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Source: Primary data

# $\chi^2$ Test of Hypothesis

H<sub>o</sub>: Repayment schedule followed by the banks is not easy for obtaining loan.

H<sub>a</sub>: Repayment schedule followed by the banks is easy for obtaining loan.

No of Respondents	<b>Observed Frequency(O)</b>	Ε	О-Е	$(\mathbf{O}-\mathbf{E})^2$	$(O-E)^{2}/E$
210	210	75	35	1225	16.33
15	15	75	-60	3600	48.00
69	69	75	-06	36	0.48
06	06	75	-69	4761	63.48
N=300	300				$S(O-E)^2/E$
					=128.29

S (O-E)<sup>2</sup>/E=128.29 . Degree of freedom V=n-1=4-1=3. At 5% level of Significance  $\chi^2_{0.05}$  for v=3=7.185  $\chi^2_{0.01}$  for V =3=11.345. Computed value >Tabulated value both at 1% and 5% level of significance. H<sub>0</sub> is rejected .H<sub>a</sub> is accepted. Repayment schedule followed by the banks is amenable for obtaining bank loan.

	No. of Respondents	Per cent
Agreed	219	73
Strongly Agreed	34	11.33
Disagreed	41	13.67
No Opinion	6	2
Total	300	100

# Table -3 Loan Assistance Helps in Increasing the Output

Source : Primary Data



# $\chi^2$ Test of Hypothesis

 $H_0$ : Financial Assistance disbursed by the commercial banks do not help the farmers in augmenting agricultural output.

 $H_a$ : Financial Assistance disbursed by the commercial banks help the farmers in augmenting agricultural output.

No of Respondents	<b>Observed Frequency(O)</b>	Ε	О-Е	$(\mathbf{O}-\mathbf{E})^2$	$(\mathbf{O}-\mathbf{E})^2/\mathbf{E}$
219	219	75	144	20736	276.48
34	34	75	-41	1681	22.41
41	41	75	-34	1156	15.41
6	6	75	-69	4761	63.48
N=300	N=300				$S(O-E)^2/E$
					=337.78

Degree of freedom V=n-1=4-1=3. At 5% level of Significance  $\chi^2_{0.05}$  for v=3=7.815 and  $\chi^2$ 

 $_{0.01}$  for v=3=11.345. Computed value > Tabulated value, H<sub>o</sub> is rejected, H<sub>a</sub> is accepted. Financial Assistance disbursed by the commercial banks amenable for augmenting agricultural output.

Table 5.4, Illustrate the opinion of the borrowers regarding increased loan over dues due to monsoon failure.

Response	No. of Respondents	Per cent
Agreed	212	70.66
Strongly Agreed	38	12.67
Disagreed	46	15.33
No Opinion	4	1.33
Total	300	100

Table -4 Increased Loan Over Dues Due To Monsoon

Source : Primary Data

# χ2 Test of Hypothesis

H<sub>o</sub>: Monsoon failure has not caused loan overdues.

H<sub>a</sub>: Monsoon failure has caused loan overdues.

No of	Observed	Expected Frequency	О-	(0-	$(\mathbf{O}-\mathbf{E})^2/\mathbf{E}$
Respondents	frequency(o)	<b>(E)</b>	Ε	$\mathbf{E})^2$	
212	212	75	137	18769	250.25
38	38	75	-37	1369	18.25
46	46	75	-29	841	11.21
04	04	75	-71	5041	67.21
N=300	N=300				$S(O-E)^2/E$
					=346.92

S  $(O-E)^2/E=346.92$ .Degree of freedom V=n-1=4-1=3. $\chi^2_{0.05}$  for V=3 =7.815 and  $\chi^2_{0.01}$  for V=3=11.345. Computed Value > Tabulated value .Ho is rejected and Ha is accepted. Monsoon Failure has caused loan over dues on the part of farmers in Rasgovindpur block.

Table 5, Illustrates the opinion of the borrowers regarding the follow-up action of the Banks.



Response	No. of Respondents	Per cent
Agreed	174	58
Strongly Agreed	21	7
Disagreed	98	32.67
No Opinion	7	2.33
Total	300	100
Source : Primary Data	l	•

### Table-5 Insufficient Follow-up action

# **x2** Test Hypothesis

 $H_0$ : Follow up action by the bankers is not adequate for loan recovery.

H<sub>a</sub>: Follow up action by the bankers is adequate for loan recovery.

No of	Observed	Expected	О-Е	$(\mathbf{O}-\mathbf{E})^2$	$(\mathbf{O}-\mathbf{E})^2/\mathbf{E}$
Respondents	Frequency(o)	Frequency(E)			
174	174	75	99	9801	130.68
21	21	75	-54	2916	38.88
98	98	75	23	529	7.05
07	07	75	-68	4624	61.65
N=300	N=300				$S(O-E)^2/E$
					=238.26

Degree of freedom V=n-1=4-1=3.  $\chi 2_{0.05}$  for v=3=7.815 and  $\chi 2_{0.01}$  for V=3=11.345

Computed value is > Tabulated Value  $H_o$  is rejected but  $H_a$  is accepted. Follow up action by the bankers is adequate for loan recovery.

# Table 6, reveals the opinion of the borrowers regarding the scale of finance.Table 6Inadequate scale of finance

ble 6In	adequate scale of finance	e
e	No. of Respondents	Р

Response	No. of Respondents	Per cent			
Agreed	181	60.33			
Strongly Agreed	75	25			
Disagreed	37	12.33			
No Opinion	7	2.33			
Total 300 100					
Source : Primary Data					

# χ2 Test of Hypothesis

H<sub>o</sub>: Scale of finance provided by the commercial banks is not adequate.

H<sub>a</sub>: Scale of finance provided by the commercial banks is adequate.

No of Respondents	Observed Frequency(o)	Expected Frequency(E)	О-Е	$(\mathbf{O}-\mathbf{E})^2$	$(O-E)^2/E$
181	181	75	106	11236	149.81
75	75	75	0	0	0
17	17	75	-58	3364	44.85
07	07	75	-68	4624	61.65
N=300	N=300				$S(O-E)^2/E$
					=256.31



 $S(O-E)^2/E=256.31$ , Degree of freedom V=n-1=4-1=3.  $\chi^2_{0.05}$  for V=3=7.815 and  $\chi^2_{0.01}$  for V=3=11.345. Computed value>Tabulated value. H<sub>o</sub> is rejected but H<sub>a</sub> is accepted. Scale of finance provided by the CBs is adequate.

Table 7, chalk out the opinion of the borrowers regarding timely disbursement of loan by the banks.

Response	No. of Respondents	Per cent
Agreed	68	22.67
Strongly Agreed	20	6.67
Disagreed	184	61.33
No Opinion	28	9.33
Total	300	100

# Table 7: Timely disbursement of loan

Source: Primary Data

# χ2 Test of Hypothesis

H<sub>o</sub>:Banks do not have timely disbursement of loan to the borrowers.

H<sub>a</sub>:Banks have timely disbursement of loan to the borrowers.

No of respondents	Observed Frequency	Expected Frequency(E)	О-Е	$(\mathbf{O}\textbf{-}\mathbf{E})^2$	$(\mathbf{O}-\mathbf{E})^2/\mathbf{E}$
68	68	75	-07	49	0.65
20	20	75	-55	3025	40.33
184	184	75	109	11881	158.41
28	28	75	-47	2209	29.45
N=300	N=300				$S(O-E)^2/E$
					=228.84

S(O-E)<sup>2</sup>/E=228.84.Degree of freedom V=n-1=4-1=3

 $\chi 2_{0.05}$  for V=3=7.815 and  $\chi 2_{0.01}$  for V=3=11.345. Computed Value > Tabulated value. H<sub>o</sub> is rejected but H<sub>a</sub> is accepted .Banks have timely disbursement of loan to borrowers.

Table 8 Easy lending Procedures				
Response	No. of Respondents	Per cent		
Agreed	190	63.33		
Strongly Agreed	35	11.67		
Disagreed	60	20		
No Opinion	15	5		
Total	300	100		

**Source:** Primary Data

# χ2 Test of Hypothesis

H<sub>o</sub>: Lending procedures adopted by the banks are not amenable to the borrowers.

H<sub>a</sub>: Lending procedures adopted by the banks are amenable to the borrowers.



No of respondents	<b>Observed Frequency</b>	Expected Frequency(E)	О-Е	$(\mathbf{O}-\mathbf{E})^2$	$(\mathbf{O}-\mathbf{E})^2/\mathbf{E}$
190	190	75	115	13225	176.33
35	35	75	-45	2025	27.00
60	60	75	-15	225	3.00
15	15	75	-60	3600	48.00
N=300	N=300				$S(O-E)^2/E = 254.33$

 $S(O-E)^2/E=254.33$ . Degree of freedom V=n-1=4-1=3.  $\chi 2_{0.05}$  for V=3=7.815 and  $\chi 2_{0.01}$  for V=3=11.345. Computed Value > Tabulated value.H<sub>o</sub> is rejected but H<sub>a</sub> is accepted . Lending procedures adopted by the banks are amenable to the borrowers.

### I. Pattern of loan Utilization

Table 9 Reasons for Loan over Dues from the Standpoint of Banks

Sl. No.	Reasons for over dues	Sample banks	% to total selected banks
1.	Willful default	5	50
2.	Drought ,floods, etc.	3	30
3.	Inability to pay	2	20

The bankers were asked to give their opinion on farm credit over dues and their opinion which are presented in table 9. After careful data analysis from the sample banks and from the direct interaction with the borrowers it is revealed that erratic non-payment status of the borrowers. The willful default of borrowers as claimed by the bankers on being interviewed is an intricate issue. As the loanees are not properly assessed by bankers while providing loans. Small borrowers are not attended, nor are they persuaded by banks through right kind of initiatives. This may be the reason why the over dues are gaining momentum. It was observed that 30 percent of the default was due to natural calamities.50 percentages of the defaulters are willful defaulters and the reason for 20 % of the defaulters was their inability to repay.

Table 10, Enumerates the reasons for overdue from the farmers view point.

Tuble 107 Reasons for Over Dues Furthers view Font						
S. No.	<b>Reasons for over dues</b>	Sample Borrowers	% to total no. of borrowers			
1	Willful Default					
2	Drought, Floods etc	170	56.67			
3	Low price for agricultural Produce	115	38.33			
4	Others	15	5			

Table 10: Reasons for Over Dues-Farmers View Point

The loan over dues accruing to the borrowers, is observed to be hardly willful default. Rather it is caused by natural disasters like flood, drought, and cyclone and low minimum support price .Some other factors such as unusual health hazards cause diversification of loan installment towards catering urgent conventional needs also account for over dues.

# Conclusion

More importantly the reasons for non-payment of the loan amount by the borrowers were frequent crop failure, diversion of loan amount for purposes other than agriculture, farm investment turning out to be unproductive the income from the crop yields was not sufficient to repay the loan while maintaining their families and priority given to the repayment of loans borrowed from the private money lenders. Some of the suggestions for prompt recovery of loan includes continuous supervision and follow up action after the loan is disbursed,



realistic assessment of loan requirement and providing technical support to the farmers to increase the productivity which will ensure better repayment by the borrowers.

### Suggestions

- 1. The disbursement of loan, seed and fertilizers has to be given in time to the farmers to increase the productivity and repayment.
- 2. There must be strict follow up action by the commercial banks for recovering the loan amount from the borrowers.
- 3. The borrowers must use the amount of loan only for agricultural purpose to increase the output.
- 4. Stringent legal actions have to be taken against the chronic defaulters such as to attach their land holdings and properties.
- 5. Effective recovery procedures have to be instituted by creating a separate court for recovery.

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