FINANCING OF AGRICULTURAL CREDIT THROUGH PDCC BANK IN PUNE DISTRICT

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ABSTRACT

Agriculture growth rates in India plays a very important role in the overall economic and social development of the country. The role of the agriculture sector in Indian economy however remains critical. Though its contribution to the overall Gross Domestic Product (GDP) of the country has fallen from about 30 percent in 1990-91 to less than 15 percent in 2011-12, a trend that is expected in the development process of any economy, agriculture yet forms the backbone of development. An average Indian still spends almost half of his/her total expenditure on food, while roughly half of India’s work force is still engaged in agriculture for its livelihood. Being a source of livelihood and food security for a vast majority of low income, poor and vulnerable sections of society, its performance assumes greater significance. Moreover this sector is a supplier of food, fodder and raw materials for a vast segment of Industry. Hence the growth of Indian agriculture can be considered a necessary condition for “Industrial Growth “

The dependence for credit on Money lenders is preferred rather than Banks by the small farmers. Co-operative Banks have made significant progress in important sectors of Indian economy. Co-operative Banks have a history of 100 years. Co-operative Banks were established with a view to provide credit to small farmers, marginal farmers etc. These Banks provides policies to the small farmers at a reasonable rate of interest and facilities to farmers, agricultural labourers artisans and small entrepreneurs in the rural India.

Keywords: PDCC Bank, Agricultural credit

INTRODUCTION

Agriculture forms the resource base for a number of agro-based industries and agro-services it would be more meaningful to view agriculture not as farming alone but as holistic value chain which includes farming, wholesaling, warehousing, processing and retailing. Farmers are not able to repay the loan availed from Money lenders or Banks due to various reasons like natural calamities, due to inefficient growth of crops, or due to medical or marriage problems at this time.

Cooperative Banks are an important constituent of the Indian financial system. In India they are registered under the Co-operative Societies Act. They are governed by the Banking regulation act
1949 and Banking Laws (Co-operative Societies) Act 1965. Co-operative Banks were the first institutions in providing rural credit to the farmers. Co-operative Banks still remainss in monopoly in the field of rural credit in India in spite of the nationalization of Commercial Banks in 1969 entry of Regional Rural Banks in 1975 and foreign Banks after 1991 cooperative credit institutions deliver credit to the largest portion of rural population in India. Co-operative Banks have a very extensive network of rural outlets as compared to Regional Rural Banks and Commercial Banks. The Rural Short-Term Co-operative Credit structure comprises with:

State Co-operative Banks (StCBs) at state level (apex) – Maharashtra State Co-operative Bank.

District Central Co-operative Banks (DCCBs) at district level- Pune District Central Co-operative Bank

And Primary Agricultural Credit Societies (PACBs) at Village level.

District Central Co-operative Banks are vital organizations not only in ensuring smooth flow of agricultural credit but also in the overall development of rural economy. DCCB’s provide the necessary financial resources to PACS and are responsible for their recovery. They lay down common policies and provide administrative guidance for the proper and efficient functioning. They supervise and control the work of the PACS.

PDCC Bank claims to be the third largest district co-operative Bank in India, thus the need arises to study the contribution of PDCC in the promotion of agricultural finance.

**RELEVANCE OF THE STUDY IN THE CURRENT SCENARIO**

The growth performance of the agriculture sector has been fluctuating across the plan periods. It witnessed a growth rate of 4.8 percent during the Eighth Plan period (1992-97). However, the agrarian situation saw a downturn towards the beginning of the Ninth Plan period (1997-2002) and the Tenth Plan period (2002-07) when the agricultural growth rate came down to 2.5 percent and 2.4 percent respectively. This crippling growth rate of 2.4 percent in agriculture as against a robust annual average overall growth rate of 7.6 percent for the economy during the tenth plan period was clearly a cause for concern. The trend rate of growth during the period 1992-93 to 2010-11 is 2.8 percent while the average annual rate of growth in agriculture and allied sectors. GDP during the same period is 3.2 percent. Since agriculture is the backbone of Indian economy. It becomes vital to study the role of PDCC Banks in the upliftment of this sector.

As banks one of the major agenda at the forefront is promotion of financial Inclusion. Rural market is one of the potential market which will take the economy of the country to greater heights. PDCC Banks are not only promoting and developing banking system in rural parts of the country by delivering better banking solutions and services but also helping the country to tighten its position in global economy and has contributed a lot for the emergence as one of the fastest developing countries in the world.

**OBJECTIVES OF RESEARCH**

1. To identify the different agricultural needs of farmers from Pune District.
2. To analyze the adequacy and end use of credit facility availed by the farmers.
3. To enhance the effectiveness of agricultural credit system.

**RESEARCH METHODOLOGY**

The research design followed is ‘Descriptive’ in nature. The problem statement is based on the impact of agricultural credit on the social and economic condition of the framers in Pune district. This study is focused on the credit schemes availed by the farmers through PDCC bank. Researcher has used advanced data analysis techniques like Correlation and Regression for checking the impact of credit
schemes while Reliability test and One sample T test is used for checking the consistency of data and testing of hypothesis respectively.

DATA COLLECTION AND SOURCES OF DATA

Population

The universe of study is as follows:

- Bank employees of PDCC Banks
- Farmers in 9 Talukas of Pune District

Sample Size

- Bank employees- Branch Manager from each branch.
- Farmers- 650

Sampling consideration

The sample considered is from the Nine Taluka’s of Pune city. Hence becomes a cluster sampling which indicate the homogeneity in cluster and heterogeneity outside the cluster.

Statistical Test used

The statistical test used in this analysis is ‘T-test’ and Chi-square test. Since the type of research design followed in this research is descriptive, there are certain assumptions which are to be tested against the mean and hence the impugned tests are used.

METHODOLOGY OF ANALYSIS

The methodology of analysis followed can be described in three sections. In first section the demographic and other questions related to decision making of credit availing are graphically represented and then the interpretation and Root cause analysis follows. While for second section in the questionnaire that is for ‘Inferential Questions’ firstly ‘Reliability analysis’ is carried out to check the consistency of the data, then graphical representation is done along with the interpretation part and lastly hypothesis testing is done for these questions to come up to findings and suggestions.

Section I : Demographics

Response Question- Graph no-1.1 Age composition

![Age Composition](image-url)
Response Question: Graph no- 1.2 Bank account

Root cause analysis

The above data can be analysed from the point of view of banking transactions of the respondents. All the respondents have the bank account; though their credit requirement is different and their saving capacities too, still all of them having a bank account could be seen as a positive development from the financial inclusion view.

Response Question: Graph no- 1.3 Nature of deposit

Root cause analysis-

The main reason behind all of them having the saving account is that they have taken credit from the bank which gets deposited in the saving account. A few have more accounts like recurring and current but most of the people do more transactions in the savings account only.

Section-II Credit facility availed

Response Question Graph no- 1.4 Frequency of loan required
Root cause analysis

The different time period required to avail loan depends on the harvest timing of the crops. If the crops are harvested annually they take loans annually and if they are harvested every six months they take loans every six months and accordingly.

Response Question: Graph no- 1.5 Fulfillment of credit requirement

Root cause analysis

The analysis of the responses can lead to the conclusion that due to lack of the satisfaction of the requirement farmers tend to search for the other sources of loans which they either find in relatives or may be other sources like sahukars.

Response Question: Graph no 1.6 Nature of Help

Root cause analysis

The analysis shows that requirement of increasing asset is much more than increasing income and hence farmers have increased their asset so that they should enjoy long term gain than current increase in Income. Reduction of poverty can also be seen as the major requirement to avail the credit facility which helps to conclude that major chunk of farmers are economically drained to such an extent that they have to avail credit facility to reduce their poverty first and then to think of asset appreciation or increase in income.
Section-III- Cropping Pattern

Response Question: graph no. 1.7 Nature of farming

Root cause analysis
Analysis shows that majority of the farmers’ takes single crop in a year while minority of the farmers take multiple crops which shows that a major chunk of farmers lack infrastructural facility of shortage of farming equipment or may be other amenities like fertilizers, seeds or man power may be. This all indicate the lack of capital inflow.

Response Question: Graph no-1.8 Cropping Pattern

Root cause analysis
It can be seen that around 25% of the total respondents is taking fruits and vegetables as their crop while 75% of the respondents are taking single crop over the year. As discussed in the earlier responses it can be concluded that lack of infrastructural facilities is the basic reason behind it.
Root cause analysis

The reason behind having varied ownership of land is either hereditary possession of land or economic condition of the farmers. If they have inherited lesser piece of land then the possession is less or they might not be in position to buy any further piece of land.

Section-IV Credit Requirements

Root cause analysis

The reason behind taking credit is quite clear from the above interpretation that farmers take credit for smaller requirements and hence the loan amount can also be seen as smaller in nature and hence the payments can be made regular and in time. eg. Purchase of seeds needs a smaller amount of loan which can be easily repaid.
Response Question - Graph no 2.1 Savings per annum

Root cause analysis
If the trend of above graph is seen then it can be observed that more number of farmers is showing increase in their savings per annum. It ultimately shows either increased income or capital appreciation or reduction of poverty. In any of these cases it is possible to have more number of farmers saving more amount of money which indicates economic well-being of the farmers in a broader context.

Response Question - Graph no 2.2 Main source of Income

Root cause analysis
It can be seen that the respondents does not only have agriculture as their main source of income but a few does have employment, business and any other source as the primary source of income. It can be derived from here that people who are farmers are no longer treating only agriculture as their main source of income but are finding the new ways of earning too. This can be seen as a positive shift as it may shift the burden on agriculture to generation of productive generation of man-power for secondary and tertiary sector.

Section V Analysis of the interviews of Bank officials
1. Does the Bank provide Loans to the following categories?
   a. Landless farmers'  b. Marginal farmers’  c. Small farmers’  d. Large farmers

- When asked the above question bank officials replied as the bank does not provide loan to landless farmers. They do provide loan to marginal, small and large farmers. It is because the primary mortgage decided by the bank is land, after that if the loan amount exceeds farmers can keep their physical assets like gold or equipment’s as secondary mortgage. This condition of collateral cannot be satisfied by the landless farmers and hence bank does not give loan to farmers coming under this category.
2. What are the various schemes provided by the Bank?
- When quizzed about this bank officials stated that bank provides Short Term Loan (1-2 years), Medium Term Loan (2-5 years), and Long Term Loan (5 and above years). Further they have added that 80% of the total population of the farmers is aware of these schemes and have availed these facilities too.

3. Which are the most acceptable Schemes?
- When asked about the most acceptable schemes bank officials have mentioned that Crop loan, Pipeline, drip irrigation and Tractor are the most acceptable loan. Owing to the dependency of the farming on monsoon it is quite expected that farmers tends to take loan for pipeline or irrigation facilities. Another aspect which came forth was the loan for crops (Crop loan), many farmers have started taking cash crops as they are more profitable and hence this crop loan has become more acceptable type of the loan.

4. What are the Bankers doing in order to spread awareness and to educate the farmers of these various schemes?
- When asked about this aspect officials stated that with the help of Primary Agriculture Cooperative societies give training. But when asked further regarding the records of such training programmes it was not available with the banking officials.

5. What is the amount of savings by the farmers?
- When discussed about this aspect the bank officials replied that maximum farmers does save upto 15000 per annum. But in some cases though they are very few farmers who are very rich those who have sugar factories and the saving deposits of them are very high which contribute to almost 4000 crore deposits. But when questionnaires were given to the farmers none of them have shows savings more than approximately 15000 per annum.

6. What is the Bank doing to find out the exact capital requirement of the farmers?
- Farmers are given loan as per the crop they have to cultivate. Suppose for sugarcane cultivation Rs. 45000 per acre is given. 15% of the expenses for cultivation are borne by the farmers. 11% is banks rate of interest if they don’t repay it within the time period then 2% extra is charged. Bank officials stated that this is their way of cross checking the proper utilization of loan amount lend to the farmers.

7. What are the methods followed by Bank in credit financing of Irrigated and non-irrigated cropping pattern?
- Irrigated land – 2 lac per acre is given if there is water source on land and the facility of bore well etc is present.
Non irrigated land – 1 lac per acre is given in case there is no source of irrigation.

SECTION VI HYPOTHESIS TESTING

Assumption to be tested
1. Agricultural credit has created a positive impact in farming.

Consideration- The impact herein is measured in terms of income of the framers. As saving is the function of income the impact is measured on the basis of change in the income of the farmers before credit after credit.

Statistics used- The statistical test used here the Paired T test.

Hypothesis framed
H0- There is no significant difference between income before credit and income after credit.
H1- Agricultural credit has created positive impact on income of farmers

Paired Samples Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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<tbody>
<tr>
<td>Pair 1 Income before credit</td>
<td>4165.8462</td>
<td>650</td>
<td>2247.80557</td>
<td>88.16619</td>
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<tr>
<td>Income after credit</td>
<td>6820.3077</td>
<td>650</td>
<td>3307.58850</td>
<td>129.73429</td>
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Paired Samples Correlations

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<th></th>
<th>N</th>
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<tr>
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<td>.835</td>
<td>.000</td>
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</table>

Paired Samples Test

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<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>-2654.46154</td>
<td>1889.70003</td>
<td>74.12013</td>
<td>-2800.00576 -2508.91732</td>
<td>-35.813</td>
<td>649</td>
<td>.000</td>
</tr>
</tbody>
</table>

Interpretation

As the significance value here comes out to be 0.00 which is lesser than 0.05 it means there is no sufficient evidence to accept the null hypothesis. As we reject the null hypothesis we accept the fact that agricultural credit has created positive impact on the income of the farmers. By the assumption of external validity researcher would like to extrapolate this finding to conclude that ‘Agricultural credit has created positive impact in farming.

FINDINGS

This study investigates the relationship and impact of agricultural credit on economic and social welfare of the farmers. The agricultural credit was considered to be provided by PDCC bank. The variables taken to accomplish this study were, Income of the farmers before credit and after credit, Recovery of loan by bank, Actual utilization of loan in congruence to the purpose and findings of the study are-

- Agriculture credit does play an important role in increasing both the income and the household savings per annum of the farmer families.
- Study has provided enough evidence for lower access to formal credit by farmers who does not own land.
- The approach, thinking and behavior of the farmers are still very conservative which one of the reasons is as rural banking is not very successful.
Farmers shy away from the institutional credit system for many reasons like, inability to repay due to irregular income, much paperwork formalities etc, which creates more dependency on non-institutional credit.

The estimated impact does show a positive relationship between land size and agricultural credit. Greater the land size more is the benefits received.

Performance of the bank in the sphere of agricultural credit was deficient in more than one ways-
- Credit Gaps- Loans were not provided to many landless farmers.
- Right amount of credit was not provided to many framers.
- Approved loans in many cases did not serve the right purpose.

The eligibility for lending was found restrictive.

Bank’s system of recovery had been failure to recover the loan fully and promptly.

Bank does not have any consultancy service which may help the farmers to transform and equip themselves with the banking facilities.

**SUGGESTIONS**

Suggestions are given in keeping Bank and Government in view for the betterment of the farmers.

**Suggestions for Bank**

- Bank should draw a broad plan of agricultural and related development in its area of operation (Operating branches). This plan should include-
  1. Purpose oriented loan policy along with the adequate and timely credit.
  2. Loan facilities for joint occupations like-
  3. Fisheries
  4. Apiculture (Bee-keeping)
- Bank should offer loan packages to the farmers with different repayment tenure-
  1. Composite credit package- Short term credit package for smaller and more frequent requirement of credit.
  2. Liquid saving package- For farmers who do not own the land but wish to purchase the land.
  3. Cost effective and flexible crop loan package.

**Suggestions for Government**

- **Contract Farming**- Government should encourage private player to invest in farming on the contractual basis. Private sector participation is imperative in Indian agriculture so as to provide much needed impetus for growth. It will promote rural self reliance in general by pooling local available resources to meet new challenges. It will also reduce migrations from rural to urban areas and reduce load of procurement.
- **Organic Farming** – Government should promote organic farming as it has proved to be more profitable than the age old traditional method. It not only reduces the production cost by 25-30% but also reduce the use of synthetic fertilizers and pesticides. Government should make special provision for promotional funds for Organic farming. This farming is very much aligned to the dairy activities which in turn can be developed as a ‘Joint occupation’.
- **Expansion of Choupal system**- Government should re-establish and expand the Choupal model. These Choupal should offer the farmers all the information, products and services they need to
enhance farm productivity, improve farm-gate price realization and cut transaction costs. Farmers should be able to access latest local and global information on weather, scientific farming practices as well as market prices in different markets. It was observed while interviewing the farmers they do not get this kind of information in their talukas.

- **Development of Rural godowns and cold storage**: In order to ensure optimum utilization of agricultural crops as fruits and vegetables and to reduce waste to minimum so as to ensure enhancement of income of the farmers, it is highly essential to strengthen the cold chain and other infrastructure. It was found in study farmers from several talukas have demanded for cold storages to the government organizations.

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