CHAPTER -8

CONCLUDING OBSERVATIONS AND POLICY RECOMMENDATIONS

This chapter provides a summary of major findings and policy recommendations. Next section of this chapter highlights the following areas:

8.1 Challenges of Agricultural Finance in India

8.2 Chapter Wise Concluding Observations

8.3 Policy Recommendations

8.4 Prospectus for Future Research

8.1 Challenges of Agricultural Finance in India

The Indian agricultural sector has been suffering from severe crises due to a host of challenges. Along with poor agricultural growth, agricultural development is experiencing crises. In this context, rural credit institutions are having difficulty in extending credit. There are risks associated with lending to informal sectors like agriculture, but the financial system needs to come up with ways to mitigate them. Credit to agriculture has been offered at concessionary rates, so commercial banks have suffered a loss in income. Consequently, commercial banks are experiencing adverse financial conditions. It is possible for a credit institution to experience large withdrawals of deposits if there is a crop failure or animal disease and as a consequence, loan demands could increases.

Commercial bank branches in rural areas tend to have lower deposits than their counterparts in urban and metropolitan areas. Due to rural poverty and low per capita income, rural residents are unable to save as much money as they should. Many rural residents do not have enough savings, so commercial banks find it hard to collect sufficient deposits from rural areas.

Table 8.1: Rural Branch Coverage of Commercial Banks

(Percentage)

year	Rural	Semi-urban	urban	Metropolitan
1991	56.92	18.74	14.31	10.03
2014	36.91	26.18	19.33	17.58

Source: Authors Own Calculation

In India, the number of bank branches has increased substantially, but the distribution of commercial bank branches remains uneven. The commercial banks have largely adopted a metro-centric strategy and have been less inclined to expand their operations in rural areas. Rural bank branches of commercial banks represented 56 percent of total commercial bank branches in 1991, whereas they accounted for only 36 percent in 2014. During the period 1991 to 2014, it demonstrated a continuous downward trend. In contrast, the share of metropolitan branches in the total number of bank branches of commercial banks has grown from 10 percent in 1991 to 17 percent in 2014.

Table 8.2: Bank Group wise Gross Non Performing Assets

(Rs.Crore)

Year	Public Sector Bank	Private Sector Bank	All Scheduled Commercial Banks	Percentage Share Of Public Sector Banks in Gross NPA	Percentage Share Of Private Sector Banks in Gross NPA
1997	43577	2542	47300	92.12	5.37
2005	48399	8782	59373	81.51	14.79
2010	59926	17639	84698	70.75	20.82
2014	227264	24184	263372	86.29	9.18

Source: RBI Financial Stability Report, Various Issues

Table 8.3: Bank Group Wise Gross Agricultural Non Performing Assets

(Rs. Crore)

Year	Public Sector Bank	Private Sector Bank	All Scheduled Commercial Banks	Percentage Share Of Public Sector Banks in Gross NPA	Percentage Share Of Private Sector Banks in Gross NPA
2004	7240	459	7699	94.03	5.96
2005	7254	465	7719	93.97	6.02
2010	8330	2023	10353	80.45	19.54
2014	28000	2200	30200	92.71	7.28

Source: RBI Financial Stability Report, Various Issues

The majority of loans offered to small and marginal farmers are not properly utilized for productive activities. Because of the loan waiver program, people intentionally default on their loans with the hope that eventually their loan payments will be waived. The informal and agricultural sectors were not adequately examined and controls were not in place, which resulted in an increase in non-performing assets (NPAs). Before 1991, Indian banks didn't give serious consideration to the issue of NPAs and their effect on profits and assets. Commercial banks' alarming NPA level has several causes, according to various factors. On the one hand, there has been an increase in total agricultural credit, but on the other hand, serious overdues problems have limited credit expansion and the viability of lending institutions, primarily the commercial banks. When borrowers fail to supervise their accounts properly or when they lack the necessary technical or managerial skills to handle their loans, they could default on their loans without good cause. In addition to impacting profitability, non-performing assets also compromise a bank's reputation. It is difficult for farmers to access agricultural credit due to a number of factors, including stipulations of the scrutiny procedures, and difficulties in recouping loans from commercial banks. As the agricultural sector in India continues to grow, institutional credit arrangements remain inadequate.

It is more difficult for the lender to maintain the quality of its portfolio when agricultural loans default. These factors could increase the cost of loan loss provisioning and affect the bank's rating in the capital markets, thereby increasing the cost of funds. The share of agricultural loans in institutional lenders' portfolios is limited in order to reduce portfolio risk. In the absence of tools for managing systemic risks in the agricultural sector, the severity of this risk is greater.

8.2 Chapter wise Concluding Observations

The agriculture sector in India is encouraged by various credit instruments. Credits have always allowed farmers to invest in new technologies, invest in machinery, invest in irrigation and adopt quality inputs. Agricultural productivity can be increased through the use of new technologies obtainable through credit. The present study entitled "An Empirical Analysis of Agricultural Finance Provided by Scheduled Public and Private Sector Banks in India in the Post Reform Era (1991-2014)" has been carried out with specific objectives:

1. To examine the growth and impact of agricultural credit on agricultural output and input.

2. To identify the major determinants of agricultural credit.

3. To study the impact of commercial banks loan policies on the economic stability of agriculture.

4. To examine the impact of long term agricultural credit on capital formation in the agricultural sector.

5. To evaluate the challenges of agricultural finance in India.

The following Hypotheses were examined in this study:

1. There is a significant impact of credit on output and input of the agricultural sector.
2. There is a significant growth of credit provided to the agriculture sector by commercial banks.
3. There is a significant relationship between the growth of deposits and credit provided to agriculture sector by commercial banks.
4. There is a significant impact of interest rate on the supply of agriculture credit

The first chapter of this study presents an introduction to the agricultural sector, agricultural finance, and some historical background of Indian commercial banks. Brief description of agriculture finance and the evolution of agriculture finance in India is presented in this chapter. The chapter discusses pre-reform and post-reform phases of agricultural institutional finance. A section of this chapter discusses cooperative credit and institutional financing. Furthermore, it gives a brief overview of sources of Agricultural credit in India and patterns of bank lending. The chapter provides brief details about different institutional agencies that offer agricultural credit. This chapter provides a brief overview of the size-wise distribution of direct finance from scheduled commercial banks to farmers and the proportion of small and marginal farmers receiving the credit from scheduled commercial banks. A brief overview of the role of various institutions in the provision of credit to the agriculture sector is also included in this chapter.

Chapter two highlighted the various published studies conducted at the national and international level regarding the agricultural finance. As seen in the review of published literature, several studies on different aspects of agricultural finance have been conducted from a national, regional, state and international perspective. These studies are of great importance, however many crucial aspects of agricultural finance remain unexplored, such as whether financial institutions had the intended effect on agricultural growth.

In chapter three, the methodology and database of the study are discussed. In this chapter, we discussed the sources of data, selected variables, time period, and data analysis techniques used in this study, as well as the limitations of the present study.

Chapter four estimated the growth and performance of agricultural finance by scheduled commercial banks. The purpose of this chapter was to examine the expansion of branch network, deposits, and advances by public and private sector commercial banks during the period 1991 to 2014.

The results of this chapter revealed that a higher proportion of commercial banks' total deposits come from deposits of public sector commercial banks than from private sector commercial banks. Increase in public sector commercial bank deposits lead to an increase in scheduled commercial bank total deposits, and similarly, increase in private sector commercial bank deposits contribute to increased commercial bank total deposits. Time deposits of commercial banks are more concentrated in public sector banks than in private sector banks. Further, Results of this chapter suggest that increased time deposits at public

sector commercial banks contributed to the increase in commercial bank total time deposits as well. Accordingly, increased private sector commercial bank time deposits reflected the increase in commercial bank total time deposits. Public sector commercial banks make a larger contribution to the total demand deposit share of commercial banks than private sector commercial banks. Increased demand deposits for public sector commercial banks, as well as demand deposits for private sector commercial banks, resulted in increased demand deposits for commercial banks. Time deposits account for a greater share of total commercial bank deposits than demand deposits. The total amount of deposits at public sector commercial banks increased due to the growth in demand deposits and time deposits. As a percentage of total deposits at private sector commercial banks, time deposits represented a greater share than demand deposits. The growth of total deposits at private sector commercial banks has been attributed to a rise in demand deposits and time deposits. The results indicate that there has been a significant change in the proportion of demand and time deposits during the study period. Public and private schedule commercial banks have increased the share of time deposits in their total deposits significantly. A number of factors have contributed to this change, including the increased proportion of households as depositors, the easing of policies for the withdrawal of deposits and the expansion of banking facilities.

Public sector commercial banks' increased agricultural advances have a significant impact on total advances by public sector commercial banks; public sector commercial banks' increased agricultural advances boost total advances by public sector commercial banks. An increased number of agricultural advances lead to higher total advances by the private sector commercial banks as well. The total advances of public sector commercial banks led to an increase in total advances of scheduled commercial banks, and similarly, the advances of private sector commercial banks led to increases in scheduled commercial bank total advances. Agricultural advances from public and private sector commercial banks have contributed to the growth in scheduled commercial bank advances.

According to regression estimates, the rural branches of public sector commercial banks in India are positively and significantly related to the rural branches of scheduled commercial banks. Rural branches of private sector commercial banks are also positively related to rural branches of scheduled commercial banks, but not significantly. It is evident from the results of the regression estimates that the number of total branches of public sector commercial banks has a higher statistically significant positive effect on the number of scheduled commercial banks' branches than the private sector commercial banks' branches. Based on the

results, public sector commercial banks' urban branches have a higher positive influence on the total number of scheduled commercial banks' urban branches than private sector commercial banks' urban branches. Results of the study showed that public sector commercial banks' metropolitan branches have a more positive impact on the total number of scheduled commercial banks' metropolitan branches than private sector commercial banks. The study indicates that private sector banks' semi-urban branches have a weaker but positive effect on all scheduled commercial banks' branches than public sector banks' branches in semi-urban areas.

From 1991 to 2014, the growth rate of demand deposits at public sector commercial banks in India increased at a rate of 11.22 percent per annum. During the study period, demand deposits of private sector commercial banks showed a significant increase. The results indicate that demand deposits of private sector commercial banks increased by 21.92 percent per year. Over the period 1991-2014, demand deposits at scheduled commercial banks grew at a rate of 13.13 percent per annum. The growth of demand deposits of scheduled commercial banks has been trending upwards during the entire study period. A positive trend can be seen in the growth rate of time deposits of public sector commercial banks. The regression estimates depicts that the rate of increase in time deposits of public sector commercial banks has been 15.88 percent per year. The growth rate of time deposits in private sector commercial banks from 1991 to 2014 showed a significant positive trend. The growth rate of time deposits in private sector commercial banks increased by 22.28 percent annually. Further, a 16.32 percent annual growth rate is registered by time deposits of scheduled commercial banks during the period under consideration, indicating that time deposits at scheduled commercial banks have been trending upwards. Growth rate of total deposits at public sector banks exhibited a positive trend during the period 1991-2014. Total deposits at public sector commercial banks grew by 15.35 percent annually during the period 1991 to 2014. The total deposits of private sector commercial banks increased during the study period. The results indicate a 22.41 percent increase annually in total deposits of private sector commercial banks. There has been a consistent upward trend in total deposits of scheduled commercial banks throughout the study period, total deposits at scheduled commercial banks increased by 16.10 percent per annum. The result shows that during 1991 to 2014, public sector commercial banks lost a significant share of their deposits in commercial banks.

Agricultural advances of public sector scheduled commercial banks have increased by 17.12 percent annually over the study period. Robust growth of 27.96 percent was recorded by the agricultural advances of the private sector commercial banks during 1991-2014, which is higher than public sector banks agricultural advances during the same period.

Considering the results of this study, it is clear that there was a sharp decline in rural bank branches of all commercial banks between 1991 and 2014. This decline was led by public sector commercial banks. The growth rate of branch expansion of public sector banks in rural areas is lower than that of private sector banks.

Results of this chapter demonstrate that rural branches of public sector commercial banks have increased at a rate of 0.70 percent per year. In addition, the urban branches of public sector commercial banks experienced a significant increase of 3.33 percent per annum over the study period. Semi urban branches of public sector commercial banks grew by 3.01 percent annually. The result shows that there is a noticeable positive trend in the growth rate of metropolitan branches of public sector commercial banks in India during the study period, it increased by 4.54 percent per annum. The total number of public sector commercial banks over the study period increased by 2.31 percent annually. The growth rate of private sector commercial banks total branches has shown a positive trend. From 1991 to 2014, the number of private sector branches has increased by 6.15 percent per annum. Rural branches of private sector commercial banks increased by 1.65 percent annually. There was a 7.19 percent annual increase in urban branches of private sector commercial banks between 1991 and 2014. The growth of private sector commercial banks branches in semi-urban areas increased by 5.77 percent per annum. Metropolitan branches of private sector commercial banks have grown significantly over the study period by 9.92 percent annually. According to the results of the study, the number of scheduled commercial bank branches in India over the period 1991-2014 has only moderately increased. Urban, semi-urban, and rural areas have witnessed branch expansion at a much slower rate than metropolitan areas. Public sector banks have increased their branch network in metropolitan areas whereas growth in rural areas has been low. During the study period, private sector banks experienced high branch network growth in metropolitan areas, but branch network expansion has been minimal in rural areas. Therefore, in this chapter through empirical analysis, it was found that there is a significant growth of credit provided to the agriculture sector by commercial banks and also there is a significant relationship between the growth of deposits and credit expansion to the agriculture sector by commercial banks.

Chapter five examines empirical estimation of the impact of agricultural finance on agricultural output and input demand. Commercial bank credit for the agricultural sector is strongly correlated with all agricultural inputs i.e., fertilizers, seeds, power tillers and tractors. Clearly, these five inputs are strongly correlated with total direct credit based on the correlation matrix. The regression analysis indicates that tractors used by the agricultural sector are positively related to the amount of direct agricultural credit lent by commercial to farmers. Due to this, the use of tractors increased in agriculture sector as a result of direct agricultural credit. In the agricultural sector, seed consumption is impacted positively and significantly by commercial banks direct credit to agriculture. The study found that the use of high variety seeds increased as the availability of direct agricultural credit increased. In the agricultural sector, direct credit lent for agricultural purposes led to an increase in fertilizer consumption. The amount of fertilizer utilized for agricultural purposes increased along with the amount of direct agricultural credit disbursed. As the amount of agricultural direct credit increased the amount of electricity consumed for agricultural purposes also increased. Direct credit from commercial banks increased the use of electricity for agricultural purposes, which helped in improvement of agricultural productivity. The role of direct agricultural credit in influencing the use of power tillers in agriculture is both significant and positive. With an increase in commercial bank direct agricultural credit, farmers have increasingly used power tillers in agriculture.

Results of this chapter indicate that indirect credit favours tractor usage in the Indian agricultural sector in a significant and positive way. An increase in the use of power tillers was also observed with the increase of indirect credit flow by commercial banks to the agricultural sector from 1991 to 2014. Agricultural indirect credit offered by banks enhanced agricultural production in India by expanding access to high-yield seeds. Indirect credit is found to have a significant positive effect on seeds utilized in agriculture. Therefore, the use of high yield seeds increased as indirect credit provided by commercial banks increased. The consumption of fertilizer in agriculture is positively impacted by the indirect credit lent by commercial banks for agricultural purposes. This implies greater use of fertilizer following more disbursements of indirect agricultural credit. The increase in indirect agriculture credit leads to an increase in the use of electricity for agricultural purposes. Indirect credit provided by commercial banks leads to higher electricity consumption in agricultural processes, potentially impacting agricultural productivity.

A rise in direct credit has been proven to lead to an increase in agricultural output. Consequently, an increase in commercial bank indirect agricultural credits leads to a rise in agricultural output. It appears that total direct credit impacts agricultural output more than total indirect credit. According to these results, indirect credit has limited potential to raise agricultural production. The pattern indicates that the increase in indirect credit of the previous year is associated with the increase in agricultural output of the present year. By examining indirect agriculture credit and its first lag, it is apparent that agriculture output differs significantly when it comes to indirect agriculture credit. Interestingly, both the public sector and private sector banks' lending towards the agricultural sector has a positive influence on the variation in agriculture output, but the intervention of public sector banks on agricultural credit is a major contributor to the improvement in agriculture output. Net cultivated land area and agricultural output have a positive relationship, it suggested that increased cultivated land area resulted in an increase in agricultural output. Keeping all other inputs constant, the increased number of workers increased agricultural production. A change in the credit in agriculture positively affected agricultural output; therefore, changing credit as an input will positively impact agricultural production. Through empirical results in this chapter, it was found that there is a significant impact of credit on output and input of the agricultural sector.

Chapter six analyzed the linkages between interest rate, interest subsidy and supply of agriculture finance by commercial banks. This chapter examined the growth of investment in securities by commercial banks, borrowing from RBI, Interest subsidy to farmers on short term credit, branch expansion in rural areas by commercial banks, time deposits and demand deposits of commercial banks. It also assessed the major determinants of agriculture lending by commercial banks. During the period 1991 to 2014, investment by scheduled commercial banks in government securities grew significantly by 16.01 percent. Banks' investment in Other Approved Securities declined over the period 1991 to 2014. As depicted by the results commercial banks shifted their investments from Other Approved Securities to government securities, their participation in other approved securities declined by 12.58 percent per year. Most of the investments made by commercial banks are in government securities. The result indicates that total investment in securities by commercial banks has increased significantly during the period under consideration by 14.54 percent per year. There is a significant positive trend of commercial bank borrowing from Reserve Bank of India during the study period. The compound annual growth rate for commercial bank borrowings from

the Reserve Bank of India stands at 11.30 percent. Moreover, this study shows that reserve bank borrowings by commercial banks grew at a rate of 10.70 percent annually. Agricultural loans have received average interest rates from banks that are lower than the average lending rates to all other sectors during most of the period under consideration. For some years between 2000 and 2002 and 2006-2007, average interest rates charged by commercial banks to the agriculture sector were higher than average interest rates for all sectors. The interest rates for direct agricultural loans offered by commercial banks are usually lower than those for indirect agricultural loans. Interest subsidies to agriculture have increased at a significant rate of 20.22 percent per year. Commercial banks' branch expansion in rural areas exhibits a fluctuating pattern. The expansion of rural branches of scheduled commercial banks has been declining for some years. From 1991 to 1993 the commercial bank branches in rural areas increased by 183 branches, Nevertheless, from 1994 to 2006, the number of rural bank branches declined annually, and there were around 7178 fewer rural banks in that period. The number of rural branches of commercial banks declined for some years due to mergers, swapping, and other alternative delivery mechanisms of financial services. In the rural areas, 6689 new commercial banks were opened during the entire study period. Commercial banks opened 13666 new branches between 2007 and 2014. One of the most popular types of deposits is the fixed deposit. Increases in commercial banks' total deposits were primarily driven by increases in fixed deposits. Over the study period, time deposits at commercial banks increased by 16.61 percent annually and demand deposits at commercial banks have increased by 13.86 percent per year. There is a negative relationship between credit to agriculture and bank investments in securities. A similar pattern is observed in relation to interest subsidies. Hence, the proportion of investment in central and state government securities from total bank deposits is negatively related to agriculture sector bank credit. An increase in interest subsidies could decrease agricultural credit supply. The association between interest subsidies and agricultural credit supply is negative. Interest rate is positive and significant which indicates that if the interest rate increases, it leads to more supply of agricultural credit. Rate of interest positively affect the supply of agricultural credit. This indicates that as interest rate increases, the supply of agricultural credit will rise. It implies that by increasing interest rate, commercial banks will be encouraged to lend more to agriculture. A decrease in the interest rate on agricultural credit, on the other hand, would lead to a decrease in the volume of agricultural credit provided by commercial banks. A rise in time deposits at scheduled commercial banks leads to an increase in agricultural credit, that is, an increased supply of agricultural credit is also stimulated by time deposits. Through

empirical evidence presented in this chapter, it was found that there is a significant impact of interest rate on the supply of agriculture credit.

Chapter seven of this study focused on impact of agriculture credit on capital formation in the agriculture sector. This chapter also investigated the growth of Long term direct credit, Short term direct credit and total direct credit supplied to the agricultural sector by scheduled commercial banks in India. The result highlighted the growth of the selected variables for the entire study period and sub-period. During the entire study period, both private capital formation and public capital formation have recorded positive growth. However, private capital formation witnessed higher growth as compared to public capital formation. From 1991 to 2000, public capital formation recorded negative growth, while private capital formation recorded positive growth during the same period. Even though the level of public sector investment in agriculture sector declined, the trend in private capital formation has improved. Public capital formation and private capital formation are complementary to each other, as proved by the findings of this study for the time period 2000 to 2010. The study reveals that during this period with the rise in public capital formation, private capital formation also increased. The results indicate that public and private capital formation cannot be considered substitutes for each other. From the results of the study, it may be concluded that previous year's public capital formation has a positive and significant impact on current year's private capital formation. It is also revealed by the results in this chapter, supply of long term direct credit was highest during the period 2000 to 2010 and during the same period, private capital formation witnessed the highest growth rate. This implies that long term direct credit to the agricultural sector has a positive and significant impact on private capital formation in the agriculture sector. It was observed that the share of short term direct credit is higher than long term direct credit in total direct credit to the agricultural sector during 1991 to 2014. Results of this study revealed that private capital formation accounted highest share in total capital formation than public capital formation in agriculture sector.

The findings of this study are consistent with the findings of several previous studies that have been conducted on the financing of the agricultural sector in India by commercial banks. The results of this study are consistent with those of (Puhazhendhi and Jayaraman, 1999; Mohammad, et.al, 2003; Chand and Kumar, 2004; Sahu and Rajasekhar, 2005; Karmakar, 2008; Das, et.al, 2009; Kumar, et.al, 2010; Singh, 2014).

8.3 Policy Recommendations

Based on Empirical analysis, this study concludes with a set of policy implications for commercial banks in India for further improving agricultural finance

I. As part of an efficient financial system, commercial banks should not limit themselves to short-term crop loans to agriculture. In addition to crops, commercial banks should offer loans for agribusinesses, livestock, and agri-industry because all these are critical to the sustainability of the entire agricultural system. Additionally, commercial banks should provide loans for processing agricultural produce, marketing, and warehouse development in addition to lending for agricultural inputs. Commercial banks in rural areas could benefit from diversifying their loan portfolio, by approving both short and long-term loans.

II. It is crucial that additional borrowing by farmers be kept to a minimum, giving due consideration to the limited ability of farmers to repay their debts. Moreover, commercial banks should prioritize investments in agricultural sectors that are productive, while avoiding excessive borrowing by farmers.

III. The commercial banks must be given a competitive environment so they can set loan rates that are enough to cover the transaction costs associated with rural lending. Consequently, high-net-worth individuals and rural residents will receive better banking services from commercial banks.

IV. Commercial banks should not offer agricultural credit at rates below market rates, as this would encourage wealthy and influential people to divert the funds to alternative uses. Commercial banks need to determine the ability of their borrowers to repay their loans on time. Commercial banks need to select borrowers who repay their loans on time and earn income from the borrowed funds.

V. It is imperative that the RBI supervise private and public sector commercial banks extending financial services to agriculture and rural areas in the context of economic stability by ensuring financial inclusion of rural and agricultural lending into equitable development. Subsidies should be transparent, clearly targeted at reducing financial & institutional costs, and phased out gradually. In addition to providing access to money, commercial banks should also facilitate the process by which individuals become more bankable.

VI. The lack of rural branches has resulted in an institutional void in rural credit. Strengthening commercial banks is a relevant strategy since they are able to do so due

to the resources they have. Regulations should be introduced to include a specific expansion program for commercial banks in rural areas. The relationship between the rural economy and the credit system will improve when commercial banks in rural areas will be able to easily establish branch networks if an incentive system is in place for branch licensing.

VII. Public and private sector commercial banks need to collaborate with local institutions in order to be able to reach out to farmers in remote areas without incurring high transaction costs.

VIII. In addition to granting credit to farmers who do not have access to other sources of finance, commercial banks should also provide credit to those who are heavily in debt from noninstitutional sources. In order to enhance financial inclusion, more branches need to be opened, the credit architecture must be revamped, deposit ratios in underdeveloped regions must be increased, and recommendations from the working group need to be implemented to improve credit delivery for farmers.

IX. Commercial banks can offer small farmers the services they need and customize credit channels that suit their particular needs, as well as offer exclusive extension services to small and marginal farmers.

X. A percent of agricultural lending targets could be allocated to commercial banks by RBI for loans aimed at agricultural development, thereby enabling them to effectively contribute to their own developments. Furthermore, the RBI can encourage commercial banks to lend more to smaller and medium-sized individual growers to promote agricultural growth.

XI. Government has offered generous yields on public securities, thus preventing potential private borrowers from getting credit due to the involvement of commercial banks in the stock and bond markets. Investing large amounts of money in the capital markets by commercial banks can lead to an unstable market, causing asset prices to rise and causing market bubbles. Economic growth and private investment would be hampered as a result of falling private lending in the country and the region. The increased investments by commercial banks in the capital markets negatively affect the availability of private credit. Increased exposure to capital markets exposes banks to other factors that may affect other assets. Supervisory and prudential frameworks should also be strengthened in order to safeguard against excessive exposure of commercial banks to capital markets.

XII. Regulatory governance needs to be improved in Scheduled Commercial Banks. Commercial bank branches need to be managed and held accountable for their actions and the metro centric concentration of banks needs to be reevaluated.

XIII. Financial regulations will need to be more flexible to accommodate business operations in rural areas so that the individual bank's regulations can be amended more easily, and they can adapt to changing circumstances more easily than those imposed by the RBI.

XIV. The government should establish a credit guarantee fund for the agriculture sector since banks are not covered by any guarantee schemes to protect them from default risk.

XV. In an Agriculture credit system, a single database is required to track all credit issued, all operations, all defaults, etc. In order to process agricultural credit within a stipulated timeframe, commercial banks will need this monitoring system.

XVI. Banking institutions can reduce shortfalls in farming credit by handling direct and indirect finance data separately, enabling them to evaluate each activity separately.

XVII. If the commercial banks intend to successfully penetrate and grow their share of the agricultural sectors organized finance, they must adopt innovative and customer oriented strategies.

XVIII. In the case of lending to the agricultural sector, bank managers must change their marketing approach in order to attract customers. Customer-focused strategies and tactics should be identified, implemented, and evaluated, rather than trying to influence them toward a goal that suits the business.

XIX. The agricultural industry can be made credit-worthy by providing agricultural industry deposits to meet their own credit needs. By reducing unnecessary expenses and increasing farmer savings, a two-stage approach may be implemented. Most villagers spend a large amount of money on social obligations and other expenses. Banks should take advantage of the mass media to dissuade them from such unnecessary spending and encourage them to save.

8.4 Prospects for Future Research

Throughout the research process, a number of novel perspectives on agricultural lending by commercial banks were gained, which may serve as a resource for research in the future. Further research may focus on a more in-depth analysis of selected variables of this study using broader methodologies. Due to the significant changes in the agricultural financial sector during the past few years, commercial banks, as an integral part of it, can be evaluated based on the services they provide to rural and agricultural clients and the costs associated with providing the services. Additionally, a performance evaluation of commercial banks at the bank wise, region wise, state wise, area wise and a comparative analysis of banks based on the ownership structure of the banking sector can also be used to conduct further analysis in agricultural sector. Also, analyzing commercial banks' profitability and the role they play in financial inclusion can be an exciting research topic. In addition, a model could also analyze data based on the number of commercial banks, the size of landholdings, and the type of agriculture financing provided by various financial institutions. For future studies, additional factors affecting agricultural finance can be examined. By visualizing and exploring the data more effectively, the analyst could better understand the risks and threats associated with quality of assets or agricultural advances. Studies regarding the cost associated with the recovery process of bad debt of commercial banks in rural areas can be made in the future.