CHAPTER I

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CHAPTER I

INTRODUCTION

THE PROBLEM

The main aim of this study is to measure the extent of flow of institutional credit to the farmers and to examine its impact on technology, productivity and revenue in the agricultural enterprise in Kanyakumari District. 'Institutional credit' refers to the funds made available by co-operative credit societies, commercial banks and the government agencies. The introduction of new technology and the consequent application of costly inputs like fertilisers, implements and improved irrigation techniques have called for enormous capital use. Neglect of institutional credit by the agricultural sector for this modernisation process had led to the
backwardness of Indian agriculture.\textsuperscript{1} Hence the present study seeks to quantify the flow of institutional credit and to measure its impact in the agricultural enterprise in Kanyakumari district.

IMPORTANCE OF THE STUDY

India is predominantly a peasant economy, where even at present, around seventy per cent of her working population is engaged in agriculture. Being the largest economic activity, agriculture serves as the index of country’s economic development. All the other sectors of the economy are concerned with the performance of the agricultural sector. The agricultural sector contributes about half of the national product. It also attains the top position in providing work and jobs to the people of India. The main features of Indian agriculture are low productivity and backwardness. These are the results of the small size of holdings, technical constraints, institutional drawback and poor extension services. Further the farming community in India is consisted of mainly small and marginal farmers.\textsuperscript{2}


Agriculture was treated as a means of subsistence in the past. The average size of the holding was so small that it could rightly be called as an uneconomic holding. These tiny farms were subsistence farms because their meagre production was hardly adequate for self consumption. Farmers of these holdings got no surplus to invest on their farms. As a result, they were still operating their holdings with traditional technology. The growth of production and productivity was stagnant. Before the period of independence there was a little rise in output. But the production per unit of land remained constant. The annual compound growth rate of production during the period 1901 to 1947 was -0.02 per cent in the case of food grains. But non-food grains showed a positive trend. Therefore Indian agriculture was backward and followed subsistence farming in the past.\(^3\) This trend had changed from subsistence to commercialised farming after the advent of Green Revolution.

Commercialisation of agriculture implies production of crops for sale rather than for family consumption. Farmers were

motivated by income consideration in adopting cash crops and the comparative net advantage had led to the specialisation of commercial crops. The new agricultural strategy enhanced specialisation of commercial crops in the crop enterprise. Further the new strategy proposed to make a technological break through in India with the introduction of new and high yielding varieties of improved seeds, increased application of the recommended classes of fertilizers and expansion of the use of pesticides so that the crop produced can be saved from destruction by insects. This technological break through has brought about spectacular changes in the agricultural production of our country. The rapid introduction of high-yielding wheat varieties and rice, and their multiplied effect in the other crops justifies the name of Green Revolution. It has pushed into the background the chronic and consuming food shortages. It has also provided an incentive for the further development of agriculture.


Further the development of the industrial sector has been dependent on agriculture. The growth of agro-based industries would depend on the performance of agriculture. The mutual interrelationship between agriculture and industry has a very important role in moving the economy towards progress. Agriculture supplies vital inputs to industry and vice versa. Ever since the dependence of industry on agriculture has been relatively heavier compared the dependence of agriculture on industry. Considering the importance of consumption goods consisting of agricultural products and the manufactured goods based on agricultural commodities in the economy, the growth of agriculture assumes critical importance. Since the mid sixties agriculture slowly has moved from the traditional to the modern cultivation practices and the new technology has been accompanied by a set of demands for new inputs such as fertilizers, pesticides and farm machineries. Thus the growth of agro-based industries would depend upon the performance of agriculture.  

Further the growing and pressing need to conserve and augment the country’s foreign exchange resources and to facilitate imports of plants and equipments for larger capital formation in the nation’s industrial sector, due emphasis is being laid now-a-days on the importance of stepping up of India’s agricultural production. Considerably higher production from agricultural land would be the only answer to the twin problems of food shortage and inadequacy for earning foreign exchange as it would not only offset the need for food grain imports, but also, would create surpluses; and the raw material requirements of industries dependent on agricultural produce would be so fully met from them that the resultant increase in the industrial output would open up a large scope for the export of finished goods and foreign exchange earnings.7

In order to raise the level of production to fulfil the above conditions, agriculture should be developed in

proportionately larger dimensions. For a development of this nature altitudes, means and modes governing the country’s agriculture in general, would need to undergo a fundamental change. It should no longer be regarded and in practice treated merely as a means of subsistence of the farming community and nothing further. The country has now much greater and far reaching expectations from its cultivable land resources; and their total utilisation should now brook no further delay. Agriculture should not only be growth oriented but also should be viewed and developed as an industry to be geared up for maximum exploitation of the total production potential of the land. Applications of technological skill, labour and capital in unprecedented measures will have to be made on farming units if the hitherto dormant resources of the country’s agricultural land are to be stirred up and optimum results secured with the aid of prudent and planned management.  

Indian agriculture has undergone a rapid technological transformation during the last few years. Most of the inputs, high yielding variety of seeds, fertilizers, insecticides and pesticides, 

8.  Idem.
electricity, improved implements and machinery required for this technological transformation are purchased from the non-farming sector. The increased use of these modern inputs has resulted in the increase of the capital needs of the farmers. The increased capital requirements cannot be met from the farmer's own funds as the pre-adoption incomes are barely sufficient to provide with the minimum necessities of life. Inadequate availability of capital has been identified as a major cause of low productivity and slow adoption of technology on majority of Indian farms.  

Employment of better techniques and improved methods of cultivation as well as application of larger quantums of labour for extensive and intensive development would inevitably entail higher costs particularly in the initial stages. Hence, the cultivator should be ensured of a provision of an enduring nature for adequate finance before he is expected to launch upon a programme of agricultural development on the contemplated scale.


In India, institutional credit for agriculture was viewed from the angle of protecting farmers from the grip of money lenders. It was hardly considered as an instrument of production enhancement. Traditionally, the role of credit is that of giving an acceleration to the developmental process. It is a lubricant that keeps the wheels of development moving. According to Dantwala, "in Indian agriculture with 74.5 percent of operational holdings falling in the category of small and marginal, the primary responsibility of development rests with the government because it needs colossal public expenditure and strong policy intervention."

Credit requirements of a farmer are usually met either (1) through drawals upon whatever little savings he has been able to make and (2) with the help of accommodation secured from relatives or money lenders or through institutional agencies, such as Revenue and Development Departments of the Government and the Co-operatives. A programme of agricultural development with


growing needs of finance could hardly be met from the first two sources enumerated above. Amongst the institutional agencies only the co-operatives could easily answer farmer's financial requirements of short, medium and long term nature. Perhaps a modest beginning in the right direction towards the aim of total agricultural development could be said to have been already made if the latest noticeable trend of turning more to the co-operation and availing of credit from them in increasing measures, is to be taken as an indication. While other sources of credit are of a limited nature, the credit support through the co-operatives is more or less of a definite and unlimited nature. The finance received from the co-operative agencies is mostly for seasonal crops or for the purchase of livestock. This sort of financial accommodation, no doubt, helps higher agricultural production; but it is the capital formation on the land resource such as sinking of wells, installation of pump sets, purchase of tractors and mechanical equipments which really contribute to increase the very productivity of the land.\(^{13}\)

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PREVIOUS STUDIES

Several theoretical and empirical studies have been made by researchers and social scientists to assess the effects of institutional credit and the repayment capacity of the farmers under different agro-economic situations.

Sarma and Siva Prasad made an attempt to forecast the demand for short-term farm credit in the selected districts of Andhra Pradesh. They inferred that the technological variables dominate over the economic variables in determining the demand for credit.\(^{14}\) Kanith observed that in Punjab the demand for credit increases in the areas where more irrigation facilities are available because a sound irrigation system encourages higher cropping intensity.\(^{15}\)

Haque and Maji examined whether there had been a change in the structure and composition of co-operative credit as a


result of the introduction of high yielding technology. The study revealed that the new agricultural production technology had changed the structure and composition of the short term as well as medium and long term co-operative credit in almost all the states in the country.\textsuperscript{16} Aswini Kumar Sarma and Roop Narayan Pandey have estimated the capital requirements for modernisation of agricultural production in Haryana. They found that greater demand for crucial inputs like fertilizer, plant protection chemicals, quality seeds and an increase in the capital and credit particularly, short term credit requirements to a substantial extent.\textsuperscript{17} Hence the technological variables dominate over economic variables in determining the credit.

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Desai made a study on the aspects relating to the flow of funds, forms of farm loans and factors affecting them in thirty villages of Coimbatore and Salem Districts of Tamil Nadu. The study inferred that the commercial banks are not much inclined in directing and channelising the non-deposit resources obtaining in the urban centres, competition among banks themselves have a positive impact on a village economy. The study added that the credit needs are increasing steadily due to increasing doses of inputs and their prices.18

Kumar, Joshi and Muralidharan have studied the demand for credit on marginal farms pertaining to a sample of fifty marginal farmers from Amroha Block of Moradabad district in western Uttar Pradesh. The study inferred that there is scope for absorbing more credit even at the existing high rates of interest paid by these marginal farmers. The study added that, given favourable input and output prices, their demand potential for credit is likely

to be very much higher. If these demands are to be met, there is a strong case for strengthening the infrastructure for the supply of credit. Hence the new agricultural production technology had increased the credit requirements of the farmers in the production process.

Prihar and Nariendar Singh have studied institutional finance for the agricultural sector in the Punjab region. They said that the farm size is positively correlated with the percentage of the borrower farmers also. Sathya Sai had analysed the flow of institutional credit to agriculture in West Godavari District of Andhra Pradesh. He noted that the proportion of loans utilised for productive purposes had a positive relationship with the farm size.


Oberi and others observed that the credit as well as capital requirements had a positive correlation with the farm size. This study was conducted in Pangi Valley of Himachal Pradesh.\textsuperscript{22} Such conclusions strongly suggest that there is a close association between farm size and the capital requirements of the farmers.

The Economic and Statistical Department of Bank of India studied the impact of bank finance on Mehboonagar district of Andhra Pradesh and it revealed that the direct impact of investment in treating irrigation facilities was felt when they were able to bring more area under multiple cropping, increase the intensity of cropping and the incremental income as compared to the non-borrower farmers.\textsuperscript{23} Subrahmanyam had analysed the credit requirements of the small farmers in West Godavari District of

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Andhra Pradesh. He has reported that the provision of credit helps the farmers in increasing the area under High Yielding Variety of Paddy where it is already grown.\textsuperscript{24}

Mehta and Sidhu examined the impact of Medium and Long-term Loan on Short-term credit needs of the Punjab farmers with primary and secondary data. They concluded that the loans given for long term investment on tube well irrigated and tractor operated farms had significantly increased the requirements of short-term loans.\textsuperscript{25}

Athavale, Yadav and Mishra made an attempt to study the role of short-term co-operative credit in providing the services required in the context of the High Yielding Variety Programme at the district and farmers level. The study was conducted in Raipur district for paddy and Tikamgarh district for wheat in Madhya


Pradesh. They found that co-operative credit contributed 30.22 per cent of the current farm expenditure in Raipur District and 59 per cent in Tikamgarh District. In both the districts, co-operative credit was used mainly for seed, fertilisers and pesticides.26

Desai, Gupta and Gurdev Singh examined the relationship between the degree of agricultural progress and the density of rural credit institutions in the semi-arid tropics of India with the help of secondary data. They found that agricultural progress is associated with density of rural financial institutions, overall amount of credit per hectare was invariably highly positively associated. The degree of agricultural progress was highly positively related to the share of credit for agricultural input sub system from the co-operatives.27 Hence it is evident that the adequate provision of credit increases the cultivated area with the advent of high yielding variety of paddy on farms.


Atteri and Joshi have made a case study to assess the role of credit in increasing income of marginal and small farmers in Ghogha village, Delhi. The study revealed that augmenting capital on marginal and small farms through increased provision of credit at reasonable rate of interest, improved their productivity and made them economically viable. Sharma has studied the impact of bank credit on agricultural transformation in Bhagalpur district. He has concluded that the borrower farmer achieved a substantial rise in crop productivity. Improvement in irrigation facilities coupled with the sustained use of fertilizers and other inputs were evidently the decisive forces observed behind the improvement in crop productivity. He observed that bank loans have helped to raise per hectare income of the farmer borrowers substantially.

Suryakumari studied the impact of credit on agricultural output in


Visakhapatnam District. The study revealed that credit had significant impact on output. Hence it is evident that the borrower farmer achieved a rise in crop productivity and the institutional credit has significant impact on output.

Desai and Desai have examined the farm production credit in changing agriculture in Gujarat. They opined that the increased credit use in changing agriculture had resulted in increased farm incomes.

Shiv Karan Singh and Ramanna studied the role of credit and technology in increasing income and employment on small and large farms in the western region of Hyderabad District of Andhra Pradesh. They concluded that the adoption of improved technology has led to a marked rise in incomes over and above the attainable levels of income with the use of adequate credit at the currently practised technology and the use of family labour.


increased substantially. According to Agarwal and Kumawat the adoption of improved technology with adequate credit facilities had increased the income of all sizes of farms significantly. This study was conducted in the semi-arid region of Rajasthan, with the help of primary and secondary data. Sinha and Sharma studied the prospects of increasing farm incomes on tube well irrigated and bullock operated farms through new technology and credit in Nalenda District of Bihar. They observed that the credit facilities increased the farm income. Hence it is evident that adequate credit facilities will increase farm income.

Sathyanarayana conducted a study in Chittoor District of Rayalaseema about the demand for working capital. The study


inferred that the working capital requirements were influenced by the size of the holding, irrigation ratio and cropping pattern. With regard to the repayment of loan, the study revealed that they were influenced by farm size and farm business income.\textsuperscript{35} Jayaraman has found that irrigation facility enables the cultivator to augment his gross earnings from his land and consequently increases his capacity to repay his debt instalment and interest charges to his credit institutions. He conducted this study in Mahi-Kadana Project of Gujarat.\textsuperscript{36} Premji made a case study of three co-operative societies in Sabarkan thesis district of Gujarat to examine crop planning and the performance of primary co-operative societies. The study revealed that the overdues of co-operative societies had

\textsuperscript{35} E. Sathyanarayana, "Need to Reactivise Credit Co-operatives", \textit{Kurukshetra}, Vol.XXXII, No.8, May 1984, pp.16-19.

increased mainly because of the weak and unstable financial condition of the farmers.\textsuperscript{37}

Kurulkar made an attempt to study the financial feasibility of agricultural investment in new wells, pumpsets and tractors and the paying capacity of cultivators making these investment in a backward region of Maharashtra. He found out that the investment on new wells and pumpsets did not fully satisfy the test of repaying capacity. But it is only the investment on tractors that satisfied this test.\textsuperscript{38}

Mohanan studied the problem of overdues in co-operative credit societies in different states. He has stated that the main causes of overdues are crop failure, inadequate and untimely supply of credit and failure to link credit with marketing. The study added that because of the overdues, the societies fail to get adequate


amount from higher bodies, which in turn may have to refuse credit even to those prompt members.\textsuperscript{39}

Balishter and Roshan Singh made a study on Institutional Finance in Agriculture in Chaumuhan Block of Mathura District of Uttar Pradesh. They have observed that the availability of credit per hectare is higher in case of marginal and small farmers as compared to medium and large farmers. The study added that the repayment position of loans was good in case of land development bank in all categories of farmers. But in case of commercial banks and co-operative societies the repayment performance is not satisfactory.\textsuperscript{40}

Balishter, Roshan Singh and Om Prakash made a study on crop loan overdues of State Bank of India in Agra intended to examine the reasons of non-payment of crop loan by defaulters. They have observed that low crop yield, inadequate finance, crop


\textsuperscript{40} Balishter and Roshan Singh, "A Study of Institutional Finance in Agriculture", \textit{Agricultural Situation in India}, Vol.XL, No.11, February 1986, pp.979-986.
failure due to natural calamities, delay in disbursal of loan, lack of supervision of loan utilisation were the reasons for the non-repayment of dues.\textsuperscript{41} Rajasekhar and Vinod Vyasulu had studied the rural credit delivery system with special reference to the growth of overdues in twenty-six branches of Rajasthan representing Canara Bank, Regional Rural Bank and Primary Agricultural Co-operative Societies. The study has revealed that structural problems such as complicated procedures in sanctioning of loans, and inadequate and untimely loans also contribute to the problem of overdues.\textsuperscript{42}

The studies done by researchers so far, have shown that credit enables improved use of technology in the production process, increases the area under cultivation which results in a rise in crop productivity, output and farm income. Repayment capacity

\textsuperscript{41} Balishter, et. al., "Crop Loan Overdues in Banks A study of state Bank of India in Agra District of Uttar Pradesh", \textit{Agricultural Situation in India}, Vol.XLIV, No.6, September 1989, pp.471-477.

of the farmers is also influenced by productivity, output and farm business income. However, the studies in the field of institutional credit are partial, because they have dealt with one or two variables which determine the need for institutional credit. They have analysed and associated cropped area and institutional credit, productivity and institutional credit, output and institutional credit, farm income and repayment capacity. The present study, though not much different from others seeks to assess the flow of institutional credit and to examine the changes brought about in the farm firms due to the supply of institutional credit.

OBJECTIVES

The objectives of this study can be broadly classified into two - (1) the structure and use pattern of the agents of production namely, land, labour, capital and the productivity, and (2) the impact of institutional credit on the agricultural enterprise of Kanyakumari District.

1. The first objective is to study the land use and cropping pattern in the District. The cultivable land is converted for other uses and there are fluctuations in the area under
various crops. So this study proposes to analyse the trends and directions in the land use and cropping pattern in Kanyakumari District.

2. The participation of agricultural population in the agricultural operation of Kanyakumari district had changed from year to year. Further to have a clear background, and to understand the structure of agricultural population the study proposed to analyse the data relating to the census years 1971, 1981 and 1991.

3. The third objective is to study the technological change and the production efficiency of principal crops. The traditional technology has changed after the Green Revolution. Institutional Credit has enabled the farmers to use the expensive scientific inputs under improved irrigated conditions. Moreover the production efficiency of Paddy, Banana, Tapioca, Coconut and Rubber had changed significantly. So, the third objective of the study is to analyse the technology adopted before the introduction of the Green Revolution and the production efficiency of the crops.
4. The demand for institutional credit has changed after the advent of the Green Revolution. To meet the changing demand for institutional credit by the farmers, many institutions have cropped up. So, it is essential to understand the trend and magnitude in the expansion of credit institutions supplying credit to agriculture. Hence, the fourth objective of this study is to assess the trend and magnitude in the expansion of the credit institutions catering to the financial needs of the farmers in Kanyakumari District.

5. The fifth objective of the study is to analyse the impact of institutional credit on agricultural production in Kanyakumari District.

6. The socio-economic background of the sample farmers were analysed in accordance with the family size, level of education, earners and dependents, occupational structure, farm size and the borrowings of the sample farmers in Kanyakumari district. So, the sixth objective of the study is to analyse the socio-economic condition of the sample farmers who have availed the loan facilities of the institutional agencies.
HYPOTHESIS

1. Institutional credit agencies with special reference to co-operatives are sufficient enough to meet the financial requirements of the farmers in Kanyakumari District.

2. Institutional credit enables the farmers of Kanyakumari District to use improved technology in their farm enterprise and to increase productivity.

3. Institutional credit enabled the farmers to maximise net revenue in their farm enterprise in Kanyakumari District.

Based on these hypothesis the study is divided into two parts, - the first part seeking to analyse the performance of the credit institutions in general and the Kanyakumari District Central Co-operative Bank in particular; and the second part, to measure the productivity of the farm before and after the utilisation of institutional credit in Kanyakumari District.
ASSUMPTIONS

1. Paddy, Banana, Tapioca, Coconut and Rubber are the major crops in Kanyakumari District.

2. Co-operatives are the major institutional agencies providing the financial requirements of the farmers.

3. There is timely availability of co-operative credit to the farmers in Kanyakumari District.

4. There is no change in the prices of the inputs used in the agricultural enterprise, before and after the use of institutional credit.

5. The sample farmers are not only borrower farmers but also they have used the entire credit for the development of agriculture.

6. Family size of the sample farmers, level of education, earners and dependents and farm size are influencing factors of production in Kanyakumari district.
SCOPE AND LIMITATIONS

The scope of the study is limited to the credit utilisation activities of the farmers of Kanyakumari District. The present study is confined to the impact of institutional credit, given to the farmers, for the agricultural development in terms of improved technology, productivity and net revenue. The results obtained from the study are based on the information gathered from the sample farmers who have obtained financial assistance from institutional sources.

However the limitations of the study are the following:

1. The farmers do not maintain any account of inputs used and the output obtained in the agricultural operations. Therefore memory bias is obvious at the time of personal interview of the sample borrower farmers.

2. Apart from the influence of technological factors, there are physical and environmental factors influencing agricultural production which are not considered in the present study.
3. The sample farmers selected for paddy have also cultivated other crops. So, there is a chance to believe that the loan taken for paddy cultivation might have been used for the cultivation of other crops also. This was noted at the time of personal interview. The same trend has been observed in the case of Banana, Tapioca, Coconut and Rubber.

4. Another limitation of the primary data is that it pertains to a single agricultural year and a single visit enumeration.

5. The entire study pertains to a micro level analysis.

CHAPTER OUTLINE

The introduction deals with the importance of the problem, previous studies made by researchers and social scientists, objectives, hypotheses, assumptions and scope and limitations of the study. The second chapter covers the theory behind the analysis, methodology followed, samples selected, data collection, details of personal interview, measurement of cost and revenue items, analysis of data and the meaning of terms used.
The third chapter deals with the land use and cropping pattern of Kanyakumari district. The fourth chapter aims to study the taluk-wise participation of agricultural population of Kanyakumari district with special reference to cultivators and agricultural labourers. The fifth chapter aims to study the technological change and the production efficiency of Paddy, Banana, Tapioca, Coconut and Rubber in Kanyakumari District.

The sixth chapter seeks to study the performance of agricultural credit institutions in general and the Kanyakumari District Central Co-operative Bank in particular. The seventh chapter deals with the impact of institutional credit on Paddy, Banana, Tapioca, Coconut and Rubber. The eighth chapter aims to study the socio-economic background of the sample borrowers and the borrowings made from institutional sources in Kanyakumari District. The last chapter details the summary and conclusions of the study.