Chapter VII

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The topic of agricultural financing is an area of wider interest due to various reasons. Credit plays a crucial role in the development of agriculture and rural economy. Rural credit includes loans and advances to agriculturists as well as non agriculturists and labourers who reside in rural areas. The main objective of rural credit is to provide adequate finance for agriculture, rural industry, trade and other economic activities of the rural area. The rural credit system aims at providing adequate finance to farmers and non farmers who suffer financial difficulties for their economic activities. The rural economic activity is highly seasonal and people need finance to meet the seasonal working capital and long term requirements.

The development and expansion of agriculture depends on the availability of finance to agriculturists. The adoption of new farm practices such as high yielding variety of seeds, chemical fertilizers, pesticides, farm machinery and irrigation facilities depends on the availability of adequate and timely finance either from own sources or from financing institutions. The financial availability of farmers is scarce and therefore they need outside finance for the adoption of better agricultural practices. One of the basic requirements for the development of agriculture is the availability of credit at reasonable rates of interest. The financial needs of farmers are dependent on the cost of land, agricultural apparatus and machines, inputs such as seeds, fertilizers, pesticides, labour, etc. They also need finance to maintain their family and to meet emergency needs.

The significance of agricultural credit, as a crucial input to agriculture, is reinforced by unique role of agriculture in macro economic framework and its role in poverty alleviation. Recognising the importance of agriculture sector in the development of our nation, the Government and the RBI have played a vital role
in creating a broad based institutional setup for catering to the credit requirements of the sector. In our country a multi agency approach comprising co-operative banks, commercial banks and regional rural banks has been followed for purveying credit to agriculture sector. Even though these institutions expand the agricultural credit lending manifold, the requirements of the farmers are not fully met. The commercial banks multiplied the quantum of lending to agriculture during the last few years, till the requirements, especially of the small and marginal farmers were not completely met.

The institutional lending to agriculture has some bottlenecks, which have to be faced both by the borrowers and lenders. The present study is an attempt in this direction and tries to analyse the perceptions of the borrowers towards the accessibility, cost, impact and repayment of the agricultural credit. The perceptions of the bankers and problems associated with the agricultural lending are also taken into contemplation. Therefore, the study entitled “A Study on Agricultural Financing by Commercial Banks in Kerala” is pursued with the following objectives.

1. To examine the perceptions of agricultural loan borrowers on accessing the credit extended by the commercial banks in Kerala.
2. To study the cost of borrowings and the impact of credit on borrowers
3. To analyze the views of borrowers on repayment performance.
4. To analyze the perceptions of bankers on lending and recovery of agricultural credit.
5. To identify the multitude of intricate problems confronted by the commercial banks in agricultural lending.

On the basis of the objectives, the following hypotheses were formulated for the convenience of the study.
1. There is no significant category, region and sector-wise difference in the perceptions of borrowers on accessing agricultural credit extended by commercial banks in Kerala.

2. The cost of agricultural loan is moderate and there is no significant variation across different categories, regions and sectors.

3. The agricultural credit has a positive impact on borrowers and there is no significant variation across different categories, regions and sectors.

4. The bankers face multitude of problems in agricultural lending. There is no variation in the extent of problems across different sectors and regions.

**Methodology**

Both primary and secondary data were used for the study. However, the study is based mainly on primary data collected from the sample beneficiaries by using Structured Interview Schedule both from the borrowers and bank officials. Separate Interview Schedules were prepared and distributed to loan beneficiaries and bank officials for collection of relevant information.

**Sample Design**

For selecting the agricultural loan beneficiaries, a Multi stage sampling procedure was adopted. First of all, the State was divided into three regions on the basis of geographical entity and from each region, one district having the highest agricultural lending (as in March 2005) was selected as sample district. Accordingly, Malapuram from the North, Kottayam from the Centre and Thiruvananthapuram from the South were selected. From each district, one public sector bank and one private sector bank were selected on the basis of the highest lending to agricultural sector. Then five branches each from the selected public and private sector banks were identified on a random basis, after eliminating the branches having less than 100 agricultural loan accounts. For the identification of the sample borrowers, a list of agricultural borrowers was obtained from the
respective bank branches and a combined list of borrowers was prepared. From the combined list, 100 samples were selected from each sector on a random basis. So the number of loan borrowers from each region comes to 200, i.e. 100 each from public and private sectors and the total number of loan beneficiaries from the three regions was 600. Sector-wise, 300 sample respondents each were selected from both public and private sectors.

The primary data required for the study were also collected from bank officials. Of the total bank branches in the selected districts, 10 per cent were identified as sample population, on a random basis, after eliminating the branches having less than 100 agricultural loan accounts. Accordingly, 62 branches from the public sector and 25 from private sector totalling 87 bank branches constituted the sample population.

**Tools of Analysis**

Both statistical and mathematical tools were used for the analysis of the collected data. Percentages, Simple and Compound Growth Rates, etc. were used for analyzing the secondary data. Student’s ‘t’ test, ANOVA and Sign Test were applied to analyse the variation across different regions and sectors. Chi-square test was applied to examine the significance of variations among different categories of borrowers, regions and sectors. Scaling technique was used to measure the extent of problems and the problems were ranked on the basis of mean score. Data were tabulated, analyzed and interpreted on the basis of category of borrowers, region and sector.

**I. Socio-economic Profile of the respondents**

1. The majority of respondents were (73%) small borrowers who availed themselves of loan up to Rs. 200000. The proportion of marginal borrowers
who take loan up to Rs. 25000 and above Rs. 200000 (medium borrowers) was 15 per cent and 12 per cent respectively.

2. Of the 92 marginal borrowers, 24 per cent represent the southern region, 39 per cent the central region and 37 percent the northern region. The proportion of small borrowers of the different regions is 35 per cent 31 per cent and 34 per cent respectively. The proportion of medium borrowers is 36 per cent 38 per cent and 26 per cent respectively in the three different regions.

3. 54 per cent of the marginal borrowers drew loan from public sector and the remaining from the private sector banks. An equal number of small borrowers took loan from both the sectors and a majority of the medium borrowers make use of the credit facility from the private sector banks (54%).

4. The majority of the marginal borrowers come under the age group of 40-60 years (74%). Only two per cent of the marginal borrowers were below 30 years and 14 per cent above 60 years. Similarly the majority of the small borrowers had an average age of 40-60 years (70%) and one per cent below 30 years. 59 per cent medium borrowers comes under the age group of 30-50 years and 31 per cent above 50 years. This is an indication of the reluctance of the youngsters in Kerala to involve in agriculture by utilising credit facilities extended by the commercial banks.

5. The majority of marginal borrowers had education up to the secondary level (76%) and two per cent had no formal education at all. 54 per cent of the small borrowers had education up to the secondary level. The majority of medium borrowers have education up to the secondary and above.

6. The majority of marginal and medium borrowers had a family size of 5-6 members, whereas it was 54 per cent among small borrowers.

7. The majority of the borrowers were fully engaged in cultivation activities. The proportion of businessmen and Government employees was five per
cent and four per cent respectively among the sample population, who also engaged themselves in agricultural operations.

8. An income wise analysis revealed that 23.5 per cent of the respondents had non-agricultural income. A majority of the respondents come under the agricultural income group of Rs. 20,000 -100,000. 6.5 per cent of the respondents had agricultural income above Rs. 100,000. Eight per cent of the respondents had non-agricultural income to the tune of above Rs. 100,000.

9. The nature of land holding revealed that 64.5 per cent of the borrowers had owned agricultural land and 29.5 per cent conducted the agricultural operations in both owned and leased land. Six per cent respondents conducted agricultural operations in lease hold land. It was revealed that land holding is a pre condition insisted by the banks to provide loan for agricultural activities.

10. 70 per cent of the respondents had an average land holding of below 2.5 acres. Three per cent of the respondents have more than 10 acres of land. 15 per cent of the leasehold borrowers conducted their agriculture operation in more than five acres of land.

11. The main source of funds for meeting the expenses of agriculture operations is owned fund. 80 per cent and 72 per cent of the borrowers who work with annual crops and long term crops, made use of owned funds for meeting the operational expenses. 62 per cent and 48 per cent of the respondents utilised the credit facility extended by the commercial banks for meeting expenses of cultivation of annual and long term crops. 19 per cent of the annual crop cultivators make use the financial assistance extended by the money lenders.

12. The majority (55%) of respondents who were engaged in the cultivation of annual crops had an average cultivation expense of less than Rs.20,000 and 52 per cent of the long term cultivators also had the same level of expenses.
36 per cent of the annual crop cultivators had expenses up to Rs.100,000. Nine per cent had agricultural expenses above Rs.100,000. 13 per cent of the leased hold farmers had operational expenses exceeding Rs.50,000.

**II. Perceptions of Borrowers on Accessing the Agricultural Credit**

1. The main source of information for agriculture credit was friends and relatives; followed by other sources such as sponsoring/intermediary agency, own experience, etc. Statistically significant category, region and sector-wise difference existed regarding the source of information for agricultural credit granted by the commercial banks in Kerala.

2. Proximity to house was the most influencing reason for the selection of bank for agriculture loan and the availability of adequate and timely credit was the reason next to it. The study found, statistical significant sector-wise difference among the borrowers on the reasons for the selection of bank.

3. Self approach was the mode of approach used by 47 per cent of respondents and 21 per cent approached through bank officials. Region-wise and sector-wise significant statistical difference was revealed by the Chi-square test.

4. The majority of respondents drew the loan for meeting operational expenses and 17 per cent for creating additional facilities. Sector-wise significant difference as evidenced by the Chi-square test revealed that more funds were granted by the public sector banks than the private sector ones for meeting agricultural operational expenses of the farmers.

5. The majority (65%) of respondents drew short term loans. 25 per cent of the respondents took the loan for a period more than one year and up to three years and 10 per cent for more than three years. The category-wise, region-wise and sector-wise analysis revealed that there was significant statistical difference in the opinion regarding the period loan.
6. The majority of respondents had the opinion that the period of loan was sufficient for their requirements. The region-wise analysis revealed that there was significant statistical difference in the opinion of the respondents regarding the sufficiency of loan period. Insufficiency in the period of loan was more in the central region than on the rest of the regions.

7. The majority of the borrowers obtained the loan on the security of land. 21 per cent obtained the loan by creating hypothecation /pledge and 14 per cent on the basis of personal security. Category-wise and sector-wise significant difference in opinion of the respondents regarding the nature of security was revealed by the Chi-square test. Loan on the security of land was mainly utilised by the small and medium borrowers. More respondents of the private sector created charge on their land than those of the public sector, for obtaining the loan.

8. The majority of respondents opined that the security margin was reasonable, and 42 per cent revealed that it was high or very high. The region-wise and sector-wise significant difference in the opinion of the respondents about the security margin was revealed by the Chi-square test. More respondents of the northern region opined that the security margin was high, compared to that of the southern and central regions.

9. 48 per cent of the respondents received the loan amount within 10 days of the application and 10-15 days were required in the case of 39 per cent. Category, region and sector-wise significant statistical difference was evident from the Chi-square test, in the opinion of the respondents regarding the time lag in the disbursement of the loan amount.

10. 24.5 per cent of the respondents revealed that there was delay in sanction and disbursement of agriculture loan amount. The category-wise and region-wise analysis revealed that there was significant statistical difference in the opinion of the respondents in this regard. The opinion about delay
was high among the medium borrowers and the respondents of the southern region than the others.

11. The majority (86%) of respondents who had the opinion that there was delay in sanction and disbursement of loan replied that the delay affected their agricultural operations.

12. Nearly one third of the respondents had the opinion that there was difficulty in obtaining loan from the commercial banks. Statistically significant regional difference in the opinion was confirmed by the Chi-square test regarding difficulty for obtaining the agriculture loan. The difficulty is more in the central region than in the rest of the regions.

13. Nearly half of the respondents who faced difficulty in obtaining loan commented that they faced security-related and procedure-related problems.

14. The majority (59%) of respondents had the opinion that the loan amount was sufficient for their agriculture operations and remaining 41 per cent opined that the loan amount was insufficient. Region-wise and sector-wise significant statistical difference was proved by the Chi-square test. More insufficiency was faced by the respondents of the southern and northern regions and the respondents of the public sector.

15. The main source of fund for meeting insufficiency in loan amount was the friends and relatives followed by moneylenders. The opinion of the respondents had significant regional difference which was evident from the Chi-square test. Dependence on friends and relatives and moneylenders for meeting the financial requirements of the respondents was higher in the southern region than in the other regions.

16. The majority (79%) of respondents revealed that there was pre-loan field visit by the bank officials. But it was only 15 per cent in post-loan periods. The pre and post field visit conducted by the bank officials had significant statistical difference in category and region-wise. More pre and post-loan
field visits were made among the medium borrowers and in the southern and central regions.

17. The majority of respondents had the opinion that the present scale of finance needs to be enhanced. The Chi-square test revealed that the opinion had significant statistical difference in different regions and sectors. Enhancement in present scale of finance was demanded more by the respondents of the southern region and customers of the public sector.

18. Opinion of the respondents towards the utilization of the loan amount showed that the majority of borrowers utilized the loan amount either fully or partially for agricultural requirements. 14 per cent respondents fully diverted the loan amount for other purposes. Region and sector-wise significant statistical difference was noticed in the opinion about the utilization of loan amount. The sidetracking was high in the northern region and also among the respondents of private sector.

19. The overall analysis of the perceptions of borrowers in accessing credit reveals that the magnitude of their borrowings did not make any significant influence on them in forming their perception as to the availing of credit from their lending institutions. Out of the fourteen variables identified for this purpose, the borrowers’ perceptions as to eleven variables which were considered more relevant for judging the accessibility of credit found no significance at any level. They disagreed only in respect of three variables – sources of information, delay in sanctioning and disbursement of loan and pre and post-loan field visits made by the banking officials.

20. There was significant difference in perception of borrowers across different regions with regard to their accessibility of credit. Inferential analysis found that in most of the variables (ten variables) explaining the accessibility, divergence in perception of borrowers found statistically significant. However, the borrowers had a consensus on reasons for selection, purpose of loan, impact of delay and nature of difficulty as the
test was not able to prove the statistical validity of difference in the opinion on these variables.

21. The borrower’s perceptions across sectors on accessibility of credit were significantly different on majority of the variables selected for the purpose.

III. Perceptions of Borrowers on Cost of Borrowings

1. The majority of respondents expressed the opinion that the rate of interest was moderate and 29 per cent opined that it was high. The Chi-square test revealed that the opinion about the rate of interest had significant statistical difference among different regions. More respondents of the central and northern regions expressed the opinion that the rate of interest charged by the banks was high.

2. The most of respondents had to bear low cost of travelling for obtaining the loan amount. 13 per cent of respondents had the opinion that the cost of travelling was moderate to high. Region-wise and sector-wise significant statistical difference was noted in the opinion of the respondents regarding the cost of travelling. The cost of travelling was comparatively high in the southern region than in the rest of the regions.

3. The majority of respondents had incurred opportunity cost by way of loss in wage/income for obtaining the agricultural loan relatively at lower rate. The opinion of the respondents in this regard found statistically significant region-wise difference by the Chi square analysis. The respondents of the northern region had to bear higher cost than the other regions.

4. The cost incurred for obtaining the supporting documents needed for agriculture loan was moderate among the majority of respondents. The Chi-square test revealed that there was statistically significant region-wise variation among the respondents and it was high in the central region vis-à-vis the other regions.
5. Analysis of the cost incurred by the respondents by way of processing fee, inspection fee, custody charges, etc. showed that the majority had to bear only low cost for the same. Chi-square test rejected the null hypothesis of no statistically significant category, region and sector-wise difference in the responses of the respondents regarding the same. Such costs were high among the medium borrowers and respondents of the public sector.

6. The cost incurred by the respondents as registration fee, stamp duty, etc. for obtaining the loan amount was low to moderate. When majority had the opinion of low cost, 42 per cent expressed that the cost was moderate. No statistically significant difference was proved in this regard by the inferential analysis.

7. 72 per cent respondents revealed that they had to bear no or low other costs for obtaining the agricultural loan. The Chi-square analysis invalidated the null hypothesis of no significant region-wise and sector-wise difference in the opinion of the respondents. The other costs were high in southern region, compared to the rest of the regions.

8. By using one sample Sign Test, null hypothesis of cost of borrowing is moderate tested against the alternate hypothesis of cost of borrowings from commercial banks which is low. The test result rejected the alternate hypothesis that the cost of borrowing is low and it was statistically inferred that the cost of borrowing for the loan beneficiaries was moderate.

IV. Perceptions of Borrowers on the Impact of Agricultural Loan

1. The opinion of the beneficiaries regarding the impact of agricultural loan on income shows that the majority had a positive impact on their income. 14 per cent expressed a reverse opinion of negative impact on income. The Chi-square test revealed that there was significant statistical region-wise
difference in the opinion of the respondents. More improvement in income was reported in the southern region vis-à-vis other regions.

2. The impact of loan on agriculture assets was positive in the case of 59 per cent respondents. The Chi-square test proved the statistical significance of region-wise and sector-wise difference in the responses of the beneficiaries. More enhancements in agricultural assets were reported in the southern region and among the respondents of the public sector.

3. The agricultural loan made positive improvements in agricultural productivity among 44 per cent of the respondents. The majority of the respondents had the opinion that the loan did not make any change in the agricultural productivity. Inferential statistical tool validated the finding of category-wise and region-wise difference in the impact of loan on agriculture productivity of borrowers. Higher productivity was attained by the medium borrowers and the respondents of the southern region.

4. Opinion of the respondents with regard to the impact of loan on facilities at home disclosed that the majority of them succeeded in making some improvements in this direction. The Chi-square test revealed that there was no significant category-wise, region-wise or sector-wise difference in the opinion of respondents.

5. Most of the respondents opined that there was no change in the food consumption pattern, as an impact of their agricultural loan. The Chi-square test verified that there was significant category-wise and region-wise statistical difference in the opinion of the respondents. Significant improvement in food consumption was reported among the medium borrowers and among the respondents of the central region.

6. By using Sign Test the study verified the validity of the hypothesis that the borrowing from the commercial banks could make positive impact on borrowers. The test result concluded with the inference of positive impact
of the agricultural borrowings on the economic and social living conditions of the borrowers.

V. Perceptions of Borrowers on Repayment and Related Problems

1. 31 per cent respondents opined that the agriculture income was always sufficient for the repayment of the loan amount. 48 per cent had sufficient income sometimes and 21 per cent faced much shortfall in agriculture income for the repayment of loan. The Chi-square test revealed that there was statistically significant region-wise and sector-wise difference in the opinion of the respondents. Higher shortfall was reported in northern region and among the respondents of public sector.

2. The majority of respondents had the opinion that the amount of instalment repayment was moderate and some respondents had the negative opinion of high or very high instalments. The Chi-square analysis revealed the statistically significant region-wise and sector-wise difference in opinion of the respondents on this aspect. More respondents of the central region opined that the instalment amount was higher than that of other regions and the proportion having the same opinion was also high among the public sector respondents.

3. The majority of borrowers renewed the existing loan or obtained new loan for the repayment old loan. The Chi-square test substantiated the significance of region-wise and sector-wise difference in the responses of the respondents. More renewal or new loan was obtained by the respondents of the northern and southern region than in the central region and also by the respondents of the public sector.

4. 71 per cent respondents’ utilised new loan for repayment of the old loan from the same bank and 15 per cent approached other banks. 19 per cent respondents utilized the financial assistance extended by the moneylenders.
Inferential statistical analysis found the validity of statistically significant region-wise difference in the opinion of the borrowers regarding the source of loan for repayment old loan.

5. The majority of borrowers did not make any default in the repayment of the loan amount. The proportion of the loan defaulter was only 20.5 per cent. The defaults had significant regional and sector-wise difference, which was evident from the result of Chi-square test. The proportion of respondents who made default in repayment was higher in the northern region than in the other regions. The sector-wise analysis revealed that more defaults were made by the respondents of the public sector than in the private sector.

6. The crop failure and low return from the agriculture activity was the main reason for default in loan repayment. Fall in prices and unexpected contingency were other reasons which lead to default. The Chi-square test revealed that there was significant category-wise and sector-wise difference in the opinion of the respondents regarding the reason for default in repayment of the loan amount. Low return from agriculture affects the marginal borrowers more than the other categories.

7. The action taken by the banks on default in repayment of loan did not make any significant variation across category, region or sector. In all the cases of default, the banks followed uniform procedures for the recovery of the loan amount.

8. A vast majority of respondents expected some incentives for prompt repayment of the loan amount. No significant category-wise, region-wise or sector-wise difference on the expectation of incentives for the prompt repayment of the loan amount was observed.

9. Reduction in interest rate was the most widely expected incentive for prompt repayment of loan amount. Enhanced loan and relaxation in security requirements were the other preferred expectations of the borrowers. Chi-square test revealed statistically significant category-wise
and sector-wise difference in the nature of incentives expected by the beneficiaries. More number of medium borrowers expected reduction in interest rate than the other categories and it was also higher in the private sector than in the public sector.

10. Category-wise analysis of difference in the perceptions of the borrowers with regard to repayment and related problems found statistically significant among the borrowers only in terms of reasons for default and nature of incentive expected. Region-wise analysis showed significance of difference in five out of the nine factors identified for this purpose – sufficiency of income for repayment, instalment repayment, loan for repayment and default in repayment and source of loan for repayment. Sector-wise analysis was almost all in parity with the region-wise analysis and varies only in respect of three aspects - source of loan for repayment; reasons for default and nature of incentive expected.

VI. Perceptions of Bank Officials on Agricultural Lending

1. Credibility of the borrower, feasibility and viability of the project were the main criteria adopted by the banks in the selection of agriculture loan beneficiaries. The extent of security that can be offered by the borrower was also the criteria followed. Both the public sector and the private sector banks followed the same criteria and order of preference for selecting the loan beneficiaries.

2. The region-wise analysis of the criteria followed by the banks revealed that the banks followed the same sequence of criteria and there was no regional difference. Therefore, it was evident that there was no region or sector-wise difference in the order of selection criteria.

3. The criteria followed by the banks for the determination of loan amount revealed that the guidelines adopted by the bank were the first deciding
factors, both in public and private sectors. Repaying capacity of the borrower was the second ranked criterion for the determination of the loan amount in public sector banks, but financial outlay of the project ranked in the same order in the private sector. Value of the security and feasibility of the project were ranked fourth and fifth in both the sectors. So more or less same criteria were followed by commercial banks from both sectors for determine loan amount to its customers.

4. The region-wise analysis of the factors that determine the amount of loan revealed that, there was no region-wise difference in the order of preference. The guidelines followed by the bank and repaying capacity of the borrowers were the major factors which determine the amount of loan.

5. The analysis of pre-loan field visit revealed that 66 per cent of public and 88 per cent of the private sector officials always make pre-loan field visits. It was clear that private sector officials made more pre-loan visits than the public sector officials. The Chi-square test proved the significance of statistical difference between the sectors on this aspect.

6. The region-wise analysis of the pre-loan field visit revealed that frequent visits were made by the officials of the southern region and fewer visits in the northern region, even though the difference was not statistically significant.

7. The analysis of post-sanction field visit revealed that in one fourth cases there was no post-loan field visit. There was no statistically significant difference in sector-wise or region-wise regarding the post-loan field.

8. The value added services provided by the banks to the respondents were analyzed and it was revealed that the majority of the banks would not provide any value added services to the borrowers. Even though sector-wise disparity was proved through the inferential analysis, no region-wise difference between banks was noticed in this regard. Advice for
minimization of cost of borrowing was the most common value added service provided by the banks to the borrowers.

9. The majority of banks sanctioned the loan amount within a period of 4-7 days. The study found significant sector-wise difference in the time lag for the sanction of the loan amount. The private sector banks were in a better position than the public sector ones in sanctioning the loan amount within a short span of time. Even though the difference between the banks in terms of time taken for sanctioning loan was not statistically significant, descriptive analysis revealed that comparatively more time was taken by the respondents of the northern region than the rest.

10. The analysis of time required to sanction the loan, which requires the approval of higher authorities, revealed that the majority of respondents sanctioned the loan within a period of three weeks and there was no sector-wise or region-wise statistical difference among the banks.

11. Private sector banks were more prompt than the public sector in sanctioning of agricultural loans to their customers. This was evident from the inference drawn by Chi-square analysis carried out for this purpose. The region-wise analysis of the disbursement of loan amount, which can be sanctioned by the branch manager, revealed that the respondents of the southern region and the central region were time bound than those of the northern region, even though the difference was not statistically significant.

12. The time lag in the disbursement of loan amount which requires the approval of higher authorities’ indicated that there was no significant statistical difference in either sector-wise or region-wise.

13. The majority of bank officials did not sanction loan to agriculturists under the DRI scheme. No sector-wise significant difference in the disbursement of loan to agriculture under DRI scheme were found.
14. The region-wise analysis of disbursement of loan under DRI scheme to agriculture revealed that the northern region overrules the other regions and the test result also exposed the significant regional difference.

15. The share of DRI loan to the agriculture sector revealed that a majority of the banks allowed less than 25 per cent of such loans to agriculture sector.

16. The region-wise analysis of the percentage of DRI loans to agriculture sector revealed that the respondents of the southern region were allowed comparatively more lending under the scheme to agriculture sector than the other regions; however the difference was not statistically significant.

17. The proportion of crop loan to total agricultural lending was more than 80 per cent among majority of the banks. The sector-wise analysis revealed that public sector banks granted comparatively more crop loan than the private sector, even though the difference was not statistically significant.

18. The region-wise analysis of proportion of crop loan to total agricultural loan revealed that the share was higher in the southern region than the other regions, but this finding did not receive statistical validity during inferential analysis.

19. The majority of respondent banks made 10 to 40 per cent of their total lending to the agricultural sector. With regard to the proportion of agricultural loan to the total lending of the banks no significant difference were found either in sector-wise or region-wise.

20. The analysis of percentage of default in repayment of agricultural loan revealed that there was less than 10 per cent default among the majority of respondent banks and it was 10 to 20 per cent in 30 per cent banks. No statistically significant difference either sector-wise or region-wise regarding the percentage of default in repayment of agricultural loan was found by the study.

21. The analysis of the percentage of NPA in agricultural lending revealed that the majority of respondent banks had less than two per cent NPA in their
agricultural lending and there was no significant variation among banks across sectors or regions.

22. The percentage level of NPA in crop loan was less than two per cent for majority of respondent banks and sector or region-wise difference among the banks in this regard did not receive any statistical validity.

23. The percentage level of NPA in term loan was also less than two per cent. Here also no statistical difference was found among the banks either sector-wise or region-wise.

24. The inducement given by the bank officials to the agricultural loan was analysed and it was found that the majority of officials induced the borrowers to utilise agricultural loan either sometimes or frequently. Banks were followed similar policies connected with this regardless of the sector or region they belong to.

25. Procedural simplicity, longer period for NPA and attainment of target were the major reasons for inducement of agricultural loan. There was neither sector-wise nor region-wise difference observed regarding the reasons for inducement.

26. The majority of bank officials had the opinion that there was occasional mis-utilisation of the loan amount by borrowers and some of them expressed their view that it was frequent. No statistically significant difference either sector-wise or region-wise were noticed in this regard.

27. Borrowers mis-utilised more than 20 per cent of the agricultural credit advanced by the banks, which was the opinion of majority of the bank officials surveyed. Even though there was no sector-wise difference found in this regard, bank officials from different regions had diverge themselves towards this. When almost 70 per cent respondents of the southern and central regions opined that the extent of mis-utilisation was more than 20 per cent, it was less than 20 per cent according to the opinion of the majority (67%) from the northern region.
VII. Problems of Commercial Banks in Agricultural Lending

1. Lending and Monitoring Problems:

   Among the lending and monitoring problems faced by the commercial banks, lack of corrective action on mis-utilization and mis-utilization of loan amount by the borrower were the most common ones. The sector-wise and region-wise analysis of lending and monitoring problems also showed that the first and second ranked problems faced by the banks were almost one and same. However the rank scores of other problems had much difference across sectors as well as regions. The Student’s ‘t’ test confirmed the sector-wise difference and ANOVA proved region-wise variation among commercial banks in their lending and monitoring problems.

   When the magnitude of such problems measured by Five Point Scales and further verified by non parametric form of hypothesis test, One Sample Sign Test it was found that the commercial banks in Kerala were facing problems only at moderate level with regard to lending and monitoring of agricultural credit.

2. Repayment and Related Problems

   Absence of incentive /subsidy for prompt repayment of the loan and waiver syndrome was the main problems faced by the banks having a mean score of more than the average score of three. Both sector-wise and region-wise analysis of these problems was also produced similar results. Inadequate return from agricultural activity and intentional failure of the borrowers were the other major repayment related problems. But on these variations in views of bank officials were observed between sectors as well as regions. Inferential analysis techniques used by the study proved that there
was statistically significant sector-wise and region-wise difference among the commercial banks in facing their repayment and other related problems.

When degree of repayment and related problems were measured and analysed with the help of statistical evidence, the study interpreted that the gravity of such problems was not much severe and commercial banks in Kerala were facing it only at moderate scale.

3. Overdue and Related Problems

The main constraints faced by the commercial banks in the form of overdue and related problems were ineffective insurance/compensation on natural calamities, lack of support from government agencies for the recovery of overdue and complicated recovery procedures. The sector-wise and region-wise analysis was also shown that these three problems were the major problems related to the overdue of their customers faced by commercial banks in Kerala. This analysis also found neither sector-wise nor region-wise difference among the banks in this regard and inferential analysis also substantiated the validity of such findings.

Statistical measure used for judging the extent of overdue and related problems proved that the intensity of such problems among commercial banks in Kerala was not low but moderate.

4. General Problems in Agricultural Lending:

Among the seven general problems identified for the purpose of analysis, all the six problems were existed among commercial banks with relatively high degree of intensity. These were in the order of severity includes: apathy to agricultural activity, small and scattered operational holdings, continuous renewal and enhancement of the loan amount, large
number of small borrowings, target based agricultural lending and limited scope for agricultural expansion.

Absence of viable projects was the only one problem which caused least botheration to bank officials.

For drawing statistical inference on the extent of general problems in agricultural lending, the null hypothesis of $\mu = 3$ was tested against the alternate hypothesis of $\mu > 3$ at 5 per cent level of significance by using non parametric test of One Sample Sign Test. As the probability value determined by the test procedure is greater than the significance level of 0.05, it should reject the alternate hypothesis and it is statistically inferred that the general problems in agriculture lending are moderate.

The sector-wise analysis of the general problems revealed that continuous renewal and enhancement of agricultural loan and apathy to agriculture were the first two problems faced by the public sector banks, whereas it was the apathy to agriculture and limited scope for agriculture expansion in the private sector. The small and scattered holding of the agricultural land was the third ranked problem faced by the commercial banks in Kerala. The Student’s t test confirmed the statistical validity of the finding that there was significant sector-wise difference in the general problems faced by the public and private sector banks in agricultural lending.

The region-wise analysis shows some regional differences in the general problems faced by the banks in agricultural lending. Small and scattered land holding was the main problem of the southern and northern regions, whereas apathy to agriculture was the main problem in the central region. Target based lending was the second problem in the southern and central region as against continuous renewal and enhancement of loan amount in the northern region. But parametric test result found no significant
region-wise difference among commercial banks in the general problems faced by them banks in agriculture lending.

**Recommendations**

Most of the recommendations are given on the basis of the findings of the study. Some general suggestions are also included based on the observations and other available information which are obtained during the course of the research.

1. Involvement of the young people in agricultural activities is very meagre. Therefore, effective and sufficient steps are required to attract them to the agricultural sector by framing attractive financing schemes to them.

2. The income generating ability of the agricultural sector can be enhanced by the adoption of the improved technology, mechanization and post-harvest operations. Development and adoption of technology demand the wise use of human capital of the country. Better income generating capability certainly improves the involvement of educated youth in this field of economic activity.

3. It is found that more fund allocation is made in the agricultural sector for meeting the operational expenses rather than investment purpose. More capital investment in the field is essential for research and development which shall generate better income and employment in the sector.

4. It is observed that the loan period is allowed by the banks have some difficulties to the borrowers. Therefore, the loan period should be enhanced especially on long term crops. The loan tenure should be matched with the life period of the plants which are cultivated by the farmers.

5. Security margin on agricultural loans should be reasonable and the procedure followed for making security should be simplified sufficient enough.
6. The practice of demanding collateral securities in addition to the principal security is common in agricultural lending especially in term lending. Such procedures should be eliminated and term loans should be advanced on the basis of the principal security.

7. Timely credit is very essential in agriculture because the agricultural activities are more time-specific and weather-specific. So, the delay in sanction and disbursement of loan amount should be avoided.

8. The present scale of financing followed by banks has some limitations. For some crops, the amount of credit is insufficient to cover even the cost of cultivation. Insufficiency in the loan amount further increases the cost of borrowings and which leads to loan defaults. Therefore, the scale of finance must be enhanced further to cover the ever increasing cost of operations and cost of living.

9. Effective pre and post-loan field visit certainly enhance the proper utilization of the loan amount and ensure the timely repayment. It is observed that the follow up of agricultural loan is very weak especially post loan follow up. So, bankers should ensure that there is effective follow up of agricultural loans.

10. The agriculture as a productive sector has some inherent limitations and therefore, the rate of interest charged on such loans, especially on term loans should be less than rates charged for consumption/unproductive loans, particularly personal loans, car loans, housing loans etc.

11. Simplification of cumbersome formalities involved in lending procedure to agriculture sector, will be of much help in streamlining the procedures and minimization of cost of borrowing to a great extent.

12. It has been observed that the payment of processing fee, inspection fee etc. adds the cost of borrowing of the borrowers. Therefore imposition of such charges on agricultural borrowings fails to find any justification.
13. Sufficient value added services like project preparation, assistance in the development of marketing facilities, helps in acquisition of assets, information relating to changes in production technology and market conditions etc. are found necessary from the observations made. This will certainly enhance the involvement of more people in agriculture and related activities.

14. The loan waiver scheme, OTS scheme etc. will support the loan defaulters than the prompt payers. So the practice of promoting the defaulters should be avoided and incentives should be given to pre and prompt re-payers. Reduction in rate of interest, enhanced loan etc. should be offered to the on time repayers.

15. Present security based lending to agriculture creates some difficulties especially to land less and lease hold farmers. Therefore, it is recommended to formulate some special financing schemes for such farmers.

16. The amount of instalment repayment should be matched with the expected income from the agricultural operations.

17. The procedure followed for the renewal of loan amount should be further simplified for ensuring timely availability of the credit.

18. Farmer friendly insurance schemes in line with the varied requirements of the cultivators, growing different crops, should be formulated and implemented so as to protect the farmers from the adverse impact of natural calamity, pest infection etc.

19. The DRI loan scheme formulated to assist the weaker section of the society should be sufficiently extended to the agriculture sector.

20. Mis-utilisation of agricultural loan is very common among the borrowers. Therefore, it is recommended to take effective corrective penal action on mis-utilisation of loan amount by the borrowers. It is also appropriate to constitute an autonomous body for monitoring the agricultural lending and its utilization. This is required to obtain the benefits of the quantum-wise
improvement in agricultural lending especially in the recent years, to enhance the agricultural productivity and improvement of agricultural production.

21. The Government should extend better support for the recovery of overdue and the recovery procedure should be simplified by taking into consideration the interests of both lenders and borrowers.

22. The pooling of small and scattered agricultural land and co-operative farming are required to overcome some of the major handicaps in the agricultural operations of the State.

23. The agricultural financing schemes of the banks and various schemes formulated by the Government for the promotion agriculture should be properly propagated among the farmers.

24. Formation of ‘farmer clubs’ associated with bank branches should be extended further to cover all bank branches.

25. Participation of bank officials in ‘Grama sabha’ give better opportunity for both bankers and farmers to formulate better agricultural financing schemes, which match with the requirements of the local needs.

26. Banks should provide the same status which enjoyed by the business borrowers to the agricultural loan borrowers also.

27. The present target specification in agricultural lending often leads to mis-appropriation of the loan amount. So, suitable control measures are required to manage such mis-appropriations in agricultural lending.

28. The more involvement of SHGs in agriculture certainly enhances the productivity and a solution to many of the agricultural production problems.

29. NREGP scheme should be extended to agriculture as a remedy for the acute labour shortage faced by the sector in the State.