CHAPTER-I

INTRODUCTION

Poverty in India is largely manifested in the rural areas and this rural economy is predominantly agricultural. Agriculture, occupying a dominant position in the Indian economic scene, harbors about 2/3rds of the labour force. The growth in the national income over the decades has largely been determined by the trends in agricultural production because agriculture is one of the major components of the Gross domestic product (GDP) and it has, via linkages, an overall impact on the other sectors of the economy.

Traditional agriculture in India, mainly dealt with implements and techniques which were quite simple and operated through animal or manual power. In such systems, the amount of finance involved in farm management was relatively small in importance and size. On the other hand, the modernized agricultural sector encompasses new sophisticated methods and equipment which involve a large amount of finance. This, the farmers may not be able to meet out of their own savings. The requirement of working capital may also increase because of: a) purchased inputs and b) new technology which is likely to encourage farmers to increase their cropping intensity. Besides increasing the working capital requirement, adoption of new agricultural technology also necessitates large fixed capital investment on such items as preparation of land for irrigation and
drainage, acquiring plough animals like bullocks, installation of irrigation facilities like pump-sets and purchase of minor farm implements and machinery like power-tillers and tractors, etc.

The process of transfer of agricultural technology, which involves large injection of both working capital and fixed capital investment into the farming sector cannot be expected to make much headway without sizeable expansion in the institutional credit support to agriculture. Hence, in the transition process from traditional to a modern structure, the growth in the demand for finances from the farm sector is likely to increase over time. Since this growing demand cannot be met by the farmers from their internal sources alone, the role of credit institutions becomes increasingly crucial to keep up with the changes in the character of farming operations in the process of growth and development of the agricultural sector. The process can be restrained or even stopped if institutions of rural credit fail to come up with adequate support system to sustain the growth of agricultural investment.

1.1. BACKGROUND OF THE STUDY

In case of the state of Assam, as compared to other states of the country, the pace of development of the agricultural sector has been very slow. The state covers a geographical area of 78,438 sq.kms and accounts for 2.5% of the total land area of the country. According to the 2001 census, the population of the state is 266.38 lakh, of which 89% are in the rural areas. During the decade spanning over the period 1991-2000, the growth of population in Assam was 18.85% as against 21.34% for India. The average
density of population per sq. km in Assam was 286 in 1991 as against all India figure of 273.

About 69% of the total working force in the state are engaged in agriculture and allied activities. The share of this sector in the Net State Domestic Product (NSDP) of Assam at constant (1993-94) prices was 36.3% and at current prices 37.8% in 1999-2000. Compared with other states of the country, the pace of development of this sector has been very slow. However, attempts at attaining self sufficiency in food-grains by the state government and growing awareness on the part of the state's cultivators for use of improved seeds, fertilizers, etc have helped in attaining some growth in this sector which has been marked by slow production as well as productivity.

Out of the total area of 78.44 lakh hectares of land in the state, 20.24 lakh hectares are covered by forests, 24.56 lakh hectares are not available for cultivation and 3.83 lakh hectares are under permanent pastures and grazing and under miscellaneous tree crops and groves which are also not available for cultivation. The net sown area at 27.01 lakh hectares accounted for 34.40% of the geographical area of the state in the year 1999-2000. Another 0.89 lakh hectares (1.13%) is cultivable waste, 0.70 lakh hectares (0.89%) is under old fallow and 0.72 lakh hectares (0.9%) is under current fallow which can be used for cultivation with suitable land development and soil conservation measures. The gross cropped area is 39.26 lakh hectares with cropping intensity at about 155%. The area sown
more than once to the net area sown was 45.2% in 1997-98 and this increased to 45.9% in 1999-2000 (NABARD, 2000-2001).

The average size of operational holding which was 1.47 hectares in 1970-71 decreased to 1.36 hectares in 1980-81 and in 1990-91, it has reached a low of 1.27 hectares. The all India scene presents a similar picture with the average size of operational holding declining from 2.0 hectares to 1.69 hectares over the period from 1976-77 to 1985-86. As per the 1990-91 agricultural census, small and marginal holdings accounted for 82.5% of total holdings in the state and 69% of the total work force are engaged in agriculture and allied activities. The share of agriculture in the state domestic product at current prices was about 35% in 1995-96 which increased to 36.17% in 1997-98, to 38.01% in 1998-99 and 37.8% in 1999-2000 (NABARD, 1999-2000).

While the annual compounded growth rate of production of food-grains for the period 1980-81 to 1990-91 for India was 2.6%, it was only 1.5% for Assam. Again, in 2000-01, the amount of fertilizer consumption per hectare of gross cropped area was 75 kg for India while it was only 29.3 kg for Assam. Moreover, the percentage of gross area irrigated to gross cropped area was also much lower in Assam in comparison to the all India figure. In fact, in 1993-94, it was 36.5% for India while it was a mere 15% for Assam and this has gone upto only 22% in 1999-2000. The number of tractors used per lakh hectare of cropped area was 254 for Assam while the all India figure was 813. In case of the number of pump-sets used per lakh
hectare of cropped area, it was 96 in case of Assam whereas the all India figure was 551 in 1993-94 (Government of India, 1995-96 & 2000-01).

Although the state has abundant surface and ground water, it is not being effectively harnessed for irrigation purpose. The state is lagging far behind the national average as it has covered only 33% of irrigable area against the national average of about 80%. The gross irrigation potential in the state has been assessed at 27 lakh hectares out of which 17 lakh hectares are planned to be created from surface water through major and medium projects (10 lakh hectares) and minor schemes (7 lakh hectares) and the rest 10 lakhs through ground water minor schemes. So far, upto end March, 2000, only 8.98 lakh hectares have been covered through private and government schemes (NABARD, 2000-01).

The backwardness of agricultural infrastructure including low irrigation capacity and low level of utilization of modern inputs like fertilizers, etc, are often cited as the main factors responsible for the poor state of agriculture in Assam. While there is little doubt that such factors are indeed the proximate causes of persistence of backwardness of agriculture in Assam, more intensive analysis is required to throw light on the ultimate causes of low productivity and technical stagnation. In this context, a pertinent question arises about the role of institutional credit in the agricultural sector of the state.

Data sourced from the National Bank for Agriculture and Rural Development (NABARD) reveals that Assam has had a below average
performance with regard to issue of loans by banks for crop production in comparison to states like Andhra Pradesh, Gujarat, Punjab, etc, during the period, 1988-89 to 1993-94 (NABARD, 1993-94). The average population per branch office in the state is much higher at 20,270 (2001 census) as against the national average of 14,800. So, these facts naturally lead us to the question whether it is the insufficient or inadequate participation of the financial institutions in the farm sector which has been acting as a major constraint in the growth of the agricultural sector of the state.

While a certain amount of research work has already been carried out in the area of institutional rural credit in Assam, the available studies mostly deal with the functioning of either commercial banks or other credit institutions like co-operative credit societies, Agricultural Refinance Corporation, etc, in the disbursement of rural credit in Assam (e.g., B.R.Deka, 1984, J.D.Kalita, 1989, K.C.Sharma, 1973). This study goes deeper to analyse the investment needs of the farmer and to what extent this is satisfied by the financial institutions. Other relevant works carried out at the all-India level are discussed at length separately in the third chapter.

1.2. OBJECTIVES

The main objectives of the study are listed in the following way:

a) Examination of the trend, composition and magnitude of agricultural investment in Assam since the mid 1980s to the present period (i.e. for a decade). This period has been taken since data is available continuously for this period.
b) Assessment of the role and effectiveness of the institutions of rural credit in promoting agricultural investment in Assam during the same period.

c) Examination of the extent to which the credit institutions meet the credit needs of farm households of different categories.

d) Analysis of the extent to which the availability of institutional credit is crucial for the adoption of new agricultural technology by farmers.

e) Prescription of policy measures for more effective functioning of the credit institutions for enhancing agricultural growth in Assam.

1.3. HYPOTHESES

The study begins with the hypothesis that the inadequate participation by the credit institutions has been a major constraint on the agricultural growth in Assam. This hypothesis has been taken because data available shows that the flow of agricultural credit to this sector by the financial institutions in the state has very tardy in comparison to other parts of the country.

A supplementary hypothesis is that the role of institutional finance is more crucial for promoting investments on fixed capital in the agricultural sector.

1.4. DATA BASE AND RESEARCH DESIGN

The study is based on both primary and secondary data. Secondary data has been sourced from the Directorate of Statistics and Economics,
Government of Assam, the office of the Accountant General, Assam, National Bank for Agriculture and Rural Development, Economic Surveys, Government of India, periodicals, journals, etc. Analysis of the trend and composition of overall agricultural investment in the state and the credit flow to the agricultural sector of the state was carried out at the macro level for the state as a whole.

The central Brahmaputra Valley Zone has been selected for primary field study. The selection has been governed not so much by the central location of the zone in the state, as by the fact that the cropping pattern there closely resembles the cropping pattern of the state as a whole.

There are two components of the field study. In the first component, the sample unit comprises of the farm household and the sample was drawn using a multi stage sampling design. A multi-stage sampling technique has been adopted to draw the sample from the zone. In the first stage of this sampling procedure, five Blocks (2 in Morigaon and 3 in Nagaon) i.e. 1/4th of the total blocks in the two districts have been selected from the zone. Then a total number of ten villages have been selected from these blocks. Prior to the selection of these villages, banking officials of the lead bank (i.e. the UBI) operating in the zone were consulted for identification of the locations, where there existed at least a few rural credit institutions (representing a composite sample of Commercial Banks, Regional Rural Banks and Land Development Banks). So, the selection of the villages has been on a purposive basis. Finally, 10% of farm households has been
selected at random from these villages. Data has been collected using a schedule of questions.

In the other component of the field survey, the sample unit comprises the sample branches of the credit institutions existing in the blocks identified for the study. In this case also, data has been sourced through a questionnaire.

The tools used to analyse the data ranges from simple ones like ratios, percentages, averages, co-relation, etc to higher ones like multiple regression analysis. For extracting additional insights of data collected in the sample survey, even case studies were taken up.

This study basically comprises of four parts. The first part contains the introductory chapters including a theoretical discussion of the research subject and a review of relevant literature. The second part reports on the overall picture emerging from the analysis of secondary data. The third part which forms the core of the dissertation, is based primarily on the field study undertaken. Finally, the concluding part first summarizes the findings and the inferences drawn from this study. This is followed up by the extraction of policy implications from the study.

1.5. LAYOUT OF THE DISSERTATION

The 1st chapter deals with the introductory portion of the study.
The 2nd chapter explains some of the conceptual issues related to the demand side of farm investment and gives an overview of the supply mechanism existing in India.

The 3rd chapter contains the review of relevant literature.

The 4th chapter reports on the secondary level data available on agricultural investment and credit flow to this sector in India and Assam.

The 5th chapter contains the methodology and sample frame adopted for the field study.

The 6th chapter gives a detailed presentation of the level of agricultural operations, adoption of better farming methods and role of credit in the farm-households surveyed in the field study.

The 7th chapter contains the results of the multiple regression analysis carried out mainly to study the influence of institutional credit on farm investment as well as on carrying out operational farm expenses and adoption of better farming methods in the sample farm-households.

The 8th chapter deals with the inadequacies of the supply mechanism i.e. the financial institutions surveyed in the study and also contains case studies of farmers who have experienced various constraints in availing farm credit from such financial institutions.

The 9th chapter reports on the overall findings from the study and also gives some suggestions based on policy implications.
References


