

Bank Finance and Rural Livelihood: An Impact Analysis in Papumpare district of Arunachal Pradesh

*¹Ms. Opang Tatin and ²Prof. Tasi Kaye

¹Research Scholar, Department of Commerce, Rajiv Gandhi University, Doimukh, (India)

²Department of Commerce, Rajiv Gandhi University, Doimukh, (India)

ARTICLE DETAILS

Article History

Published Online: 29 November 2017

Keywords

Rural finance
economic development
impact analysis
rural livelihood

*Corresponding Author

Email: opangtatin4346@gmail.com

ABSTRACT

Finance is the life blood of any economy. There are many sources of finance for economic activities. The bank finance is one of the important factors for enhancing rural livelihood. Agriculture is one of the major sources of sustainable livelihood in rural areas. Two third of rural population depends on agriculture and lives in abject poverty. Nationalisation of commercial banks marked the beginning of social banking in rural areas. It provided provision of institutional credit at moderate rates of interest to needy farmers. Rapid expansion of bank branches has a positive effect on rural farm and non-farm output, income and employment which helped farmers to avail services and credit facilities and a variety of loan for meeting their production needs. It provides them the opportunities to diversify various non-farm productive activities such as such as rearing of livestock, Horticulture/Plantation, Dairy/Fishery, etc. Thus, promotes sustainable rural livelihood in the study area. The bank has also changed their approach from just being lenders to building up relationship banking with the borrowers, and encourages the habit of thrift and efficient utilisation of financial resources needs to be also enhanced among the farmers. Hence, through these efforts commercial banks enabling better healthcare, sanitation facilities at workplaces and home, and to promote an education for all as given top priority for rapid rural development. The present paper is an attempt to analyse the impact of bank finance on agricultural and its allied activities of rural people in Papum Pare district of Arunachal Pradesh.

INTRODUCTION

Most people in our country live in rural areas. More than 20 percent of the population is living in abject poverty followed by staggering gap between labour force and workforce, massive unemployment, farmers to perpetual indebtedness etc. Therefore, to developed nation economy it is necessary to develop rural economy in the country. Rural development has been redefined as the process of improvement in the quality of life and economically well-being of people living in rural and backward remote areas through remuneration of employment and facility to provide better resources through equitable distribution of income and wealth for the regional balances in rural areas. So, bank finance or credit creation by commercial bank is the most important instrument in accelerating development programme to regional balance in rural areas. Therefore, bank finance is considered as the lifeline to boost up the rural livelihood. In this paper an attempt has been made to examine the impact of bank finance granted by commercial banks in the development of rural livelihood in the study area in general and the sample beneficiaries in particular. To measure the economic development of the study area, income has been chosen as the one of variable in this research report. These are broadly discussed under these following sub headings.

OBJECTIVES

1. To study the bank finance on rural agriculture sector in the study area.

2. To study the impact of bank finance on income generation rural livelihood activities in the study area

METHODOLOGY

The study is based on primary and secondary data. The 35 borrowers have been selected through random sampling from different banks which constitutes the unit of observation of the present study. The present study has been undertaken to analyse the impact of bank finance on income generation of rural people which enhance their sustainable livelihood.

IMPACT OF BANK CREDIT ON INCOME GENERATION OF BENEFICIARIES

Income plays an important role not only for livelihood of people but also for their economic growth and development of rural economy in the study area, and also to change the living standard as well as to recognisable status in the society. In general sense, according to the definition of Business Dictionary: "The flow of cash or cash-equivalents received from work (wage or salary), capital (interest or profit), or land (rent) is known as income".

During the Fourth Five Year Plan (1969 – 1974), the government of India has been nationalised many commercial banks in the year 1969 and second phase in 1980 with the motive of various objectives. One of the prime objectives was to develop backward areas and to remove regional imbalances;

to create employment opportunities and to ensure economic equality with the increase the income of rural people; it has been observed that the commercial bank plays a vital role to enhancement of income generation with the creation of credit as well as implementing government developmental programme. Hence, the information had been collected from each beneficiary about their annual income before and after the bank loan. Some of them were transparently shows their written records but most of them were narrated in oral due to illiterate and lack of knowledge to keep proper record of their income.

Table 1 presented the information of increase in annual income or incremental income was observed in beneficiaries of agriculture and its allied sectors during Post-Loan Period. It shows, the total net income of beneficiaries was Rs.1,06,000.00 during the Pre-Loan Period which increased in Post-Loan Period with Rs.1,45,913.00 and the net incremental income amount with Rs.39,913.00. Likewise, the overall average net income per beneficiaries was Rs.17,666.67 during Pre-Loan Period which increased in Post-Loan Period with Rs.24,318.83. Further, the overall average incremental income was estimated to Rs.6,652.17 to each beneficiary with the growth of 37.65 percent after availing the bank loan.

However, it was further elaborated in activity-wise with reference to Table 2 reveals that Dairy/Fisheries has recorded highest increase in average incremental income of Rs.10,150.00 with an extension of 53.42 percent followed by Poultry/Pig/Sheep/Goat with an extension of 39.06 percent followed by Horticulture/Plantation with 37.09 percent, besides

this, Farm Mechanisation and Minor Irrigation with the growth of 35.00 percent respectively. Apart from this, Crop Loan has reached to 24.40 which is lowest in extension of income was recorded with the percent of 24.40 percent. It has been found that due to hindrances of infrastructure like Transport, Communication and Marketing Facilities, the commercialisation were difficult to launch and not too profitable, so that this was the reason to growth of low income in the study area. Thus, bank loan was too beneficial to the rural people of the study area, to increase their level of income and to improve their economic condition.

TESTING OF HYPOTHESIS

Commercial banks provide credit facilities to beneficiaries for the income generation to improve their earning capacity. The beneficiaries were expected to improve their socio-economic conditions through strengthening their resource base by creating surplus income. Hence, it was found relevant to find out whether the beneficiaries had made any significant improvement of their income generation in the post-loan period. Therefore, to analyse and interpret purpose, the agriculture and its allied activities has been categorised into: minor irrigation, farm mechanisation, horticulture/plantation, dairy/fishery, poultry/pig/sheep/goat, crop loan. In order to find out the significant variations in the income generations are studied with the help of the paired sample’s t-test/matched paired observation/dependent sample which is based on testing difference between means of two samples with two tailed significance.

Table 1
Activity-wise Annual Net Income and Incremental Income earned by Sample Beneficiaries

Activities	Average Net Income per Beneficiaries			Average Incremental	
	Total Beneficiaries	Pre-Loan Period	Post-Loan Period	Income per Beneficiaries	% of Increase
(I) Agriculture:		Rs.in '000'	Rs.in '000'	Rs.in '000'	Rs.in '000'
1. Minor Irrigation	6	20000.00	26000.00	6000.00	30.00
1. Farm Mechanisation	8	27000.00	36500.00	9500.00	35.19
2. Horticulture/Plantation	6	17000.00	23305.00	6305.00	37.09
3. Dairy/Fishery	4	19000.00	29150.00	10150.00	53.42
4. Poultry/Pig/Sheep/ Goat	6	16000.00	22250.00	6250.00	39.06
5. Crop Loan	5	7000.00	8708.00	1708.00	24.40
Total	35	106000.00	145913.00	39913.00	37.65
Average	35	17666.67	24318.83	6652.17	37.65

Source: Compiled from field data.

(i) Minor Irrigation

Hypothesis: There is no significant difference in income generation of the beneficiaries before and after procuring bank loan in minor irrigation.

Table 2 Paired sample’s t-test – Minor Irrigation

	Mean	N	Std. Deviation	t	df	Table Value at 5%	Significance (2-tailed)
Pair 1 Minor Irrigation Pre-Loan	2.0000E4	6	3346.64011				
Minor Irrigation Post-Loan	2.6000E4	6	8221.92192	-2.614	5	2.571	Significant

The table 2 reveals the results of the paired sample’s t-test. The calculated value of ‘t’ = 2.614, which is greater than the table value of ‘t’ is 2.571 at 5 percent level of significant at 5 degrees of freedom in two tailed test. Therefore, the hypothesis has been rejected. These means there is a significant difference

between pre-loan and post-loan periods of income of the beneficiaries after obtaining bank loan for the minor irrigation. Thus, there has been a significant improvement of income generation of the beneficiaries in the post-loan period of minor irrigation in the agriculture sector.

(ii) Farm Mechanisation

Hypothesis: There is no significant difference in income generation of the beneficiaries before and after procuring bank loan for Farm Mechanisation.

Table 3 Paired sample's t-test – Farm Mechanisation

	Mean	N	Std. Deviation	t	df	Table Value at 5%	Significance (2-tailed)
Pair 1 Farm Mechanisation Pre-Loan	2.7000E4	8	2877.99533				
Farm Mechanisation Post-Loan	3.6500E4	8	10110.10810	-2.546	7	2.365	Significant

The calculated value of 't' is 2.546, which is greater than the table value of 't' is 2.365 at 5 percent level of significant at 7 degrees of freedom in two tailed significant through paired sample's t - test, which is presented in table 3. Hence, the testing of hypothesis has been rejected. It can be stated that

there is a significant difference in the income generation between pre-loan and post-loan periods. Thus, there has been a significant improvement in the income generation of the beneficiaries after obtaining loan from commercial banks for the farm mechanisation during the post loan periods.

(iii) Horticulture/Plantation

Hypothesis: There is no significant difference in income generation of the beneficiaries before and after obtaining the bank loan for horticulture/plantation.

Table 4 Paired sample's t-test – Horticulture/Plantation

	Mean	N	Std. Deviation	t	df	Table Value at 5%	Significance (2-tailed)
Pair 1 Horticulture/Plantation Pre-Loan.	1.7000E4	6	2966.47939				
Horticulture/Plantation Post-Loan	2.3305E4	6	10839.39805	-1.740	5	2.571	Not Significant

Here, the calculated value of 't' is 1.740 which is less than table value of 't' is 2.571 at 5 percent level of significant at 5 degrees of freedom in two tailed test, which is presented in table 4. Therefore, the hypothesis has been accepted. It means that there is no significant difference in the income generation

between pre-loan and post-loan periods. Hence, there is no significant improvement after obtaining bank loan for horticulture/plantation during post loan period in agriculture sector.

(iv) Dairy/ Fishery

Hypothesis: There is no significant difference in income generation of beneficiaries before and after obtaining bank loan in dairy/fishery.

Table 5 Paired sample's t-test – Dairy/Fishery

	Mean	N	Std. Deviation	t	df	Table Value at 10%	Significance (2-tailed)
Pair 1 Dairy/Fishery Pre-Loan	1.9000E4	4	2160.24690				
Dairy/Fishery Post-Loan	2.9150E4	4	9517.87791	-2.708	3	2.353	significant

Here in the table 5 shown that the calculated value of 't' = 2.708 is greater than the table value of 't' is 2.353 at 5 percent level of significant at 3 degrees of freedom in the paired t – test in two tailed significance. Therefore, the hypothesis has been rejected. Hence, it can be stated that there is a significant

difference in the income generation between pre-loan and post-loan periods. Thus, there has been a significant improvement in the income generation of beneficiaries after availing loan from the commercial banks for the dairy/fishery in the agriculture sector.

(v) Poultry/Pig/Sheep/Goat

Hypothesis: There is no significant difference in income generation of beneficiaries before and after procuring bank loan in poultry/pig/sheep/goat.

Table 6 Paired sample's t-test – Poultry/Pig/Sheep/Goat

	Mean	N	Std. Deviation	t	df	Table Value at 5%	Significance (2-tailed)
Pair 1 Poultry/Pig/Sheep/Goat Pre-Loan	1.6000E4	6	1788.85438				
Poultry/Pig/Sheep/Goat Post-Loan	2.2250E4	6	5888.54821	-2.255	5	2.571	Not Significant

It has been cited that the calculated value of 't' is 2.255 which is greater than the table value of 't' i.e., 2.571 at 5 percent level of significant at the degrees of freedom of 5 in paired sample's t – test in two tailed significance, which is presented in the table 6. As a result, the null hypothesis has

been rejected. On that account, it can be stated that there is no significant difference in the income generation between pre-loan and post-loan periods. Thus, there has been no significant upgrading in the income generation of beneficiaries after aided bank credit for poultry/pig/sheep/goat in the agriculture sector.

(vi) Crop Loan

Hypothesis: There is no significant difference in income generation of the beneficiaries before and after availing bank loan in crop loan.

Table 7 Paired sample's t-test – Crop Loan

	Mean	N	Std. Deviation	t	df	Table value at 5%	Significance (2-tailed)
Pair 1 Crop Loan Pre-Loan	7.0000E3	5	707.10678				
Crop Loan Post-Loan	8.7080E3	5	3138.84851	-1.051	4	2.776	Not Significant

The cited table 7 reveals that the calculated value of 't' is 1.051 which is less than the table value of 't' is 2.776 at 5 percent level of significant at 4 degrees of freedom in the paired sample's t – test in two tailed significant. Therefore, the null hypothesis has been accepted. It means that there is no significant difference in the income generation between pre-loan and post-loan periods. Hence, there is no significant enhancement in the earning of income of the beneficiaries after procuring loan from the commercial banks for crop loan in the agriculture sector.

biggest change to pisciculture. Another reason is the lack of modern technology to use breeding livestock as well as lack of veterinary care facilities in rural areas which is indeed for high productivity.

CONCLUSION

Thus, credit facilities provided by the commercial banks have significant impact on the level of income from agriculture and its allied activities. However, study also reveals that there is an insignificant impact on some part of the agriculture sector; beneficiaries in agriculture sector, procuring loan for horticulture/plantation, poultry/pig/sheep/goat, and crop loan have been no significant impact on their income generation. It is due to lack of marketing channels and physical infrastructure like roads, railways, processing units, storage and warehouse facilities to keep back the product produce for selling later at a better price, which forced them to sell at low prices. A part from this, crop failure is due to climate change conditions like: constantly increasing of high temperature, high rainfall and high relative humidity were leads to growth of pests, flu viruses and diseases. Heavy rainfall leads to flood situation which is

REFERENCES

- [1] Thamilarasan.S, "Role of NABARD In Promoting Rural Development - A Case Study in Dharmapuri District" Ph.D Thesis, Deptt. of Commerce, Periyar University, 2006.
- [2] Kaye.T, "Role of Regional Rural Banks in Economic Development (A Case Study of Arunachal Pradesh Rural Bank)", Abhijeet Publications, Delhi, 2006.
- [3] Jain, T.R & Ohri, V.K, "Indian Economic Development for Class XI", 2016-17 Global Publication Pvt Ltd, Mumbai.
- [4] Gupta,S.P. "Statistical Methods" Sultan Chand & Sons, Educational Publishers, New Delhi.
- [5] Websites:
- [6] www.businessdictionary.com.
- [7] <https://www.gktoday.in>
- [8] www.wikipedia.
- [9] <https://www.medcalc.org>