Agricultural Credit and Rural Economy

An Analysis on the impact of agricultural Credit on rural development

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Abstract

The agriculture sector is crucial for every economy to achieve inclusive growth and poverty reduction. It plays the important role in the development of each nation. As the major source of livelihood for majority of the population, its growth is inevitable for the development of the nation. Agricultural production in India is mostly driven by credit support and can help farmers to grow more providing this financial support. Agricultural credit support as financial input has been increased compared to past years (Huppi et. al). The contribution and the impact of banking is limited in agriculture sector especially in rural area due to low return. The paper is an attempt to know the credit distribution among the different players of agricultural sector and to determine the impact of the credit on rural population. The study also considers the farmers accessibility into the institutional credit. Always there are factors which restrict the entry in to agricultural credit by the rural farmers, especially the small and marginal scale farmers. This study is an attempt to understand the intensity of different factors that determine farmer's accessibility into the rural credit. It also considers the impact of farm loan on the rural development, by way of change in income and employment opportunities.

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1. Introduction

As the agriculture constitutes an important share of national output and employs a majority of the labor force, the sector is integral to nation's development. Agriculture plays a vital role in providing food security and employment in all nations. It contributes around 16% of GDP and employment to more than half of the population in India. Its growth directly affects the prosperity and well being of people at large. It was with the green revolution agriculture got importance and considered as the income generating and profit making economic activity. Up to that time it was considered only as a means for survival(Reddy et .al). Financial requirement of agriculture and related activities have increased tremendously due to the use of modern farm inputs. Adoption of modern techniques made agricultural activities as expensive. But it was difficult for the farmers with small agricultural holding to mange this increased expenditure. So they seek different formal and informal sources finance.

The purpose of this paper was to analyse the impact of agricultural credit, especially to rural small agricultural households. Statistical tools have been used to analyse the primary data collected using structured questionnaire from 200 households of Wayanad district, a hilly district in Western Ghats mostly populated by tribal and small agricultural farmers.

2. Objectives

The specific objectives of the study are

- 1. Evaluate the impact of farm credit on income and employment
- 2. Identify the important constraints of rural farmers in acquiring agricultural credit from formal financial institutions.

3. Agricultural credit in India

Finance has been an important input requirement for Indian agriculture, especially to rural poor agricultural households. To solve this issue different indigenous credit systems were developed over the years. The practice of extending institutional credit to agriculture can be traced back to Colonial period when farmers were provided with credit by the Colonial Government during drought years(Rane et.al). Later, the Cooperative Societies Act was passed in 1904 and cooperatives were established as the premier institutions for disbursing agricultural credit.

Twentieth century were characterised by continuous attention to the provision of rural credit. In 1935 Reserve Bank was founded with specific provision for agricultural credit. The Report of the All India Rural Credit Survey (1954) visualised cooperatives as an exclusive agency for providing credit to agriculture and urged a well defined role for commercial banks in delivering agricultural credit. They recommended the establishment of a State Bank and the extension of commercial banking facilities to rural areas.

All India Rural Credit Review Committee set up in July 1966 recommended that the commercial banks should play a complementary role, along with co-operatives, in extending rural credit. The nationalisation of major commercial banks in 1969 and in 1980 acted as a medium in providing momentum to the efforts of commercial banking system for extending agricultural credit.

The concept of priority sector was introduced in 1969 to underscore the imperative of financing of certain neglected sectors like agriculture. Later decentralised credit planning through the Lead Bank Scheme was also introduced, under which, each district was placed with one of the commercial banks, called the district Lead Bank, to spearhead the credit allocation (Thakur et.al).

Green Revolution in the late 1960s and 1970s necessitating adequate availability of credit that could enable the purchase of inputs such as fertilizer, high yielding varieties of seeds, pump sets for irrigation, and the like. The solution that was the establishment of a separate banking structure, capable of combining local feel characteristic of co-operatives and the professionalism and large resource base of commercial banks. Following the recommendations of the Narasimham Working Group (1975), Regional Rural Banks (RRBs) were set up.

Later on the basis of the recommendations of the "Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development", the National Bank for Agriculture and Rural Development (NABARD) was set up in 1982 for providing credit for the promotion of agriculture. NABARD is the Apex institution which has been entrusted with a pivotal role in the sphere of policy planning and providing refinance facilities to rural financial institutions to augment their resource base. NABARD has been playing an important role in micro-credit through the Self-Help Groups (Mahendra).

After 1991 due to the vast geographical coverage and functional reach rural financial institutions were characterised a decline in productivity and efficiency. Weaknesses in the performance of rural financial

institutions since 1991 resulted in setting up of various committees and working groups to look into their operations. These committees made far-reaching recommendations having a bearing on agricultural credit.

The institutional sources of agricultural credit consist of government, co-operatives, commercial banks, Regional Rural Banks and NABARD. The percentage share of institutional agencies has been increasing in fulfilling the credit needs of the farmers. Among these agencies, the co-operatives are the cheap and the best source of agricultural credit to farmers. Other institutional agencies have to be necessarily considered to supplement the resources of the co-operatives.

4. Agricultural credit and rural development

Agriculture and rural economy is the backbone of the country. It provides food employment opportunity to a large number of the population. More than 70% of the rural population depend on it as a means for livelihood. The Reduced government investment in the form of subsidies and other financial assistance made them depend on credit sources both institutional and non institutional, for finance. So Finance is important for agricultural and rural economic growth. Finance is required farmers, local traders and processors, input suppliers, rural household, and even for non agricultural business firms in the rural areas. They need it as Working Capital for the creation of Fixed Asset, to smoothen the Income fluctuations and to carry out household activities. For agricultural farmers it is important for carrying out their activities effectively by adopting modern techniques of production and processing.

Agriculture credit influences various aspects of rural household's economic behaviour. It changes the dimensions of agricultural activities. Credit finance enables them to introduce modern techniques in farming, which helps in increasing production and productivity of the sector. High yielding varieties of seeds, fertilisers and pesticides are also important for a change in production scenario of agricultural sector. This increases agricultural production, income and employment opportunities of in village level.

5. Empirical analysis

Even though agriculture is an important livelihood and source of employment for majority of rural population in the country, the financial need of this section especially the that of small and medium farmers in the rural area was seldom addressed by the administrative authorities and banking mechanism. The increased finance through credit, facilitate the introduction of modern techniques of production and inputs in farming. It promote the agricultural productivity and employment opportunities through increased production. So the impact of this farming credit on income and employment is an important area of study. In this context this study attempt to analyse the impact of formal agricultural credit on rural farmers and suggest information about the measures that could be adopted to improve the accessibility to formal credit by agricultural farmers.

5.1 Methodology and data collection

For selecting the representative rural agricultural farmers multi-stage sampling technique was employed in this study. One panchayath each was selected from four Block Panchayath of Wayanad district, namely Vythiry, Thavinjal, Ambalavayal, and pulppally. From these four Grama Panchayaths 50 each household were randomly selected from the list of agricultural land holders available within the village agricultural offices. The respondents were agricultural land holders who are with the maximum of 4 acres of agricultural land. Many of the respondents had applied for credit from banks in the last two years from the time of conducting the survey. Required data were collected from them by using structured questionnaire through scheduled interviews conducted. The questionnaire was designed to seek information regarding the socio-economic characteristics of the respondents, change in income and production and the major constraints for the access in agricultural credit.

5.2 Data analysis and interpretation

In order to analyse the data collected from 200 respondent both descriptive and inferential statistic were employed. Descriptive statistical tools were used to examine the socio-economic features of the farmers. A four point Likert type scale was used to identify the respondents' constraints in acquiring agricultural credit. The t test was employed to evaluate the effect of credit on employment and productivity.

Analysis was conducted on the primary data collected form 200 sample collected randomly from the study area. The result of the analysis is explained with the following features.

6.2 Access to credit

The details about respondents' access to formal credit is presented in the following table

| Accessibility | Frequency | Percentage | |
|-------------------|-----------|------------|--|
| Easily Accessible | 46 | 23 | |
| Find Difficulties | 154 | 77 | |
| Total | 200 | 100 | |

| Table 2: | Accessibility | to agricultural | credit |
|----------|---------------|-----------------|--------|
|----------|---------------|-----------------|--------|

Source: Primary survey

The result revealed that, 77 % of the households find difficulties in accessing formal credit from financial institutions in the last one year. Even though various policies and financial inclusion programmes were introduced by the government to improve credit access and financial literacy by rural people, access to formal credit by the respondents find difficulties.

6.3 Determinant of credit access

Household was constrained from institutional loan by number of factors. These factors prevent the easy access to agricultural credit by rural poor farmers(YerramRaju). The respondents' ability to access formal production credit in the area is constrained by some factors which are presented in the table below

| Item | | Strongly agree | Agree | Disagree | Strongly disagree |
|-----------------------|------------|----------------|-------|----------|-------------------|
| Collateral | Frequency | 34 | 86 | 0 | 0 |
| | Percentage | 28.33 | 71.67 | 0.00 | 0.00 |
| Financial Literacy | Frequency | 8 | 28 | 84 | 0 |
| Thiancial Literacy | Percentage | 6.67 | 23.33 | 70.00 | 0.00 |
| Specified purposes | Frequency | 15 | 81 | 16 | 8 |
| specified purposes | Percentage | 12.50 | 67.50 | 13.33 | 6.67 |
| Interest rate | Frequency | 83 | 21 | 16 | 0 |
| Interest rate | Percentage | 69.17 | 17.50 | 13.33 | 0.00 |
| Simple procedures | Frequency | 21 | 92 | 7 | 0 |
| | Percentage | 17.50 | 76.67 | 5.83 | 0.00 |
| Interest in Bank loan | Frequency | 0 | 96 | 24 | 0 |
| | Percentage | 0 | 80 | 20 | 0 |
| Availability of fund | Frequency | 16 | 104 | 0 | 0 |
| | Percentage | 13.33 | 86.67 | 0.00 | 0.00 |
| Distance to bank | Frequency | 1 | 14 | 99 | 6 |
| | Percentage | 0.83 | 11.67 | 82.50 | 5.00 |

Table 3: Constraints to credit access (percentage)

Source: Primary Survey

These constraints are common to all the formal financial institutions located in the study area. Foremost among these constraints 71.67% of respondent strongly agree that high interest rate in most of these institutions as an important constraint to accessibility to the credit. They agree that collateral (71.67), loan for specified purpose, procedural difficulties, disinterest in bank loan(80%) and availability of bank loan(86.67%) are important in determining the credit accessibility. Most of the respondent disagree that that distance to the financial institution and financial literacy are important impediments to credit access. These show that the constraints have limited the respondents' ability to access credits that could have been used to improve their agricultural production and income.

Impact of credit on employment

Bank loan helps the agricultural sector to increase the crop intensity, irrigation area, and especially the production of the labour intensive high yielding verities of crop in the rural area. These changes in rural farming results the use of both own labour and hired labour in the agricultural activities. It was clear from the details given by the sample households. So the increased availability of agricultural credit helped the rural economy to generate more employment opportunities.

| Panchayath | Average man days | | Increase in | 1 % change in |
|------------|--------------------|---------------------|-------------|---------------|
| | Pre-loan Period | Post-loan Period | mandays | mandays |
| Vythiri | 240 | 265 | 25 | 10% |
| Pulpally | 248 | 263 | 15 | 6% |
| Meppadi | 180 | 230 | 50 | 27% |
| Muttil | 190 | 238 | 48 | 25% |

 Table 4: Impact of credit on production and employment

Source: Primary survey

Impact of credit on production and income

Increase in agricultural production and productivity and additional employment generated in the agriculture and allied sectors automatically results in the additional income generation in the society. The details of income generated for the sample household proves that agricultural credit has significant impact on the income generation.

| Table 5: Impact of credit on production and income | | | | | | |
|--|---------------------|-----------------------------------|-----------------|--|--|--|
| Panchayath | Per acre production | % change in post loan | | | | |
| | Pre- loan Period | Pre- loan Period Post loan Period | | | | |
| | | | period per acre | | | |
| Vythiri | 120000 | 140000 | 12% | | | |
| Pulpally | 240000 | 290000 | 20% | | | |
| Ambalavayal | 180000 | 210000 | 16% | | | |
| Thavinjal | 245000 | 290000 | 18% | | | |

Table 5: Impact of credit on production and income

Source: Primary survey

The impact of agricultural credit on production and income was clear from the table given above. The is an increase in per acre output in all four panchayath. It is higher in Pulppally and Thavinjal panchayath were major crop was cash crop specifically pepper and tea. The per acre output was increased in all these panchayath during the loan period.

| Table 6: Impact of credit or | n production and income | One-Sample Test results |
|------------------------------|-------------------------|-------------------------|
| Tuble 0. Impact of create of | i production and meome | One Sumple restresults |

| | | Test Value $= 0$ | | | | |
|------------------------------------|-------|------------------|-----------------|-----------------|--|-------------|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| Per acre production before loan | 6.913 | 3 | .006 | 1.97250E5 | 106439.8459 | 288060.1541 |
| Per acre production after | 6.433 | 3 | .008 | 2.32500E5 | 117479.7687 | 347520.2313 |

The t value is less than 0.05 so the null hypothesis is rejected and alternate hypothesis is accepted that is there is significant difference between pre and post credit income situation.

7 Findings and Conclusion

The study shows that 95% of the respondents are engaging in agricultural activities as their primary livelihood with an average farm size of 2 acres of land. As most of them are belongs to the poor background, availability of inputs is an important problem for them. The agricultural input like hybrid variety of seed, fertilisers, adequate irrigation facilities are important for the sustainability of this category. For making these inputs available in time and size agricultural financing is important. Formal source of agricultural finance is important as it available at lower cost and conditions while comparing to informal sources. The commercial banks and co-operative banks are the major source of institutional finance to agriculture in the district. But there are number of factors that influence the availability of credit. The study shows that high interest rate, need for collateral, low financial literacy, and complex banking procedures etc. limit farmers' access to credit. So the improved credit facility is important for the better performance of agricultural sector. The availability of low cost credit and simplified banking procedures are important in this respect for the development of the agricultural sector and there by the rural economy.

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