A STUDY ON CO-OPERATIVE BANK IN FINANCING AGRICULTURAL & ALLIED ACTIVITIES WITH SPECIAL REFERENCE TO DIMAPUR DISTRICT OF NAGALAND

By

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CERTIFICATE

This is to certify that the thesis entitled "**A study on Co-operative Bank in financing Agricultural & Allied activities with special reference to Dimapur district of Nagaland**" is an authentic record of the research work carried out by ***Mr. Keviu Shuya*** under my guidance and supervision for the award of the ***Degree of Doctor of Philosophy*** in ***Agricultural Economics,*** under Nagaland University.

I further certify that this Research work and investigation reported in the thesis has not previously formed the basis for the award of any other degree or diploma or fellowship or other similar title to any candidate of this or any other university. The assistance of all kinds received by the student has been duly acknowledged.

Date : 10th May 2013
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DECLARATION

I, *Mr. Keviu Shuya*, do hereby declare that the thesis entitled "A study on Co-operative Bank in financing Agricultural & Allied activities with special reference to Dimapur district of Nagaland" submitted to the Nagaland University, for the award of the *Degree of Doctor of Philosophy* in *Agricultural Economics* is the record of original and independent research work done by me under the supervision and guidance of *Dr. Amod Sharma*, Assoc. Prof. & Head, Department of Agricultural Economics, Nagaland University, School of Agricultural Sciences and Rural Development, Medziphema Campus, has not previously formed the basis for the award of any Degree or Diploma or Fellowship or other similar title to any candidate of this or any other university.

Date : 14th May 2013
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DEDICATED
TO

ALL MY
FAMILY MEMBERS
&
FRIENDS

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ABBREVIATION

₹	- Ra in Indian Rupees
%	- Percentage
ACP	- Annual Credit Plan
Agri/ Agril.	- Agriculture
AIRCSC	- All India Rural Credit Survey Committee
Anon.	- Anonymous
Approx.	- Approximately
ARF	- Automatic Refinance Facility
ASL	- Altitude above Sea Level
CBs	- Commercial Banks
CCBs	- Central Co-operative Bank
CDF	- Co-operative Development Fund
Co-op	- Co-operative
DCCB	- District Central Co-operative Bank
Fig.	- Figure
GDP	- Gross Domestic Product
GoI	- Government of India
Govt.	- Government
Ha	- Hectare
HRD	- Human Resource Development
KCC	- Kisan Credit Card
Kg	- Kilogram
LTCCS	- Long-Term Co-Operative Credit Structure
MT	- Metric Ton
MT Loan	- Medium-Term Loan

MVP	- Marginal Value Product
NA	- Not Available
NABARD	- National Bank for Agricultural and Rural Development
NAFSCOB	- National Federation of State Cooperative Banks Ltd.
NER	- North East Region
Nos.	- Numbers
NPA	- Non-Performing Asset
NSCB	- Nagaland State Co-operative Bank
NSTFDC	- National Schedule Tribe Finance and Development Corporation
OLS	-Ordinary Least Square
PACs	- Primary Agricultural Credit Societies
PCARDB	- Primary Co-Operative Agriculture And Rural Development Bank
Qt	- Quintal
RBQ	- Rank Based Quotient
RRB	- Rural Regional Bank
SAO	- Seasonal Agricultural Operation
SCARDB	- State Co-Operative Agriculture And Rural Development Bank
SFDA	- Small Farmers Development Agency
SHG	- Self Help Group
SN	-Serial Number
StCB/ SCB	-State Co-operative Bank
STCCS	- Short-Term Co-operative Credit Structure
Viz.	- Namely/ that is to say/ as follows

CHAPTER-I

INTRODUCTION

CHAPTER - I

INTRODUCTION

Agriculture is the mainstay of Indian economy not only in terms of contribution to the gross domestic product but also the people dependent upon it. A high level growth of agriculture is essential both for achieving the objective of food security at macro and micro levels and also to alleviate poverty in India. Approximately 15.7 per cent (at current price) of the GDP is contributed by agriculture and allied sector, with about 52.1 per cent of the country's population dependent on this sector and accounts for about 12 per cent share of the country's exports (Anonymous, 2010)[1].

In ancient times, agriculture was considered as a prestigious, notable and honourable occupation. In the last few years, the Indian economy has emerged as one of the fastest growing economies in the world. However, the vulnerability of the Indian economy with respect to the performance of the agricultural sector despite other macroeconomic indicators and sectors gaining in strength is well known. Many economist and policy-makers believe that the future growth of the domestic economy, to a large extent, will depend on the robust performance of the agricultural and rural sector. The manufacturing and service sectors cannot sustain the economy's growth if the rural sector underperforms.

Even today it is a common saying that the real India lives in villages. The economy of India is a rural based with more than 70 per cent of the population depends directly or indirectly on agriculture and its allied enterprises for their livelihood. India owns one of the largest livestock populations in the world. The animal husbandry sectors have been projected as the subsidiary source of income and employment generation using the limited available resources. Therefore, it has a tremendous scope to contribute towards the socio-economic aspect of the rural farmers.

The challenges faced by our country in securing food as well as nutritional security for a fast growing population need an integrated approach for livestock farming and thereby providing employment opportunities to seasonally employed rural farmers and supplementary income to improve their living standards.

The role of banks in rural upliftment and the effectiveness of banks as a tool for socio-economic, and over all development of the rural people consists of a broad spectrum. The success or failures of any enterprises depends to a large extent on the availability of finances.

The contribution of the banking and financial sector to the current economic growth of the Indian economy is very significant. However, the access of banking services to the rural, agriculture and the common man in general is not as promising. As V. Leeladhar (Deputy Governor, RBI, on the occasion of the Commemorative lecture at the Fedbank Hormis Memorial Foundation, Ernakulam) said "Despite making significant improvements in all the areas relating to financial viability, profitability and competitiveness, there are concerns that banks have not been able to include a vast segment of the population, especially the underprivileged sections of the society, into the fold of basic banking services". The focus of Indian banks on financial inclusion i. e; delivery of banking services at an affordable cost of the low-income groups has been dismal. In India, the focus of the financial inclusion at present is more or less confined to ensuring a bare minimum access to a savings bank account without frills to all. Having a current account/savings account on its own, cannot be regarded as an accurate indicator of financial inclusion.

The rural population in India suffers from a great deal of indebtedness and is subject to exploitation in the credit market due to high interest rates and the lack of convenient access to credit. Rural households need credit for investing in agriculture and smoothening out seasonal fluctuations in earnings. Since cash flows and savings in rural areas for the

majority of the households are small, rural households typically tend to rely on credit for other consumption needs like education, food, housing, household functions, etc. Rural households need access to financial institutions that can provide them with credit at lower rates and at reasonable terms than the traditional money-lenders and thereby, help them avoid debt-traps that are common in rural India.

Micro-finance is a broad term that includes deposits, loans, payment services and insurances to the poor. The concept of micro-finance and micro-credit are used interchangeably. But micro-credit does not include savings; hence micro-finance is a more appropriate term (Vaibhav, 2012). The concept is understood as providing poor families with very small loans to help them engage in productive activities or grow their small businesses. A success indicator of micro-finance lies in the 'credit-plus' approach, where the focus has not only been on providing credit, but to integrate it with other developmental activities. Today micro-finance is very much in the agenda of public policy and it has been increasingly used as a vehicle for reaching the otherwise unreachable poor in the country. One such agency that provides micro-finance is the co-operative bank.

A co-operative bank is a financial entity which belongs to its members, who are at the same time, the owners and the customers of their bank. Co-operative banks are often created by persons belonging to the same local or professional community or sharing a common interest. Co-operative banks generally provide their members with a wide range of banking and financial services like loans, deposits, banking accounts etc. Co-operative banks differ from stockholder banks by their organization, their goals, their values and their governance. In most countries, they are supervised and controlled by the banking authorities and have to respect prudential banking regulations, which put them at a level playing field with stockholder banks. Depending on countries, the control and supervision can be implemented directly by state entities or delegated to a co-operative federation or central body (Kanchu, 2012).

1.1. HISTORY OF CO-OPERATIVE BANKING IN INDIA

The origins of the co-operative banking movement in India can be traced to the close of the nineteenth century when, inspired by the success of the experiments related to the co-operative movement in Britain and the co-operative credit movement in Germany, such societies were set up in India. Co-operative banks are an important constituent of the Indian financial system. They are the primary financiers of agricultural activities, some small-scale industries and self-employed workers. The Anyonya Co-operative Bank in India is considered to have been the first co-operative bank in Asia (Anonymous, 1999).

Co-operative banks have completed 100 years of existence in India. The co-operative banks in India form an integral part of our money market today. The history of co-operative banks goes back to the year 1904. Towards the end of the 19th century, the problems of rural indebtedness became acute and the passing of agricultural land from the peasants to the moneylenders became a common phenomenon. Sir Frederic Nicholson a British Officer in India suggested 'Find Raiffersen in India', i.e. to introduce Raiffersen model of German agricultural credit (Huss, 1924).

In 1904, a bill was drafted by Sir Edward Law in 1901 with the objectives of assisting farmers, artisans and low-paid employees with credit. As a follow-up, the first Co-operative Society Act of 1904 was formally launched in India and enacted to enable formation of "agricultural credit co-operatives" in the villages under Government sponsorship to encourage co-operative movement in India (Goel, 2006). In 1914, the Maclagen committee envisaged a three tier structure for co-operative banking viz., Primary Agricultural Credit Societies (PACs) at the grass root level, Central Co-operative Banks at the district level and State Co-operative Banks at state level or Apex Level (Gurusamy, 2009a).

The development of co-operative banks from 1904 to 1951 was a disappointing one. The first phase of co-operative bank development was

the formation and regulation of co-opefative society. The constitutional reforms which led to the passing of the Government of India Act in 1919 transferred the subject of "Co-operation" from the Government of India to the Provincial Government. The Government of Bombay passed the first State Co-operative Societies Act in 1925 "which not only gave the movement, its size and shape but was a pace setter of co-operative activities and stressed the basic concept of thrift, self-help and mutual aid" (Anonymous, 2012a)[1].

In the formative stage Co-operative Banks were Urban Co-operative Societies run on community basis and their lending activities were restricted to meeting the credit requirements of their members. There was the genefal fealization that urban banks have an important role to play in economic construction. This was asserted by a host of committees. The Indian Central Banking Enquiry Committee (1931) felt that urban banks have a duty to help the small business and middle class people (Anonymous, 2012b)[1].

The establishment of the Reserve Bank of India and the Agricultural Credit Depaftment in 1935 was an important event. As a result, the movement gained great momentum.

The concept of Urban Co-operative Bank was first spelt out by Mehta-Bhansali Committee in 1939 which defined an Urban Co-operative Bank as a Primary Co-operative Bank other than a Primary Co-operative Society, wefe made applicable in 1966. It recommended that, those societies which had fulfilled the criteria of banking should be allowed to work as banks and recommended an Association for these banks (Gurusamy, 2009b).

The Co-operative Planning Committee (1946) went on record to say that urban banks have been the best agencies for small people in whom joint stock banks are not generally interested. The Rural Banking Enquiry Committee (1950), impressed by the low cost of establishment and

operations recommended the establishment of such banks even in places smaller than taluka towns. The real development of co-operative banks took place only after the recommendations of All India Rural Credit Survey Committee (AIRCSC), which were made with the view to fasten the growth of co-operative banks in India. The co-operative banks were expected to perform duties, namely, extend all types of credit facilities to customers in cash and kind, advance consumption loans, extend banking facilities in rural areas, mobilize deposits, supervise the use of loans etc. (Kainth, 1998).

Then the Multi-State Co-operative Societies Act 2002 (New Version) came into force with effect from August 19, 2002. The item "Co-operative Societies" is now a State Subject of the State List of the Constitution of India (Anonymous, 2012)[2].

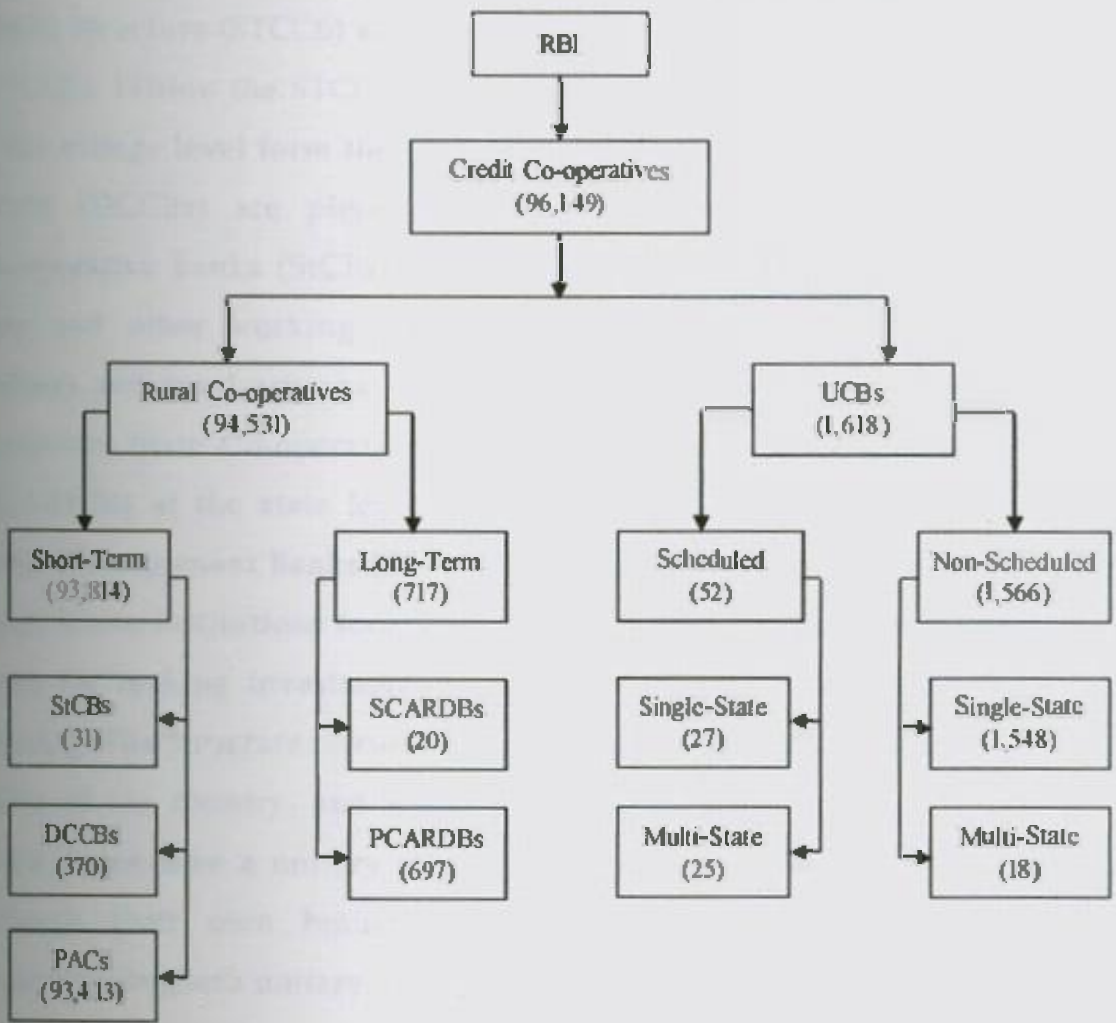
While the co-operative banks in rural areas mainly finance agricultural based activities including farming, cattle, milk, hatchery, personal finance etc. along with some small scale industries and self-employment driven activities, the co-operative banks in urban areas mainly finance various categories of people for self-employment, industries, small scale units, home finance, consumer finance, personal finance, etc. (Gupta and Jain, 2012a)

Though they are registered under the Co-operative Societies Act of the Respective States (where formed originally) the banking related activities of the co-operative banks are also regulated by the Reserve Bank of India. They are governed by the Banking Regulations Act 1949 and Banking Laws (Co-operative Societies) Act, 1965 (Gupta and Chopra, 2008).

1.2. CO-OPERATIVE BANK STRUCTURE IN INDIA

The co-operative banking structure in India comprises of two main components, *viz.*, urban co-operative banks and rural co-operative credit institutions. While urban co-operative banks have a single tier structure,

CO-OPERATIVE BANK STRUCTURE IN INDIA



StCBs: State Co-operative Banks; DCCBs: District Central Co-operative Banks; PACS: Primary Agricultural Credit Societies; SCARDBs: State Co-operative Agriculture and Rural Development Banks; PCARDBs: Primary Co-operative Agriculture and Rural Development Banks.

Note: 1. Figures in parentheses indicate the number of institutions at end-March 2012 for UCBs and at end-March 2011 for rural co-operative.
2. For rural co-operatives, the number of co-operatives refers to reporting co-operatives.

(Source: Reserve Bank of India, 2012)

Fig. 1.1. Co-operative bank structure in India

rural co-operatives have a complex structure. Rural co-operative credit institutions have two distinct structures, *viz.*, the Short-Term Co-operative Credit Structure (STCCS) and the Long-Term Co-operative Credit Structure (LTCCS). Within the STCCS, Primary Agricultural Credit Societies (PACs) at the village level form the base level, while District Central Co-operative Banks (DCCBs) are placed at the intermediate level, and the State Co-operative Banks (StCBs) at the apex level. The STCCS mostly provide crop and other working capital loans primarily for a short period to farmers and rural artisans. The long-term structure of rural co-operatives comprises State Co-operative Agriculture and Rural Development Banks (SCARDBs) at the state level and Primary Co-operative Agriculture and Rural Development Banks (PCARDBs) at the decentralized district or block level. These institutions focus on providing typically medium to long-term loans for making investments in agriculture, rural industries, and lately housing. The structure of rural co-operative banks is not uniform across the states of the country, and varies significantly from one state to another. Some states have a unitary structure with the state level banks operating through their own branches, while others have a mixed structure incorporating both unitary and federal systems (Anonymous, 2007).

The structur e of commercial banking is of branch-banking type; while the co-operative banking structure is a three tier federal one.

- Primary Credit Societies at the bottom, at village level.
- Central Co-operative Bank at the Intermediate Level, works at the district level
- State Co-operative Bank at the top, works at state level

1.2.1. The Primary Agricultural Credit Societies

A primary society is an association of borrowers and non-borrowers residing in a particular locality and taking interest in the business affairs of one another. As membership is practically open to all inhabitants of a locality, people of different status are brought together into the common organization. The society may be started with ten or more persons of a village.

1.2.2. The Central Co-operative Banks

A Central Co-operative Bank is a federation of primary societies in a specified area. Where membership of a Central Co-operative Bank is restricted to primary societies only, it is known as a 'banking union'. Nowadays, individuals are also admitted as members of almost all Central Co-operative Banks. Central Co-operative Banks are generally situated at the headquarters of district and have on their boards of management, individuals of sufficient influence and business capacity in addition to representatives of primary societies. The CCBs form an important part in the short-term structure of Co-operative Credit Institutions.

1.2.3. The State Co-operative Banks

These are State Co-operative Banks (SCB), Central Co-operative Banks (CCB) and Primary Co-operative Banks (PCB). The SCB is an apex level bank for a state. CCBs are apex level banks for each district. PCBs are rural or Semi-Urban Level Co-operative Banks. These are financial institutions whose primary objects are to provide credit facilities, i.e., loans and advances to its member only. These societies are formed in large organizations or Government Departments or at certain regions. The members are those working in the particular organization/ region. They

Table 1.1. List of State Co-operative Banks in India

SN	Name of the State Co-operative Banks
1.	The Andaman and Nicobar State Co-operative Bank Limited
2.	The Andhra Pradesh State Co-operative Bank Limited
3.	The Arunachal Pradesh State Co-operative Apex Bank Limited
4.	The Assam Co-operative Apex Bank Limited
5.	The Bihar State Co-operative Bank Limited
6.	The Chandigarh State Co-operative Bank Limited
7.	The Delhi State Co-operative Bank Limited
8.	The Goa State Co-operative Bank Limited
9.	The Gujarat State Co-operative Bank Limited
10.	The Haryana State Co-operative Apex Bank Limited
11.	The Himachal Pradesh State Co-operative Bank Limited
12.	The Jammu and Kashmir State Co-operative Bank Limited
13.	The Karnataka State Co-operative Apex Bank Limited
14.	The Kerala State Co-operative Bank Limited
15.	The Madhya Pradesh Rajya Sahakari Bank Maryadit
16.	The Maharashtra State Co-operative Bank Limited
17.	The Manipur State Co-operative Bank Limited
18.	The Meghalaya Co-operative Apex Bank Limited
19.	The Mizoram Co-operative Apex Bank Limited
20.	The Nagaland State Co-operative Bank Limited
21.	The Orissa State Co-operative Bank Limited
22.	The Pondicherry State Co-operative Bank Limited
23.	The Sikkim State Co-operative Bank Limited
24.	The Tamil Nadu State Apex Co-operative Bank Limited
25.	The Tripura State Co-operative Bank Limited
26.	The Uttar Pradesh Co-operative Bank Limited
27.	The Punjab State Co-operative Bank Limited
28.	The Rajasthan State Co-operative Bank Limited
29.	The West Bengal State Co-operative Bank Limited
30.	The Chhattisgarh Rajya Sahakari Bank Maryadit
31.	The Uttaranchal Rajya Sahakari Bank Limited

(Source: NAFSCOB, 2012)

collect subscriptions, deposits, etc., from members and loans from co-operative banks and extend credit facilities to its members only.

The RBI has overall control on all financial institutions operational guidelines and controls over co-operative banks are exercised by NABARD. The Reserve Bank assists the co-operative structure by providing concessional finance through NABARD in the form of General Lines of Credit for lending to agricultural activities. Thus, the whole system is integrated with the Banking structure of the country.

1.3. THE NEED FOR CO-OPERATIVE BANK

Agriculture is far the most important sector of the Indian Economy and there is a need for rapid growth of production and productivity, which is crucial for economic development.

In the last few years the farmers are experiencing a rapid change where, increased use of capital and credit has become a common phenomenon rather than an exception. These further increase the overall capital as well as credit requirement of the farmers where finance is being considered as the life blood of all economic activities. The increased pressure of population and the need to raise living standard has created the scope for better financial institutions and better bank networks. To meet the challenges ahead, greater emphasis and facilities to boost them up has been underlined by the Bankers and the policy makers (Singha, 2010).

India having one of the largest networks of Co-operative Banks plays a key role in the development of the rural sector in general and agriculture in particular. They are engaged in several economic activities such as disbursement of credit, distribution of agricultural inputs and in arranging storage, processing and marketing of farm produce. Over the years, although there is massive expansion of financial infrastructure including

agricultural financing in the country, the pace of development in the Northeastern India is however, not up to the mark (Singha, 2010b).

Agriculture along with livestock rearing and other allied agricultural activities is a common aspect seen in most tribal houses of India and plays an important part, especially in the lives of the North-Eastern Hill Region people. Many rural development programs had been launched to uplift the rural people. These rural development programs are linked with bank credits, which enabled the poor people to obtain loans and undertake productive enterprises. Since agricultural operations are seasonal, family labour may become ideal, leading to decreased labour efficiency and unemployment problems. Agriculture and allied activities helps to supplement the farm income as well as utilizes the surplus resources of the farm. To remove or suppress such problems, one important measure is financing them to take up productive enterprises through banking sectors.

Although a few studies on macro aspects of agricultural credit have been undertaken, yet specific studies to highlight the status of agricultural finance in the Northeastern India is lacking.

1.4. JUSTIFICATION OF THE STUDY

In Dimapur district of Nagaland, till today no concrete research has been carried out to investigate the credit needs, credit utilization and the repayment problems faced by the borrowers as well as the impact of credit.

The results of the study will give a general idea of the nature of credit disbursement and utilization. It will also highlight the impact on their employment and their income. Further the study may also help in analyzing the problems and constraints faced by the banker as well as the borrowers in regards to agricultural & allied activities borrowings.

Based on the study it would enable the bankers, planner, Central Government, Nagaland State Government, lending institutions and other policy makers to frame suitable policies for strengthening the rural credit system in remote or hill tribal area.

1.5. OBJECTIVES OF THE STUDY

The broad objective of the study is to examine the magnitude of financing made by Co-operative Bank on Agricultural and Allied activities and the impact on the borrowers in promoting productivity, income generation and the employment generation in the study area. Also, to consider the impact of credit on production potential and all-round development of rural people, the present study entitled, "A study on Co-operative Bank in financing agricultural and allied activities with special reference to Dimapur district of Nagaland" with the following specific objectives was conducted:

1. To study the magnitude of finance made by Co-operative banks,
2. To study the utilization of bank loan and the problems faced by the borrowers in utilization of the loan,
3. To study the repayment performance of the borrowers,
4. To study the impact of bank finance on productivity, income and employment,
5. To study the problems faced by borrowers in acquiring bank loans and
6. To study the problems faced by borrowers and also problems faced by bankers.

CHAPTER- II

REVIEW OF LITERATURE

CHAPTER – II

REVIEW OF LITERATURE

The banking sector has witnessed a huge growth in the recent years. However, despite such a growth, the credit flow by banks to the rural and agricultural sectors remains dismal, which, more or less, has resulted in financial exclusion of the rural masses. A comprehensive review of literature is an integral part of any investigation, as it not only gives an idea of the work done in the past and assists in delineation of problem area, but also provides basis for interpretation and discussion of findings. Available literature on the subject is briefly presented in chronological order in six sub headings as follows:

2.1. Magnitude of finance made by Co-operative banks:

Misra, 1970 in his study showed that 25 per cent of the total borrowings was meant for capital expenditure, 17 per cent for current farm expenditure, 42 per cent for family consumption, 4 per cent for repayment of old debts and 12 per cent for social obligation. He reported that the private agencies were the only source of agricultural credit in the Kashi Vidyapith of Varanasi, being dominated by money-lenders accounting for 81 per cent of the total framer's loans followed by relatives (17 per cent) and others (12 per cent).

Subramanian *et al.*, 1971 studied the credit needs and availability to the farmers and observed that out of total borrowings, co-operatives shared about 62 per cent, Commercial banks 13 per cent and the private sources the rest. However, the co-operative loans were found to be confined to large farmers alone. All these indicate the dominance of institutional credit inthearea which was biased towards large farmers.

Rao, 1974 opined that if the DCCBs and PACSs are not doing well for the distribution of agricultural loan and deposit mobilization, the farmers have to go other financial institutions who may charge slightly more but who preserve an assurance for the services. In a good number of cases, the demand of agricultural loan from the co-operative banks is more than the non-cooperative banks. There are ample evidences of the cases where the unduly heavy overhead charges on agricultural loan have been claimed by the District Central Co-operative Banks and Primary Agricultural Societies which is basically responsible for raising the interest among the non-cooperative based financial institutions. The private dealers are capable of influencing the farmers at a good rate of interest and services.

Bhatia, 1975 reported that the farm borrowing was higher on the large farms, but the hectare borrowing was higher in small farms. The commercial banks usually neglect the small farms. The investment per hectare of operated land was higher on large farm. The co-operative societies were active and provided 40 per cent of the credit to both types of farms.

Deo, 1976 studied the problems of agricultural credit allocation and emphasized that the problem of credit allocation in agriculture was immense and required attention. He suggested that financial experts, social scientists, and team of bank personnel have to work together and for better the expansion of credit.

Dhawan and Kahlon, 1978 studied and examine the adequacy of credit supplied by different institutions and the economic rationale of credit obtained for different inputs by the small farms selected from seven villages in Ferozepur district of the Punjab related to the year 1974-75. The analysis of capital and credit needs showed that even in the existing plan the small farmers needed 76.00 per cent of cash over their owned capital to run the farm business successfully. The analysis of optimal plans developed at improved levels of technology indicated an increase of 278.00

per cent in credit requirements over the farmer's own capital. The requirement of cash increased further to 594.00 per cent with the incorporation of water purchasing activity in the analysis. The functional analysis showed that the small farmers were rational in making investment on implements and machinery, milch animals, seeds, manures and fertilizers.

Haque and Maji, 1978 studied the changes in the distribution of co-operative credit in different states of India during the year 1965-75. The observed change in the structure and composition of co-operative credit over the period of study is consistent with the pre-requisites for the success of new technology. Marginal and small farmers with less than two hectares of land received about one-third of the medium and long-term credit advanced by the central land development banks in 1974-75. The effect of credit advanced for purchase of fertilizers was found to be positive in 10 out of 16 states. The credit supply in 7 out of 16 states did not increase in real terms.

Singh *et al.*, 1978 studied the pattern of flow of credit in Bichpuri development block of Agra district in Uttar Pradesh and found that the pattern of financing agriculture was similar both at the national and district levels. The proportion of bank finance to agriculture showed a steady but slow increasing trend over a period of four years. The overall share of large farmers in total finance to agriculture was much higher as compared to the small and medium farmers in all the years (1972 to 1977). The share of small farmers showed an increasing trend mainly during the years 1976 and 1977 when deliberate efforts were made to direct the flow of bank credit in favour of small farmers.

Desai, 1979 studied the performance of the formal rural financial market in India taking into consideration three different aspects: sectoral allocation of credit and mobilization of deposits, rural loan-term structure, default rate and the distribution of rural credit and purchasing power of

rural credit and the distribution of benefits arising from the concessional lending rates among different sized farms. The study revealed that the share of rural credit had increased to around 28.00 per cent to 30.00 per cent from about 20.00 per cent in the early 1960s. The share of rural deposits had also grown to 33.00 per cent in 1970s (from 25.00 per cent in the 1960s). Since 1973-74 both rural credit and rural deposits have stagnated and also the percentage contribution of rural credit to net domestic product from agriculture. The purchasing power of both rural credit and deposits had decreased more than that of total credit and deposits.

Hajela, 1979 reported that despite 28 years of planning, agricultural credit is dominated by unorganized private credit institutions or money lenders. The need for organized financing institutions such as co-operative credit societies, commercial banks and regional rural banks is emphasized. The credit gap which exists is very important in view of the need for agriculture to produce a marketable surplus. On the basis of the analysis it was concluded that the co-operative credit societies are the only institutions capable of breaking the money lender's monopoly on the agricultural market.

Kainth, 1979 studied the probable contribution of the long-term co-operative credit to farmers in Punjab. Per hectare flows of co-operative credit varied in the range of Rs. 17.71 - Rs. 34.37, Rs. 25.99 - Rs. 51.85, and Rs. 39.92 - Rs. 67.74 respectively in terms of total cropped area, net sown area and net area irrigated. Per holding flow of co-operative credit varied in the range of Rs. 5,258.33 to Rs. 9,011.02 with a coefficient of variation of 20.03 per cent. Per hectare and per holding flows of the co-operative credit showed an increasing trend.

Kharat and Tripathi, 1979 in their study showed that the co-operative bank lends out more and has a greater impact because of its easier policy

than the other Nationalized Bank. This was found from a study of 60 borrowers equally distributed between the two banks.

Bagchi and Sain, 1980 studied the extent of recovery, overdues, outstanding loans and default ratio for different types of loans from credit institutions. Loans advanced by the bank had enabled the farmers to purchase seeds, fertilizers, insecticides etc., to meet the wages for hired labour, cost of irrigation and to procure farm implements and machinery. Most loans were advanced for the cultivation of wheat followed by summer paddy and jute respectively. Marginal and small farmers were relatively more punctual in repaying the loans. A major portion of the medium term loans were advanced for minor irrigation pump-sets and shallow tube-wells.

Wali, 1980 studied the changes in co-operative policy in relation to provision of credit to farmers in India since 1956 and examined the reasons for the failure of the co-operative credit structure to meet the needs of the small farmers and concluded that there is a need for streamlining the credit co-operatives to cater to the needs of the rural poor.

Rao and Rao, 1983 reported that the institutional agencies were the most popular sources of credit as they supplied about 70 per cent of the total borrowings in the study area. In regards to different size groups the share of institutional credit was highest on medium farms and lowest on marginal farms.

Singhal and Singhal, 1984 reported that, unless bank branch expansion in rural areas match the expansion in size of the rural population in the decade ahead, the population per branch will go up, due to over-whelming increase in population growth. Because, if the rural population per branch increases continuously then the rate of credit flow per capita goes on decreasing and there will be inadequate credit flow to the rural people which hampers the possibility of taking up any reproductive activities as a result of which the income level will be reduced drastically.

So there should be adequate number of bank branches with sufficient amount of loanable funds to meet the credit needs of the rural people.

Venkitesan, 1984 in his study revealed that PACS working on profit had a strong resource base, high rate of deposit mobilisation, low borrowings, high distribution of agricultural advances and high rate of loan recovery compared to those incurring losses. The study also identified the major factors contributing to the resources of the PACS, such as cropping pattern and occupational structure of the members, saving habits of the people, satisfaction to the beneficiaries arising from simplified loaning procedures and active participation of members in the affairs of the society.

Varma, 1985 observed that the overall performance of the CCBs in Maharashtra is a mixed one. In his opinion, their weaknesses are overdue, poor recoveries, insufficient management, inadequate and untrained staff, lack of supervision, poor deposits, defective loan policies, defective book adjustments, inadequate bad and doubtful reserves, etc.

Winfred, 1986 studied the funds management of CCBs in India and found out that mobilisation of resources is one of the core functions of the CCBs. He noted that the CCB have to tap the rural resources not only to keep the credit system in an efficient order but also to reduce their dependence on outside borrowings. He opined that co-operative capital should be employed judiciously and in the most economical and fruitful manner so as to derive maximum benefits with minimum expenditure. The efficient utilisation of resources calls for a developmental approach in the diversified direction without sacrificing the main principles of banking, namely liquidity, safety and profitability. Lastly, he reported that better deployment of funds not only improves the image and income earning capacity of the banks but also reduces regional and functional imbalances.

Paul, 1987 studied the operational efficiency of Ernakulam DCB and was of the opinion that the bank was efficient in the mobilisation of funds

which is evident from owned funds to borrowed funds ratio and the borrowed funds to working capital ratio. It was however found to be inefficient in the deployment of funds. The ratio of net profit to own funds ratio showed a declining trend due to lack of efficient utilisation of funds. The liquidity position of the bank was reported to be very sound. He was of the opinion that the bank can improve its position by finding out new avenues for investment, better cash management and by taking all efforts to curtail the overdue position of the bank and by forming an extension wing to study the problems of its member societies.

Pandey and Kumar, 1989 studied the nature and growth of the co-operative credit in different states in India over the period 1970-1981. They noted the disparities in the disbursement of co-operative credit to different categories of holdings. It was observed that, although there was an increase in the amount of loan disbursement by the co-operative societies, their number has been declining over the year. On a per hectare basis, loan advances to small and marginal farmers are respectively higher than for farms above 2 hectares, but on a per borrower basis, the situation is reverse. Disparity in the flow of credit on a per hectare basis has been increasing.

Patel, 1997 stated that during the last fifty years, the country's rural banking system witnessed a spectacular growth with the number of rural credit outlets crossing the 1,50,000 mark. The credit disbursements have also increased tremendously. At the same time, several unhealthy trends have also set in this sector. In view of the challenges posed by the Ninth plan and ensuring third millennium, it called for overhauling the rural credit structure to make it vibrant, viable and dynamic.

Puhazhendhi and Jayaraman, 1999 stated that development of the rural credit delivery system in the country has metamorphosed from monopoly of the co-operatives to the induction of commercial banks and establishment of Regional Rural Banks for improving the outreach and

ensuring access to credit in the rural areas. With the implementation of financial sector reforms, the access was on, ensuring the financial health of the system. Innovations in rural credit delivery had an impact on agricultural production and reduction of poverty due to increased flow of credit. Accelerating the pace of capital formation in agriculture, infrastructure development with focus on transportation and marketing, ensuring credit discipline would enable the rural sector to absorb more credit form institutional sources. The focus should be on strategies that are required for tackling issues such as sustainability and viability, operational efficiency, recovery performance, small farmer coverage and balanced sector development.

Satyasai and Badatya, 2000 reported that for restructuring the co-operative credit system, there is a need to overcome certain issues such as inability to offer all types of financial service that commercial banks offer and other internal and external weaknesses such as, rising transaction cost, declining business level, mismanagement of overdue, excessive bureaucratization, politicization etc.

Samal, 2002 in his study on institutional flow of credit indicated that despite conscious efforts, there exists a substantial gap between the demand for and supply of agricultural credit. Some measures to improve credit flow to small and marginal farmers are presented.

Aynew *et al.*, 2003 studied the functional structure of loans, credit-deposit ratio, and loan delinquencies of primary agricultural co-operative credit societies (PACS) in Haryana, India, using secondary data for the years 1988/89-1997/98. Majority (34-40 per cent) of the borrowing members of these societies were small farmers. Current production growth and stability (CPGS) loans constituted as much as 93-98 per cent of credit disbursed. The credit-deposit ratio was greater than unity, indicating that the amount of deposits was very small compared to the amount of loans advanced. Chronic overdues have registered an increasing trend during the

period studied. There existed no uniformity in the delinquency rates of the PACS.

Mohanty and Haque, 2003 in their study revealed that despite substantial increases in the flow of institutional credit to agriculture in India in recent years, inter-regional and inter-class disparities seem to have widened. The eastern and central regions of the country, which are starved of capital for agricultural modernization, also suffer from inadequate supply of institutional credit. The poorer section of the rural population continue to borrow largely from private agencies like money-lenders, traders and relatives, as co-operatives and commercial banks mainly cater to the needs of the better off. In other words, the relatively backward region and poorer section of the population in India have not benefited much from existing credit institutions.

Singh and Kumar, 2003 examined the credit gap in agriculture in Bikaner district, Rajasthan, India, using both primary and secondary data for the year 1998-99. Primary data were obtained from 90 borrower and 72 non-borrower farmers of different size groups. The total credit gap for the district was estimated at 86.38 per cent, showing a major hindrance to the development of the agricultural sector, to which the government and the policy planners must pay adequate attention.

Bhaskaran *et al.*, 2004 analysed the performance of co-operative banks in regard to crop loans, investigates the costs/ margins of these rural financial institutions, and examines the role of refinancing provided by NABARD in bringing down interest rates. It also explored whether these banks can provide crop loans at lower rates of interest, and suggests a novel method of "delayering" the co-operatives to improve their operational efficiency.

Anonymous, 2005 reported that there should be a focus to restore autonomy of credit co-operatives by scaling down the control and interference by the state governments through amendments to the State

Co-operative Societies Act. Further, the recommendations of the task force included provision of financial assistance for recapitalization, to fund the accumulated losses of the short-term co-operative credit structure, evolving a common accounting system, management information system and computerization and HRD initiatives.

Hatai *et al.*, 2006 in their study on agricultural credit and overdues in Uttar Pradesh found that out of total borrowing on marginal farms, crop loan shared about 61.00 and 74.00 per cent in the west and east zones respectively. The term loan was only 25.00 and 38.00 per cent of the total borrowing in the east and west zone respectively on the marginal farms. The share of crop loans was further reduced to 32.00 per cent on large farms. He concluded that crop loan has inverse relationship with the size of holding, whereas the positive relationship was observed between the term loan and the size of holdings.

Mohan, 2006 reviewed the status and issues of agricultural credit in India and concluded that though the overall flow of agricultural credit in India had increased over the years there were several gaps in the system like inadequate provision of the credit to small and marginal farmers, paucity of medium and long term lending and limited deposit mobilization and heavy dependence on borrowed funds by major agricultural credit borrowers.

Radhakrishnan, 2006 reviewed the working of two co-operative societies and found that 65.95 per cent of the landless, small and tiny land owners who own less than 1 hectare have not received any loan. However, only 23.25 per cent of those who own more than 4 hectares have not received loan. The success rate of the co-operative movement rises with the co-operation of members; the members decrease with the fall of Primary Agricultural Co-operative Banks (PACBs). The performance of PACB depends on the people who administer it and people who participate in its operation as members.

Chalam and Prasad, 2007 examined the factors behind the changing profitability and financial condition of Primary Agriculture Co-operative Societies (PACSs) in Andhra Pradesh, conducted on data from nine selected PACSs for a 10-year period starting from 1994-95 and 2003-04. Though the ratio of interest earned to total income and ratio of total income to working capital is high and satisfactory, the ratios of interest paid to total income, expenditure to total income and establishment expenditure to total expenditure are high. Productivity should be improved. The PACSs are lending much more than the deposits they are receiving. Profitability should be improved due to inconsistent net profit to total income and total deposit of selected societies, low average return of assets and insignificant return on equity of selected societies. In conclusion, to improve operational efficiency, they should reduce the ratio of interest paid to total income and establishment expenditure. To improve productivity, mobilization of deposits and profitable deployment of funds are suggested. To improve profitability, increasing the return on equity to at least a minimum of 10 per cent is suggested.

Muley, 2007 argued that to uplift the rural population, financial support is necessary. It is an essential requirement for the farm and non-farm sector. These sectors need short, medium and long term loans for their operations. The co-operative banking is the cheapest and best source of rural credit. As per the fundamental principle of co-operation, the co-operative credit is based on the principal of mutual help service objective rather than profit. Considering the importance of co-operative credit the government should protect the co-operative banks in rural competitive environment. Researcher discussed the measures to review co-operative law, adoption of new technologies, computerization, good communication network, tighten the supervision and monitoring of operation, removal of political interference, required training and incentives to staff, etc. as well as measures for rehabilitation of co-operative credit.

Harshitha *et al.*, 2008 were of the view that farm credit is a strategic input. Among the various financial institutions, the co-operatives have emerged as a major source of farm credit. This study showed that all the financial indicators for the Head Office showed high positive growth, the highest in respect of advances (36 per cent). Similar trends were observed for the branches. The overall performance of the bank depended mainly on the training and experience of chairman and managing director.

Kumar and Dixit, 2008 suggested that lack of sufficient credit is one of the serious inhibiting factors in the modernization of traditional agriculture in the tribal areas. A total of 140 households spread over 8 villages in 4 development blocks of Ranchi district, Bihar state, India, were interviewed using a spatially designed questionnaire. Farm borrowing in the case of "all farmers" in the less developed region is significantly sensitive to fixed capital expenditure, expenditure on consumption and non-farm activities. Variations in farm borrowing can also be explained to some extent by working capital expenditure, expenditure on fertilizers and outstanding loans. Thus, across the two regions there were differences in the factors affecting farm borrowings and there are also differences in the extent of influence of these explanatory variables.

Pujari *et al.*, 2008 researched on the co-operative institutions network in the state of Karnataka, based on 10 years (1996-97 to 2005-06) published secondary data. The study revealed that the share of agricultural credit covered more than 69.71 per cent of total credit advanced. Among the total amount of agricultural credit advanced, short term credit constituted about 81.70 to 91.00 per cent. In purpose-wise classification of agricultural credit advanced by PACS, the share of APS credit was highest in total credit advanced. Out of the APS credit, CPGS occupied the maximum share of 86.67 per cent to 96.19 per cent of the total amount of credit advanced. The mounting amount of overdues indicated the weakness of PACS in the state. The positive values of delinquency rate indicated that the amount of credit recovered was less than the credit outstanding. The majority of credit

overdues were within one year or less from the due date. The PACS should initiate concrete steps to convince the rural people for deposit mobilization. Suitable measures should be adopted for timely recovery of credit and reduce amount of overdues. Credit should be properly utilized for productive purpose.

Basak, 2009 revealed that Urban Co-operative Banks (UCBs) figure among the vital segments of the banking industry of the country. They essentially cater to the credit needs of persons of small means. Though some UCBs have performed creditably in the recent years, a large number of them have shown discernible signs of weakness. The operational efficiency is unsatisfactory and characterized by low profitability, ever growing Non-Performing Assets (NPAs) and relatively low capital base. The large-scale sickness in the UCBs has shaken the public confidence in co-operative banks. In this context, this paper makes an attempt to examine the working and financial performance of the UCBs.

Chatterjee, 2009 examined the expansion of institutional rural credit in the district of West Bengal, India, since bank nationalization. The study relied on secondary sources of data for the period 1972-73 to 2005-06. Commercial banks, regional rural banks and co-operatives are the major suppliers of institutional credit in rural West Bengal. The two indicators used to capture banking infrastructure development are populations served per bank branch and Credit-Deposit Ratio. As future agricultural development is largely influenced by the performance of the institutional agencies in supplying credit to the rural sector, improving their performance should be the foremost priority of the policy-maker. Though the study revealed that the rural credit deposit ratio, ratio of agricultural credit to total credit by commercial banks and total loans outstanding (at constant prices) by the primary agricultural credit societies have shown improvement in 2005-06, the overall performance of institutional credit agencies are dissatisfactory. The state of West Bengal as well as the districts witnessed a significant expansion of banking network, particularly in the

rural areas, in the period following the nationalization of the banks. The district level data revealed that the performance of institutional agencies supplying credit in rural West Bengal has deteriorated since the 1990's.

Sakthivel and Aranganathan, 2009 in their study stated that the co-operative banks are upheld mainly to help agriculture and other activities. The weaker sections are provided more assistance by lending at a lower rate of interest than other commercial banks. The share capital of these co-operative banks is contributed by both the State Government and the public. The co-operative banks like many other financial service is facing a rapidly changing market, new technologies, economic uncertainties, fierce competition and more demanding customers and the changing climate has presented an unprecedented set of challenges.

Selvi, 2009 in her study stated that the co-operatives in Kanyakumari district, India played a vital role in the credit scene, particularly, in rural areas. Their role in the development of agriculture is of much useful to the people concerned. The co-operatives in Kanyakumari district have 114 Primary Agriculture Credit Societies, 16 branches and 5 Primary Land Development Banks or Societies. Despite the vast expansion of the formal credit system in the country, the dependence of rural poor on money lenders continue in many areas especially for meeting emergent requirements. Such dependency is pronounced in the case of marginal farmers, landless labourers, and petty traders and rural artisans belonging to socially and economically backward classes and tribes whose propensity to save is limited or too small. For various reasons, credit to these sections of the population has not been institutionalized in practice.

Gaur and Khatkar, 2010 examined the present status of rural credit in India with a special focus on agricultural credit. The efforts like nationalization of banks, establishment of RRBs, strengthening of credit institutions, etc. have been quite effective in reducing the role of informal sources like money lenders and a significant increase in the access of rural

cultivators to institutional credit. The banking institutions have evolved new products to meet the challenge of increasing flow of credit in the fanning sector like Kisan Credit Cards, Self-Help Groups (SHGs), Bank linkage programmes, Micro-finance, etc. Kisan Credit Card scheme provides loans for agriculture and allied activities, crop loans and consumption loans to the farmers. Significant progress has been made in institutionalization of rural credit and the credit supply to agriculture sector in rural areas.

Kumar and Kaur, 2010 reported that in India, there is a plethora of banks providing almost all services that an individual requires. The paper reviewed the financial appraisal of Haryana State Co-operative Apex Bank which has been playing an important role in the economy of the state. The study covers the period of five year from 2002-03 to 2006-07. The various parameters taken for the appraisal of banks are number of offices, membership, paid up capital, reserves and other funds, deposit mobilization, deposit type wise, demand, collection, loans issued, loans outstanding, cost of management and profit and loss and number of branches in profit and loss. For the purpose of study, secondary data had been collected and analyzed from various sources such as NAFSCOB's reports and annual reports of HARCO BANK.

Kumar *et al.*, 2010 were of the view that institutional credit has been conceived to play a pivotal role in the agricultural development in India. A large number of institutional agencies are involved in the disbursement of credit to agriculture. However, the persistence of money lenders in the rural credit market is still a major concern. In this backdrop, the study has examined the performance of agricultural credit flow and has identified the determinants of increased use of institutional credit at the farm household level in India. The study based on the secondary data compiled from several sources revealed that the institutional credit to agriculture in real terms has increased tremendously during the past four decades. The structure of credit outlets has witnessed a significant change and

commercial banks have emerged as the major source of institutional credit in recent years. But, the declining share of investment credit in the total credit may restrain the sustainable agricultural growth. The quantum of institutional credit availed by the farming households is affected by a number of socio demographic factors which include education, farm size, family size, caste, gender, occupation of household, etc. The study has suggested simplification of the procedure for a better access to agricultural credit of smallholders and less-educated/ illiterate farmers.

Ariyarathna and Mula, 2011 reported that many small financial institutions in developing countries make great effort to provide efficient services to poor households. It is generally accepted that maintaining the best financial practices which are of importance in corporate governance mechanism of institutions, has a close relationship with the efficiency of financial institutions, although they are small.

Das and Chaudhury, 2011 studied the performance of SCBs in the NER and also make a comparative study on the growth and financial performance of SCBs. They observed that SCBs in NER is not performing well at par with all India level. The SCBs in the NER suffers from low profitability and high NPAs which hinders the growth of SCBs in North East.

Das, 2012[1] observed that SCBs in North Eastern Region are not at par with the rest of the country. The Meghalaya Co-operative Apex Bank is the exception in this context but still faces some common problems that are suffered by other State Co-operative Bank in the region. Low Credit-Deposit (C-D) ratios, high over dues, high volume of Non-Performing Assets etc. are common to all State Co-operative Banks in the North Eastern Region of India. But among the rest of all State Co-operative Banks in North Eastern Region, the Meghalaya Co-operative Apex Bank is performing very well in terms of profitability and operational efficiency.

Das, 2012[2] was of the view that the State Co-operative Banks provide the necessary financial resources to District Co-operative Banks and Primary Agricultural Co-operative Societies and are responsible for their recovery. They have played significant role in the development of rural economy of India. The present paper explores and evaluates the growth and progress of State Co-operative Banks in the North Eastern Region of India. Further, efforts are also given to make a comparative analysis of SCBs in NER & India through some selected financial indicators. It is found that all the financial variables (capital, reserves, deposits, advances, demand, collection and over dues) increased with higher growth rate during 2002-2009 on the basis of Compound Annual Growth Rate. The paper highlights the reasons for slow progress of State Co-operative Banking in the North Eastern Region of India which is considered as the most backward region of the country. Further, this paper focuses on several pitfalls and shortcomings faced by State Co-operative Banks in region. Finally, it is observed that the SCBs in NER are not at par with all India level which is evidenced from the study of some selected financial indicators.

Deshmukh and Somalkar, 2012 reported that the Urban Co-operative Banks were giving banking facility to grass root persons. The concept of "Financial Inclusion" is inbuilt in the structure of Urban Co-operative Bank. As Urban Co-operative Banks are mostly working in the rural and semi-urban areas they understand the genuine commercial needs of the local population in their area of operation. Urban Co-operative Banks help small and medium sized traders, entrepreneurs, artisans and farmers who are deprived of banking facility as private sector and commercial banks tap only high profile and successful entrepreneurs. The Urban Co-operative Banks play an important role in economic construction. They are the back bone of banking system and contribute for growth of the nation and hence this sector needs special attention in the years to come, from the government and also from the Reserve Bank of India.

Gupta and Jain, 2012b opined that the Banking business has done wonders for the world economy. The government of India started the co-operatives as the institutional agency to tackle the problem of usury and rural indebtedness, which has become a curse for population. In such a situation co-operative banks operate as a balancing centre. At present there are several co-operative banks which are performing multi-purpose functions of financial, administrative, supervisory and development in nature of expansion and development of co-operative credit system. In brief, the co-operative banks have to act as a friend, philosopher and guide to entire co-operative structure. The study is based on some successful co-operative banks in Delhi (India). The study of the bank's performance along with the lending practices provided to the customers is herewith undertaken. The customer has taken more than one type of loan from the banks. Moreover they suggested that the bank should adopt the latest technology of banking like ATMs, internet/online banking, credit cards etc. so as to bring the bank at par with the private sector banks.

Kumar and Saluja, 2012 argued that the co-operative banking sector is one of the main partners of Indian banking structure and have more reach to the rural India through their huge network of credit societies in the institutional credit structure. The co-operative sector has played a key role in the economy of the country and is always recognized as an integral part of our national economy. Co-operatives have ideological base, economic objects with social outlook and approach. The co-operative covers almost all villages in India. The co-operative form of organization is the ideal organization for the economically weaker sections in the country. According to recent study by the World Bank and National Council for Applied Economic Research, the Primary Agriculture Credit Societies (PACS) amount to about 30 percent of micro credit in India.

Memane, 2012 reported that as per 2011 census, about 68.8 percent of the population resides in rural areas, depending directly or indirectly upon agriculture for their livelihood. There are so many problems in agriculture

but agric ultur e credit is a major problem in rural area. In many developing countries, it has been found that the rural credit market is imperfect in nature. There are substantial variations in the availability of formal credit in rural urban locations. Primary agriculture co-operative societies are present in the major parts of rural area; they provide the source of money to the farmer, which will be easily available for the cultivation.

Singh and Sukhmani, 2012 reported that the co-operative credit structure which is an integral and important part of Indian Banking system is not immune to winds of economic change. Agriculture, the main sector of Indian economy, is prone to natural calamities. As a result of uncertainty in production, low income generation and high transaction cost, agriculture financing is a very risky business for banks. Therefore commercial banking system avoids financing agriculture operations, and to fill these gap co-operative banks were organised as a tool of state policy. Agriculture being the prime sector of Indian economy, needs a very strong, efficient and effective institutional credit support even today. Therefore it has been repeatedly stressed that the vitality and viability of the co-operative credit institutes must be preserved to enable them to function efficiently, as they are and will be prime institutional agencies for agriculture and rural credit with their vast network, wider coverage and out-reach extending to remotest part of the country.

2.2. Utilization of bank loan and the problems faced by the borrowers in utilization of the loan:

Athavale and Mishra, 1970 in their study showed that the purpose for which the amount was diverted, were purchase of drought animals, redemption of money lenders debt and purchase of shares etc. They suggested appointment of additional supervision to ensure proper utilization. Further, the loan should be sanctioned within the shortest period and in appropriate time to avoid misutilization.

Kaushal, 1972 in his paper cited an example of the Corporation bank which has been successful in its experiment in providing the rural farmers with most of the financial requirements of their use under one roof. Findings of the study emphasized that the strategy of the Corporation bank has been caught by the people who are pleased at the prospects of getting the financial assistance of daily use at their nearest point under one point.

Narayan, 1974 did a research on management of credit and farmers behavior and attempted to analyze the various facets of economical, psychological and sociological behaviour. This study was based on a survey of a Primary Agricultural Co-operative Credit Society, Ranchi. The study concluded that the decision of buying habits was influenced by many factors: (i) The persons, who stimulate, inform or persuade the consumer at any stage of the buying process e.g. the neighbour who narrates the experience, feelings, economy and variety of the use of a particular brand of fertilizer and its preference. A number of studies have shown that personal influences have played a decisive role in the choice of branded fertilizer than the non-branded. This shows that farmers in India are as much amenable to communication and influences as elsewhere. (ii) The person who takes the decision to purchase a particular brand of fertilizer is most crucial, ii is the farmer who, in general decides to purchase a particular brand or the primary agricultural society which decides to keep a particular brand at the store. Out of the 15,000 farmers surveyed, it was found that the house-wives played a decisive role in choosing a particular brand of fertilizer.

Guruswami, 1976 in his study on utilization of farm finance advanced by nationalized bank identified that about 18.68 per cent of the respondents diverted the loans because of non-availability of finance for consumption purposes, diversion of this sort of negatively influenced the repaying capacity of the borrowers since the use to which the borrower money was put were not in the nature of improving the economic status of the intended beneficiary.

Dixit, 1977 study revealed that even after the introduction of production-oriented loan disbursements through the institutional sources, the loans were utilized for purposes other than stipulated. The extent of diversion in the use of loans was more on small farms and it declined with an increase in the size of farms. Co-operatives accounted for 56.00 per cent of the total borrowings of member farmers. The need is emphasized for adequately meeting the credit needs of the farmers.

Pandey and Muralidharan, 1977 in their study showed that the size of loan and consumption expenditures were the major factors influencing overdues in co-operative credit societies at the farmer's level irrespective of the categories. They reported that the loans issued were without keeping the repayment capacity of the borrower in mind and were not properly supervised resulting into diversion of loan either for consumption purposes or for non-stated capital investments.

Rajput and Singh, 1977 in their study observed that the farmers borrowed mainly for invest ment expenditure. They pointed out that of the total borrowings, long-term credit accounted for 48.00 per cent, medium-term credit (51.00 per cent) and short-term credit (about 1.00 per cent).

Singh and Dhawan, 1978 study on source, utilisation and productivity of agricultural credit in Ludhiana district of Punjab observed that a greater diversion of short-term loan towards consumption and the proportion of credit diverted were inversely related to the size of holding.

Bal and Singh, 1979 in their study reported that 58.00 per cent of the total agricultural labour households were in debt. Average debt per family was Rs 893. About 55.00 per cent of total debts were owed to professional money lenders while the share in total debts of other non-institutional agencies was about 25.00 per cent. The remaining 20.00 per cent was owed to co-operatives. Only 7.00 per cent of total debts were without interest and for about 73.00 per cent interest varied from 20.00 per cent to 60.00 per

cent. Debts were mostly for consumption needs; and about 70.00 per cent of indebted households were committed for 3 years.

Singh and Dhawan, 1979 studied on agricultural finance in India and argued that it has the twin problems of inadequate supply and ineffective utilization. The study examined the pattern of utilization of credit advanced to various categories of farm (by size) and by different lending institutions. The eventual allocation of funds between different inputs according to farm size was also examined. The analysis showed that a large proportion of institutional credit went to farmers of medium and large size holdings whereas small farmers had non-institutional sources which were costlier but more accessible. Small and medium sized holdings borrowed for irrigation or milch cows, larger borrowers used funds for tractors and tractor-drawn equipment's. There was considerable diversion of short term credit to consumption. All farm sizes showed inefficiencies in using credit.

Sarma and Goswami, 1981 revealed that the farmers' borrowed both for productive and non-productive purposes. They further observed that about 69 per cent of total borrowings were utilized for non-productive purposes. Within the productive purposes, purchase of livestock accounted the maximum i.e. 18 per cent of total borrowings as against 32 per cent for procurement of food in case of non-productive purposes. The share of landless, marginal and small farmers for the procurement of food were found to be the highest being 53.91, 30.92 and 48.89 per cent respectively. But the medium farmers used a greater share of their borrowings for business.

Rao and Acharyulu, 1982 studied the flow of credit at Nagullanka village in East Godavari district. They found that about 53 per cent of the institutional funds and 80 per cent of the non-institutional funds were utilized on 'farm productive expenditure'. The remaining funds were utilized on unproductive expenditure. Among different categories of farmers, the large farmers had diverted about 51 per cent of the

institutional funds for unproductive expenditure. Marginal farmers had diverted about 53 per cent of their borrowing to unproductive expenditure, that too for family consumption.

Singh and Jain, 1985 reported that the uncoordinated lending and lack of effective supervision in follow up operations has encouraged diversion of credit to non-productive purposes.

Naidu and Prasad, 1987 studied the utilisation pattern of the co-operative short-term production credit with the help of cross tabular analysis and regression analysis. They found that, the proportion of the co-operative short-term credit used for production purpose was inversely related to farm size and the amount diverted was mostly used for consumption purpose by marginal and small farmers while it was used for other non-agricultural purpose by medium and large farmers. They further opined that regular follow-up visits are necessary to assure the use of loan amount for stipulated purposes.

Patil *et al.*, 1987 reported that farmer's borrowed both for productive and non-productive purposes. The extent of use for unproductive purposes was highest for large farmers and lowest in case of small farmers. They further reported that among the non-productive purpose crop loan was most dominant as it accounted for the highest percentage of the total credit which were among the non-productive purpose. Family expenses had the highest share in the total advances for all the size groups except the small farmers.

Satyasai, 1988 reported that the smaller the farm size, the greater is the extent of the diversion loan to other needs. He further reported that much of the diversion of credit for marginal and small farmers accounted for the consumption need.

Ohha, 1989 studied the performance of co-operative banks in India and pointed out several inadequacies. Most co-operative fail to mobilize

significant deposits and are functioning merely as conduits. The overall recovery of dues remains inadequate. The need to ensure timely and adequate credit for productive purpose and to create an environment conductive to financial discipline and recovery of dues is emphasised.

Singh *et al.*, 1989 in their study showed that among the different size groups, productive utilization of loan was highest on large size group. The non-productive utilization of loan was of small and medium.

Subharao, 1990 reported that the rate of interest was a significant variable effecting short term as well as long term credit and its utilisation.

Pathania and Verma, 1991 studied the impact of size of loan and types of farmers on co-operative credit utilisation and reported that the framers with low size of loan utilized the credit significantly more than those farmers who borrowed large amount of credit. Misutilisation was also found significantly more among the farmers who borrowed low amount of credit. The tendency of partial utilisation was higher among small farmers.

Vaikunthe, 1991 studied the agricultural credit utilization and recovery performance of KCC bank, Dharwad. The study pointed out that the percentage repayment was more in the case of the farmers in the non-irrigated area compared to the irrigated area. The overdues were larger in the case of small farmers compared to medium and big farmers in the irrigated area.

Pathania and Verma, 1992 studied the impact of family income and value of farm assets on credit utilisation. They concluded that farmers with low family income utilize the credit significantly less than the farmers having higher family income. Misutilization is significantly less among higher income group farmers than low-income group farmers.

Singh, 1995 pointed out that institutional credit has made important contribution to the growth of agricultural output. In the context of flow of

credit to agriculture, viability of investment was considered as an important aspect. It was noted that less than 50 per cent of the farmers availed the institutional credit for crop production and the amount of credit was hardly sufficient for the purchase of fertilizer alone and stressed on simplification of lending procedure.

Chinnappa, 1999 study on credit problems in Shimoga district showed that out that about 52 per cent and 28 per cent of small farmers and large farmers expressed that loans were not provided in time. This was a hindering factor in executing their agricultural programmes.

Jayasheela and Birdar, 2000 reported that many empirical studies revealed that the loans are being utilized for other than specific purposes. This misutilization of loans increases the burden on the borrowers because they are not in a position to generate enough income to repay the loans which they have availed from the bank.

Moniruzzaman, 2002 in his study attempted to reflect the performance of women co-operatives in relation to the Grameen Bank (GB) groups in terms of loan utilization and factors affecting the loan amount received by the members. Data were derived from 100 members selected from GB centres and the Mohila Bittahin Samabaya Samity (MBSS) societies. The researcher found that the MBSS members under BRDB utilized 57.00 per cent of loan for agricultural purposes while the corresponding figure for GB members was 39.00 per cent. 31.00 per cent of loan money was utilized for non-agricultural purposes of which 17.00 per cent was for petty business and 14.00 per cent in rickshaw and van purchasing for MBSS members. The members of GB societies utilized 44.00 per cent of loan for non-agricultural purpose of which 20.00 per cent was for petty business and 24.00 per cent was for rickshaw and van purchasing. The rate of loan repayment was satisfactory for both the societies. Regression results showed that the most significant loan determinants were

owned land, savings in co-operative, length of membership for MBSS; savings in co-operative and annual income for GB groups.

Fernandez, 2007 viewed that while provisioning of credit through the micro-finance institution is important, credit can be productively absorbed only when it is enmeshed with other development interventions. The paper argued that the absorption and use of credit can be made more effective if the micro finance institutions are linked with self-help groups. Emphasizing partnerships, the paper shows how multiple agencies could work together, each playing a unique role in poverty alleviation. Hence, it is argued that credit institution need not become a single window for all financial services to the poor.

Sapkal *et al.*, 2010 made a study on the borrowing and utilization of co-operative credit by farmers in Satara district of Maharashtra, India. The sampling method used in the present investigation was a two stage random sampling with villages as primary sampling unit and cultivators as secondary sampling unit. It was observed that 24.94 per cent of the total amount of loan was misutilized at the overall level and also in the case of medium term and long term loan, it was noticed that 15.12 per cent and 17.95 per cent of the total amount of borrowing was misutilized, respectively. As such, 94.87 per cent of total amount borrowed was from institutional sources and this proportion increased with the increase in size of holding.

2.3. Repayment performance of the borrowers:

Chauhan, 1971 observed in his study that the small farmers were more prompt/ punctual in repayment of loans in his study area. The amount of overdues for big farmers and medium was higher in comparison to small farmers.

Roye, 1972 in a study argued that the repaying capacity of the farmers was very poor due to small size of land holdings. Gross output from such holding remained at a low level which would hardly suffice to meet the consumption needs.

Dutta, 1973 was of the view that the farmers were reluctant to repay the loan as it becomes a habit on their part not to repay loan taken either from the bank or from the government.

Hanumantharayappa, 1977 study on small farmer's production credit requirements and repayment problems results showed that there was no strong connection between social status and loan repayment. Repayment was related to income generated from sales. Dairy farmers repaid promptly as their average cash income was higher and more regularly received. Crop failure, diversion of loans and lack of supervision are the main reasons given for default by arable farmers.

Desai and Rao, 1978 reported the default rate in co-operative credit is very high. It is relatively high for short-term loans than for long term loans. Except for a few states like Tamil Nadu, Andhra Pradesh, Kerala, Punjab and Haryana all the other states have more than 30 to 35 per cent default rate. The analysis revealed that inappropriate loan terms and administration were the most important reasons. It also revealed that these factors were interrelated. For solving these problems, the study emphasized the need for reorientation of the credit projects with better economic analysis.

Kim, 1978 stated that the repayment performance is measured as a proportion of repaid amount of total repayment requirement in a given year. Multiple regression analysis reveals factors influencing repayment are not uniform . However, loan supervision and value of farm product sale are found to be significant factors irrespective of farm type. The regression co-efficient associated with the proportion of the loan used for productive purposes was not significant at any probability level.

Sanderatne, 1978 discussed the nature and extent of small farmer loan defaults on the basis of data obtained from a survey. The five reasons for default are categorized as follows: (i) defects in agrarian structure; (ii) variability in income caused by fortuitous, seasonal or unforeseen factors; (iii) defects and inadequacies in the organization disbursing credit; (iv) attitude conditions not conducive to repayment and (v) misallocation of borrowed funds. Strengthening the credit disbursing agency is thought to be important in minimizing default; village level institutions must be developed to develop financial discipline among farmers, supervise funds and follow up loans.

Boakye, 1979 reviewed several issues related to the non-repayment of loans, particularly causes and effects. It shows that even the most successful methods of broadening small farmer access to credit, the strongest range of incentives to lending institutions to provide such credit, and the most enlightened policies within these institutions, are of no use if borrowers fail to repay their loans. For any credit programmes, loan repayment must be improved. Group lending, to farmers' associations rather than to individual farmers, may be a way of reducing delinquency and default rates, although more research is needed on this.

Joshi, 1979 examined the pattern of repayment of short and medium term loans and identified the reasons for default/ delay in repayment of these loans and studied the factors affecting promptness in repayment, based on an analysis of data collected from 149 farmers in Maharashtra. A large majority of the borrowers had complaints about the availability of inputs. Except in the case of defaulting medium-term borrowers in the dry area, non-institutional agencies like the professional moneylenders, traders and commercial agents were found to be important sources of credit. The default in repayment of loans by the selected farmers was due to low yield returns, settlement of other debts, increase in domestic expenditure, new investments in land/ gold/ houses, failure to get non-farm income and

support of local political leaders were identified as major factors influencing the repayment of loans.

Saudamini, 1979 was of the view that there was huge loss and large outstanding dues despite significant progress in mobilization and credit disbursement. The performance of the bank with respect to total disbursement of loan and coverage of population has been remarkable. She suggested that the strengthening of infrastructural facilities would improve the loan recovery.

Singh and Sandhu, 1980 in their analysis of data from a sample of 90 farmers in Kapurthala district, of Punjab, India showed that agricultural co-operative credit societies were the main institutional agency which provided financial assistance to the farmers. Loans by non-institutional agencies were scarce. Short-term loans for the purchase of farm inputs while medium-term loans were advanced for tube-well engines, threshers and livestock. Long-term loans were sanctioned for tractors and other costly machinery. Analyzing overdues, it was found that those of medium farmers were highest and lowest for large farmers. The main reason for overdues was low savings by farmers.

Chand and Sidhu, 1981 pointed out that the defaulters were high in small size, then on medium and the large size. In small and large size groups the defaulters were almost the non-wilful defaulters. They further reported that the overdues were highest in case of small farmers followed by medium and large farmers.

Jain, 1983 studied the recovery performance of farm loans and concluded that recoveries may be improved by scientific appraisal of loan proposal, effective supervision with advisory technical guidance on utilisation etc. educating farmers on repayment and penalty for wilful default and assurance for future productive credit would also favour the recovery of agricultural loans.

borrowers into non-defaulters and defaulters, and assess the probability of willful and non-willful defaulting. Utilization of credit and non-farm income was found the dominant factors in classifying the borrowers into defaulters and non-defaulters. Farm income and consumption expenditure were the significant factors to determine willful defaulting. One unit of increase in the factors such as farm income and consumption expenditure would lead to one unit increase in willful defaulting. The sources of credit availed and interest rate were the significant factors to determine the amount of non-willful defaulting.

Misra, 2009 examined the performance of PACSs and observed that government's contribution to the share capital of PACS was found to be detrimental to their recovery performance. He also observed that growth of membership size in the PACSs is another factor for the detrimental of the recovery performance.

Shukla *et al.*, 2010 reported that the problem of recovery of agricultural loans from the farmers has become a cause of great concern. The high overdues have affected the overall financial health of commercial banks. Problem of overdues is a hard nut to crack, particularly in rural Indian condition, where the financial institutions like co-operatives, commercial banks and regional rural banks have collectively weak financial structure and do not have very strong organizational structure for supervising the use of loans. The political interference and reluctant attitude of institutions and borrowers have facilitated the growth of willful defaulter in agricultural sector. The lack of adequate supply, assessment of potential credit needs, follow up action and proper uses of borrowed funds are responsible for mounting overdues. Overdues can be minimized, if the expected size of credit is related on a scientific basis to production outlay and the loans are effectively supervised in regard to their utilization and finally, the farmer is approached at the right time for repayment.

2.4. Impact of bank finance on the borrowers:

Rai *et al.*, 1975 studied the role of institutional credit in generation of farm income and found out that the net income per hectare; family labour income and farm business income of the borrower farmers were much higher than the non-borrower farmers.

Mehrotra, 1978 in his study on short-term credit needs results revealed that credit has a crucial role to play in augmenting and maximizing farm incomes of farmers. The quantum of credit required for maximizing net farm incomes is quite high at the traditional level and it will go still higher if improved technology is used by the farmers.

Ram *et al.*, 1978 conducted a study to examine the contribution of bank credit on the generation of income and saving on farms based on three year averages (1971-72 to 1973-74) of data collected from 150 cultivators, selected randomly from 10 villages. They found that, share of production finance cost was 37.03 per cent of the total cost incurred on crop production, which varied from 29.94 per cent to 34.58 per cent on small, medium and large farm size respectively. The average net income, family labour income and farm business income generated on account of bank credit, these amounted to Rs. 571.64, Rs. 736.00 and Rs. 922.22 per farm respectively. The value of corresponding incomes on per hectare basis worked out to Rs. 223.11, Rs. 287.26 and Rs. 360.64 respectively in small, medium and large farms.

Sinha and Broasway, 1979 assessed the availability of credit and its utilization as well as the impact of credit usage on employment and earnings in agriculture. Regional rural banks provided 86 per cent of the credit, and 88 per cent of borrowings were used directly for agricultural purposes. Borrowers applied more inputs to their land (12 per cent increases on the cost of cultivation) and their net incomes were higher than those of non-borrowers.

Roshan and Singh, 1980 studied the impact of bank finance on intensity of cropping pattern, crop output and on farm income of the borrower-farmers through the installation of tube wells. Data was collected from a sample of 59 farmers who had borrowed from the district branch. Investment in tube wells enabled the borrowers to adopt double/multiple cropping pattern and to raise the intensity of cropping. A shift in cropping pattern from low income crops to high income crops was also evident. Bank finance helped to increase yields of selected crops by 32 per cent. The net return on investment in tube well was estimated at 15.7 per cent.

Singh and Ramanna, 1981 examined the role of credit and technology in increasing income and employment on small and large farmers in Western Hyderabad of Andhra Pradesh and reported that there is scope for raising income by reorganization of resource and further increase in income could be realized effectively. They also indicated that there are possibilities of increasing income and employment on all types of farmers with the use of adequate capital under both existing and improved technologies.

Jain and Sarawgi, 1982 carried out a studied on the impact of farm credit provided by the co-operatives and commercial banks in the tribal areas of Madhya Pradesh. The study revealed that the relative performance of co-operatives in increasing the cropping intensity of small and medium farmers was higher as compared to the commercial bank. The researchers reached the conclusion that the co-operative credit institution performed better in case of small farmers as against the large farmers and the commercial banks performance was more satisfactory in case of large farmers as against the small farmers.

Reddy, 1982 pointed out that finance is the essential requirement for almost every day's activity. Both producer and consumers in rural as well as urban areas need finance for their day to day requirement and for all productive activities.

Anonymous, 1987 reported that the loans have been found to help the borrowers to become self-employed, to obtain permanent jobs and to raise the overall living standard.

Kumar *et al.*, 1989 in their study on impact on institutional credit on income and employment revealed that credit and owned capital were two important factors influencing gross returns and employment level. Further, it was revealed that borrowers from institutional sources were better placed than the non-institutional borrowers.

Gajanana and Sharma, 1990 reported that on optimization, both returns and employment prospects improved substantially when the provision of unlimited availability of capital (credit). Further, the recommended technology has a profound influence on returns and employment. The effect of recommended technology was more pronounced when it was associated with adequate capital.

Deoghare *et al.*, 1991 conducted a study on the impact of credit and technology on income and employment of small farmers under different farming systems and revealed higher net income and better utilisation of human resource under optimal plan as compared to existing ones. Further, the adoption of technology even with restricted capital facilities i.e. relaxation of capital constraints and optimization resources could turn out to give more opportunities for human labour employment in respective cases.

Vaidya, 1991 in a study showed that bank finance obtained for agricultural, allied agricultural and non-agricultural purposes enable borrower's families to increase their income, employment and assets structure both in case of agriculture and allied non-agriculture purposes.

Reddy, 1994 conducted a study of the financial performance of a Co-operative Bank. The author concluded that the overall financial position and performance of the bank was quite satisfactory. However profitability

and other financial indicators like solvency ratio, disclose only one aspect of co-operative performance. In one sense, the more important aspect of co-operative performance is the impact created on the economic and social life of its members.

Shekar *et al.*, 1999 studied the impact of co-operative credit on income and employment generation of the farmers of Karimnagar District, Andhra Pradesh. After availing credit from the co-operatives, all the sampled farmers were benefited in terms of increased human and bullock labour employment as well as net income from the farm business. Human labouremployment generated was the highest in the case of medium farms. However, bullock labour employment generated was the highest in the case of small farms. Also the net income increased per hectare land after the loan was the highest in the case of small farms.

Das, 2002 examined the impact of the Arunachal Pradesh State Co-operative Apex Bank's loans on rural development in the Indian state. Data was obtained from 200 tribal beneficiaries drawn from 10 branches of the bank. It was observed that the loans provided by the bank played an important role in improving the economic conditions of the borrowers. The bank's financing has significantly contributed to an increase in the annual income of the borrowers and generated employment in various activities. It also enabled the borrowers to raise their living standards.

Joshi, 2002 stated that credit is an important input in the development process. Ensuring the provision of timely and sufficient credit to large segment of rural population has been one of the major policy initiatives which have guided the formulation of public policy in the country. The growth of financial intermediation through the expansion of banking services has been a powerful catalytic agent for development.

Ara *et al.*, 2004 in their study revealed that the yield gap is quite substantial, which implies that the farmers could increase their production and realize more income had they been adequately familiar with the

technology. Training and proper input use, proper management and care, creating awareness of the importance of water quality for fish production, and practical demonstration in the rural areas are some of the measures suggested to boost fish production and reduce technical inefficiency.

Akmal *et al.*, 2005 examined the impact of agricultural micro-credit on crop productivity and gender empowerment. Results revealed that farmers' use of quality inputs (seeds and fertilizers) was improved after gaining access to microcredit. Crop productivity and cropping intensity were also improved. A change in consumption and spending pattern (a measure of welfare impact) of both male and female beneficiary households was also noticed. It is suggested that increasing the amount of microcredit and lowering the interest rate would augment gender empowerment in the project area.

Gangaiah *et al.*, 2006 studied the impact of Self Help Groups on income and employment in Chitoor district of Andhra Pradesh. On an average the loans received generated 184 days of employment per house hold and income on an average Rs. 19,578/- per family which was sufficient to bring the poor families above the poverty line. The opinions of sample respondents revealed that they productively made use of the income generated after receiving the loans. 39.11 per cent of respondents reinvested their income on agriculture, 20.34 per cent of them revealed that part of the income generated was utilized for educating their children and 15.84 percent of them spent on health.

Ramakrishnappa and Jagannath, 2006 conducted a study on emerging micro-finance issues in dairy development in Karnataka. The study found that the micro-finance scheme has positive impact on income and employment generation, and has improved the natural resource management options.

Deorukhakar *et al.*, 2007 studied the impact of institutional credit on cost, returns on profitability in the north Konkan region of Maharashtra

state. Credit enables farmers to use various input to the recommended levels and thereby increase agricultural production through increased employment opportunities. The analysis revealed that cropping intensity on beneficiary farm category was higher than non-beneficiaries. Similar trend was observed for other purpose of loan. Per farm income and profit on beneficiary farms was higher than non-beneficiary farms. The effect of short-term loan in production process was found significant on all size groups. The value of regression coefficient indicated that with increase of one rupee short-term loan, gross income of small farmers increased by Rs. 5.03, medium farmers by Rs. 1.25 and large farmer by Rs. 2.93. The results clearly demonstrated that there is positive impact of agricultural credit on per hectare yield of different crops. Thus, the flow of farm credit has resulted in improving the economy of the borrower farmers.

Jongur, 2008 observed that a necessary linkage of activities on loan approval and disbursements has an impact on agricultural productivity, even though it has some constraints including: lack of adequate funds for its clients/farmers, poor repayments abilities etc., among others. Some remedies were suggested for its improvements including provision of hybrid seeds, livestock studs, pesticides and fungicides at affordable prices to farmers.

Ray, 2008 in a study based on survey data collected from a sample of 160 farm households in West Bengal, India, revealed that credit availability from both institutional and non-institutional sources have a significant contribution to change in cropping pattern. But the impact of credit availability on cropping pattern change is more significant in the case of smaller-sized land holdings. The profitability is also higher in the case of small and marginal farmers. Close supervision of cultivation, availability of credit and the exclusion of costs of family inputs (e.g. family labour) are the factors behind this higher profitability.

Thamilarasan, 2009 assessed the impact of institutional credit on farmers who have availed credit from co-operatives especially for production purposes. The impacts of institutional credit provided by co-operative banks are studied in terms of employment generation, creation of assets, income and occupation of the farmers in Dharmapuri district, Tamil Nadu, India. The study showed that the financial assistance from the banking institutions for agricultural operations has created significant impact on the level of income and employment (in terms of number of mandays both for land owners and agricultural coolies), and thereby in the formation of assets. However, the study proved that the impact is little and limited when it comes to improvement in the extent of land-holding or the value of lands. Similarly, no improvement was seen on the occupational status of the borrowers.

Sarkale *et al.*, 2010 examined the impact of Satara District Central Co-operative Bank in agricultural and rural development revealed that the bank increased the income level of the farmers and overall agricultural scenario.

2.5. Problems faced by borrowers and the bank(ers):

Patel, 1974 pointed out that unawareness among the rural masses about the role of commercial banks in transforming the rural social life, lending schemes formulated by the banks, financing procedures, legal banking, technology and economic requirements etc. were the principal constraints of rural credit.

Singh *et al.*, 1974 pointed out that the main problems faced by the small farmers in getting credit was the process of getting loan itself was not easy and liberal. A farmer has to run a number of times to the society or the bank for completing the formalities. Further, the lending institutions are

reluctant to advance medium and long-term loans due to poor repaying capacity.

Hate, 1977 in his study identified the problems faced by the organized institutional agencies in financing agriculture in India. They include inadequacy of finance, weakness of the co-operative credit system in many areas, sectoral and regional imbalances in the flow of credit, lack of bankable assets and mounting debts. The study suggests measures to find solutions and presents comments on the difficulties encountered in implementing such measures.

Sawant, 1978 in a study on a sample of 175 farmers from 109 villages in Maharashtra State to identify associations between borrowing behaviour and personal characteristics of borrowing farmers revealed that financing agencies had served only those farmers who were literate, actively participating in social organization, possessing a large land holding and were innovators.

Anandan, 1979 pointed out that the non-repayment of loan by co-loanees, difficulties in obtaining suitable securities, non-availability of certificates and document from concern department were the main problems faced by the farmers in the way of obtaining loans from the banks.

Famoriyo, 1980 in his paper concludes that banks and other institutions have problems in dealing with individual smallholders because of difficulty of contact, lack of information and uncertainty in the supervision and repayment of loans. It is suggested that farmer co-operative societies appear to be the best means of bringing essential credit to such smallholders.

Puhazhendhi and Balakrishan, 1981 reported that the nature of problems faced by the farmers in getting and using farm credit were, the

delay in sanction of loan, rigidity of rules concerning security and inadequate supply of credit etc.

Murthy, 1982 reported that some of the major problems in financing agriculture through multi-agency are different systems, procedure and policies, security norms service and supervision, charges bearing interest rates etc.

Saxena, 1983 conducted a study on practice and problems of District Central Co-operative Banks in Utiar Pradesh and highlighted major problems of primary co-operative societies, as lack of financial assistance, poor managerial capabilities, lack of experienced supporting staff, non-inception of the proven methods of purchase and sales promotional activities. All the branches can have uniformity in rates and other policies. As a normal practice there should be only one consumer society in a city operating through certain number of shops and its membership should be open to all such sections of consumers as it may deserve a character of the community institution. This section covers studies on many other areas of vital importance viz., finance, protection of farmers' interest, specific areas, problems etc.

Shankarish and Rao, 1983 studied the operational problems of District Co-operative Banks. The findings of the study are close to the reality. It is suggested that the credit facility should be made available to the farmers at the door step so that unnecessary expenditure may be saved. According to the study 70.00 per cent of the margin of the farmers may be saved, in this way. It will also eliminate the necessity of the recovery inspectors visiting the primary co-operative credit societies to verify the position of the recovery.

Barua, 1986 analyzed that in North-East India inadequacy of banking services in the backward areas is not the major cause of non-development. The major problem is non-development of effective extension services at all levels, especially at the village level, for agriculture and allied activities.

Gupta and Sadhu, 1995 in their study observed that mounting overdues, staff problems, lack of consumption loans, improper assessment of credit needs, rigidity of institutional credit were the major constraint of rural credit and offered suggestions like, recovery of overdues, development of staff, people's participation, consumption loan, etc.

Joseph, 1995 in his study on funds management of the Agricultural and Rural Development Banks in Kerala found out that the growth rates of cost components were high compared to income factors. The cost of management was also high in these banks and it was found to adversely affect the profitability. He further opined that, because of maintaining overdues, profitability was deteriorating year after year and the operational efficiency and overall return was very low in these institutions. The margins received by primary banks were not sufficient for their profitable running. In his opinion, major reasons for heavy overdues were high family expenditure, wilful neglect, modification of subsidy system, misutilisation of income from the project and inappropriate Government policy.

Patel, 1995 observed that ineligibility, continuous decline of the profit, high working cost, lower margin, govt. intervention etc. were some of the problems of rural credit delivery system. Handling small loans and bad management were also some other problems recorded by him. He suggested improve ment in productivity, efficiency of employees, autonomy to bank, encouragement of mobilization of deposit, credit deployment, recovery, man power planning, infrastructural facilities, effective coordination among various institutions etc.

Gandhi, 1999 stated that in the case of co-operative credit, the problems were created often because the co-operatives were not people's co-operatives but government's co-operatives. It was suggested that group lending should be developed in a large way. Institutional credit may also be given for consumption purposes on the basis of land. It was indicated

that waiving of loans by the government in the past for political reasons was a major problem and it punished the non-defaulters rather than the defaulters. A good insurance service could help to make agricultural lending more viable. It was also found that recovery rates were better in non-institutional credit than in institutional credit. Thus, there was a case adoption of some features of informal lending into institutional lending.

Reddy, 1999 conducted a study on the performance, strength and weaknesses of the financial institutions in agriculture credit in India. The credit co-operatives are facing a serious situation on account of mounting overdues. Improvement of recovery performance is crucial for the expansion of agricultural credit as well as for the agriculture credit system. Innovative resources for mobilization of deposits are needed, and confidence among the depositors. The commercial banks will have to be persuaded to vigorously target priority lending to the agriculture sector.

Agrawal and Solanke, 2002 reported that the co-operative banks are contributing a constituent part in India's banking and financial system. The rural area requires funds for two reasons viz., working capital through short terms needs and agriculture and other bearing activities through long term requirements. The agricultural and other than agricultural processes in the rural areas is typically seasonal. The households require credit to work seasonal activities in earning and expenditure. But Govt. of India has not provided a good support to the co-operatives due to which many problems has been faced by them. Thus an attempt has been made to elaborate the problems and the relative perspective of co-operative banks in the Indian Economy.

Subburaj *et al.*, 2003 examined the technical and operational problems confronting primary agricultural co-operative banks in India, including problems with the organizational structure, low level of productivity, low level of profitability, low viability, and inadequate managerial skills. Strategies to address these problems are suggested.

Yerramraju, 2004 stated that the problems confronting Indian agricultural credit are high transaction costs and poor recoveries. He suggests means to improve the lending infrastructure in terms of policy objectives. The need for the National Bank for Agriculture and Rural Development to re-envision its role is also pointed out.

Tamuli, 2005 study on an overview of the development of the agricultural co-operative sector in Arunachal Pradesh, India, and identifies the problems faced by the co-operatives in terms of infrastructure, management, finance, and credit recovery, among others. Suggestions to improve the functioning of co-operatives in the state are presented.

Prasad, 2006[1] in his article examined the performance of co-operative credit and banking structure. The critical problems faced by PACSs are lack of diversification in business portfolio, low volume of business, declining percentage of borrowing membership, high cost of management, imbalances in loan outstanding, unskilled staff, lack of professionalism, weak MIS, involvement in less profitable PDS business and low interest margin.

Prasad, 2006[2] in his article pointed out the several problems faced by PACSs. He stated that the problems faced by PACSs have greatly affected their performance. He suggested that PACSs must advance more amounts of short-term, medium-term and long-term loans to the members and link the credit with marketing of products which will go a long way towards better recovery of loans and advances, which in turn, will improve the financial soundness of PACSs.

Thanarathnam, 2006 while studying the working of primary agriculture co-operative bank analyzed the loan dispersed by the bank found that 24 per cent of the farmers stated easy accessibility and 76 per cent of the farmers' stated low rate of interest were the reasons for borrowing from co-operatives, which was a good indicator of good performance of bank. He found that difficulties in getting loans were due

to the difficult procedures for 22 per cent, cost of availing loans for 16 per cent, security required for 24 per cent, untimely loans availability for 18 per cent of the farmers along with difficulties in providing documents for 20 per cent of the farmers. He opined short term loans were generally provided on personal security. Therefore, the problem of providing security as a problem could be easily remedied.

Gnanadhas and Geetha, 2009 were of the view that co-operatives occupy a place of eminence in the economic activity of the country and have been acting as a catalyst for the socio-economic development. Since independence, the co-operative sector has made remarkable progress, which has also resulted in certain weaknesses. Default in repayment of loan is a major problem, which affects the entire financial performance of the societies. The present study reports that the environmental factor is the most influencing factor leading to default in repayment of loan. The apex co-operative institution, therefore, should take into consideration the problem and should come forward for the revival of the societies in order to make them as economically viable societies.

Ravichandran and Alkhathlan, 2009 opinioned that very few people have access to banking services. There are number of factors affecting access to financial services by weaker section of the society in India. The lack of awareness, low incomes and assets, social exclusion, illiteracy are the barriers from demand side. The distance from bank branch, branch timings, cumbersome banking procedure, over requirement of documents for opening bank accounts, unsuitable banking products/ schemes, language, high transaction costs and attitudes of bank officials are the barriers from supply side.

Sharad and Thakkar, 2012 reported that the rural credit co-operative system in India is the world's largest rural financial systems. During the past over hundred years, these credit co-operatives have witnessed many successes and failures. For a long time, co-operatives have been plagued by

numerous problems such as undue government interference, poor governance and management, high overdues and lack of deposits, financial indiscipline and accumulating non-performing assets.

2.6. Suggestion and policy implication:

Finch, 1969 was of the view that the borrower's security, ability and integrity, their past record of repaying debt etc. should be carefully reviewed while financing them. It also emphasized on determination of borrowers present financial status, evaluation of proposed programme for the next period, reviewed performance of past years and reviewed periodic progress.

Agarwal, 1974 in his study stressed on the formation of the District Central Co-operative Banks for which the whole country may be divided in different zones. Family may be taken as primary unit. One hundred families of a locality or an area may be allowed to form a co-operative. The present card holders who might be getting their supplies from their fair price shops should be asked to get themselves enrolled as members of the primary co-operative society of their respective areas/localities. If the above distributive scheme is implemented, it is expected that not only the interest of the consumer will be protected, but the district co-operative bank will also help the government to hold the interest rate to protect the interest of the farmers by making available the articles which are in scarcity.

Agarwal and Kumawat, 1974 stated that mere introduction of improved technology without comparable credit facilities cannot be expected to have any significant impact on farm income. So, efforts should be made to extend credit facilities along with the popularization of HYV, fertilizers, pesticide, and irrigation facilities. Inadequacy of credit is an important factor limiting acceptability of new agricultural technology.

Sarkar, 1974 in his study on the overdues of co-operative banks in India found that the heavy overdues at the level of DCBs are said to impair their capacity to borrow from the higher financial institutions. He was of the opinion that the reason for the rise in the level of overdues was the failure of the DBCs to recover their dues and not due to any inherent inability of the borrowers to repay. The failure of the executives of the co-operative institutions to adopt appropriate measures, political patronage to defaulters, defective lending policy pursued by the DCBs and Primary Agricultural Credit Societies and administrative weaknesses were the other reasons cited for higher overdues in co-operative financial institutions.

Batra, 1977 reported that though the rural banks are conceived as agencies for opening alternative sources of credit for developmental needs in the rural areas of India, it is argued that credit will not automatically reach the weakest and the most deserving sections of the community. For this, special efforts will have to be made in co-ordination with other credit institutions and proper vigilance exercised.

Garg, 1977 in his study on farmer's problem and credit co-operatives concluded that the retail outlets should be stepped up with a view to diversify the range of agricultural product. The study expected that in view of the keen interest on the part of the Government, both central and state, the agricultural co-operative movement may soon make headway and was likely to provide required protection to the farmers who are mercilessly cheated by the retailers in private trade.

Naidu, 1977 reported that the performance of credit institutions have to be judged not only in terms of development but also by the capacity to reach the small farmers, rural artisans, agricultural labourers and other members of the weaker sections of the community. A plea is made for introducing structural changes in the institutional framework for helping the weaker sections. Apart from the development of all aspects of the

Indian agricultural sector, it calls for special attention to the promotion of rural village industries in the context of rural development and removal of unemployment and underemployment.

Chidambaram, 1978 studied the organization of the Agricultural Refinance and Development Corporation (ARDC), the scope of refinance facilities, refinance policy, terms of refinance, operations, developmental role, evaluation, and International Development Association (IDA) credit for financing agricultural projects. It is concluded that with the various measures taken or proposed to be taken, the Corporation expects to play a much larger role in helping member banks, not only by providing refinance facilities but also by giving assistance in regard to the various features of a sound system of investment credit for agricultural development.

Colombo, 1978 opined that the rigidity with which certain criteria's for the allocation of credit are upheld should be relaxed so that the flow of credit could be on time towards projects in need of support. Monetary policy should not assume a neutral stance especially for cases where timeliness is most effective, as in some aspects of the agricultural situation. Public intervention could easily speed up the circulation of funds to affect a timeliness which is at the moment lacking and which has a debilitating effect on the agricultural sector.

Desai, 1978 in his study reported that the group approach can enable the banks to reach a larger number of clients through a given amount of administrative resources. The group approach can help to achieve scale economies and then assist cost reduction. These groups are not entities in the same way as co-operatives, which are formed through official or government sponsorship, but informal groups at village level.

Kamath, 1978 in his study detailed the steps necessary to co-ordinate the variety of credit institutions which at present overlap each other in servicing agricultural sector. The working group made recommendations in the following categories: area and functional demarcation, consortium

approach, branch expansion, interest rates, security for loans, procedures and systems, inspection and supervision and credit guarantees.

Kasar and Patil, 1978 suggested that the organizational structure and the working procedure of the institutional credit agencies need to be modified for lowering the cost of credit as well as removing the anomalies in respect of security, clumsy procedure, interest rate etc. for uniformity of their functioning.

Pancras, 1978 studied the funds management in co-operative banks and came to the conclusion that the co-operative banks in the far flung areas are forced to keep more cash / liquid assets due to their far away location from apex banks. He opined that profitability in co-operative banks is a factor of efficient management of funds mobilization and deployment of funds. Further, he stressed that it should be the objective of a bank to increase profitability by efficient control of costs associated with funds management.

Shah, 1978 in his article alleged that the limitations on the small farmer can be analyzed as resource constraints and systems barriers. Small farmers face both the resource and systems constraints though within these constraints they can often attain a high level of efficiency. The problems of the small farmer viewed as resources is one of scale, when viewed as systems it is highly complex with no single characteristic (such as credit or knowledge extension) which can provide the remedy. An example is given of the harm to the economy of the small farm which can arise when cattle numbers are increased. Three categories of remedy are suggested: Expanding the enterprise base by increasing the size of the holding via land reforms; expanding the resource base within the existing technology (e.g. irrigation making it possible to grow two crops); and remedies that involve system change (e.g. with irrigation new crops can be introduced).

Khemani, 1981[1] *is of the view that in rural credit schemes, where the* aim is to achieve perceptible economic growth, the field staff has to take

over the role of a change agent to promote village development. There must be a continuous and close relationship between bank staff and the adopted villages so that maximum positive benefits are derived from the programmes, and the supervisory role is not stressed.

Khemani, 1981[2] reported that the area approach offers several advantages: (i) coverage of a large number of farmers by a small number of field staff and field visits, (ii) curtailed requirements for transport, and (iii) easier and less expensive supervision and recovery.

Reddy, 1981 reported that credit giving institutions while providing the credit to the weaker sections, should take into consideration normal credit requirements for consumption purposes. He also suggested that, a greater portion of credit should be in kind. Further, it should examine the technical feasibility and productive capacity of the project. The technical advice, if required , should be provided to the loan applicants. Furthermore, the credit supervisor should supervise and control the use of loan amount throughout year.

Desai, 1983 was of the view that no single agency can satisfy all the credit needs in magnitude and area to be covered. He suggests that it is not only the strengthening of the financial institutions such as co-operatives, commercial banks including regional rural banks, but an effective coordination of their lending activities. Therefore, the idea of multi-agency approach shall be the appropriate model for defining the respective roles of co-operatives, the commercial banks and the regional rural banks in a given area of operations.

Nicholson, 1983 went on saying that credit shall educate, discipline and guide the borrower. It should be granted to only those who have learned to think, plan, to save. It is emphatically not the outpouring of cheap capital that to classes unprepared for the boon. What is wanted is the promotion of facilities for saving, the encouragement of banking deposits, the inculcation of the true project, uses and limits of credit, in other words,

the development of the essential national virtues of thrift, foresight and self-help, through institutions organized for these ends.

Lalwani, 1984 in a study tried to evaluate the personnel philosophy and approaches to the personnel management to highlight; the organizational planning and development, the staffing pattern, the training and development, the motivations, the labour relations and the personnel research. It was found that the personnel policies, instructions approaches and regulations were very crucial factors for smooth running of the co-operative sector. Under the orientation courses, the co-operatives objectives could be accomplished for poor masses of India by giving a fresh outlook to the personnel policies.

Sharma, 1985 in his study on short-term agricultural credit of Rajasthan Central Co-operative Bank observed that, with regard to short-term credit, the central co-operative banks should re-orient their loan policies and procedures on the basis of crop loan system. He suggested that loans should be given in instalments and there should be a proper linkage between advancing and repayment of loans in the sowing and harvesting seasons.

Shah, 1986 in his study called for the establishment of Research and Development cells in co-operative banks as the need of the hour essential for survival, especially in view of the competitive multi-agency banking concept which has come in the field of rural finance. He mentioned that the present profile of the functioning of the co-operative credit institutions, imply establish the rule of thumb as a modus operandi at all levels of management. Planning in co-operative banks is also asked to be more systematic without loosing the sense of flexibility and entrepreneurial flair. He opined that co-operative banks have to be more imaginative on their approach in marketing and selling of banking services.

Burkell, 1989 in his study revealed that group lending reduces risks, lowers administrative and transaction costs; and it is argued that its design

and evaluation should reflect the goal of improving the quality of rural financial services. The function of group lending schemes is discussed in relation to financial development, informal finance and the proper goal of rural finance projects. The mechanisms by which interest rate ceilings and others have stunted the potential contribution of group lending to rural finance development are highlighted. The conditions for a successful use of joint liability as loan security, the proper role of savings mobilization and informal finance schemes are also discussed.

Reddy *et al.*, 1989 while investigating a suitable resource use pattern for farmers with short-term loans felt that there is need to educate farmers in reorganization of resource use within the existing level of own funds and crop loan facilities to enable them to achieve better net farm returns.

Anonymous, 1993 studied the annual report of NABARD and pointed out the weakness of the institutional agencies in providing rural finance in the following words. The National Bank recognizes that for the effective operation of its policy, a financially sound and operationally efficient credit delivery system is necessary. It has, therefore, been the banks' endeavour to re-orient the functioning of its client institutions viz., commercial banks, regional rural banks and co-operative banks towards the achievement of above goals.

Tucker, 1993 in his study noted that Human Resource Development has a definite role to play in improving productivity in co-operatives.

Muthupandian, 1995 in his study on the overall performance of Tirunelveli District Central Co-operative Bank (TDCCB) noted that the success of TDCCB in future will depend not only upon the development of primary societies and the growth of the co-operative spirit among the members but also upon the extent to which they are able to mobilise deposits and savings and make recoveries of bad debts. He further pointed out that the bank will have to encourage agricultural development and will

have to come up regarding the standard of supervision of the societies under their charge.

Joshi, 1997 stated after evaluating the strengths and weaknesses of the country's rural credit structure that non-institutional agencies continued to dominate the rural areas. The village money-lender was still strong. Calling for a drastic overhaul of the set-up, the rural financial institutions could be viable only if they mobilize deposits. Monitoring the use of rural credit must form an essential ingredient of an effective delivery system. Firmness in the face of political pressure and development of sense of responsibility and accountability were prerequisites if the weaker sections were to reap the full benefits of the rural credit structure, he believed.

Kota and Sharma, 2001 argued that a successful financial institution, especially a co-operative financial institution, had to adopt itself to the changing needs in order to become sustainable.

Singh *et al.*, 2001 reported that the prime function of these societies has been to supply agricultural inputs. One of the major constraints has been the imposition from government agencies which has undermined the role of co-operative societies. For a successful co-operative society, efficient management is of utmost importance as most of the respondents held this factor as a basic requirement.

Tiwary, 2001 reported that the emerging psycho-socio economic problems of farmers in India make it imperative to re-evaluate the human resource development priorities for credit co-operatives, overall priority of co-operative credit should be total recovery management (recovery of financial and moral health of the members) rather than recovery management (recovery of loans).

Dev, 2004 studied the important indicators relating to rural India in the pre and post-liberalization periods. These indicators relate to

macroeconomic trends, the agricultural sector, poverty, investment and capital flows, employment and real wages, the public distribution system, and health and education. It is suggested that investment, technology and appropriate institutions are needed to make rural development more broad-based and balanced. Ten general areas where policy attention is required are outlined. These areas viz., employment, increase in public investment, agriculture, water management, rural institutional reforms, rural non-farm sector, health and education, improving basic services, reduction in personal, regional and gender inequalities and decentralization and governance.

Roy and Syed, 2004 analyzed and observed that the programmes undertaken by different agencies had contributed a lot in the area of poverty alleviation through gainful self-employment among the rural poor. It is suggested that more diversified areas should be earmarked for enriching the scope of investment in different productive activities as well as micro-enterprises in rural areas. The government should come up with more financial resources in micro-credit operations and field training for the development of social capital in poverty-stricken areas.

Sen, 2004 reported that the co-operative banks continue to play a critically significant role in the socio-economic matrix of India. As such, these institutions cannot simply be washed away. Effective measures are, therefore required to be taken on an urgent basis so that they continue to contribute towards the development process in the country.

Gupta, 2005 studied the history of co-operative credit institutions in India highlighting the initiatives taken so far in strengthening such institutions. It is argued that no initiative for strengthening credit co-operatives will be sustained unless it comes from the co-operative system itself. The role of apex co-operative institutions in strengthening the whole co-operative credit system is emphasized.

Patil, 2005 studied the evolution of agricultural credit institutions in India, describes the country's co-operative credit system, highlighting its problemsand deficiencies. He argued that it may be worthwhile for the government/RBI to study the cost structure of the co-operative banks, develop appropriate cost norms for rural banking, and extend suitable support where the costs are higher in spite of efficient operation.

Hussain, 2006 in his study concluded that it is high time that the service co-operative banks in Kerala have to analyse the profitability of each of their activity, plan their funds efficiently and effectively, utilize their work force to the maximum in order to get a reasonable profit and survive in their competitive environment.

Seilan, 2006 in his article suggested that the societies should be encouraged to mobilize more deposits to become financially stronger so that the owned funds get strengthened, the loaning policies reoriented in favour of small and marginal farmers and other weaker sections of the rural community. To ensure proper utilization of credit, strict vigilance and effective supervision of credit is necessary. The members should take active interest in the working of co-operative credit societies and proper training has to be given to society staff which will lead to the improvement in the quality of service rendered by co-operative credit societies.

Kumar and Singh, 2007 suggested that apart from financing, proper guidance regarding utilization of the available high yielding varieties of seeds, fertilizers and pesticides depending on soil conditions and effective supervision from time to time should be initiated.

Natarajan, 2007 opined that co-operatives have to get a reasonable profit. Therefore, it is high time that the SCBs to analyse their profitability of each of their activity, plan their funds efficiently and effectively utilize their work force to the maximum in order to get a reasonable profit and survive in their competitive environment otherwise the loss scenario will eat away the capital of the banks held up to liquidation.

Sharma *et al.*, 2007 in their study examined access to credit which includes pattern of borrowing, overdues and determinants of borrowing behaviour. The results suggested that financial institutions should be given a free hand to some extent to tackle the lending at their own level. The emphasis needs to be given on "number of borrowers" rather than "amount of lending" which may help the small and marginal farmers to a large extent. Thus, there is need to develop the multi-functioning co-operatives which should not only provide good quality and adequate inputs but also sufficient credit to the farmers.

Sujatha, 2007 studied the financial performance of the Krishna District Co-operative Central Bank (KDCC) in India and identified its strengths, weaknesses, opportunities and threats. A structural and growth analysis was conducted on balance sheets and profits and loss accounts from 1995 to 2005. The strengths of the bank are: higher level of own funds, reasonable cost of deposits and borrowings, low expense ratios and favourable burden ratio. Its weaknesses are: high levels of liquid and cash assets, low credit to deposits ratio and low yield on advances. Its opportunities are: expansion and new areas of business. Its threats are: low yield on assets, low profitability, low non-interest income and growing non-performing assets. The following are suggested: conversion of weaknesses into strengths through planned and sustained effort, addressing threats immediately, launching of a deposit mobilization campaign to achieve minimum growth annually, diversification of loan portfolio and loan recovery.

Dutta and Basak, 2008 were of the view that Co-operative banks should improve their recovery performance, adopt new system of computerized monitoring of loans, implement proper prudential norms and organize regular workshops to sustain in the competitive banking environment.

Paramasivan, 2008 in his study on lending and repayment performance of primary agriculture co-operative banks, suggested that the restructuring of co-operative societies is unavoidable in the present day situation and the primary agricultural co-operative banks should change their structure and programmes in accordance with modern development.

Paranjothi and Ravichandran, 2009 conducted a study to understand how co-operatives are functioning at the grassroots level and discuss the approach of various working groups towards co-operatives in the 11th Five Year Plan of India. The first section of the paper deals with the performance of primary co-operatives at the grassroots level during the last 5 years (1999-2000 to 2004-05). The second section discusses the recommendations of the Steering Committee on Agriculture and Allied Sectors and the Working Groups on Agricultural Marketing and Animal Husbandry and Dairying with respect to co-operatives in the 11th Five Year Plan. The concluding section outlines some strategies to ensure that co-operatives survive in a competitive environment.

Reddy, 2010 suggested a new approach to banks to reach wider population in rural areas by establishing mobile-banks/ representatives/ agents who operate on commercial basis rather than just by self-help groups. These agents/ representatives work on commission basis and hence self-motivated and cost effective in assisting banks in service provision/ deposit mobilization.

Barton *et al.*, 2011 reported that finance is an important topic for senior co-operative leaders and boards of directors. Education is needed on how to align co-operative finance principles with co-operative principles and business models.

CHAPTER – III

METHODOLOGY

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METHODOLOGY

The success of any investigation turns out to be depends upon the methodological approach followed. The accuracy of methodology followed is reflected in the outcome of the investigation.

Methodology refers to process of providing information regarding decisions of what, where, when, how much and by what means the study was carried out.

The methods adopted in the course of this study have been summarized under the following heads.

1. Research Design

Design means to plan. Designing is a decision making which is to be carried out according to the existing situation for effective implementation. It is a process of deliberate anticipation directed towards solution of expected situations.

The present study was based on the "descriptive" type of research design in which "Ex-post facto" planning stage with specific objectives were set for the inquiry. In the light of the objectives, the technique of the investigation to be adopted, tools to be used and the pattern of statistical analysis to be followed were decided. Further, the scheme of the presentation of the study was developed and given a definite shape to match with the outline of the study. The study was conducted in the light of the setobjectives and under framework of the adopted outline.

In order to understand the findings of the study in a wider context and to evaluate their relevance in the light of available knowledge on the subject, an effort has been made through review of proper and relevant literature related to the previous researches, which have been conducted in this field. To provide scientific basis to the study, a proper hypothetical framework was also developed, which provided a definite direction and specific scope to the investigation. The findings of the study have been properly discussed in the light of available research material on the subject and subsequently summarized in the light of all the proper aspects covered within the scope of the study.

3.2 Sampling procedure

Based on the objectives of the study, beneficiaries (loaners) who had availed bank loan and the non-beneficiaries (non-loaners) were considered for the present study.

The present study was purposively carried out in the state of Nagaland. The State consists of eleven districts, of which Dimapur district was selected purposively, the reason being that-

(a) No specific study has been carried out in financing agricultural and allied activities by the Co-operative Bank so far in Dimapur district.

(b) The district has the evidence of successful implementation of bank finance as in this study area locates the main office i.e. The State Co-operative Bank.

(c) Easy accessibility and acquaintance to the district blocks for the investigator.

The sampling process in this study consists of three stages viz., selection of blocks, selection of villages and selection of respondents.

3.2.1 Selection of blocks

Out of four blocks in Dimapur District, two blocks viz., Dhansiripar and Medziphema were selected for the present study. These blocks were known to the investigator which facilitated reliable and valid information from the respondents.

3.2.2 Selection of villages

The complete list of villages pertaining to each selected block of district Dimapur was obtained from the block office and three villages from each block were setected by random sampling technique. Thus, in all 6 villages were selected by random sampling technique.

3.2.3. Selection of the respondents

Respondents were selected randomly for the present study. From the selected six villages, ten (10) respondents from beneficiaries and non-beneficiaries famities were selected from each village; thus making a total sample of 120 numbers (sixty borrowers and sixty non-borrowers) for the study.

3.3. Techniques of data collection and period of inquiry

The present study is based on the secondary data related to situational background of the entire district, amount of loan advances to the selected borrowers and the primary data of the selected farmers. The secondary data was collected from the concerned banks operating in the selected blocks, District Agriculture Office, Block Offices, District Statistical Office and other related offices. The primary data was collected with the

help of well tested and structured interview schedule and open questionnaires developed for this purpose. Informal interviews were conducted for making further probe into the questionnaire data, as and where required to ascertain the facts from the respondents and others concerned. The interview schedule was pre-tested on a sample population of the study and was modified and corrected according to the requirement of the situation.

The primary data in the study relates to the year 2010-12.

3.4. Processing and Analysis of Data

After completion of the field survey a systematic editing of the data was done and classified into tabular form for analysis using relevant statistical tools.

The data thus, collected was compiled and tabulated systematically. In most of the cases simple tabular analysis was followed. The statistical method and tests used in the present study were percentage, mean, standard deviation, rank order, Co-relation Co-efficient and Regression analysis.

To arrive at the statistical reliability of the results obtained on the basis of tabular analysis, the following tools were used.

Growth rate:

It is the rate of increase in size per unit time. The percent change from one period to another is calculated with the formula-

$$\text{Growth rate} = \frac{(\text{Present value} - \text{Past value})}{\text{Past value}} \times 100$$

Mean and averages:

In mathematics, an average is a measure of the "middle" or "typical" value of a data set and often simply called the "mean".

$$\text{Average } (\bar{x}) = \frac{1}{N} \cdot \sum_{i=1}^{n} x_i = \frac{x_1 + x_2 + x_3 \ldots + x_n}{N}$$

Where, N = total number of observations

x_i = sample item value

$x_1 + x_2 + x_3 \ldots + x_n$ are the sample observations

Percentage:

A percentage is defined as a number represented as a fraction of 100. Percentages are used to express numbers. It is used to compare things and also used in ratios. It is denoted by the symbol % and represented by the formula-

$$\text{Percentage } (\%) = \frac{n}{\Sigma x_i} \times 100$$

Where, n = sample item value and

Σx_i = Total sample item value

Functional analysis:

In order to establish a functional relationship of different enterprises with its strategic input variables, Cobb-Douglas production function of the following type was used to assess the impact of inputs towards the gross return:

$$y = a \cdot x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8 \ldots\ldots\ldots\ldots\ldots x_n.$$

Whereas, y is the output and,

$x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8 \ldots x_n$ are the inputs or independent variables

$b_1, b_2, b_3, b_4, b_5, b_6, b_7, b_8 \ldots\ldots b_n$ are the elasticity of production of the input factors $x_1, x_2, x_3, x_4, x_5, x_6, x_7, b_8 \ldots\ldots\ldots x_n$ respectively.

a is constant,

x_1 is Human labour cost in Rs./ha,

x_2 is Seed or sapling or animal or fingerling cost in Rs./ha,

x_3 is Fertilizer or nutrient cost in Rs./ha,

x_4 is Plant protection or animal or fingerlings medicine cost in Rs./ha,

x_5 is Machinery or equipment used cost in Rs./ha,

x_6 is Transportation cost in Rs./ha,

x_7 is Marketing cost in Rs./ha,

x_8 is Miscellaneous cost in Rs./ha and

y is the total cost in Rs./ha,

The function becomes linear in logarithmic form as-

$$\text{Log } y = \log a + b_1 \log x_1 + b_2 \log x_2 + b_3 \log x_3 + b_4 \log x_4 + b_5 \log x_5 + b_6 \log x_6 + b_7 \log x_7 + b_8 \log x_8 + \ldots\ldots b_n \log x_n$$

The Cobb-Douglas production function allows greater degree of freedom and has the advantage over other types of function as the estimate can be computed conveniently. The regression co-efficient (b_1) in Cobb-Douglas production function directly indicate the elasticity of production which measures the percentage change in output for unit percentage change in the input (Bhowmick, 1975).

The Cobb-Douglas production function facilitates to examine the resource use efficiency by comparing marginal value product (MVP) to its factor cost. The marginal value product of an input is computed as follows:

$$MVP\ x_i = d_y / d_x = b_i \cdot y / x_i$$

Where b_i is the elasticity co-efficient of x_i, x_i and y is the geometric means of input and output respectively.

Preferential ranking technique was utilized to identify the constraints faced by the borrowers and to rank the constraints they perceived as bank problems in order of their preference. The quantification of data was done by first ranking constraints and then calculating the Rank based Quotient (RBQ) as given by (Sabarathanam 1988), which is as follows:

$$R.B.Q. = \sum fi\ (n+1-i) / N \times n \times 100$$

Wherein: fi = Number of borrowers reporting a particular problem under ith rank,

N = Number of borrowers,

n = Number of problems identified.

CHAPTER- IV

PROFILE OF THE STUDY AREA

CHAPTER - IV

PROFILE OF THE STUDY AREA

4.1. THESTATE

Nagaland became a constituent State of the Indian Union, the 16th State of India on 1st December 1963. This magical valley is situated in the eastern sentinel of the Indian sub-continent, located between 25°6'N to 27°4'N latitude and 93°20'E to 95°15'E longitude. Nagaland is bound by Assam in the West, Myanmar in the East, Arunachal Pradesh and part of Assam in the North and Manipur in the South The state is blessed with pleasant sub alpine climate all year round with an average rainfall of 1,000 mm to 2,500 mm (Aye, 2012).

There are 11 districts viz., Dimapur, Kiphire, Kohima, Longleng, Mokokchung, Mon, Peren, Phek, Tuensang, Wokha and Zunheboto. Kohima is the state capital. The state has a rich tradition handed through generations. It covers an area of 16,579 sq. km (approx.) (Anonymous, 2011).

The total population of Nagaland as on 1st March 2011 stood at 19,80,602 as per the provisional results of the Census of India 2011. In terms of population, Nagaland shares merely 0.16 per cent of the total population of the country. The State has registered the lowest growth rate of population during the period 2001-20011 with population growth rate of -0.47 per cent. The sex ratio (i. e. the number of females per thousand males) was recorded as 931. Total literacy of the State rose to 80.11 per cent in the year 2011.

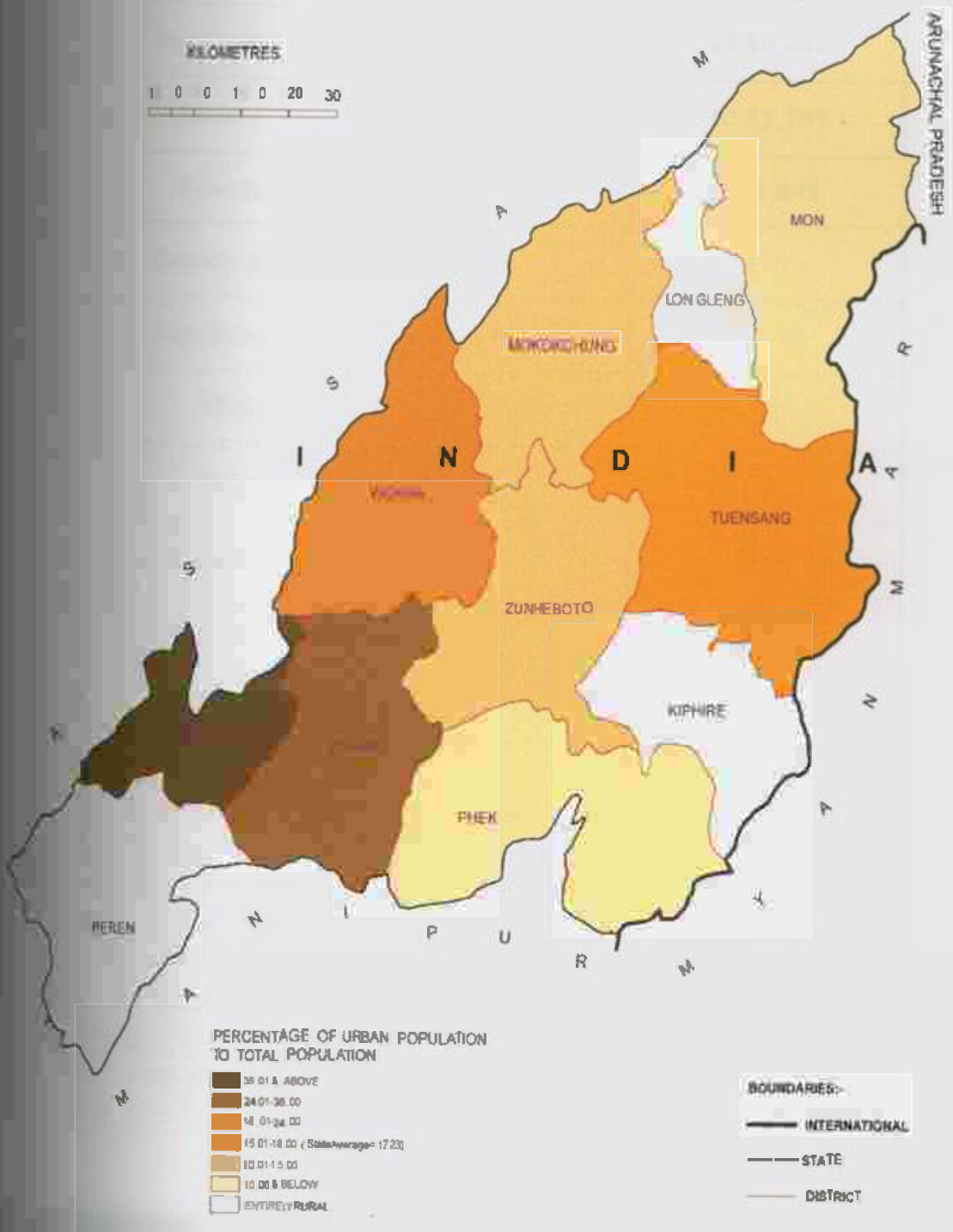


Fig. 4.1. Map of Nagaland *(Source: Census of India, 2011a)*

Table 4.1. Nagaland Statistics

SN	Particulars	Value
1	Area (sq. km)	16,579
2	Population	19,80,602
	Male	10,25,707
	Female	9,54,895
3	Density (per sq. km)	119
4	Population Growth Rate (in %)	- 0.47
	Male	- 2.05
	Female	1.27
5	Sex Ratio	931
6	Literacy Rate (in %)	80.11
	Male	83.29
	Female	76.69
7	No. of Districts	11
8	No. of Sub-Divisions	114
9	No. of Towns	26
10	No. of Villages	1,428

(Source: Census of India, 2011b)

4.2 THE STUDY AREA

Dimapur district was inaugurated as the eighth district of Nagaland on December, 1997. Earlier it was a sub-division under Kohima district. It is being referred to as a gateway of Nagaland and Manipur and the main commercial hub of the State. Dimapur district in Nagaland is bound by Kohima district on the south and east and Assam on the west and north. Dimapur city, the district headquarter is distinct in its character where all the different communities have congregated.

A large area of the district lies in the plains with an average elevation of 260 m above sea level except the Medziphema sub-division and a few villages of Niuland sub-division, which are located in the foothills. Dimapur is situated 25° 54' 45" N Latitude and 93° 44' 30" E Longitude. The climate is hot and humid in the plains during summer (reaching a maximum of 36° C, with humidity upto 93%) while the winter months are cool and pleasant. The average annual rainfall is 1504.7 mm. The district has four blocks/sub divisions viz., Medziphema, Kuhoboto, Nuiland and Dhansiripar (Anonymous, 2009)

The total area of Dimapur is 927 sq. km. The total population of the district is 3,79,769 with a population density of 410 as per Census report 2011.

4.2.1. Traditional, cultural and social identity of Dimapur district

Dimapur district draws its name from the Kachari dialect; 'di'- meaning river, 'ma'- meaning great or big, and 'pur'- meaning city, connoting the term 'the city near the great river'. It was once the ancient capital of 13th century Kachari rulers. "Dimapur" is a later appellation.

Dimapur is the major commercial hub of Nagaland, with a heterogeneous mix of people from all over India, and for which it is also

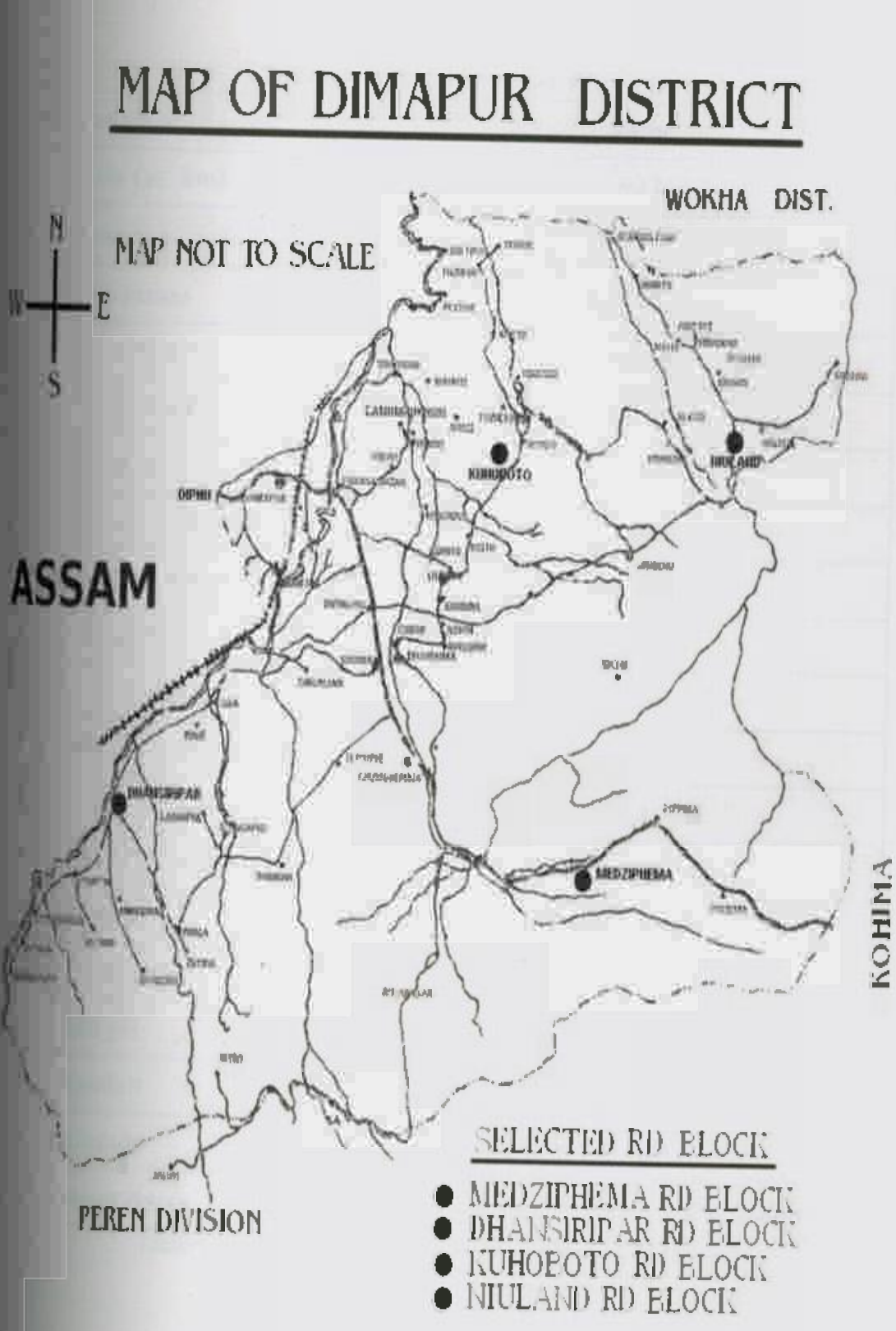


Fig. 4.2. Map of Dimapur district *(Source: BDO Office, Medziphema)*

Table 4.2. Dimapur Statistics

Sl.	Particulars	Value
1.	Area (sq. km)	927
2.	Location	25°48' & 26°00' North latitude and 93°30' & 93°54' East longitude
3.	Population	3,79,769
	(a) Male	1,98,163
	(b) Female	1,81,606
4.	Sex Ratio	916
5.	Density (per sq. km)	410
6.	Literacy Rate (in %)	85.44
	(a) Male	88.07
	(b) Female	82.54
7.	No. of Blocks	4
8.	No. of Villages	204
9.	No. of Households	28,762
10.	Climate	Subtropical
11.	Temperature	10^0 to 40^0 C
12.	Soil pH	4.5 to 6.0
13.	Rainfall	1,500 to 2,000 mm
14.	Altitude	140 to 600 m (ASL)
15.	Major rivers	Dhansiri, Diphu, Chathe, Zubza

(Source: Krishi Vigyan Kendra Dimapur, 2010)

known as "mini India". Besides the dominant Naga tribes, who comprise about 50 per cent of the city's population, other prominent groups include Bengalis, Assamese, Nepalese, Biharis, Marwaris, Punjabis and also Tamils and Keralites. In the last two decades, Tibetan traders have also settled in the city.

In Dhansiripahar sub division, the tribes inhabiting the area is predominantly Angami, Sumi, Kachari and Chakhesang while in Medziphema sub division, the Angami tribe is predominant although a few Kuki and Sumi villages also exist. In Kuhuboto and Niuland sub divisions, the Sumis are the predominant tribe inhabiting the areas. All these tribes have their own customary laws which dominate their social life. The Village Councils are the local bodies through which such customary laws are enacted. The norms and traditions regarding marriage, divorce, inheritance, death etc. are governed by such customary laws. Disputes regardingland, water and such resources and even personal disputes are often resolved based on these customary laws (Anonymous, 2013).

4.2.2 Agriculture in Dimapur district

Agricultural practices in the district are TRC, rainfed and traditional. By and large, mono cropping is practiced in the district. The TRC paddy alone covers an area of 32,900 ha whereas Jhum covers about 7,800 ha. Besides, the second important crop in the district is Kharif Maize which covers about 2,500 ha. Maize is generally grown as an intercrop with jhum paddy. Winter maize is also grown in certain blocks of the district which covers about 460 ha. Important Pulses are also grown in the district such as pea, lentil, black gram, beans, green gram, arhar grown over an area of 1,360 ha in both Kharif and Rabi season. With the favourable agro climatic conditions, oilseeds sucli as groundnut, soybean, sesame, sunflower, mustard, linseed, etc. are grown in an area of 5,800 ha. Commercially viable crops such as sugarcane, ginger, jute, turmeric, tea, potato etc. are also

Table 4.3. Area and Production of major Agricultural Crops in Dimapur district

Sl	Crop	Area (Ha)	Production (MT)	Productivity (Qt/Ha)
1	Jhum paddy	9,620	17,170	17.85
2	TRC paddy	35,310	85,610	24.25
3	Maize	6,680	13,120	19.64
4	Bajra	50	40	8.00
5	Ragi	30	30	10.00
6	Wheat	370	630	17.03
7	Barley	60	90	15.00
8	Oats	50	50	10.00
	Total Cereal	**52,170**	**1,16,740**	**22.38**
9	Tur / Arhar	400	370	9.25
10	Urd / Moong	90	80	8.89
11	Cowpea	160	230	14.38
12	Horse gram	40	40	10.00
13	Pea	660	600	9.09
14	Lentil	440	330	7.50
15	Gram	90	70	7.78
16	Black gram	110	80	7.27
	Total pulses	**1,990**	**1,800**	**9.05**
17	Groundnut	120	130	10.83
18	Soya bean	2,010	2,490	12.39
19	Castor	50	40	8.00
20	Sesame	620	390	6.29
21	Sunflower	590	310	5.25
22	Rapeseed / Mustard	4,120	4,130	10.02
23	Linseed	1,080	870	8.06
	Total oilseed	**8,590**	**8,360**	**9.73**
24	Sugarcane	1,100	47,840	434.91
25	Ramie	20	0	0.00
26	Jute	770	1,390	18.05
27	Potato	590	7,420	125.76
28	Tea (green)	2,860	12,720	44.48
29	Tapioca	90	2,120	235.56
30	Colocassia	240	2,290	95.42
31	Mesta	250	470	18.80
	Total Commercial Crops	**5,920**	**74,250**	**125.42**

(Source: Statistical handbook of Nagaland, 2011a)

grown in the district, covering an area of 1,580 ha (Anonymous, 2010a)[2]. The area, production and productivity of the major agricultural crops grown in Dimapur district is given in Table 4.3.

4.2.3. Horticulture in Dimapur district

In Nagaland, fruits and vegetables are produced in an area of 25000-26300 ha with the total production of 25600-32000 tonnes respectively, of which Dimapur district contributes major portion of production. Commercial cultivation of pineapple, banana, cashew nut and lemon is also followed in the district. The Horticulture Technology Mission (HTM) has helped to a great extent in popularizing the cultivation of horticultural crops including floriculture. Dimapur is gifted with a unique topography and varied agro-climatic and soil conditions, which offers opportunities to cultivate a variety of horticultural crops like vegetables and fruits. Among vegetables, spring summer (cucurbits, bhindi, beans), summer (cucurbits, bhindi, beans) as well as winter vegetables (cabbage, cauliflowers, carrot, radish, palak, pea, etc.) are being cultivated in the districts. Fruits like pineapple, guava, lemon, litchi, and mango are the major ones covering the area in district. Among floriculture, the commercial crop is Anthurium (Anonymous, 2010b)[2]. The area, production and productivity of the major horticultural crops grown in Dimapur district is given in Table 4.4.

4.2.4. Animal Husbandry in Dimapur

Livestock farming, particularly poultry farming contributes enormously towards the livelihood of the farmers. Dairy farming is being practiced by a number of farmers in the district. The milk is collected by the Dimapur Milk Union Limited at 4th Mile Dimapur and is processed for the production of milk products like milk packets, curd and ghee etc. Dairy

Table 4.4. Area and Production of major Horticultural Crops in Dimapur district

SN	Crop	Area (Ha)	Production (MT)	Productivity (Qt/Ha)
1	Sweet Potato	100	1000	100.00
2	Cabbage	110	1000	90.91
3	Cauliflower	70	140	20.00
4	Brinjal	45	300	66.67
5	Chilly	300	2100	70.00
6	Pea	220	1500	68.18
7	Beans	100	700	70.00
8	Bhindi	50	200	40.00
9	Tomato	100	500	50.00
10	Gingef	200	3000	150.00
11	Garlic	10	20	20.00
12	Radish	50	300	60.00
13	Colocasia	100	2,000	200.00
14	Tapioca	450	3,600	80.00
15	Xanthophylum	10	60	60.00
16	Onion	200	256	12.80
17	Naga cucumber	40	240	60.00
18	Leafy Vegetables	500	1,000	20.00
19	Others	600	4,000	66.67
	Vegetables and Spices	**3,255**	**21,916**	**67.33**
20	Lemon	300	2,400	80.00
21	Pomelo	105	500	47.62
22	Pomegranate	15	50	33.33
23	Papaya	60	400	66.67
24	Banana	310	3,050	98.39
25	Guava	20	100	50.00
26	Mango	50	100	20.00
27	Litchi	70	140	20.00
28	Jack-fruit	25	40	16.00
29	Pineapple	1900	24,000	126.32
30	Mosambi	20	60	30.00
31	Others	120	250	20.83
	Fruits	**2,995**	**31,090**	**103.81**

(Source: Statistical handbook of Nagaland, 2011b)

farming is mainly practiced by Nepalese and other state people. Piggery and poultry farming are very common in the district. In rural areas of the district, each and every household have minimum 1-2 pigs and 5-6 nos. of poultry birds in the backyard of house. Most of the farmers follow backyard system of poultry rearing, however, some farmers with higher number of poultry birds follows deep litter system. In case of backyard poultry system, the birds are fed with broken rice/ maize seeds in morning and evening. After poultry, duckery is the other popular form of livestock farming in the district. Goat and rabbit farming are limited to small scale (Anonymous, 2010c)[2].

CHAPTER-V

FINDINGS & DISCUSSION

CHAPTER - V

FINDINGS AND DISCUSSION

The various data collected through secondary and primary means was arranged systematically and by using suitable technique, table formulation and interpretation was done. Keeping in mind, the objectives of the study, the researcher approached the problems from different aspects.

The results are presented and discussed under the following heads-

5.1. BANK SCENARIO IN NAGALAND
5.2. STATUS OF CO-OPERATIVE BANK IN NAGALAND
5.3. SOCIO-ECONOMIC STATUS OF THE RESPONDENTS
5.4. LAND INVENTORIES OF THE RESPONDENTS
5.5. CROPPING PATTERN OF THE RESPONDENTS
5.6. LIVESTOCK INVENTORIES OF THE RESPONDENTS
5.7. FISH PRODUCTION OF THE RESPONDENTS
5.8. RESPONDENTS' PLANTATION
5.9. EXPENDITURE AND INCOME OF THE RESPONDENTS
5.10. EMPLOYMENT GENERATED
5.11. IMPACT OF CO-OPERATIVE BANK FINANCE ON EMPLOYMENT AND INCOME
5.12. RESOURCE USE EFFICIENCY
5.13. STATUS OF BANK LOAN RECEIVED BY THE BORROWERS
5.14. PROBLEMS FACED BY THE BORROWERS
5.15. PROBLEMS FACED BY THE BANK(ERS)

5.1 BANK SCENARIO IN NAGALAND

5.1.1. Bank branch network in Nagaland

As on 31st March 2012, there are 19 Commercial Banks with 93 branches, 1 Regional Rural Bank with 9 branches and 1 Co-operative Bank with 21 branches with a total of 123 bank branches operating in Nagaland. At present

Table 5.1 Bank branch network in Nagaland (in numbers)

Year ↓	Agency→	CBs	RRB	Co-op Bank	Total
31-03-2012	Rural	50	1	1	52
	Semi Urban	43	8	20	71
	Total	93	9	21	123
31-03-2011	Rural	43	3	11	57
	Semi Urban	39	5	10	54
	Total	82	8	21	111
31-03-2010	Rural	38	5	12	55
	Semi Urban	39	5	10	54
	Total	77	10	22	109
31-03-2009	Rural	38	5	12	55
	Semi Urban	36	5	10	51
	Total	74	10	22	106
31-03-2008	Rural	38	5	12	55
	Semi Urban	33	3	9	45
	Total	71	8	21	100

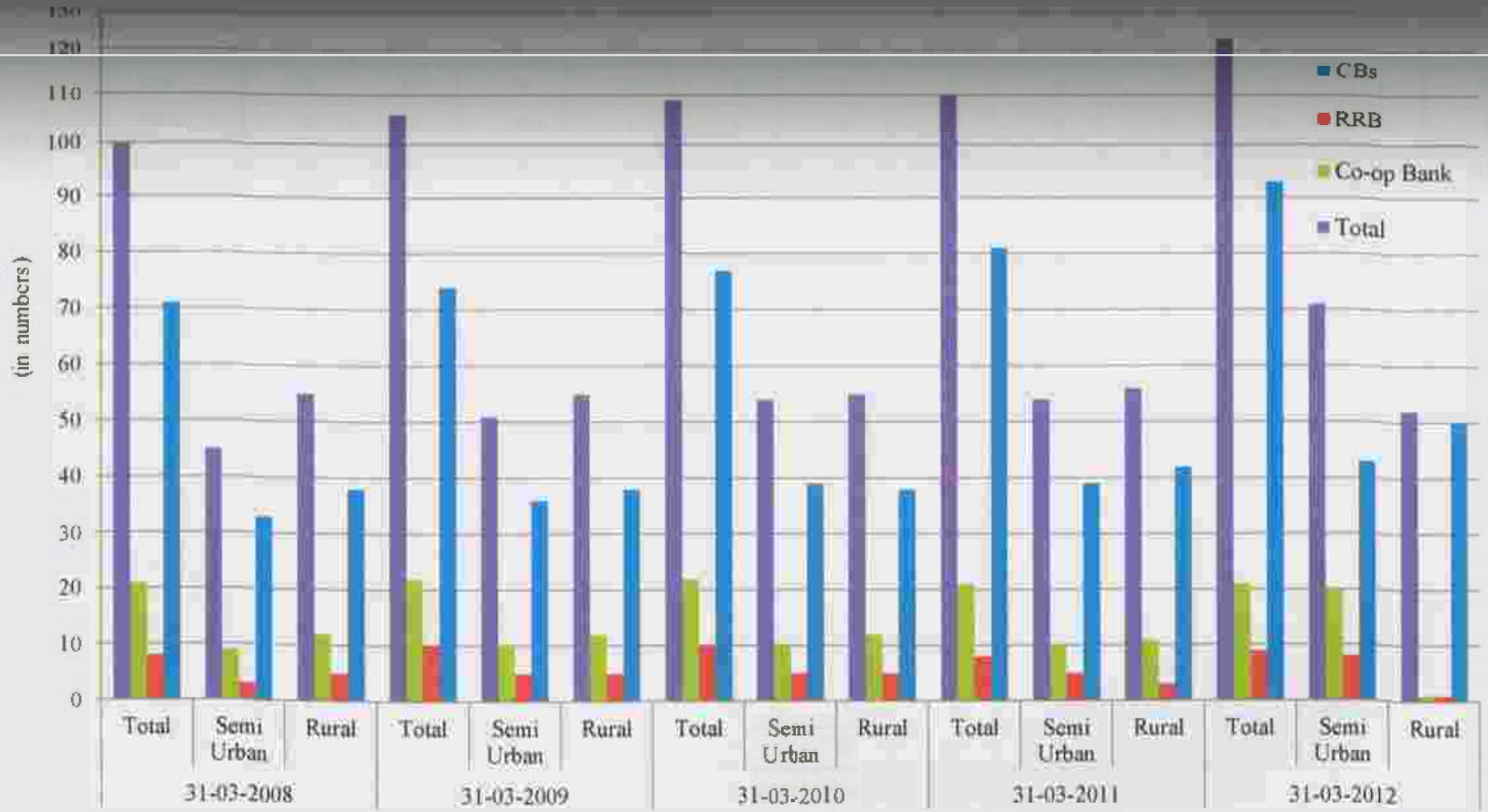


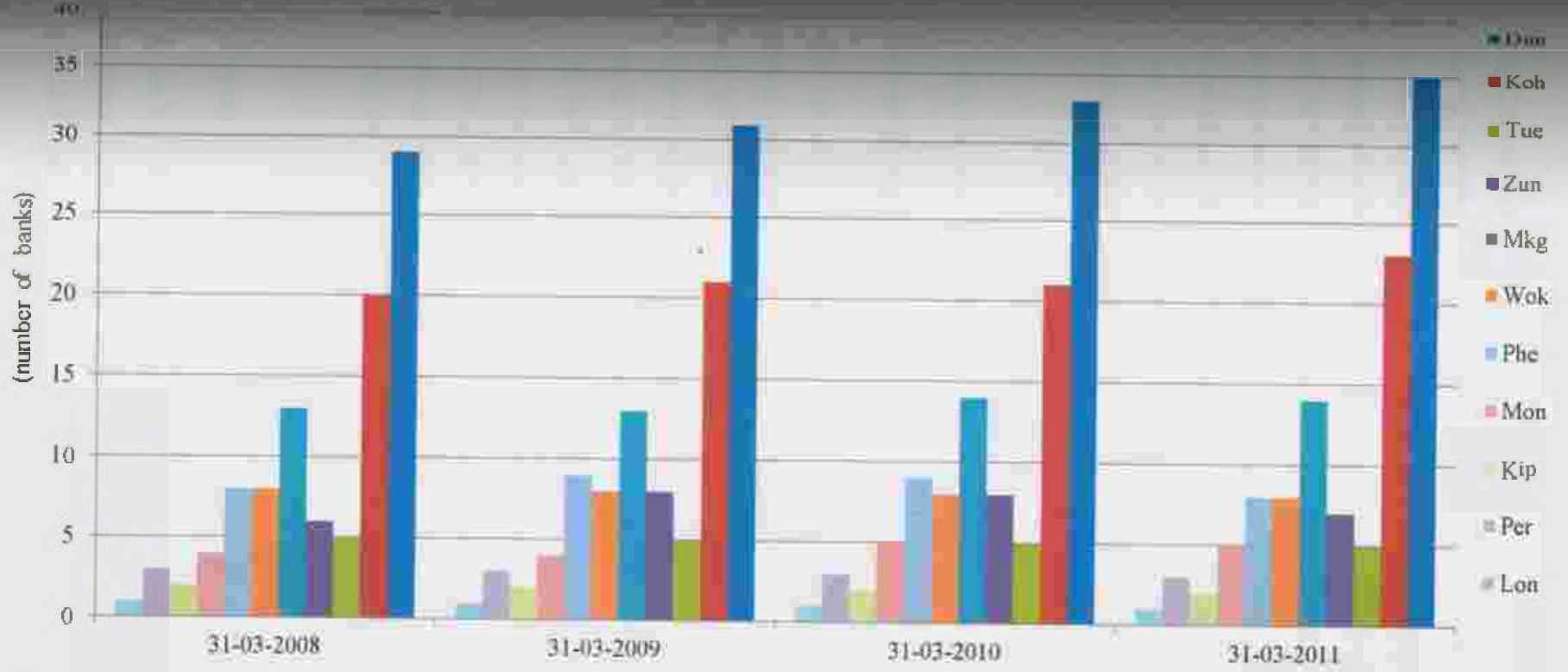
Fig. 5.1. Status of bank branch network in Nagaland

Table 5.3: District-wise distribution of Bank branches in Nagaland

(As on month end)

Year ↓	District →	Dim	Koh	Tue	Zun	Mkg	Wok	Phe	Mon	Kip	Per	Lon	Total
31-03-2011	CBs	28	16	4	5	10	6	5	4	1	2	1	82
	RRB	2	3	0	1	1	1	0	0	0	0	0	8
	SCB	5	4	1	1	3	1	3	1	1	1	0	21
	Total	35	23	5	7	14	8	8	5	2	3	1	111
31-03-2010	CBs	26	14	4	5	10	6	5	4	1	2	1	78
	RRB	2	3	0	2	1	1	1	0	0	0	0	10
	SCB	5	4	1	1	3	1	3	1	1	1	0	21
	Total	33	21	5	8	14	8	9	5	2	3	1	109
31-03-2009	CBs	25	14	4	4	9	6	5	3	1	2	1	74
	RRB	2	3	0	2	1	1	1	0	0	0	0	10
	SCB	4	4	1	2	3	1	3	1	1	1	0	21
	Total	31	21	5	8	13	8	9	4	2	3	1	105
31-03-2008	CBs	23	13	4	4	9	6	5	3	1	2	1	71
	RRB	2	3	0	1	1	1	0	0	0	0	0	8
	SCB	4	4	1	1	3	1	3	1	1	1	0	20
	Total	29	20	5	6	13	8	8	4	2	3	1	99

Dim-Dimapur; Koh-Kohima; Tue-Tuensang; Zun-Zunheboto; Mkg-Mokokchung; Wok-Wokha; Phe-Phek; Kip- Kiphire; Per-Peren; Lon-Longleng



Dim-Dimapur; Koh-Kohima; Tue-Tuensang; Zun-Zunheboto; Mkg-Mokokchung; Wok-Wokha; Phe-Phek; Kip- Kiphire; Per-Peren; Lon-Longleng

Fig. 5.2 District-wise distribution of bank branches in Nagaland

There are 52 bank branches located in rural areas and 71 in semi-urban areas. Data showed that there is a least growth in the bank branches in the past few years as seen in Table 5.1 and Fig. 5.1. The current network of banking in the state is however far from being adequate. Out of the 74 Development Blocks in Nagaland, 32 Blocks are still un-banked. The people living in the un-banked areas have to travel a long way to the nearest banks. The bank branches failed to reach the areas where they are needed the most, the rural areas. Most of the Banks are situated in the commercial hubs like Dimapur, Kohima, Mokokchung and Wokha as given in Table 5.2 and Fig. 5.2.

5.2. Credit, Deposits and Credit-Deposit Ratio in Nagaland

5.2.1. Credit (Loans and Advances)

The status of loan and advances from NABARD in Nagaland over the past years is given in Table 5.3. The total loans and advances outstanding as on March 2012 was found out to be ₹ 1,72,451 lakhs, which was also the highest ever recorded in terms of amount. Examination of the table showed that there is an increase in the overall growth rate from 10.34 per cent in 2010-11 to 16.10 in 2011-12. The major share of advances during the year 2011-12 was released to the Commercial Banks followed by the RRB and then the SCB. The agency-wise break-up indicates that the SCB has the highest growth rate of 59.79 per cent, followed by the RRB with growth rate of 50.00 percentand then the CBs with a growth rate of 13.25 per cent.

5.2.2. Deposits

As on March 2012, the aggregate deposits of all the bank operating in the state stood to ₹ 6,09,869 lakhs, with an overall growth rate of 64.08 per cent from 24.37 per cent in 2010-11, as given in Table 5.4. The RRB with has

Table 5.3. **Status of bank Loans and Advances from NABARD in Nagaland**

(₹ in lakhs)

Agency → / Year ↓	CBs	RRB	SCB	TOTAL
2011 - 2012	1,57,616.00 (13.25)	1,611.00 (50.00)	13,224.00 (59.79)	1,72,451.00 (16.10)
2010 - 2011	1,39,181.00 (9.72)	1,074.00 (23.22)	8,276.00 (20.07)	1,48,531.00 (10.34)
2009 - 2010	1,26,853.19 (18.62)	871.62 (8.56)	6,892.71 (2.28)	1,34,617.52 (17.59)
2008 - 2009	1,06,939.00 (23.68)	802.91 (1.38)	6,739.04 (12.34)	1,14,480.95 (22.76)
2007 - 2008	86,463.00 (35.18)	792.00 (2.19)	5,999.00 (8.13)	93,254.00 (32.68)
2006 - 2007	63,959.31 (47.95)	775.00 (9.77)	5,548.13 (24.22)	70,282.44 (45.20)

(Figure in the parentheses indicates the growth rate in percentage)

Table 5.4. **Status of bank deposits in Nagaland**

(₹ in lakhs)

Agency → / Year ↓	CBs	RRB	SCB	TOTAL
2011 - 2012	5,67,620.00 (13.92)	5,755.00 (36.41)	36,494.00 (13.76)	6,09,869.00 (64.08)
2010 - 2011	4,98,268.00 (25.07)	4,219.00 (27.19)	32,080.00 (14.12)	5,34,567.00 (24.37)
2009 - 2010	3,98,405.77 (20.13)	3,316.96 (37.18)	28,111.55 (35.63)	4,29,834.28 (21.15)
2008 - 2009	3,31,656.00 (27.76)	2,418.00 (40.01)	20,727.00 (11.72)	3,54,801.00 (26.77)
2007 - 2008	2,59,600.00 (16.75)	1,727.00 (11.28)	18,552.00 (13.56)	2,79,879.00 (16.50)
2006 - 2007	2,22,352.84 (13.21)	1,552.00 (-3.53)	16,337.31 (12.61)	2,40,242.15 (13.04)

(Figure in the parentheses indicates the growth rate in percentage)

the highest growth rate of 36.41 per cent followed by the Commercial Banks recorded a growth rate of 13.92 per cent and then the SCB with 13.76 per cent. The major share of deposits is seen from the Commercial banks with deposits of ₹ 5,67,620 lakhs, followed by SCB with ₹ 36,494 lakhs and the RRB with 15755 lakhs.

5.12.3. Credit-Deposit Ratio

The Credit-Deposit (CD) ratio of all the banks over the past years in the state is given in Table 5.5 and Fig. 5.3. It was observed that the overall CD ratio as on March 2012 has slightly increased from 27.79 during 2010-11 to 28.28. Bank-wise analysis revealed that only the SCB has an increase in the CD ratio to 36.24 from 25.80 during 2010-11. On analysing of the table, the SCB has the highest credit deposit growth rate of 40.46 per cent. This indicates that the SCB had performed better than their counterpart in terms of bank credits and deposits.

5.13. Bank Annual Credit Plan (ACP) in Nagaland

The banks in the State have been financing production and investment activities in the farm as well as the non-farm sectors. The Annual Credit Plan of the entire banks in Nagaland is given in Table 5.6 and Fig. 5.4. The Annual Credit Plan was estimated to the tune of ₹ 32,479.32 lakhs during the year 2011-12, for the disbursement to the priority sectors. The overall flow of credit during the year 2011-12 showed that the credit plan for Agri and Allied sectors had increased (63.54 per cent), while other sectors (22.30 per cent) and Industries (14.16 per cent) had decreased.

Table 5.5. Status of bank Credit-Deposit Ratio in Nagaland (in percentage)

Agency → / Year ↓	CBs	RRB	SCB	TOTAL
2011 - 2012	27.77 (-0.59)	27.99 (9.97)	36.24 (40.46)	28.28 (1.77)
2010 - 2011	27.93 (-12.27)	25.46 (-3.13)	25.80 (5.22)	27.79 (-11.28)
2009 - 2010	31.84 (-1.25)	26.28 (-20.86)	24.52 (-24.59)	31.32 (-2.94)
2008 - 2009	32.24 (-3.19)	33.21 (-27.59)	32.51 (0.55)	32.27 (-3.16)
2007 - 2008	33.31 (15.79)	45.86 (-8.16)	32.34 (-4.78)	33.32 (13.89)
2006 - 2007	28.76 (30.68)	49.94 (13.79)	33.96 (10.31)	29.25 (28.45)

(Figure in the parentheses indicates the growth rate in percentage)

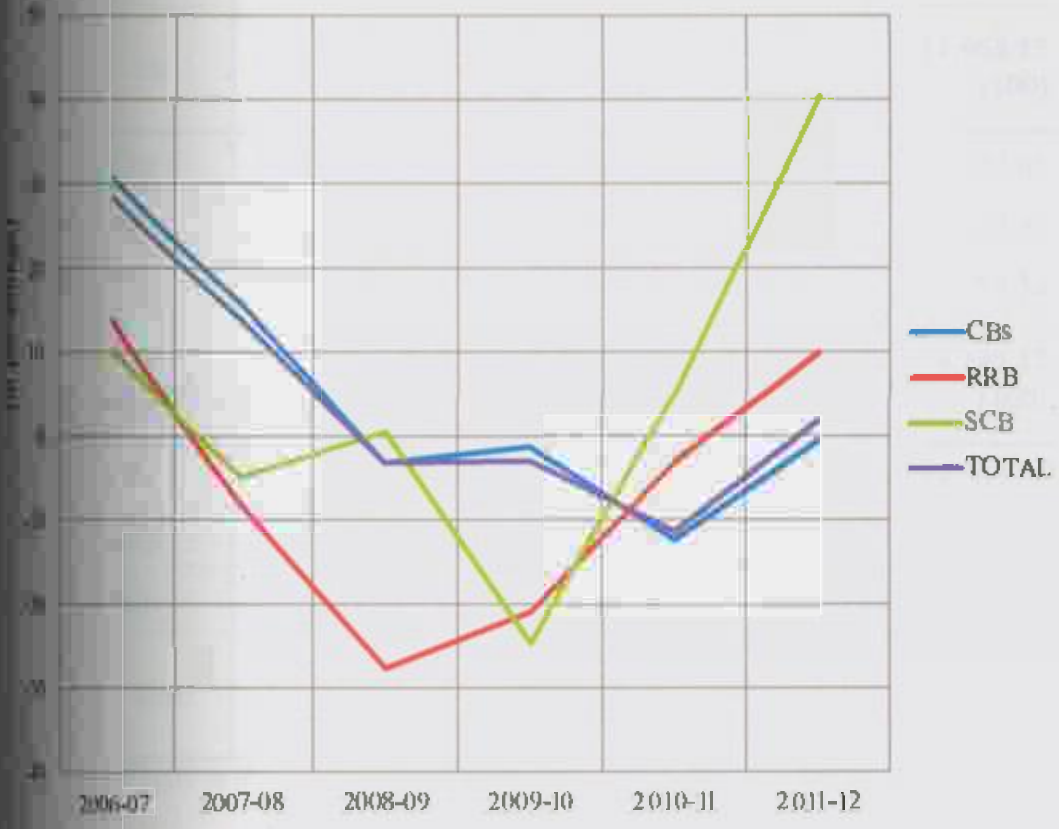


Fig. 5.3. Status of Credit-Deposit growth rate in Nagaland

Table 5.6. **Distribution of bank Annual Credit Plan in Nagaland** (₹ in lakhs)

Year ↓	Agency	Agri & Allied	Industries	Others	Total (Achievements)
2011–2012	CBs	18,950.74	4,545.98	5,793.19	29,289.91
	RRB	1,396.04	53.63	1,096.66	2,546.33
	SCB	290.32	0.00	352.76	643.08
	Total	20,637.10 (63.54)	4,599.61 (14.16)	7,242.61 (22.30)	32,479.32 (100)
2010–2011	CBs	2,953.00	2,879.00	4,756.00	10,588.00
	RRB	109.00	0.00	363.00	472.00
	SCB	604.00	29.00	509.00	1,142.00
	Total	3,666.00 (30.04)	2,908.00 (23.83)	5,628.00 (46.12)	12,202.00 (100)
2009–2010	CBs	3,326.86	1,771.55	6,236.75	11,335.16
	RRB	131.26	0.00	117.27	248.53
	SCB	379.43	0.00	0.00	379.43
	Total	3,837.55 (32.08)	1,771.55 (14.81)	6,354.02 (53.11)	11,963.12 (100)
2008–2009	CBs	2,543.57	1,631.68	3,548.40	7,723.65
	RRB	83.10	0.00	111.28	194.38
	SCB	224.14	0.00	0.00	224.14
	Total	2,850.81 (35.01)	1,631.68 (20.04)	3,659.68 (44.95)	8,142.17 (100)
2007–2008	CBs	3,206.24	1,858.00	7,000.94	12,065.18
	RRB	23.35	0.00	23.45	46.80
	SCB	237.34	0.00	0.00	237.34
	Total	3,466.93 (28.07)	1,858.00 (15.05)	7,024.39 (56.88)	12,349.32 (100)

(Figure in the parentheses indicates the percentage of credit plan)

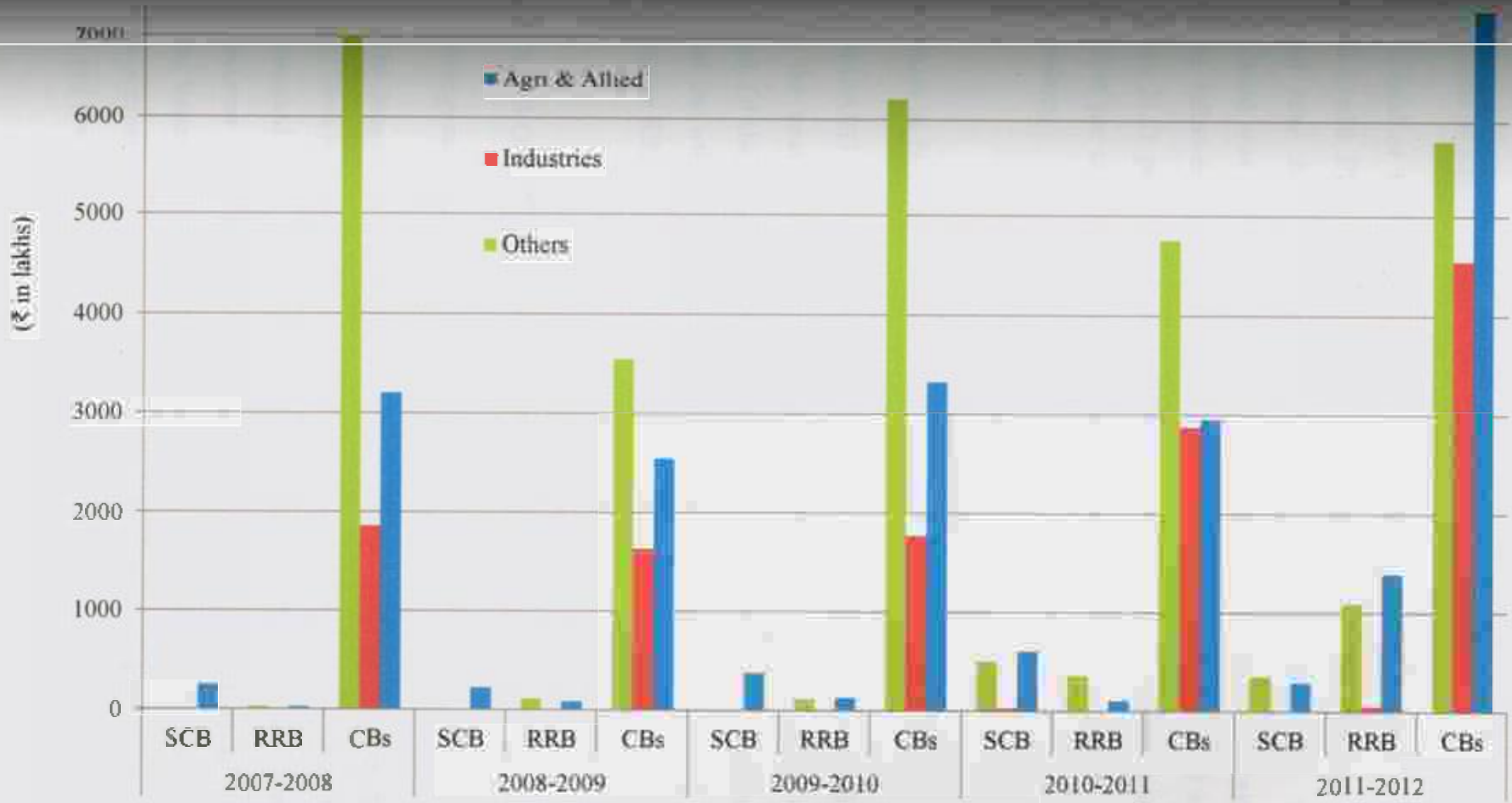


Fig. 5.4. Distribution of sector-wise share of Annual Credit Plan in Nagaland

11.4. Status of Kisan Credit Card (KCC) in Nagaland

A total of 16,800 numbers of Kisan Credit Card were fixed under the Annual Credit Plan with a credit sanction of ₹ 3,926.15 lakhs during the financial year 2011-12 as given in Table 5.7 and Fig. 5.5. The highest achievement was made by the CBs whose achievement percentage was 59.71 per cent, followed by the SCB with 51.06 per cent achievement and the RRB with only 21.71 per cent achievement. The overall achievement was found out to be 55.40 per cent which is only half the mark of the total sanction amount and numbers.

11.5. Share of NABARD refinance in Nagaland

NABARD refinance support for meeting investment credit of banks during the year 2011-12 was to the tune of ₹ 615.04 lakhs, as given in Table 5.8. Of the total amount, 81 per cent (₹ 500 lakhs) was refinanced to the SCB and the other 19 per cent (₹ 115.04 lakhs) was refinanced to the CBs, whereas, the RRB was not refinanced as shown in Fig. 5.6.

12. STATUS OF CO-OPERATIVE BANK IN NAGALAND

12.1. Management and Meetings

The Nagaland State Co-operative Bank management is governed by Board of Directors comprising of 16 Directors, of whom the State Government is represented by the Addl. Chief Secretary & Finance Commissioner, Commissioner & Secretary Co-operation & the Registrar of Co-operative Societies, Representative from NABARD as ex-officio Member, besides one Director representing Primary Agricultural Co-operative Societies from each District and the Managing Director of NSCB, who is the Member Secretary.

Table 5.7. Status of Kisan Credit Card (KCC) in Nagaland

Year	Agency	Target (in nos)	Achieved (in nos)	Achievement (in %)	Credit Sanctioned (₹ in lakhs)
[illegible]-2012	CBs	16,800.00	10,032.00	59.71	3,926.15
	RRB	1,700.00	369.00	21.71	91.31
	SCB	3,500.00	1,787.00	51.06	233.56
	Total	22,000.00	12,188.00	55.40	4,251.02
[illegible]-2011	CBs	8,400.00	3,092.00	36.81	1,072.00
	RRB	670.00	988.00	147.46	144.08
	SCB	1,730.00	1,959.00	113.24	278.25
	Total	10,800.00	6,039.00	55.92	1,494.33
[illegible]-2010	CBs	8130.00	5,369.00	66.04	1,461.33
	RRB	450.00	561.00	124.67	114.90
	SCB	1,645.00	449.00	27.29	44.26
	Total	10,225.00	6,379.00	62.39	1,620.49
[illegible]-2009	CBs	6,630.00	1,078.00	16.26	293.29
	RRB	1,200.00	249.00	20.75	61.85
	SCB	0.00	233.00	-	16.35
	Total	7,830.00	1,560.00	1992	371.49
[illegible]-2008	CBs	6,356.00	1,699.00	26.73	389.09
	RRB	387.00	59.00	15.25	14.75
	SCB	1,000.00	72.00	7.20	7.20
	Total	7,743.00	1,830.00	23.63	411.04

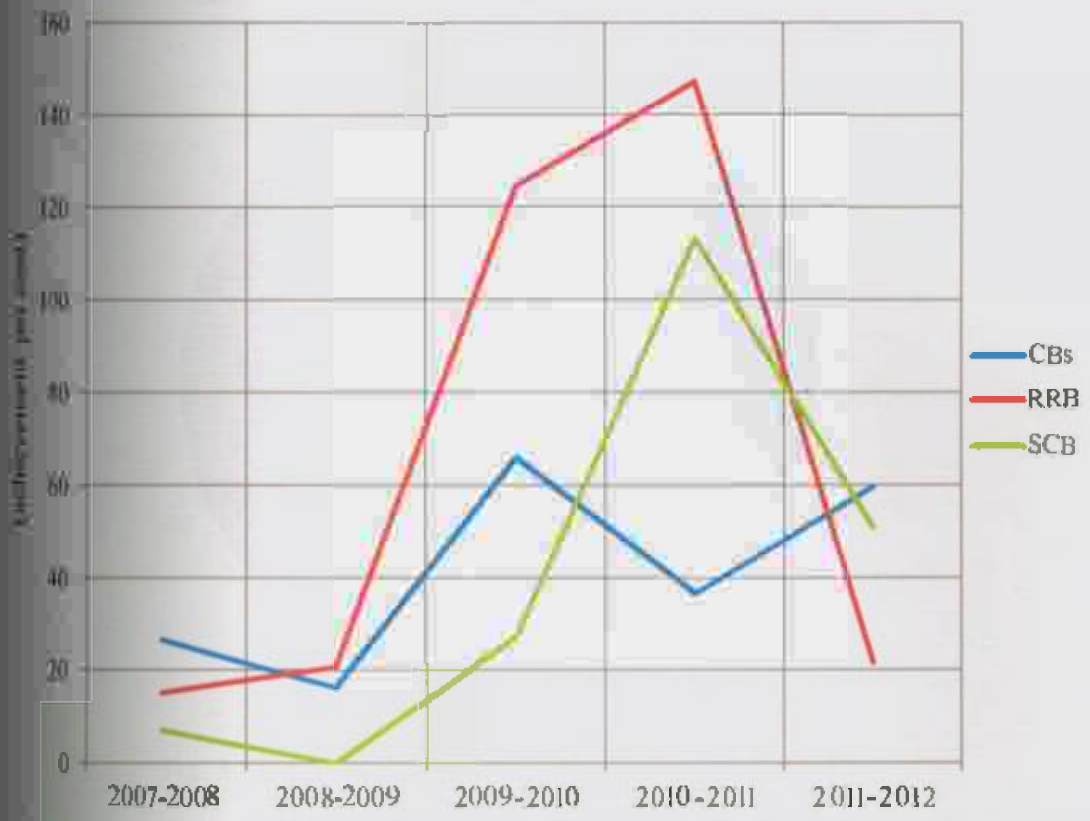


Fig. 5.5. Kisan Credit Card scheme achievement in Nagaland

Table 5.8. Agency-wise share of NABARD refinance in Nagaland (₹in lakhs)

Year	CBs	RRB	SCB	Total
2010 - 2011	115.04 (59.17)	0.00 (0.00)	500.00 (40.00)	615.04 (43.59)
2009 - 2010	46.97 (-528.06)	0.00 (0.00)	300.00 (10000)	346.97 (14.98)
2008 - 2009	295.00 (5 1.02)	0.00 (0.00)	0.00 (0.00)	295.00 (5 1.02)
2007 - 2008	144.50 (-38.64)	0.00 (0.00)	0.00 (0.00)	144.50 (-38.64)
2006 - 2007	200.33 (32.12)	0.00 (0.00)	0.00 (0.00)	200.33 (32.12)

(Figure in the parentheses indicates the growth rate in percentage)

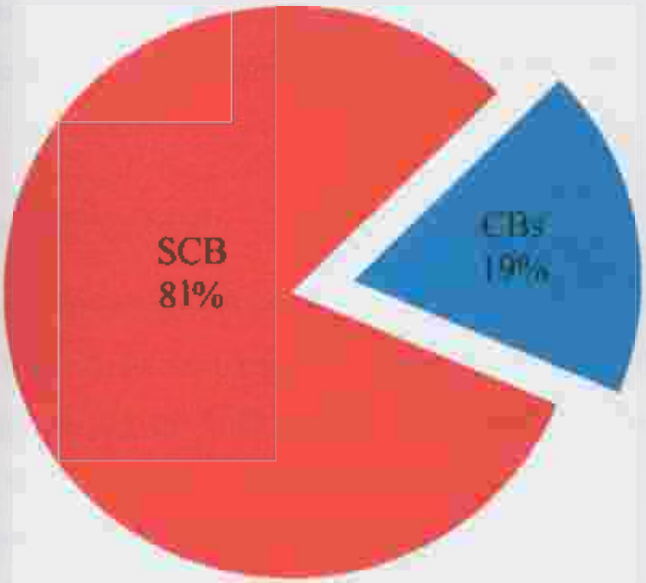


Fig. 5.6. Share of NABARD refinance during 2010-11

Table 5.9. Meetings held by the SCB during the past years (in numbers)

Meeting Held	2007-08	2008-09	2009-10	2010-11	2011-12
Board Meeting	2	4	5	6	3
Executive Committee	2	-	-	2	-
BWC	1	2	1	1	2
Central Loan Committee	1	1	1	1	2
Loan Committee	-	2	1	1	1
Audit Committee	-	1	1	1	1
Audit Committee	-	2	1	1	1
Total	6	12	10	13	10

During the past few years the meetings of the Board of Directors, Committees & Sub-Committees held is given in Table 5.9.

5.2.2. Performance of the SCB

The financial highlights and progress achieved during the past years is detailed under Table 5.10 and Fig. 5.7. It was observed that the SCB had an average working capital of ₹ 38,854.53 lakhs during the year 2011-12. The investment was seen to have a negative growth rate of -2.66 per cent, but the CD Ratio was recorded the highest over the years with 36.00 per cent during the year 2011-12 with a growth rate of 41.29 per cent which was a drastic improvement over the previous year (2010-11), with a growth rate of only 1.92 per cent. The recovery performance was also observed to have improved, with a recovery performance of 60.78 per cent. The overall Net Profit-Loss was found to be highest during the year 2011-12 with a net profit growth rate of 42.09 per cent. The accumulated loss during 2011-12 was found to be -1.98 and increasing since the year 2009-10 to the present year 2011-12.

5.2.2.1. Membership

During the financial year 2011-12 the total membership rose to 13,150 with a growth rate of 15.05 per cent from 11,430 with a growth rate of 7.12 percent during 2010-11. The highest growth rate was recorded highest in all these years, during the 2011-12.

5.2.2.2. Sources of Funds

Funds required for lending and investments are raised through owned funds, Public deposits and borrowings from the State Govt., and NABARD.

The share capital also was observed to have increased with a growth rate from 3.54 per cent (₹ 3,290.80 lakhs) during 2010-11 to 7.88 per cent (₹ 3,549.49) during 2011-12. During the year 2011-12, Capital Fund of the Bank was sourced from Share capital contributed by the State Govt., amounting to ₹ 2,724.21 lakhs, Co-operative Institutions amounting to ₹ 265.34 lakhs, Nominal members contributing ₹ 555.69 lakhs and share capital deposit of ₹ 4.25 lakhs. It is evident from Fig. 5.8 that, the highest share of capitals in all the years comes from the contribution of the State Government.

The total reserves was found to be highest during the year 2011-12 which stood at ₹ 382.79 lakhs (growth rate of 7.29 per cent) as on 31 March 2012 but the growth rate was found highest during the year 2007-08 with a growth rate of 36.39 per cent.

The own funds was found out to be ₹ 3,932.28 with a growth rate of 7.84 per cent as on March 2012 which was also recorded the highest.

Deposits form the biggest share of resource of the Bank. During the period under report, the Bank with its existing deposit schemes, continue to mobilize a sizable deposit. The deposits of the Bank have increased from ₹ 32,310.50 lakhs as on March 2011 to ₹ 36,683.45 lakhs as on March 2012, making it the highest total deposits (growth rate of 13.53 per cent). It was observed that though the total deposits have increased, the growth rate of total deposits have been decreasing during the past years.

Under borrowings, it was found out that there has been only a marginal growth in the overall borrowings during the year 2011-12, from ₹ 1,013.82 lakhs (96.68 per cent growth rate) in the previous year to ₹ 1,027.98 lakhs (1.40 per cent growth rate) as on March 2012. The highest source of borrowings during the year 2011-12 was from the NABARD ARF (Refinance) to the tune of ₹ 580 lakhs, followed by NABARD SAO with ₹ 375.10 lakhs and then by KSTFDC borrowings of ₹ 69.13 lakhs.

Table 5.10. Co-operative Bank performance in Nagaland (₹in lakhs)

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Membership Total Nos.					
(a) Co-operatives	2,975 (1.22)	3,029 (1.82)	3,121 (3.04)	3,427 (9.80)	3,571 (4.20)
(b) State Govt.	1 (0.00)	1 (0.00)	1 (0.00)	1 (0.00	1 (0.00)
(c) Outside Co-operative fold	6,662 (12.74)	7,528 (13.00)	7,962 (5.77)	8,002 (0.50)	9,578 (19.70)
(d) Total Nos.	9,638 (8.92)	10,558 (9.55)	11,084 (4.98)	11,430 (3.12)	13,150 (15.05)
Source of Fund (in ₹)					
(a) Share Capital	3,062.89 (1.80)	3,117.49 (1.78)	3,177.69 (1.93)	3,290.08 (3.54)	3,549.49 (7.88)
(a) State Govt.	2,652.21 (0.00)	2,679.21 (1.02)	2,679.21 (0.00)	2,679.21 (0.00)	2,724.21 (1.68)
(b) Co-op Institutions	2,130.7 (2.86)	218.72 (2.65)	227.01 (3.79)	251.15 (10.63)	265.34 (5.65)
(c) Nominal Members	197.61 (32.30)	219.56 (11.11)	271.47 (23.64)	355.47 (30.94)	555.69 (56.33)
(b) Share Capital Deposit	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4.25 (0.00)	4.25 (0.00)
(b) Reserves (free)	259.91 (36.39)	315.34 (21.33)	329.31 (4.43)	356.77 (8.34)	382.79 (7.29)
(c) Own Funds	3,322.80 (3.86)	3,432.83 (3.31)	3,507.00 (2.16)	3,646.35 (3.97)	3,932.28 (7.84)
(d) Deposits (Total)	18,726.34 (-28.67)	22,597.41 (20.67)	28,111.88 (24.40)	32,310.50 (14.94)	36,683.45 (13.53)
(i) Current	1,964.03 (24.09)	2,234.62 (13.78)	1,493.67 (-33.16)	2,214.34 (48.25)	2,454.38 (10.84)
(ii) Savings	9,966.02 (17.90)	12,156.08 (21.98)	15,480.35 (27.35)	17,593.7 (13.65)	20,349.13 (15.66)
(iii) Demand Deposits (1 + 2)	11,930.05 (18.87)	14,390.70 (20.63)	16,974.02 (17.95)	19,808.04 (16.70)	22,803.51 (15.12)
(iv) Time Deposits (3 + 4)	6,796.29 (9.93)	8,206.71 (20.75)	11,137.86 (35.72)	12,502.46 (12.25)	13,879.94 (11.02)
(e) Borrowings (Total)	89.67 (-47.71)	74.39 (-17.04)	515.47 (592.93)	1,013.82 (96.68)	1,027.98 (1.40)

(g) NABARD (SAO)	0.00 (0.00)	0.00 (0.00)	146.34 (0.00)	200.00 (36.67)	375.10 (87.55)
(h) NABARD (ARF)	14.41 (-74.34)	0.00 (0.00)	300.00 (0.00)	740.00 (146.67)	580.00 (-21.62)
(i) NABARD (CDF)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4.69 (0.00)	3.75 (-20.04)
(j) Govt. of Nagaland	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
(k) NSTFDC	75.26 (0.00)	74.39 (-1.16)	69.13 (-7.07)	69.13 (0.00)	69.13 (0.00)
(l) Others	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Working Capital (average in ₹)	18,247.87 (12.47)	21,385.60 (19.94)	27,617.96 (26.19)	33,784.80 (22.33)	38,854.53 (15.01)
Cash & Bank Balances (in ₹)	1,568.36 (117.93)	2,284.94 (45.69)	1,410.24 (-38.28)	1,312.63 (-6.92)	1,864.56 (42.05)
Investments (in ₹)	10,920.74 (9.80)	14,102.51 (29.14)	20,607.77 (46.13)	24,211.86 (17.49)	23,568.54 (-2.66)
Advances (in ₹)	5,919.28 (9.49)	6,339.80 (7.10)	6,892.81 (8.72)	8,232.37 (19.43)	13,209.04 (60.45)
C : D Ratio (in %)	31.61 (-5.16)	28.10 (-11.10)	24.52 (-12.74)	25.48 (3.92)	36.00 (41.29)
Recovery performance (in %)	56.91 (16.71)	59.56 (4.66)	59.88 (0.54)	58.40 (-2.47)	60.78 (4.08)
Overdues (in ₹)	2,310.76 (1.05)	2,096.51 (-9.27)	2,096.67 (0.01)	2,438.88 (16.29)	2,753.13 (12.92)
Net Profit (+) / Loss (-) (in ₹)	24.96 (-106.86)	-1,303.71 (-5,323.20)	50.58 (-103.88)	61.56 (21.71)	87.47 (42.09)
Accumulated Losses (in ₹)	3,217.70 (-0.77)	4,521.41 (40.52)	4,470.83 (-1.12)	4,409.27 (-1.38)	4,321.80 (-1.98)

(Figure in the parentheses indicates the growth rate in percentage)

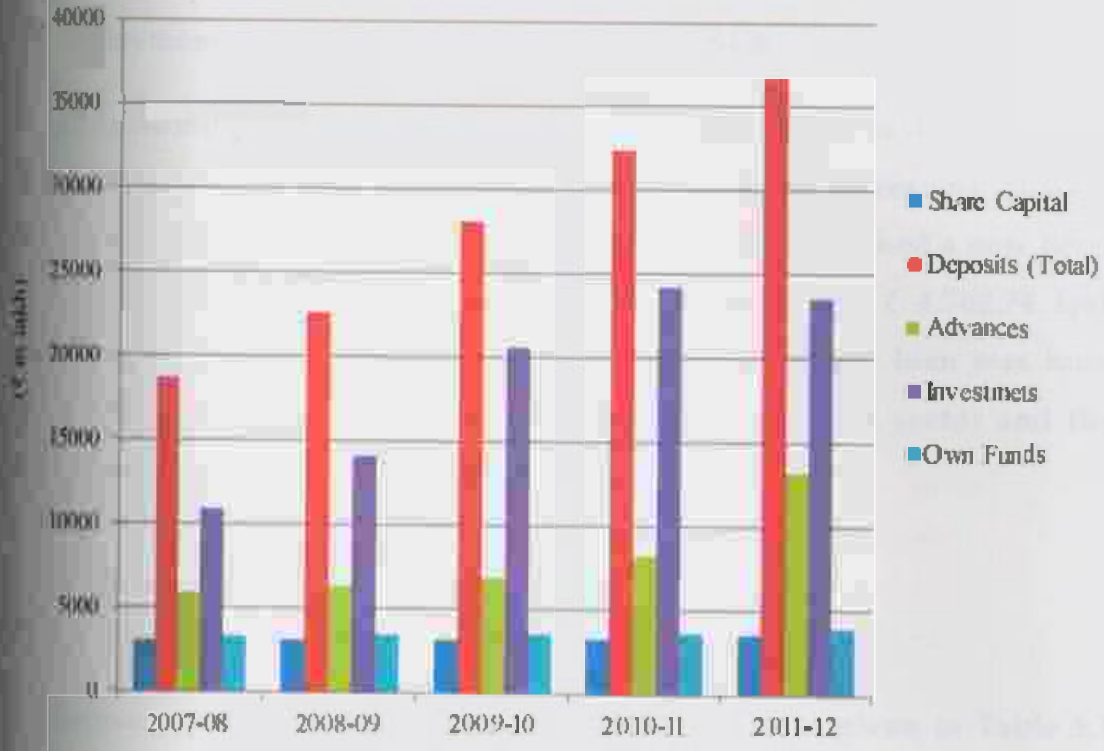


Fig. 5.7. Comparative position of the SCB

Fig. 5.8. Status of share capital of the SCB

5.3.3. Deployment of Loans and Advances by the SCB

The distribution of the annual flow of loan and advances during the past years showed that it is increasing year after year in an increasing order, as given in Table 5.11. The total flow of credit from the SCB reached a new height of ₹ 9,242.91 lakhs during the year 2011-12, while it was ₹ 4,762.74 lakhs during the year 2010-11. The flow of credit to the consumer loan was found highest, followed by cash credit, then agriculture and allied sector and then the SHG for medium term loan, as shown in Fig. 5.9.

5.3.4. Recovery performance of the SCB

Recovery position of the State Cooperative Bank is given in Table 5.12 and Fig. 5.10. It was found out that there was a significantly increase in the recovery of the principal credit distributed from 58.40 per cent as on March 2011 to 60.78 per cent as on March 2012, which was also recorded as the highest ever recorded on recovery. The recovered principal during 2011-12 was found to be ₹ 4,266.24 lakhs with an overdue amount of ₹ 2,753.13 lakhs. The highest interest amount recovered was also during the year 2011-12 amounting to ₹ 1,117.94 lakhs, with an overdue amount of ₹ 1,171.54 lakhs and interest recovery of 48.83 per cent.

5.4. SOCIO-ECONOMIC STATUS OF THE RESPONDENTS

5.4.1. Distribution of respondents according to land holding

The distribution of the respondents according to land holding is given in Table 5.13. There were a total of 120 respondents, 60 respondents from the borrowers and 60 from the non-borrowers. The borrowers had 10 respondents (16.67 per cent) with Marginal land holdings, 40 respondents with small land

Table 5.11. Distribution of SCB annual flow of Loans and Advances (₹in lakhs)

Sr.	Purpose wise credit/ loan	2007-08	2008-09	2009-10	2010-11	2011-12
I	Kharif Crop	169.43	168.65	177.42	255.24	280.11
II	Rabi Crop	16.13	23.53	26.43	6.49	24.10
III	KCC	10.54	17.04	89.39	227.76	268.99
IV	Piggery	17.83	12.05	44.92	95.55	449.40
V	Dairy	13.05	4.65	5.25	2.10	8.30
VI	Fishery	0.27	0.51	2.32	0.50	4.99
VII	Poultry	5.18	1.44	3.83	10.10	1.20
VIII	Other Allied purposes	19.84	29.51	5.05	0	82.37
IX	SRTO	78.84	89.84	228.80	285.76	519.49
X	Rural Housing	418.72	337.32	436.64	636.63	1,719.36
XI	SSI Units	11.64	1.50	6.50	28.70	12.22
XII	Weaving	0.00	0.00	0.00	3.00	0.00
XIII	Business & N-agri loans	72.29	92.71	45.53	312.43	65.79
XIV	Consumer durables/ Service Loan	775.93	841.80	561.34	1,019.63	3,530.36
XV	MT Loan to SHGs	28.86	71.21	97.15	254.74	333.15
XVI	Cash credit & Others	1,628.42	1,816.52	1,652.55	1,624.11	1,943.08
	Total	3,266.97	3,508.28	3,383.12	4,762.74	9,242.91

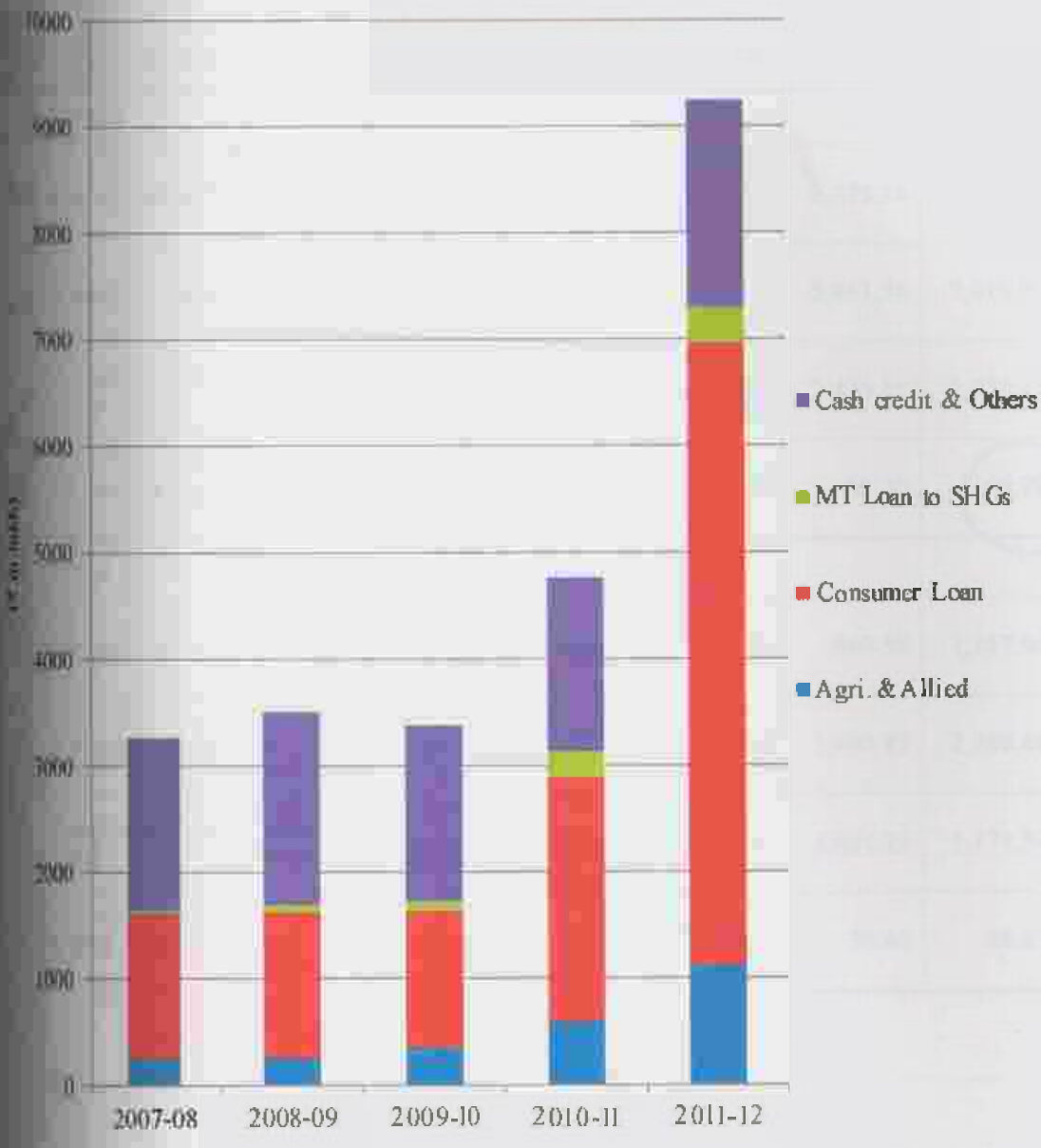


Fig. 5.9 Distribution of the SCB loan

Table 5.12. **Recovery performance of the SCB** (₹in lakhs)

Sl. No.	Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
i	Principal					
(a)	Recovery during the period	3,051.87	308.76	3,128.93	3,423.18	4,266.24
(b)	Demand for the period	5,362.63	5,184.27	5,225.60	5,861.36	7,019.37
(c)	Overdues at the end of the period	2,310.76	4,875.51	2,096.67	2,438.18	2,753.13
(d)	Recovery to demand (%)	56.91	59.56	59.88	58.40	60.78
ii	Interest					
(a)	Collected during the period	802.44	835.76	813.36	669.56	1,117.94
(b)	Demand for the period	1,742.33	1,686.16	1,665.93	1,690.83	2,289.48
(c)	Overdues at the end of the period	939.89	850.40	852.57	1,021.27	1,171.54
(d)	Interest Recovery (%)	46.06	49.57	48.82	39.60	48.83

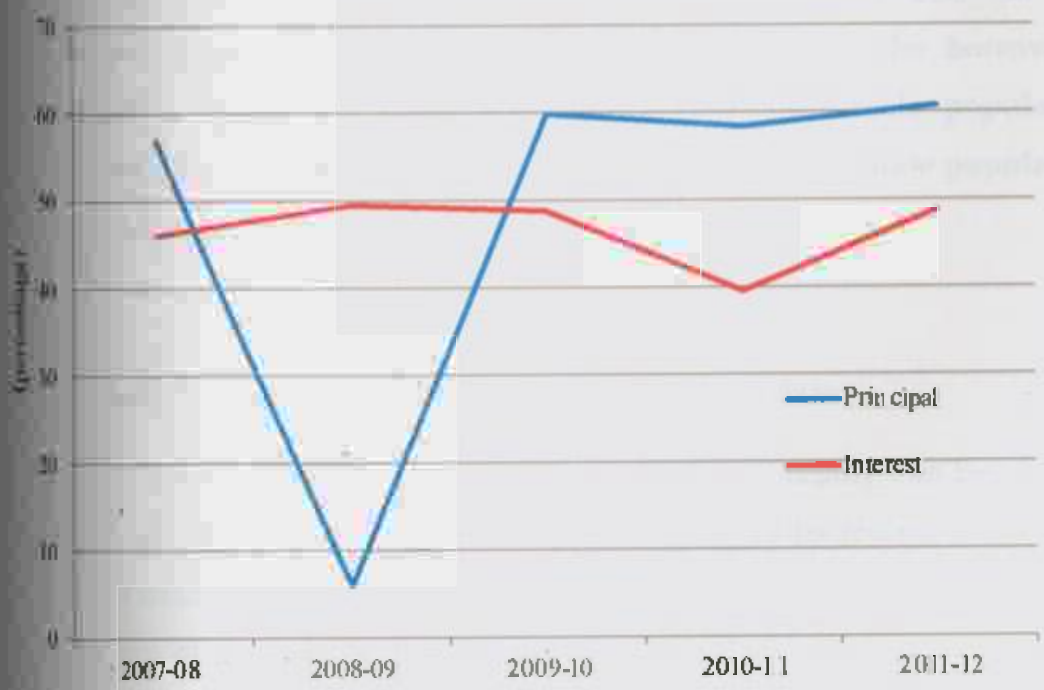


Fig. 5.10. Recovery percentage of the SCB

holdings (66.67 per cent) and 10 respondents with Medium size land holding (16.67 percent). On the other hand the non-borrowers had 8 respondents with Marginal land holding, 32 respondents with Small land holdings (53.33 per cent) and 20 respondents with Medium size land holdings (33.33 per cent).

5.12. Distribution of respondents according to activity

The distribution of the respondents according to activity is given in Table 5.14. Both the borrowers and non-borrowers each had 7 respondents (11.67 per cent) with agricultural based activities, 20 respondents (33.33 per cent) with fishery based activities and 33 respondents (55 per cent) with animal husbandry activities.

5.13. Distribution of respondents' family demography

Family profile of the respondents is given in Table 5.15. The average family size of the borrowers was found to be 5.53 and 4.80 for the non-borrowers in the study area. The table revealed that under borrowers, male population (55.20 per cent) was higher that the female population (44.80 percent). The same applies for the non-borrowers with male population (52.25 per cent) higher than the female (47.74 per cent).

5.14. Distribution of respondents' family educationat status

The educational qualification of the respondents' family can be noticed from Table 5.16. The sample respondent's farm family illiteracy was found out to be 6.18 per cent for the borrowers and 15.63 per cent for the non-borrowers. The proportion of male and female literacy rate under borrowers was found

Table 5.13. Distribution of respondents according to land holding (in ha)

Land Holdings	Category	Borrowers	Non-Borrowers
<0.5	Marginal Group I	10 (16.67)	8 (13.33)
0.5 - 1.0	Small Group II	40 (66.67)	32 (53.33)
1.0 - 2.0	Medium Group III	10 (16.67)	20 (33.33)
Total		60 (100)	60 (100)

(Figure in the parenthesis represents the percentage)

Table 5.14. Distribution of respondents according to activity (in numbers)

	Activities	Group I	Group II	Group III	Total
BORROWERS	Agriculture	0 (0.00)	3 (5.00)	4 (6.67)	7 (11.67)
	Fishery	0 (0.00)	15 (25.00)	5 (8.33)	20 (33.33)
	Animal Husbandry	10 (16.67)	22 (36.67)	1 (1.67)	33 (55.00)
	Total	10 (16.67)	40 (66.67)	10 (16.67)	60 (100)
NON-BORROWERS	Agriculture	3 (5.00)	1 (1.67)	3 (5.00)	7 (11.67)
	Fishery	1 (1.67)	13 (21.67)	6 (10.00)	20 (33.33)
	Animal Husbandry	4 (6.67)	18 (30.00)	11 (18.33)	33 (55.00)
	Total	8 (13.33)	32 (53.33)	20 (33.33)	60 (100)

(Figure in the parenthesis represents the percentage)

Table 5.15. **Distribution of respondents' family demography** (in numbers)

Category		Sample Size	Male	Female	Total	Average
Land Holding	Marginal	10 (16.67)	27 (8.14)	23.5 (7.09)	50.5 (15.23)	5.05
	Small	40 (66.67)	126.5 (38.16)	103 (31.07)	229.5 (69.23)	5.74
	Medium	10 (16.67)	29.5 (8.90)	22 (6.64)	51.5 (15.54)	5.15
	Total	60 (100)	183 (55.20)	148.5 (44.80)	331.5 (100)	5.53
Crop Production	Marginal	8 (13.33)	25 (8.68)	19 (6.60)	44 (15.28)	5.50
	Small	32 (53.33)	79.5 (27.60)	77 (26.74)	156.5 (54.34)	4.89
	Medium	20 (33.33)	46 (15.97)	41.5 (14.41)	87.5 (30.38)	4.38
	Total	60 (100)	150.5 (52.25)	137.5 (47.74)	288 (100)	4.80

(Figure in the parentheses represents the percentage)

Table 5.16: Distribution of respondents' family educational status

(in numbers)

Groups		Total Sample size	Illiterate			Literate											
						Primary			High School			Graduate & above			Total		
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	50.5 (15.23)	3 (0.90)	2.5 (0.75)	5.5 (1.66)	8 (2.41)	3 (0.90)	11 (3.32)	11 (3.32)	15 (4.52)	26 (7.84)	5 (1.51)	3 (0.90)	8 (2.41)	27 (8.14)	23.5 (7.09)	45 (13.57)
	Group II	229.5 (69.23)	6.5 (1.96)	5.5 (1.66)	12 (3.62)	37 (11.16)	25 (7.54)	62 (18.70)	59 (17.80)	52.5 (15.84)	111.5 (33.63)	24 (7.24)	20 (6.03)	44 (13.27)	126.5 (38.16)	103 (31.07)	217.5 (65.61)
	Group III	51.5 (15.54)	3 (0.90)	0 (0.00)	3 (0.90)	7 (2.11)	3 (0.90)	10 (3.02)	11.5 (3.47)	11 (3.32)	22.5 (6.79)	8 (2.41)	8 (2.41)	16 (4.83)	29.5 (8.90)	22 (6.64)	48.5 (14.63)
	Total	331.5 (100)	12.5 (3.77)	8 (2.41)	20.5 (6.18)	52 (15.69)	31 (9.35)	83 (25.04)	81.5 (24.59)	78.5 (23.68)	160 (48.27)	37 (11.16)	31 (9.35)	68 (20.51)	183 (55.20)	148.5 (44.80)	311 (93.82)
NON-BORROWERS	Group I	44 (15.28)	2 (0.69)	7 (2.43)	9 (3.13)	12 (4.17)	3 (1.04)	15 (5.21)	9 (3.13)	6 (2.08)	15 (5.21)	2 (0.69)	3 (1.04)	5 (1.74)	25 (8.68)	19 (6.60)	35 (12.15)
	Group II	156.5 (54.34)	9.5 (3.30)	11 (3.82)	20.5 (7.12)	34 (11.81)	26 (9.03)	60 (20.83)	29 (10.07)	31 (10.76)	60 (20.83)	7 (2.43)	9 (3.13)	16 (5.56)	79.5 (27.60)	77 (26.74)	136 (47.22)
	Group III	87.5 (30.38)	6 (2.08)	9.5 (3.30)	15.5 (5.38)	18 (6.25)	16 (5.56)	34 (11.81)	16 (5.56)	12 (4.17)	28 (9.72)	6 (2.08)	4 (1.39)	10 (3.47)	46 (15.97)	41.5 (14.41)	72 (25.00)
	Total	288 (100)	17.5 (6.08)	27.5 (9.55)	45 (15.63)	64 (22.22)	45 (15.63)	109 (37.85)	54 (18.75)	49 (17.01)	103 (35.76)	15 (5.21)	16 (5.56)	31 (10.76)	150.5 (52.26)	137.5 (47.74)	243 (84.38)

M- Male; F- Female; T- Total

(Figure in the parentheses represents the percentage)

to be 55.20 per cent for male and 44.80 per cent for female, whereas for the non-borrowers it was found out to be 52.74 per cent for male and 47.74 per cent for the female. This depicts that male literates was found to be higher than females. On the type of education level attained, High School level was found to be prevalent (48.27 per cent) under borrowers and Primary schooling (37.85 percent) under non-borrowers.

5.15. Occupation of the respondents' family

The occupation of the respondents' family is given in Table 5.17.1 and Table 5.17.2. It was found out that the borrowers main occupation was agriculture (44.77 per cent) and also with a dominant agriculture as their secondary occupation (70.93 per cent). Under non-borrowers agriculture was found out to be their primary occupation (48.70 per cent) and also their secondary occupation (41.75 per cent). These findings revealed that agricultural activity played a dominant role in the study area.

5.16. Work force of the respondents' family

A perusal of Table 5.18 reveals the work force of the respondents. The total work force of the borrowers was found to be 81.60 per cent, contributed by male with 42.84 per cent and female with 38.76 per cent of workers of the total borrowers' population. For the non-borrowers total workforce was found out to be 78.13 per cent, contributed by 42.01 per cent male workers and 36.11 per cent female workers. The male workers in both the case was found to be higher than the female workers.

Table 5.1.1. Distribution of respondents' family Primary Occupation

GROUPS		AGRI			BUS			SER			OTH			Total		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	4 (2.33)	6 (3.49)	10 (5.81)	5 (2.91)	5 (2.91)	10 (5.81)	2 (1.16)	0 (0.00)	2 (1.16)	1 (0.58)	1.5 (0.87)	2.5 (1.45)	12 (6.98)	12.5 (7.27)	24.5 (14.24)
	Group II	27 (15.70)	32 (18.60)	59 (34.30)	11 (6.40)	16 (9.30)	27 (15.70)	18 (10.47)	8 (4.65)	26 (15.12)	5.5 (3.20)	3 (1.74)	8.5 (4.94)	61.5 (35.76)	59 (34.30)	120.5 (70.06)
	Group III	5 (2.91)	3 (1.74)	8 (4.65)	5 (2.91)	5 (2.91)	10 (5.81)	4 (2.33)	3 (1.74)	7 (4.07)	2 (1.16)	0 (0.00)	2 (1.16)	16 (9.30)	11 (6.40)	27 (15.70)
	TOTAL	36 (20.93)	41 (23.84)	77 (44.77)	21 (12.21)	26 (15.12)	47 (27.33)	24 (13.95)	11 (6.40)	35 (20.35)	8.5 (4.94)	4.5 (2.62)	13 (7.56)	89.5 (52.03)	82.5 (47.97)	172 (100)
NON-BORROWERS	Group I	3 (1.55)	4 (2.07)	7 (3.63)	7 (3.63)	0 (0.00)	7 (3.63)	1 (0.52)	1 (0.52)	2 (1.04)	5 (2.59)	7 (3.63)	12 (6.22)	16 (8.29)	12 (6.22)	28 (14.51)
	Group II	29 (15.03)	23 (11.92)	52 (26.94)	11 (5.70)	8 (4.15)	19 (9.84)	4 (2.07)	4 (2.07)	8 (4.15)	9.5 (4.92)	14 (7.25)	23.5 (12.18)	53.5 (27.72)	49 (25.39)	102.5 (53.11)
	Group III	18 (9.33)	17 (8.81)	35 (18.13)	9 (4.66)	7 (3.63)	16 (8.29)	4 (2.07)	1 (0.52)	5 (2.59)	1 (0.52)	5.5 (2.85)	6.5 (3.37)	32 (16.58)	30.5 (15.80)	62.5 (32.38)
	TOTAL	50 (25.91)	44 (22.80)	94 (48.70)	27 (13.99)	15 (7.77)	42 (21.76)	9 (4.66)	6 (3.11)	15 (7.77)	15.5 (8.03)	26.5 (13.73)	42 (21.76)	101.5 (52.59)	91.5 (47.41)	193 (100)

Agr- Agriculture; Ser- Service; Bus- Business; Oth- Others

(Figure in the parentheses represents the percentage)

Table 5.12.2: Distribution of respondents' family Secondary Occupation

On numbers

GROUPS		AGR			BUS			OTH			Total		
		M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	8 (4.65)	10 (5.81)	18 (10.47)	3 (1.74)	1 (0.58)	4 (2.33)	1 (0.58)	1.5 (0.87)	2.5 (1.45)	12 (6.98)	12.5 (7.27)	24.5 (14.24)
	Group II	42 (24.42)	46 (26.74)	88 (51.16)	14 (8.14)	10 (5.81)	24 (13.95)	5.5 (3.20)	3 (1.74)	8.5 (4.94)	61.5 (35.76)	59 (34.30)	120.5 (70.06)
	Group III	8 (4.65)	8 (4.65)	16 (9.30)	6 (3.49)	3 (1.74)	9 (5.23)	2 (1.16)	0 (0.00)	2 (1.16)	16 (9.30)	11 (6.40)	27 (15.70)
	TOTAL	58 (33.72)	64 (37.21)	122 (70.93)	23 (13.37)	14 (8.14)	37 (21.51)	8.5 (4.94)	4.5 (2.62)	13 (7.56)	89.5 (52.03)	82.5 (47.97)	172 (100)
NON-BORROWERS	Group I	5 (2.58)	4 (2.06)	9 (4.64)	5 (2.58)	5 (2.58)	10 (5.15)	6 (3.09)	3 (1.55)	9 (4.64)	16 (8.25)	12 (6.19)	28 (14.43)
	Group II	23 (11.86)	18 (9.28)	41 (21.13)	23 (11.86)	10 (5.15)	33 (17.01)	7.5 (3.87)	21 (10.82)	28.5 (14.69)	53.5 (27.58)	49 (25.26)	102.5 (52.84)
	Group III	18 (9.28)	13 (6.70)	31 (15.98)	9 (4.64)	9 (4.64)	18 (9.28)	5 (2.58)	9.5 (4.90)	14.5 (7.47)	32 (16.49)	31.5 (16.24)	63.5 (32.73)
	TOTAL	46 (23.71)	35 (18.04)	81 (41.75)	37 (19.07)	24 (12.37)	61 (31.44)	18.5 (9.54)	33.5 (17.27)	52 (26.80)	101.5 (52.31)	92.5 (47.68)	194 (100)

Agr- Agriculture; Ser- Service; Bus- Business; Oth- Others

(Figure in the parentheses represents the percentage)

Table 5.18. Distribution of respondents' family work force

(in numbers)

	GROUPS	Workers			Helpers			Non-workers			Total Work Force		
		M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	12 (3.62)	12 (3.62)	24 (7.24)	9 (2.71)	8 (2.41)	17 (5.13)	6 (1.81)	3.5 (1.06)	9.5 (2.87)	21 (6.33)	20 (6.03)	41 (12.37)
	Group II	57 (17.19)	57.5 (17.35)	114.5 (34.54)	40 (12.07)	31 (9.35)	71 (21.42)	28.5 (8.60)	15 (4.52)	43.5 (13.12)	97 (29.26)	88.5 (26.70)	185.5 (55.96)
	Group III	15 (4.52)	12 (3.62)	27 (8.14)	9 (2.71)	8 (2.41)	17 (5.13)	6 (1.81)	2 (0.60)	8 (2.41)	24 (7.24)	20 (6.03)	44 (13.27)
	TOTAL	84 (25.34)	81.5 (24.59)	165.5 (49.92)	58 (17.50)	47 (14.18)	105 (31.67)	40.5 (12.22)	20.5 (6.18)	61 (18.40)	142 (42.84)	128.5 (38.76)	270.5 (81.60)
NON-BORROWERS	Group I	10 (3.47)	9 (3.13)	19 (6.60)	8 (2.78)	7 (2.43)	15 (5.21)	7 (2.43)	3 (1.04)	10 (3.47)	18 (6.25)	16 (5.56)	34 (11.81)
	Group II	37 (12.85)	28 (9.72)	65 (22.57)	26 (9.03)	28 (9.72)	54 (18.75)	16.5 (5.73)	21 (7.29)	37.5 (13.02)	63 (21.88)	56 (19.44)	119 (41.32)
	Group III	25 (8.68)	19 (6.60)	44 (15.28)	15 (5.21)	13 (4.51)	28 (9.72)	6 (2.08)	9.5 (3.30)	15.5 (5.38)	40 (13.89)	32 (11.11)	72 (25.00)
	TOTAL	72 (25.00)	56 (19.44)	128 (44.44)	49 (17.01)	48 (16.67)	97 (33.68)	29.5 (10.24)	33.5 (11.63)	63 (21.88)	121 (42.01)	104 (36.11)	225 (78.13)

M- Male; F- Female; T- Total

(Figure in the parentheses represents the percentage)

5.4. LAND INVENTORIES OF THE RESPONDENTS

5.4.1. Respondents' land holdings

The distribution of respondents' land holdings is given in Table 5.19. The overall average land holding was found to be 0.73 ha for the borrowers and 0.89 ha for the non-borrowers. Under borrowers, Group I have an average holdings of 0.43 ha, Group II with 0.69 ha and Group III with an average of 1.19. The non-borrowers Group I have and average holdings of 0.44 ha, Group II with 0.78 ha and Group III with 1.24 ha. The finding also revealed that farmers in the study area mostly cultivate their own land and no land was leased out in both the cases (borrowers and non-borrowers).

5.4.2. Respondents' land use pattern

The distribution of respondents' land use pattern is given in Table 5.20. The borrowers as a whole had a land holding of 43.92 ha. Of this, the maximum utilization was found to be for the use of agricultural operation. Land under vegetable cultivation accounts for 30.16 per cent and land under Paddy accounts for 27.11 per cent of the total land holdings, followed by fishery (16.08 per cent). The sample non-borrowers have a total land holding of 53.33 ha. The maximum land use was seen under agriculture for the production of paddy accounting for 35.87 per cent and vegetable cultivation with 15.39 per cent of the total available land.

5.5. CROPPING PATTERN OF THE RESPONDENTS

5.5.1. Respondents' area and production of agricultural crops

The respondents' area and production of agricultural crops is given in Table 5.21. The borrowers in total cropped an area of 46.34 ha, with a total

Table 5.19. Distribution of respondents' according to land holding (in ha)

	Groups	Sample Size	Owned land	Leased in	Leased out	Total land available	Average land holding
HOUSEHOLDS	Group I	10 (16.67)	4.30 (9.79)	0.00 (0.00)	0.00 (0.00)	4.30 (9.79)	0.43
	Group II	40 (66.67)	25.06 (57.07)	2.66 (6.05)	0.00 (0.00)	27.72 (63.12)	0.69
	Group III	10 (16.67)	7.03 (16.00)	4.87 (11.09)	0 (0.00)	11.90 (27.09)	1.19
	TOTAL	60 (100)	36.39 (82.86)	7.53 (17.14)	0.00 (0.00)	43.92 (100)	0.73
SCS HOUSEHOLDS	Group I	8 (13.33)	3.48 (6.53)	0.00 (0.00)	0.00 (0.00)	3.48 (6.53)	0.44
	Group II	32 (53.33)	25.02 (46.89)	0.00 (0.00)	0.00 (0.00)	25.02 (46.89)	0.78
	Group III	20 (33.33)	22.04 (41.31)	2.81 (5.27)	0.00 (0.00)	24.85 (46.58)	1.24
	TOTAL	60 (100)	50.55 (94.73)	2.81 (5.27)	0.00 (0.00)	53.36 (100)	0.89

(Figure in the parentheses represents the percentage)

Table 5.20. Distribution of respondent's land use pattern

(in ha)

Groups		Dwelling Area	Agriculture		Under Animal Husbandry	Plantation	Fishery	Barren	Others	Total
			Paddy	Veg						
BORROWERS	Group I	1.03 (2.34)	0.27 (0.61)	1.87 (4.26)	0.17 (0.38)	0.74 (1.68)	0.11 (0.25)	0.03 (0.06)	0.09 (0.20)	4.30 (9.79)
	Group II	4.24 (9.65)	7.36 (16.75)	8.23 (18.73)	0.54 (1.22)	2.14 (4.87)	4.76 (10.85)	0.27 (0.61)	0.19 (0.43)	27.72 (63.12)
	Group III	1.61 (3.67)	4.28 (9.75)	3.14 (7.16)	0.13 (0.30)	0.47 (1.07)	2.19 (4.98)	0.00 (0.00)	0.08 (0.18)	11.90 (27.09)
	TOTAL	6.88 (15.66)	11.91 (27.11)	13.24 (30.16)	0.83 (1.90)	3.34 (7.62)	7.06 (16.08)	0.29 (0.67)	0.36 (0.81)	43.92 (100)
NON-BORROWERS	Group I	1.10 (2.06)	1.27 (2.38)	0.71 (1.34)	0.02 (0.04)	0.00 (0.00)	0.38 (0.71)	0.00 (0.00)	0.00 (0.00)	3.48 (6.53)
	Group II	6.02 (11.28)	9.51 (17.83)	4.22 (7.92)	0.15 (0.28)	1.34 (2.51)	3.63 (6.81)	0.07 (0.13)	0.08 (0.15)	25.02 (46.91)
	Group III	4.10 (7.69)	8.09 (15.18)	3.27 (6.14)	0.15 (0.28)	6.02 (11.29)	2.53 (4.75)	0.27 (0.50)	0.39 (0.74)	24.83 (46.55)
	TOTAL	11.22 (21.04)	18.87 (35.39)	8.21 (15.39)	0.32 (0.60)	7.36 (13.80)	6.54 (12.27)	0.33 (0.62)	0.48 (0.89)	53.33 (100)

(Figure in the parentheses represents the percentage)

Table 5.21. Distribution of respondents' cropping area and production (in average)

Groups		Total Area Cropped (in ha)	Sample Size	Yield (Kg)						Sold (Kg)					
				Cereals	Pulses	Oilseed	Vegetables	Others	Total	Cereals	Pulses	Oilseed	Vegetables	Others	Total
BORROWERS	Group I	7.45	10 (16.67)	147.50 (3.54)	74.90 (1.80)	2.00 (0.05)	204.40 (4.91)	29.00 (0.70)	457.80 (10.99)	1,509.00 (3.25)	1,145.00 (2.47)	60.00 (0.13)	2,075.90 (4.48)	66.00 (0.14)	4,855.90 (10.47)
	Group II	38.90	40 (66.67)	768.00 (18.44)	75.45 (1.81)	25.50 (0.61)	277.88 (6.67)	44.35 (1.07)	1,191.18 (28.61)	6,896.25 (14.87)	992.63 (2.14)	803.75 (1.73)	2,448.10 (5.28)	327.18 (0.71)	11,467.90 (24.73)
	Group III	16.33	10 (16.67)	1839.00 (44.17)	138.20 (3.32)	79.20 (1.90)	414.10 (9.95)	44.30 (1.06)	2,514.80 (60.40)	20,331.00 (43.85)	2,070.00 (4.46)	2,443.50 (5.27)	4,716.20 (10.17)	485.00 (1.05)	30,045.70 (64.80)
	TOTAL	46.34	60 (100)	2,754.50 (66.15)	288.55 (6.93)	106.70 (2.56)	896.38 (21.53)	117.65 (2.83)	4,163.78 (100.00)	28,736.25 (61.97)	4,207.63 (9.07)	3,307.25 (7.13)	9,240.20 (19.93)	878.18 (1.89)	46,369.50 (100)
NON-BORROWERS	Group I	5.02	8 (13.33)	626.25 (14.36)	20.00 (0.46)	1.25 (0.03)	170.00 (3.90)	11.13 (0.26)	828.63 (19.00)	27.50 (0.14)	78.13 (0.40)	0.00 (0.00)	1,028.00 (5.33)	8.75 (0.05)	1,142.38 (5.92)
	Group II	31.67	32 (53.33)	1,197.81 (27.46)	47.31 (1.08)	13.56 (0.31)	206.72 (4.74)	16.06 (0.37)	1,481.47 (33.96)	4,278.44 (22.18)	354.69 (1.84)	342.97 (1.78)	1,621.84 (8.41)	56.41 (0.29)	6,654.34 (34.49)
	Group III	25.28	20 (33.33)	1,665.75 (38.19)	90.35 (2.07)	29.25 (0.67)	249.25 (5.71)	17.15 (0.39)	2,051.75 (47.04)	7,774.00 (40.30)	832.75 (4.32)	847.00 (4.39)	1,944.60 (10.08)	97.50 (0.51)	11,495.85 (59.59)
	TOTAL	36.69	60 (100)	3,489.81 (80.01)	157.66 (3.61)	44.06 (1.01)	625.97 (14.35)	44.34 (1.02)	4,361.84 (100.00)	12,079.94 (62.61)	1,265.56 (6.56)	1,189.97 (6.17)	4,594.44 (23.81)	162.66 (0.84)	19,292.57 (100)

(Figure in the parentheses represents the percentage)

PHOTO GALLERY

Glimpse of agricultural activities undertaken by the respondents':

(1) Researcher interacting with respondent under Medziphema block

(2) Researcher interacting with respondent under Dhansiripar block

(3) Researcher interacting with group of respondents under Medziphema block

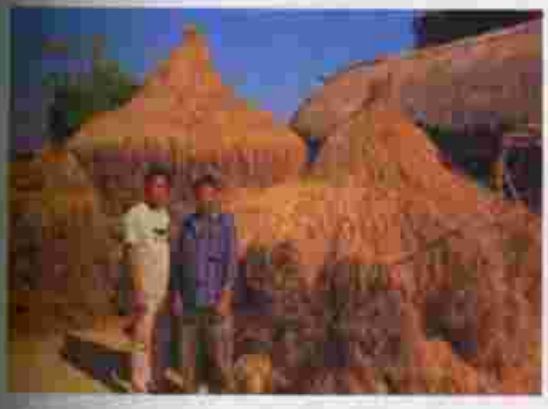
(4) Researcher with respondent under Medziphema block

(5) Female respondent from Medziphema block

(6) On-farm group photo of researcher with respondents from Medziphema block

(7) Researcher interacting with group of respondents of Medziphema block

(8) Researcher with respondent from Dhansiripar block



(9) Researcher On-farm interaction with respondent under Dhansiripar block

(10) Researcher interacting with repondents fom Medziphema block

(11) Researcher interacting with groups of respondent under Medziphema block

(12) Researcher with female respondent under Dhansiripar block

(13) On-farm interaction with female respondent under Dhansiripar block

(14) Researcher On-farm interaction with respondent under Dhansiripar block

(15) View of respondents' paddy field under Medziphema block

(16) Inter-cropping of paddy with legumes by the respondents of Medziphema block

(17) Indigenous method of bunching to prevent paddy from falling

(18) Respondents' farm family harvesting paddy at Dhansiripar block

(19) On-site stacking of harvested paddy

(20) Off-site stacking of harvested paddy

(21) Threshing of paddy using bullock at Dhansiripar block

(22) Threshing of paddy using power tiller at Medziphema block

(23) Respondents' rapeseed field at Medziphema block

(24) Respondents' mustard field at Medziphema block

(25) Brinjal cultivation by respondents under Dhansiripar block

(26) Respondents' soya bean field at Medziphema block

(27) Sweet pea farm of respondents at Dhansiripar block

(28) Cabbage farm of respondents under Dhansiripar block

(29) Radish cultivation by respondents under Medziphema block

(30) Tomato cultivation by respondents under Medziphema block

production of 4,163.78 kg and a sold out value of ₹ 46,369.50. Observation of the table revealed that, major share of production comes from cereals accounting for 66.15 per cent of the total production and also with the highest sold out value (61.97 per cent) of the total sold out value. On the other hand, the non-borrowers have a total cropped area of 36.69 ha, with a total production of 4,361.84 kg and a total sold out value of ₹ 19,292.85. Comparing the data, the income generated from the borrowers had a higher sold out value than the non-borrowers.

5.5.2. Respondents' cost of cropping

The average cost of cropping for the borrowers was found out to be ₹ 48,276.65 and ₹ 28,595.69 for the non-borrowers as given in Table 5.22. The maximum cost incurred under cropping for both the borrowers and non-borrowers was the cost of labour. For the borrowers the owned labour and hired labour accounts for 52.33 per cent and 15.39 per cent respectively. Whereas for the non-borrowers it was found out to be 36.38 per cent and 12.90 per cent for owned and hired labour respectively. The cost of production was found to increase with the increased in the land holding i.e. from marginal to medium size land holding.

5.6. LIVESTOCK INVENTORIES OF THE RESPONDENTS

5.6.1. Respondents' livestock inventories

The distribution of respondents' livestock inventories is given in Table 5.23. The borrowers, on an average had a total current livestock value of ₹ 32,663 and the non-borrowers with a current average value of ₹ 15,173.33. The highest number of livestock's reared by the borrowers and non-borrowers per respondent family was reported from poultry, with an average of 4.08 and

Table 5.22: Distribution of respondents' cost of cropping (₹ in average)

Items	Borrowers				Non-Borrowers			
	Group-I	Group-II	Group-III	TOTAL	Group-I	Group-II	Group-III	TOTAL
Sample Size	10	40	10	60	8	32	20	60
Owned Labour	4,770.00 (9.88)	7,666.50 (15.88)	12,828.00 (26.57)	25,264.50 (52.33)	3,037.50 (10.62)	3,300.00 (11.54)	4,065.00 (14.22)	10,402.50 (36.38)
Hired Labour	350.00 (0.72)	2,330.00 (4.83)	4,750.00 (9.84)	7,430.00 (15.39)	950.00 (3.32)	2,234.38 (7.81)	3,365.00 (11.77)	6,549.38 (22.90)
Seed cost	360.00 (0.75)	980.75 (2.03)	1,800.00 (3.73)	3,140.75 (6.51)	431.25 (1.51)	667.19 (2.33)	900.00 (3.15)	1,998.44 (6.99)
Chemicals/Manures /Salts	52.00 (0.11)	32.25 (0.07)	65.00 (0.13)	149.25 (0.31)	0.00 (0.00)	9.38 (0.03)	92.50 (0.32)	101.88 (0.36)
Tools	144.00 (0.30)	262.00 (0.54)	495.50 (1.03)	901.50 (1.87)	117.50 (0.41)	103.44 (0.36)	96.00 (0.34)	316.94 (1.11)
Bullock & Machinery Labour	560.00 (1.16)	1,016.25 (2.11)	1,865.00 (3.86)	3,441.25 (7.13)	534.00 (1.87)	923.75 (3.23)	1,223.60 (4.28)	2,681.35 (9.38)
Transportation	355.00 (0.74)	843.50 (1.75)	1,539.00 (3.19)	2,737.50 (5.67)	342.00 (1.20)	639.75 (2.24)	871.10 (3.05)	1,852.85 (6.48)
Marketing Charges	345.60 (0.72)	623.30 (1.29)	1,197.40 (2.48)	2,166.30 (4.49)	400.50 (1.40)	692.81 (2.42)	917.70 (3.21)	2,011.01 (7.03)
Other Charges	806.40 (1.67)	885.60 (1.83)	1,353.60 (2.80)	3,045.60 (6.31)	534.00 (1.87)	923.75 (3.23)	1,223.60 (4.28)	2,681.35 (9.38)
Total	7,743.00 (16.04)	14,640.15 (30.33)	25,893.50 (53.64)	48,276.65 (100)	6,346.75 (22.19)	9,494.44 (33.20)	12,754.50 (44.60)	28,595.69 (100)

(Figure in the parentheses represents the percentage)

Table 5.23: Distribution of respondents' livestock inventories

Groups		Cattle		Poultry		Piggery		Goatery		Others		Total Value (in ₹)
		Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	
BOR ROWERS	Group I	7	35,600	64	7,890	59	3,81,000	4	9,600	6	6,400	4,40,490
	Group II	60	2,76,000	157	1,4620	150	9,07,500	17	42,400	22	20,000	12,60,520
	Group III	22	1,01,200	24	2,270	23	1,39,500	4	9,600	5	6,200	2,58,770
	TOTAL	89	4,12,800	245	24,780	232	14,28,000	25	61,600	33	32,600	19,59,780
	Average	1.48	6,880	4.08	413	3.87	23,800	0.42	1,026.67	0.55	543.33	32,663
NON-BORROWERS	Group I	1	1,200	48	5,410	14	96,000	0	0	2	1,700	1,04,310
	Group II	11	54,000	186	18,390	63	3,34,500	25	45,600	5	3,600	4,56,090
	Group III	10	46,000	131	11,750	53	2,59,500	10	27,200	9	5,550	3,50,000
	TOTAL	22	1,01,200	365	35,550	130	6,90,000	35	72,800	16	10,850	9,10,400
	Average	0.37	1,686.67	6.08	592.50	2.17	11,500	0.58	1,213.33	0.27	180.83	15,173.33

(Figure in the parentheses represents the percentage)

birds respectively. The maximum present value was seen from piggery with an average value of ₹ 23,800 per borrower family and ₹ 11,500 per non-borrower family.

5.2. Respondents' cost of livestock production

The cost of livestock production on an average incurred was found out to be ₹ 32,496.73 and ₹ 14,653.45 for the borrower and the non-borrowers respectively as given in Table 5.24. Under both the cases (borrowers and non-borrowers), the highest cost was incurred on the purchase of animals for rearing, accounting to an average of ₹ 11,278.40 (34.71 per cent) and ₹ 5,264.18 (35.92 per cent) respectively, followed by an average feeding cost of ₹ 8,243.25 (25.37 per cent) for the borrowers and ₹ 3,779.96 (25.80 per cent) for non-borrowers.

5.3. Returns from livestock production

The average return from livestock production for borrowers was found out to be ₹ 55,371.26 and ₹ 33,648.17 for non-borrowers as given in Table 5.25.1. Under borrowers, the highest average return was found out to be from cattle with a return of ₹ 27,979.33 (50.53 per cent) and for the non-borrowers the highest average return was from piggery with an average of ₹ 23,741.50 (70.56 per cent).

The item-wise breakup of return from different source as given in Table 5.25.2, revealed that of the different items sold, the sale of mature animals contributed the highest, with an average sold out value of ₹ 30,422 (54.94 per cent) for the borrowers and ₹ 23,686.04 (70.39 per cent) for the non-borrowers.

Table 5.14: Distribution of respondents' cost of livestock production (₹ in average)

Groups		Construction cost	Cost of animals	Feeding cost	Medication	Equipment's	Labour Input	Transportation cost	Marketing cost	Others	Total Cost
BORROWERS	Group I	3,871.00 (10.06)	13,606.80 (35.36)	11,148.00 (28.97)	194.00 (0.50)	1,077.50 (2.80)	5,978.70 (15.54)	1,383.00 (3.59)	348.00 (0.90)	870.00 (2.26)	38,477.00 (100)
	Group II	3,333.38 (10.66)	10,884.60 (34.80)	7,725.75 (24.70)	329.50 (1.05)	979.13 (3.13)	5,391.96 (17.24)	1,410.50 (4.51)	244.13 (0.78)	975.00 (3.12)	31,273.94 (100)
	Group III	3,101.00 (11.18)	9,343.80 (33.68)	5,856.00 (21.11)	457.00 (1.65)	952.50 (3.43)	5,230.45 (18.86)	1,511.00 (5.45)	177.50 (0.64)	1,110.00 (4.00)	27,739.25 (100)
	Average	3,435.13 (10.57)	11,278.40 (34.71)	8,243.25 (25.37)	326.83 (1.01)	1,003.04 (3.09)	5,533.70 (17.03)	1,434.83 (4.42)	256.54 (0.79)	985.00 (3.03)	32,496.73 (100)
NON-BORROWERS	Group I	1,005.00 (8.88)	3,859.50 (34.11)	3,365.00 (29.74)	20.63 (0.18)	323.75 (2.86)	1,943.63 (17.18)	450.00 (3.98)	121.25 (1.07)	225.00 (1.99)	11,313.75 (100)
	Group II	1,327.50 (9.38)	5,186.94 (36.67)	3,469.38 (24.52)	85.00 (0.60)	463.91 (3.28)	2,534.47 (17.92)	602.19 (4.26)	142.97 (1.01)	334.38 (2.36)	14,146.72 (100)
	Group III	1,782.75 (9.64)	6,746.10 (36.47)	4,505.50 (24.35)	115.25 (0.62)	589.25 (3.19)	3,316.03 (17.92)	797.50 (4.31)	182.50 (0.99)	465.00 (2.51)	18,499.88 (100)
	Average	1,371.75 (9.36)	5,264.18 (35.92)	3,779.96 (25.80)	73.63 (0.50)	458.97 (3.13)	2,598.04 (17.73)	616.56 (4.21)	148.91 (1.02)	341.46 (2.33)	14,653.45 (100)

(Figure in the parentheses represents the percentage)

Table 5.25.1. Distribution of respondents' return from livestock production

(₹ in average)

	Groups	Cattle	Poultry	Piggery	Goatery	Total
BORROWERS	Group I	15,734.00 (28.35)	225.00 (0.41)	38,669.70 (69.66)	880.00 (1.59)	55,508.70 (100)
	Group II	28,230.00 (51.39)	212.50 (0.39)	25,453.18 (46.33)	1,040.00 (1.89)	54,935.68 (100)
	Group III	39,974.00 (71.81)	100.00 (0.18)	13,995.40 (25.14)	1,600.00 (2.87)	55,669.40 (100)
	Average	27,979.33 (50.53)	179.17 (0.32)	26,039.43 (47.03)	1,173.33 (2.12)	55,371.26 (100)
NON-BORROWERS	Group I	2,252.50 (8.77)	1,187.50 (4.62)	22,240.00 (86.60)	0.00 (0.00)	25,680.00 (100)
	Group II	8,875.63 (26.87)	1,296.88 (3.93)	20,432.50 (61.86)	2,425.00 (7.34)	33,030.00 (100)
	Group III	11,035.00 (26.13)	1,487.50 (3.52)	28,552.00 (67.60)	1,160.00 (2.75)	42,234.50 (100)
	Average	7,387.71 (21.96)	1,323.96 (3.93)	23,741.50 (70.56)	1,195.00 (3.55)	33,648.17 (100)

(Figure in the parentheses represents the percentage)

Table 5.10.2: Distribution of respondents according return from animal husbandry (₹ in average)

Groups		Items								
		Young		Mature		Milk	Egg	Manure	Others	Total
		Nos.	Value	Nos.	Value					
BORROWERS	Group I	1.70 (0.003)	3,760.00 (6.77)	4.10 (0.01)	39,305.00 (70.81)	9,720.00 (17.51)	0.00 (0.00)	2,453.70 (4.42)	270.00 (0.49)	55,508.70 (100)
	Group II	0.73 (0.001)	1,585.00 (2.89)	3.35 (0.01)	30,402.50 (55.34)	18,225.00 (33.18)	0.00 (0.00)	4,536.18 (8.26)	187.00 (0.34)	54,935.68 (100)
	Group III	0.20 (0.0004)	600.00 (1.08)	2.30 (0.004)	21,560.00 (38.73)	26,730.00 (48.02)	0.00 (0.00)	6,639.40 (11.93)	140.00 (0.25)	55,669.40 (100)
	Average	0.88 (0.002)	1,981.67 (3.58)	3.25 (0.01)	30,422.50 (54.94)	18,225.00 (32.91)	0.00 (0.00)	4,543.09 (8.20)	199.00 (0.36)	55,371.26 (100)
NON-BORROWERS	Group I	2.25 (0.01)	5,050.00 (19.67)	6.25 (0.02)	20,387.50 (79.39)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	242.50 (0.94)	25,680.00 (100)
	Group II	2.19 (0.01)	4,606.25 (13.95)	7.22 (0.02)	22,503.13 (68.13)	4,556.25 (13.79)	0.00 (0.00)	1,125.00 (3.41)	239.38 (0.72)	33,030.00 (100)
	Group III	2.90 (0.01)	6,220.00 (14.73)	8.20 (0.02)	28,167.50 (66.69)	6,075.00 (14.38)	0.00 (0.00)	1,500.00 (3.55)	272.00 (0.64)	42,234.50 (100)
	Average	2.45 (0.01)	5,292.08 (15.73)	7.22 (0.02)	23,686.04 (70.39)	3,543.75 (10.53)	0.00 (0.00)	875.00 (2.60)	251.29 (0.75)	33,648.17 (100)

(Figure in the parentheses represents the percentage)

PHOTO GALLERY

Glimpse of animal husbandry (Cattle) undertaken by the respondents':

(1) Researcher with respondent at Medziphema block

(2) Researcher interacting with female respondent at Medziphema block

(3) Researcher with respondent at Dhansiripar block

(4) Researcher interacting with female respondent at Dhansiripar block

(5) Researcher interacting with female respondent at Medziphema block

(6) Researcher with respondent at Medziphema block

(7) Researcher interacting with respondent at Medziphema block

(8) Researcher interacting with female respondent form Medziphema block

(9) Atypical cattle shed at Dhansiripar Block

(10) Cattle shed at Medziphema block

(11) Free-range Cattle rearing at Dhansiripar block

(12) Cattle shed at Medziphema block

PHOTO GALLERY

Glimpse of animal husbandry (Piggery) undertaken by the respondents':

(1) Researcher interacting with respondent at Dhansiripar block

(2) Researcher interacting with female respondent at Medziphema block

(3) Researcher interacting with female respondent at Dhansiripar block

(4) Researcher with female respondent at Medziphema block

(5) Researcher interacting with respondent at Medziphema block

(6) Researcher interacting with female respondent at Medziphema block

(7) Researcher interacting with female respondent at Medziphema block

(8) Researcher interacting with respondent at Medziphema block

(9) Researcher interacting with female respondent at Dhansiripar block

(10) Researcher interacting with female respondent at Dhansiripar block

(11) Researcher interacting with female respondent at Medziphema block

(12) Semi-open system of pig rearing at Medziphema block

(13) Female respondent of Dhansiripar block caring for the piglet

(14) Typical traditional pig sty at Medziphema block

(15) Typical modern pig sty at Medziphema block

(16) piggery and fishery integrated farming practiced at Dhansiripar block

(17) A view of items used in preparation of pig feed at Dhansiripar block

(18) A view of preparation of pig feed at Medziphema block

PHOTO GALLERY

mpse of animal husbandry (Poultry) undertaken by the respondents':

) Researcher with respondent family at Medziphema block

(2) Researcher with male respondent at Medziphema block

Researcher with female respondent at Medziphema block

(4) A view of poultry farm at Medziphema block

A view of traditional poultry farm

(6) A view of traditional chicken coop

(7) Chicks at modern type of poultry farm at Dhansiripar block

(8) Ready for market broilers at Medziphema block

(9) View ofswan goose reared by respondent at Medziphema block

(10) Integrated farming system practiced by respondents at Dhansiripar block

(11) View of poultry feeds used by respondents at Medziphema block

(12) Poultry nutrients and medication used by the respondent

5.2. FISH PRODUCTION OF THE RESPONDENTS

5.2.1. Respondents' cost of fish production

The cost of fish production of the respondents is given in Table 5.26. The overall average cost of fish production was found to be ₹ 11,455.63 for the borrowers and ₹ 8,091.96 for the non-borrowers. The total cost incurred was found increasing with the increase in the farm size under both the cases of borrowers and non-borrowers. The highest cost incurred for fish production was the feed cost, with an average cost of ₹ 4,626.53 (40.39 per cent) and ₹ 3,610.25 (44.62 per cent) for borrowers and non-borrowers respectively.

5.2.2. Respondents' yield and income from fish production

The respondents' average yield from fish production was found to be 250 kg, with a worth value of ₹ 25,026.67 for the borrowers, whereas for the non-borrowers, it was found out to be 154.73 kg, worth ₹ 15,472.50 as given in Table 5.27. The average sold out value of fish for the borrowers was found to be ₹ 23,670.83 and ₹ 14,760.83 for the non-borrowers. Comparatively, in terms of yield and returns from sales of fish, the borrower was found to be better off than its counterpart, the non-borrowers.

5.3. RESPONDENTS' PLANTATION

5.3.1. Respondents' cost of plantation

The cost of plantation for the respondents is given in the Table 5.28. The average cost of plantation for the borrowers was found out to be ₹ 2,029.73 and ₹ 4,086.33 for the non-borrowers. The highest cost incurred for plantation under both the cases was from the labour cost. The borrowers' human labour cost was found to be 59.78 per cent, contributed by 34.16 per cent owned

Table 5.27. **Distribution of respondents yield and income from fish production**

(in average)

	Groups	Yield		Consumed		Sold	
		Kg	Value (Rs.)	Kg	Value (Rs.)	Kg	Value (Rs.)
BORROWERS	Group I	24.00	2,400.00	3.00	300.00	21.00	2,100.00
	Group II	256.40	25,640.00	16.28	1,627.50	240.13	24,012.50
	Group III	470.40	47,040.00	21.40	2,140.00	449.00	44,900.00
	Average	250.27	25,026.67	13.56	1,355.83	236.71	23,670.83
NON-BORROWERS	Group I	76.50	7,650.00	3.75	375.00	72.75	7,275.00
	Group II	183.38	18,337.50	8.50	850.00	174.88	17,487.50
	Group III	204.30	20,430.00	9.10	910.00	195.20	19,520.00
	Average	154.73	15,472.50	7.12	711.67	147.61	14,760.83

(Figure in the parentheses represents the percentage)

PHOTO GALLERY

Glimpse of fishery activities undertaken by the respondents':

(1) Researcher with respondent at Medziphema block

(2) Researcher with female respondent at Medziphema block

(3) Researcher with female respondent at Medziphema block

(4) Respondent from Medziphema block

(5) Researcher with respondent at Medziphema block

(6) Researcher with female respondent at Medziphema block

(7) Researcher with respondent at Dhansiripar block

(8) Researcher with female respondent at Dhansiripar block

(9) Researcher with respondent at Dhansiripar block

(10) Researcher with respondent at Medziphema block

(11) Researcher with respondent at Dhansiripar block

(12) Researcherwith respondent at Dhansiripar block

(13) View of respondent fishery at Dhansiripar block

(14) View of respondent fishery at Medziphema block

(15) View of respondent fishery at Dhansiripar block

(16) View of respondent fishery at Dhansiripar block

(17) View of respondent fishery at Dhansiripar block

(18) View of respondent fishery at Medziphema block

(19) View of respondent fishery at Medziphema block

(20) View of respondent fishery at Dhansiripar block

(21) View of respondent fishery at Medziphema block

(22) View of respondent fishery at Medziphema block

(23) A view of integrated farming at Dhansiripar block

(24) Pump-set used for dual purpose by the respondent at Dhansiripar block

labour and 25.62 per cent hired labour. Whereas, the non-borrowers had a human labour cost of 60.62 per cent contributed by 31.35 per cent owned labour and 39.26 per cent hired labour. The next highest cost was the cost of planting materials, which was 33.82 per cent for the borrowers and 33.11 per cent for the non-borrowers.

5.8.2. Respondents' returns from plantation

The return from plantation for the respondents is given in the Table 5.29. The average total return from plantation for the borrowers was found to be ₹ 1,136.67 and ₹ 1,926.56 for the non-borrowers. The borrowers' total return from sale of the products accounts for 61.58 per cent and for the non-borrowers it was 60.77 per cent. The highest sales return from plantation came from the sale of fruit crops, both for the borrowers and the non-borrowers with 57.18 per cent and 44.34 per cent of the total value respectively.

5.9. EXPENDITURE AND INCOME OF THE RESPONDENTS

5.9.1. Respondents' annual expenditure

The total annual expenditure of the respondents' family is given in Table 5.30. The borrowers on an average per annum had a total expenditure of ₹ 1,22,346.56, whereas for the non-borrowers it was ₹ 88,838.89. The total expenditure for the borrowers was incurred from on-farm expenditure amounting to ₹ 62,074.31 (50.74 per cent) and the family-needs expenditure amounting to ₹ 60,272.25 (49.26 per cent), whereas for the non-borrowers, it was found out to be ₹ 36,363.64 (30.15 per cent) for on-farm expenditure and ₹ 52,475.25 (59.07 per cent) for family-needs expenditure. The highest

Table 5.28. Distribution of respondents cost of plantation (₹ in average)

Groups		Human Labour			Planting Materials	Chemicals	Transportation	Marketing	Others	Total Cost
		Hired	Owned	Total						
BORROWERS	Group I	660.00 (25.62)	880.00 (34.16)	1,540.00 (59.78)	871.20 (33.82)	82.50 (3.20)	82.50 (3.20)	0.00 (0.00)	0.00 (0.00)	2,576.20 (100)
	Group II	480.00 (25.62)	640.00 (34.16)	1,120.00 (59.78)	633.60 (33.82)	60.00 (3.20)	60.00 (3.20)	0.00 (0.00)	0.00 (0.00)	1,873.60 (100)
	Group III	420.00 (25.620	560.00 (34.16)	980.00 (59.78)	554.40 (33.82)	52.50 (3.20)	52.50 (3.20)	0.00 (0.00)	0.00 (0.00)	1,639.40 (100)
	Average	520.00 (25.62)	693.33 (34.16)	1,213.33 (59.78)	686.40 (33.82)	65.00 (3.20)	65.00 (3.20)	0.00 (0.00)	0.00 (0.00)	2,029.73 (100)
NON-BORROWERS	Group I	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Group II	437.50 (29.26)	468.75 (31.35)	906.25 (60.62)	495.00 (33.11)	46.88 (3.14)	46.88 (3.14)	0.00 (0.00)	0.00 (0.00)	1,495.00 (100)
	Group III	3,150.00 (29.26)	3,375.00 (31.35)	6,525.00 (60.62)	3,564.00 (33.11)	337.50 (3.14)	337.50 (3.14)	0.00 (0.00)	0.00 (0.00)	10,764.00 (100)
	Average	1,195.83 (29.26)	1,281.25 (31.35)	2,477.08 (60.62)	1,353.00 (33.11)	128.13 (3.14)	128.13 (3.14)	0.00 (0.00)	0.00 (0.00)	4,086.33 (100)

(Figure in the parentheses represents the percentage)

Table 5.29: Distribution of respondents average return from plantation (₹ in average)

Groups		Timber (Rs.)		Firewood (Rs.)		Fruit crops (Rs.)		Seedlings (Rs.)		Others (Rs.)		Total Value (Rs.)		
		Home	Sold	Home	Sold	Home	Sold	Home	Sold	Home	Sold	Home	Sold	Total
BORROWERS	Group I	82.50 (6.12)	0.00 (0.00)	137.50 (10.20)	0.00 (0.00)	110.00 (8.16)	825.00 (61.22)	82.50 (6.12)	0.00 (0.00)	110.00 (8.16)	0.00 (0.00)	522.50 (38.78)	825.00 (61.22)	1,347.50 (100)
	Group II	147.50 (12.11)	150.00 (12.32)	100.00 (8.21)	0.00 (0.00)	80.00 (6.57)	600.00 (49.28)	60.00 (4.93)	0.00 (0.00)	80.00 (6.57)	0.00 (0.00)	467.50 (38.40)	750.00 (61.60)	1,217.50 (100)
	Group III	40.00 (4.73)	0.00 (0.00)	87.50 (10.36)	0.00 (0.00)	70.00 (8.28)	525.00 (62.13)	52.50 (6.21)	0.00 (0.00)	70.00 (8.28)	0.00 (0.00)	320.00 (37.87)	525.00 (62.13)	845.00 (100)
	Average	90.00 (7.92)	50.00 (4.40)	108.33 (9.53)	0.00 (0.00)	86.67 (7.62)	650.00 (57.18)	65.00 (5.72)	0.00 (0.00)	86.67 (7.62)	0.00 (0.00)	436.67 (38.42)	700.00 (61.58)	1,136.67 (100)
NON-BORROWERS	Group I	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Group II	31.25 (4.60)	0.00 (0.00)	42.18 (6.21)	0.00 (0.00)	168.75 (24.83)	312.50 (45.98)	62.50 (9.20)	0.00 (0.00)	62.50 (9.20)	0.00 (0.00)	367.18 (54.02)	312.50 (45.98)	679.69 (100)
	Group III	225.00 (4.41)	950.00 (18.63)	212.50 (4.17)	0.00 (0.00)	562.50 (11.03)	2,250.00 (44.12)	450.00 (8.82)	0.00 (0.00)	450.00 (8.82)	0.00 (0.00)	1,900.00 (37.25)	3,200.00 (62.75)	5,100.00 (100)
	Average	85.42 (4.43)	316.67 (16.44)	84.90 (4.41)	0.00 (0.00)	243.75 (12.65)	854.17 (44.34)	170.83 (8.87)	0.00 (0.00)	170.83 (8.87)	0.00 (0.00)	755.73 (39.23)	1,170.83 (60.77)	1,926.56 (100)

(Figure in the parentheses represents the percentage)

Table 5.30. Distribution of the respondents annual expenditure

(₹ in Average per annum)

Groups		On Farm expenditure						Farm family needs					Total Expenditure
		Agricultural Production	Animal Husbandry	Fishery Production	Plantation	Others	Total	Household Needs	Education	Transportation	Others	Total	
BORROWERS	Group I	7,743.00 (8.16)	38,477.00 (40.56)	1,092.00 (1.15)	2,576.20 (2.72)	0.00 (0.00)	49,888.20 (52.59)	23,460.00 (24.73)	15,570.00 (16.41)	3,835.00 (4.04)	2,112.00 (2.23)	44,977.00 (47.41)	94,865.20 (100)
	Group II	14,640.15 (11.70)	31,273.94 (24.99)	11,634.10 (9.30)	1,873.60 (1.50)	0.00 (0.00)	59,421.79 (47.49)	38,797.50 (31.00)	19,297.50 (15.42)	4,463.75 (3.57)	3,156.00 (2.52)	65,714.75 (52.51)	1,25,136.54 (100)
	Group III	25,893.50 (17.61)	27,739.25 (18.87)	21,640.80 (14.72)	1,639.40 (1.11)	0.00 (0.00)	76,912.95 (52.31)	43,080.00 (29.30)	20,160.00 (13.71)	4,485.00 (3.05)	2,400.00 (1.63)	70,125.00 (47.69)	1,47,037.95 (100)
	Average	16,092.22 (13.15)	32,496.73 (26.56)	11,455.63 (9.36)	2,029.73 (1.66)	0.00 (0.00)	62,074.31 (50.74)	35,112.50 (28.70)	18,342.50 (14.99)	4,261.25 (3.48)	2,556.00 (2.09)	60,272.25 (49.26)	1,22,346.56 (100)
NON-BORROWERS	Group I	6,346.75 (8.39)	11,313.75 (14.95)	3,972.00 (5.25)	0.00 (0.00)	0.00 (0.00)	21,632.50 (28.59)	24,750.00 (32.71)	23,400.00 (30.92)	3,968.75 (5.24)	1,920.00 (2.54)	54,038.75 (71.41)	75,671.25 (100)
	Group II	9,494.44 (11.01)	14,146.72 (16.41)	9,624.50 (11.16)	1,495.00 (1.73)	0.00 (0.00)	34,760.66 (40.31)	26,343.75 (30.55)	18,515.63 (21.47)	4,240.63 (4.92)	2,370.00 (2.75)	51,470.00 (59.69)	86,230.66 (100)
	Group III	12,754.50 (12.19)	18,499.88 (17.68)	10,679.40 (10.21)	10,764.00 (10.29)	0.00 (0.00)	52,697.78 (50.37)	29,250.00 (27.96)	15,825.00 (15.13)	4,190.00 (4.01)	2,652.00 (2.54)	51,917.00 (49.63)	1,04,614.78 (100)
	Average	9,531.90 (10.73)	14,653.45 (16.49)	8,091.97 (9.11)	4,086.33 (4.60)	0.00 (0.00)	36,363.64 (40.93)	26,781.25 (30.15)	19,246.88 (21.66)	4,133.13 (4.65)	2,314.00 (2.60)	52,475.25 (59.07)	88,838.89 (100)

(Figure in the parentheses represents the percentage)

PHOTO GALLERY

Glimpse of respondents' engaged in other activities:

(1) A view of respondents areca nut and teak plantation at Dhansiripar block

(2) A view of respondents passion fruit plantation at Medziphema block

(3) Rabbit farming undertaken by respondent at Medziphema block

(4) Jute production by respondent at Dhansiripar block

(5) Indigenous indoor bee keeping by respondent at Medziphema block

(6) Indigenous on farm bee keeping by respondent at Medziphema block

expenditure incurred was for animal husbandry with an amount of ₹ 32,496.73 (8.56 per cent) for the borrowers and for the non-borrowers, the highest expenditure was incurred for household needs amounting to ₹ 26,781.25 (31.15 per cent).

5.32 Respondents' annual income

The distribution of respondents' annual income from different sources is given in Table 5.31. The findings revealed that the average annual income from different sources was found to be ₹ 1,38,136.10 per respondents for the borrowers and ₹ 83,389.81 for the non-borrowers. Of the different sources of income of the respondents, animal husbandry contributed a major share, on an average contributing ₹ 55,371.26 (40.08 per cent) to the borrowers income and ₹28,368.85 (34.02 per cent) to the non-borrowers income. The income was found to increase with the increase in the farm size for the borrowers. Under the non-borrowers category the income was found highest under Group II (small size), followed by Group I (marginal size) and then by Group III (medium size). On comparison of the findings, the borrowers' income generated from agricultural, animal husbandry and fishery activities was found higher than the non-borrowers in all the cases. This implies that the income generated from agricultural and allied activities was found to have a positive impact on the borrowers.

5.33 EMPLOYMENT GENERATED

The distribution of respondents' employment generated from different agricultural and allied activities in mandays is given in Table 5.32.1. Under the category of borrowers, the total average number of mandays generated was 305.62 mandays, with male employed for 161.64 days (52.89 per cent) and

Table 5.31: Distribution of the respondent annual income (₹ in average)

Groups		Agricultural Production	Animal Husbandry	Fishery	Forest & Plantation	Service	Business	Others	TOTAL
BORROWERS	Group I	4,855.90 (4.90)	55,508.70 (56.01)	2,100.00 (2.12)	825.00 (0.83)	18,000.00 (18.16)	15,720.00 (15.86)	2,100.00 (2.12)	99,109.60 (100)
	Group II	11,467.90 (8.36)	54,935.68 (40.05)	24,012.50 (17.50)	750.00 (0.55)	28,275.00 (20.61)	11,430.00 (8.33)	6,307.50 (4.60)	1,37,178.60 (100)
	Group III	30,045.70 (16.87)	55,669.40 (31.25)	44,900.00 (25.21)	525.00 (0.29)	30,900.00 (17.35)	16,080.00 (9.03)	0.00 (0.00)	1,78,120.10 (100)
	Average	15,456.50 (11.19)	55,371.26 (40.08)	23,670.83 (17.14)	700.00 (0.51)	25,725.00 (18.62)	14,410.00 (10.43)	2,802.50 (2.03)	1,38,136.10 (100)
NON-BORROWERS	Group I	1,142.37 (1.32)	25,680.00 (29.77)	7,275.00 (8.43)	0.00 (0.00)	12,750.00 (14.78)	34,050.00 (39.47)	5,375.00 (6.23)	86,272.38 (100)
	Group II	6,654.34 (7.15)	33,030.00 (35.50)	17,487.50 (18.79)	312.50 (0.34)	10,875.00 (11.69)	21,375.00 (22.97)	3,318.75 (3.57)	93,053.09 (100)
	Group III	7,184.90 (10.14)	26,396.56 (37.26)	12,200.00 (17.22)	2,000.00 (2.82)	8,250.00 (11.65)	10,762.50 (15.19)	4,050.00 (5.72)	70,843.97 (100)
	Average	4,993.87 (5.99)	28,368.85 (34.02)	12,320.83 (14.77)	770.83 (0.92)	10,625.00 (12.74)	22,062.50 (26.46)	4,247.91 (5.09)	83,389.81 (100)

(Figure in the parentheses represents the percentage)

Table 5.13.1 Distribution of respondents' employment generated in mandays

(In mandays)

Groups		Crop production			Animal Husbandry			Fishery			Plantation			Others			Total		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	38.00 (15.23)	37.50 (15.03)	75.50 (30.27)	53.50 (21.45)	67.59 (27.10)	121.09 (48.55)	1.00 (0.40)	0.00 (0.00)	1.00 (0.40)	6.60 (2.65)	3.25 (1.30)	9.85 (3.95)	24.00 (9.62)	18.00 (7.22)	42.00 (16.84)	123.10 (49.35)	126.34 (50.65)	249.44 (100)
	Group II	65.05 (22.92)	53.25 (18.76)	118.30 (41.68)	48.10 (16.95)	43.35 (15.27)	91.45 (32.22)	13.40 (4.72)	4.55 (1.60)	17.95 (6.32)	4.18 (1.47)	1.90 (0.67)	6.08 (2.14)	28.50 (10.04)	21.56 (7.60)	50.06 (17.64)	159.23 (56.10)	124.60 (43.90)	283.83 (100)
	Group III	109.80 (28.62)	99.40 (25.91)	209.20 (54.54)	36.60 (9.54)	40.59 (10.58)	77.19 (20.12)	23.10 (6.02)	21.10 (5.50)	44.20 (11.52)	3.10 (0.81)	1.90 (0.50)	5.00 (1.30)	30.00 (7.82)	18.00 (4.69)	48.00 (12.51)	202.60 (52.82)	180.99 (47.18)	383.59 (100)
	Total	70.95 (23.22)	63.38 (20.74)	134.33 (43.95)	46.07 (15.07)	50.51 (16.53)	96.58 (31.60)	12.50 (4.09)	8.55 (2.80)	21.05 (6.89)	4.63 (1.51)	2.35 (0.77)	6.98 (2.28)	27.50 (9.00)	19.19 (6.28	46.69 (15.28)	161.64 (52.89)	143.98 (47.11)	305.62 (100)
NON-BORROWERS	Group I	26.50 (16.87)	24.13 (15.36)	50.63 (32.23)	23.25 (14.80)	25.48 (16.22)	48.73 (31.03)	8.13 (5.17)	7.70 (4.90)	15.83 (10.08)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	25.00 (15.92)	16.88 (10.74)	41.88 (26.66)	82.88 (52.77)	74.18 (47.23)	157.05 (100)
	Group II	38.28 (18.58)	29.03 (14.09)	67.31 (32.67)	28.13 (13.65)	40.51 (19.66)	68.64 (33.31)	19.47 (9.45)	9.23 (4.48)	28.69 (13.92)	3.38 (1.64)	1.80 (0.87)	5.17 (2.51)	23.13 (11.22)	13.13 (6.37)	36.25 (17.59)	112.38 (54.53)	93.69 (45.47)	206.07 (100)
	Group III	51.90 (19.09)	36.45 (13.41)	88.35 (32.50)	31.10 (11.44)	35.35 (13.00)	66.45 (24.44)	21.35 (7.85)	9.18 (3.38)	30.53 (11.23)	29.25 (10.76)	18.00 (6.62)	47.25 (17.38)	25.00 (9.20)	14.25 (5.24)	39.25 (14.44)	158.60 (58.35)	113.23 (41.65)	271.83 (100)
	Total	38.89 (18.38)	29.87 (14.11)	68.76 (32.49)	27.49 (12.99)	33.78 (15.96)	61.27 (28.95)	16.31 (7.71)	8.70 (4.11)	25.02 (11.82)	10.88 (5.14)	6.60 (3.12)	17.47 (8.26)	24.38 (11.52)	14.75 (6.97)	39.13 (18.49)	117.95 (55.73)	93.70 (44.27)	211.65 (100)

M- Male; F- Female; T- Total

(Figure in the parentheses represents the percentage)

Table 5.32.2. Distribution of respondents' employment generated in numbers

(in numbers)

Groups		Cropping			Animal Husbandry			Fishery			Plantation			Others			Total		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	1.20 (11.32)	1.20 (11.32)	2.40 (22.64)	2.10 (19.81)	2.00 (18.87)	4.10 (38.68)	0.10 (0.94)	0.20 (1.89)	0.30 (2.83)	0.90 (8.49)	0.50 (4.72)	1.40 (13.21)	1.20 (11.32)	1.20 (11.32)	2.40 (22.64)	5.50 (51.89)	5.10 (48.11)	10.60 (100)
	Group II	1.43 (12.32)	1.41 (12.22)	2.84 (24.54)	1.60 (13.84)	1.70 (14.70)	3.30 (28.54)	0.71 (6.16)	0.90 (7.78)	1.61 (13.95)	0.65 (5.62)	0.30 (2.59)	0.95 (8.22)	1.43 (12.32)	1.44 (12.43)	2.86 (24.76)	5.81 (50.27)	5.75 (49.73)	11.56 (100)
	Group III	1.50 (13.22)	1.20 (10.57)	2.70 (23.79)	1.60 (14.10)	1.50 (13.22)	3.10 (27.31)	0.80 (7.05)	0.85 (7.49)	1.65 (14.54)	0.80 (7.05)	0.40 (3.52)	1.20 (10.57)	1.50 (13.22)	1.20 (10.57)	2.70 (23.79)	6.20 (54.63)	5.15 (45.37)	11.35 (100)
	Total	1.38 (12.31)	1.27 (11.38)	2.65 (23.69)	1.77 (15.81)	1.73 (15.52)	3.50 (31.33)	0.54 (4.81)	0.65 (5.82)	1.19 (10.63)	0.78 (7.01)	0.40 (3.58)	1.18 (10.59)	1.38 (12.31)	1.28 (11.45)	2.65 (23.76)	5.84 (52.26)	5.33 (47.74)	11.17 (100)
NON-BORROWERS	Group I	1.25 (16.67)	1.13 (15.00)	2.38 (31.67)	0.63 (8.33)	1.63 (21.67)	2.25 (30.00)	0.13 (1.67)	0.38 (5.00)	0.50 (6.67)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1.25 (16.67)	1.13 (15.00)	2.38 (31.67)	3.25 (43.33)	4.25 (56.67)	7.50 (100)
	Group II	1.22 (14.47)	1.03 (12.24)	2.25 (26.72)	0.69 (8.16)	1.50 (17.81)	2.19 (25.97)	0.50 (5.94)	0.64 (7.61)	1.14 (13.54)	0.56 (6.68)	0.25 (2.97)	0.81 (9.65)	1.16 (13.73)	0.88 (10.39)	2.03 (24.12)	4.13 (48.98)	4.30 (51.02)	8.42 (100)
	Group III	1.25 (11.24)	1.05 (9.44)	2.30 (20.67)	1.05 (9.44)	1.45 (13.03)	2.50 (22.47)	0.70 (6.29)	0.73 (6.52)	1.43 (12.81)	1.75 (15.73)	0.95 (8.54)	2.70 (24.27)	1.25 (11.24)	0.95 (8.54)	2.20 (19.78)	6.00 (53.93)	5.13 (46.07)	11.13 (100)
	Total	1.24 (13.75)	1.07 (11.85)	2.31 (25.60)	0.79 (8.73)	1.53 (16.92)	2.31 (25.65)	0.44 (4.90)	0.58 (6.44)	1.02 (11.33)	0.77 (8.55)	0.40 (4.44)	1.17 (12.99)	1.22 (13.52)	0.98 (10.91)	2.20 (24.43)	4.46 (49.45)	4.56 (50.55)	9.02 (100)

M- Male; F- Female; T- Total

(Figure in the parentheses represents the percentage)

female for 143.98 mandays (47.11 per cent). In the non-borrowers category, average number of mandays was 211.65 mandays, with male employed for 117.95 mandays (55.73 per cent) and female for 93.70 mandays (44.27 per cent). Of the different agricultural activities, crop production was found to generate the highest employment mandays, generating 134.33 mandays (43.95 per cent), with 70.95 male mandays (23.22 per cent) and 63.38 female mandays (20.74 per cent) for the borrowers, whereas for the non-borrowers it generated 68.76 mandays (32.49 per cent) with 29.87 male mandays (14.11 per cent) and 38.89 female mandays.

The distribution of respondents' employment generated in numbers is given in Table 5.32.2. The average number of persons employed for the borrowers was found to be 11.17 per family of which 5.84 (52.26 per cent) male and 5.33 (47.74 per cent) female were employed. The non-borrowers employed 9.02 persons per family with 4.56 (49.45 per cent) male and 4.56 (50.55 per cent) female.

5.33. IMPACT OF CO-OPERATIVE BANK FINANCE ON EMPLOYMENT AND INCOME

Table 5.33 reveals the impact of co-operative bank finance on income and employment. A significant increasing trend on overall group was observed. The increase in income from crop production was found to be 38.27 per cent, animal husbandry with 48.12 per cent, fishery enterprise with 16.79 per cent, plantation enterprise with 16.33 per cent and other agriculture and allied activity had increased to 42.55 per cent on the sample respondents after getting the co-operative bank finance, which was found to be statistically significant at 1 per cent level during 't' test, except on other enterprises which has 1.39 per cent increase and statistically non-significant. Further it showed that such activities could be further explored for generating more income by

Table 8.33 Impact of co-operative bank finance on income and employment status

SN	Parameters	Before		After		% Change	't' test
		Mean	SD	Mean	SD		
A.	Income (₹)						
1.	Crop Production	3192.50	1218.01	4330.05	2062.34	26.27	4.577963**
2.	Animal Husbandry	14670.83	9784.27	28279.17	21990.56	48.12	6.702508 **
3.	Fishery	975.33	351.35	1093.33	481.83	10.79	3.085567 **
4.	Plantation	1099.42	342.55	1313.96	521.76	16.32	4.156683 **
5.	Others	405.54	223.70	411.29	239.11	1.39	- 2.36075 NS
Total		20349.38	11415.22	35422.00	24216.08	42.55	4.94287**
B.	Employment						
1.	Crop Production	21.28	8.120	28.86	13.74	27.32	5.215270 **
2.	Animal Husbandry	58.68	39.13	113.11	87.96	45.25	5.679833 **
3.	Fishery	21.86	9.63	24.38	8.78	10.12	2.260137**
4.	Plantation	4.39	1.37	5.25	2.08	15.82	3.727963 **
5.	Others	1.62	0.89	1.64	0.95	1.28	- 2.05863 NS
Total		110.39	55.53	170.73	101.21	35.33	4.156683 **

*(NS - Non Significant & ** - Significant at 1 per cent level of significance.)*

the farmers. It also showed a significant increase on overall group employment. Employment from crop production was to have increased to 27.32 per cent, animal husbandry with 45.25 per cent, fishery enterprise with 18.12 per cent, plantation enterprise with 15.83 per cent and other agriculture and allied activity has increased to 35.34 per cent on the sample respondents after getting the co-operative bank finance, which was found to be statistical significant at 1 per cent level during 't' test, except on other enterprise it was 1.29 per cent increased with statistically non-significant, further it shows that more potentiality can be explored for generating more emptoyment by the farmers in the coming days.

5.12. RESOURCE USE EFFICIENCY

Cobb-Douglas Production Functions was used in the present study for the assessment of the resource use efficiency of different enterprises viz., crop production, livestock and plantation crops on different farm size groups in the selected area. The production function of different enterprises were fitted as regressing gross return (y), x_1, x_2, x_3, x_4, x_5, x_6, x_7 and x_8 in terms of rupees (₹) as independent variables on marginal, small and medium farm size groups as well as overall farm size group.

5.12.1. Resource Productivity

The Ordinary Least Square (O.L.S.) estimates of parameters of Cobb-Douglas type of production with respect to different farm size groups and overall farm size samples are presented in Table 5.34.1 and 5.34.2.

It is clear from the tables that the value of co-efficient of multiple determinations (R^2) for beneficiaries ranges from 99.56 per cent (in marginal

sizegroup of farm) to 87.08 per cent (in small size group of farm), and with an overall of 94.76 per cent, which explains the variation in the dependent variables by the selected independent variables chosen in the equation in different farm size groups and in overall farms. By aggregating the cross-sectional data of all the farms in various farm size groups under beneficiaries, the value of R^2 in all farm samples was found to be 0.9956, which shows that 99 per cent of the variation of dependent variable is explained by the independent variation chosen in the equation. Even on the non-beneficiaries farm size group it was found out to be in the range of 99.99 per cent to 94.55 per cent with an overall of 99.96 per cent, which shows a good fit of the selected model. The remaining variation of dependent variable might be due to other variables, which have been used in excess or not properly used.

The overall regression co-efficient of input a (constant) was found to have positive significant at 1 per cent and 10 per cent level for the beneficiaries and non-beneficiaries respectively, which indicates that the model is a good fit. The negative and non-significant values, indicate that constant have very little role towards the gross return.

The regression co-efficient of x_1 (human labour cost) for beneficiaries was found maximum (0.24) on the overall and minimum on the small size group (0.19) and was found significant at 10 per cent level of significance, while on marginal and medium size group it was found non-significant. The non-beneficiaries human labour had significance on the marginal (0.94) and small (0.96) size group at 10 and 5 per cent level of significance respectively. The non-significant character may mean that it contributes less or that their role is very less to the return. Even the investment of selected input was found to have negative impact, so it is better to re-allocate the input variables for further investment and have meaningful contribution with regard to the input investment.

In case of x_2 (seed/sapling/animal/fingerling cost) it was found to be positive and significant at 10 per cent level of significance in the entire size group under beneficiaries. x_2 was also found significant under non-beneficiaries in all the group size. It indicates a good fit with more potential in comparison to other inputs toward the gross returns.

The regression co-efficient of x_3 (fertilizer) was found to be statistically significant at 1 per cent level only in medium farm size group (25.75) on the beneficiaries, while on the non-beneficiaries, it was found significant on the medium and the overall. The result shows that in comparison to the other farm size groups, it could be betier utilized on the farm, because of its positive role in gaining more net return. While on other farms, its contribution was less or may be utilized in excess, which ultimately provides a negative response towards the gross return. So it may be concluded that the investment in the medium farm size group may further have more potential after the investment or by shifting the other inputs for getting better returns.

The value of x_4 (plant protection) was found to be significant only in the small size group under beneficiaries and significant at 10 per cent level of significance, whereas, it was not found significant in any of the group under non-beneficiaries. So it will be better to shift the inputs as an investment to potential areas for getting better prospects as well as returns as compared to other inputs as it contributes little towards the gross return.

The value of x_5 (machineries) was found to be significant only in the overall group under beneficiaries significant at 1 per cent level, while on the non-beneficiaries, it was found to be significant on the small size group and in the overall group significant at 10 per cent level of significance.

The value of x_6 (transportation) for the beneficiaries was found to be statistically significant at 10 per cent level in small size and medium farm group and the overall groups at 1 per cent level of significant, which shows a

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(i).	**Marginal farm size group**				
1.	10	a	-16384^{NS} (5.09E+10)	-3.2E-07^{NS}	0.995627*** (312.048)
2.		x_1	0.025571^{NS} (0.038727)	0.660283^{NS}	
3.		x_2	33.91158* (24.25238)	1.398279*	
4.		x_3	-15.3005^{NS} (8.979653)	-1.70391^{NS}	
5.		x_4	3.17E+16^{NS} (2.96E+16)	1.072674^{NS}	
6.		x_5	-42.0953^{NS} (27.14217)	-1.55092^{NS}	
7.		x_6	44.36427*** (30.91366)	1.435103***	
8.		x_7	244.4481*** (131.2289)	1.862762***	
9.		x_8	-5E+15^{NS} (4.62E+15)	-1.07267^{NS}	

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(ii).	**Small farm size group**				
1.	40	a	2723.806^{***} (3.912539)	1.886113^{***}	0.870789^{***} (1527.016)
2.		x_1	0.19939^{*} (0.088797)	2.245466^{*}	
3.		x_2	4.847295^{*} (3.912539)	1.238913^{*}	
4.		x_3	-4.87357^{NS} (4.984829)	-0.97768^{NS}	
5.		x_4	53.15255^{*} (259.3595)	0.204938^{*}	
6.		x_5	-11.1585^{NS} (67.17767)	-0.1661^{NS}	
7.		x_6	-1.0825^{NS} (1.791139)	-0.60436^{NS}	
8.		x_7	6.654108^{*} (17.58313)	0.378437^{*}	
9.		x_8	-0.20627^{NS} (2.452675)	-0.0841^{NS}	

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(iii).	**Medium farm size group**				
1.	10	a	-5750.69^{NS} (5319.275)	-1.0811^{NS}	0.99505^{***} (849.6419)
2.		x_1	0.095459^{NS} (0.204114)	0.467673^{NS}	
3.		x_2	7.061947^{*} (6.164715)	1.145543^{*}	
4.		x_3	25.75573^{***} (15.20491)	1.693909^{***}	
5.		x_4	-103.514^{NS} (92.39518)	-1.12034^{NS}	
6.		x_5	-10.6342^{NS} (7.810345)	-1.36155^{NS}	
7.		x_6	16.18642^{***} (2.428331)	6.665657^{***}	
8.		x_7	45.66887^{***} (37.39815)	1.221153^{***}	
9.		x_8	4.768853^{*} (3.139343)	1.519061^{*}	

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(iv)	**Overall farm size group**				
1.	60	a	716.0078*** (947.6455)	3.246245***	0.947637*** (1787.897)
2.		x_1	0.245545* (0.07564)	0.755565*	
3.		x_2	1.398507* (1.995703)	0.700759*	
4.		x_3	-1.89379NS (4.724446)	-0.40085NS	
5.		x_4	-29.5739NS (39.16007)	-0.75521NS	
6.		x_5	9.466241*** (4.491117)	2.10777***	
7.		x_6	2.708045* (1.695795)	1.596917*	
8.		x_7	10.34837** (15.08908)	0.685819**	
9.		x_8	-0.38046NS (1.41825)	-0.26826NS	

(Figures in parenthesis indicates the Standard Error of regression Co-efficient)

*(*** Significant at 1 per cent, ** significant at 5 per cent and * significant at 10 per cent level)*

SN	No's of observation	Variables	Regression Co-efficiency	t- Statistics	R^2
(i).	**Marginal farm size group**				
1.	8	a	722.6128^{***} (241.2675)	2.995069^{***}	0.999967^{***} (16.71651)
2.		x_1	0.942542^{*} (0.023498)	40.11149^{*}	
3.		x_2	1.156315^{**} (0.122511)	9.438457^{**}	
4.		x_3	-0.6849^{NS} (0.770485)	-0.88892^{NS}	
5.		x_4	-7.75261^{NS} (2.923082)	-2.6522^{NS}	
6.		x_5	-9.39066^{NS} (4.15061)	-2.26248^{NS}	
7.		x_6	12.74165^{***} (3.522442)	3.617278^{***}	
8.		x_7	5.209856^{***} (2.55363)	2.040176^{***}	
9.		x_8	$-5E+15^{NS}$ (-0.0000231)	-0.0121^{NS}	

Sl. No.	No's of observation	Variables	Regression Coefficients	t-value	R^2
(ii).	**Small farm size group**				
1.	32	a	261.4756*** (98.52987)	2.65377***	0.998825*** (66.51042)
2.		x_1	0.96716** (0.016182)	59.76906**	
3.		x_2	1.102792* (0.198469)	5.55649*	
4.		x_3	-0.57408NS (0.696591)	-0.82413NS	
5.		x_4	0.653858NS (0.376943)	1.734635NS	
6.		x_5	1.1719* (0.250646)	4.675523*	
7.		x_6	0.51656NS (0.217086)	2.379517NS	
8.		x_7	2.994106* (0.597837)	5.008234*	
9.		x_8	-0.34281NS (0.486553)	-0.70458 NS	

(iii)	**Medium farm size group**				
1.	20	x	-2863.69^{NS} (1538.522)	-1.86133^{NS}	0.945508*** (713.0072)
2.		x_1	0.203841^{NS} (0.06347)	3.211612*	
3.		x_2	3.841157** (1.680644)	2.285527**	
4.		x_3	4.266043* (4.18209)	1.020074*	
5.		x_4	-41.692^{NS} (33.66562)	-1.23842^{NS}	
6.		x_5	-3.62684^{NS} (3.485446)	-1.04057^{NS}	
7.		x_6	8.827077*** (1.386537)	6.366275***	
8.		x_7	11.44018* (13.64558)	0.83838*	
9.		x_8	4.676801^{NS} (1.143489)	4.089941^{NS}	

No.	No. of observation	Variables	Regression Co-efficient	t- Statistics	R^2
(iv).	**Overall farm size group**				
1.	60	a	16.16413* (42.62756)	0.379194*	0.999662*** (69.96485)
2.		X_1	0.993629NS (0.0084)	118.2938NS	
3.		X_2	1.066331* (0.086997)	12.2571*	
4.		X_3	1.036308* (0.166168)	6.236491*	
5.		X_4	0.952754NS (0.267153)	3.566325*	
6.		X_5	1.27755* (0.247783)	5.155922*	
7.		X_6	0.21086NS (0.207801)	1.014721NS	
8.		X_7	1.382999* (0.415286)	3.330234*	
9.		X_8	0.982642NS (0.365714)	2.686917NS	

(Figures in parenthesis indicates the Standard Error of regression Co-efficient)

*(*** Significant at 1 per cent, ** significant at 5 per cent and * significant at 10 per cent level)*

tive significant contribution of the input to the gross returns. Under beneficiaries marginal and medium size group was found significant at 10 cent level of significance.

The value of x_7 (marketing cost) was found significant in all the groups d also on the overall groups under beneficiaries and non-beneficiaries, ich shows a positive significant contribution of the inputs to the gross rn. So it will be better to continue the investment on these inputs for ing better prospects as well as benefiting the farmers after reshuffling the et cost.

The value of x_8 (miscellaneous) was found to be significant only in the dium size group and was found statistically significant at 10 per cent level der beneficiaries, while under non-beneficiaries it was non-significant.

522. Resource use efficiency

To evaluate how efficiently the farmers of the study area have been izing their resources, the Marginal Value Product (MVP) of an input was mpared with its respective factor cost. An optimal use of that factor was alized as the ratio approach unity. The value of ratio greater than unity ans that returns could be increased by using more of that resource and if ue of ratio is less than unity, it indicates improper use of the resources. The rginal value products of a particular resource indicates the expected dition of that resource to the gross return caused by an addition of one unit that resource, while other inputs are held constant. The marginal value oducts of these factors were computed by multiplying the regression efficient of that resource with the geometric mean of gross return to the ometric mean of each resource. The computed MVP of different strategic ables is shown in Table 5.35.1 and 5.32.2.

The value of MVP for x_1 (human labour cost) was found to be positive for the entire farm size groups. Under beneficiaries, an addition of one unit of the x_1 input would be adding a value ranging from 4.21 to a maximum of 679, whereas in the non-beneficiaries it would be adding a value in the range 34.55 to 217.61.

The value of MVP for x_2 (seed/sapling/animal/fingerling cost) was found to be positive for all the farm size groups. The value ranges from 0.47 to 932.56 for the beneficiaries and from 31.79 to 108.51 for non-beneficiaries.

The MVP of x_3 (fertilizer) was found to be positive for medium farm size (120.51) and negative for the marginal (-18.83) and the small (-21.52) farm size of the beneficiaries. The negative MVP means that addition of one unit of the input x_3 would reduce the return ranging from 18.83 to 21.52. Also the MVP of x_3 for the non-beneficiaries was found to be positive on medium farm size (727.59) and negative on the marginal (-420.76) and small (-182.76) farm size of the beneficiaries.

The MVP of x_4 (plant protection) in marginal size and small size was found to be positive and negative for the medium size group and the overall group of the beneficiaries. Whereas for the non-beneficiaries, the marginal, small and medium farm size had a negative value indicating that the addition of unit will reduce the return and only the overall will have a positive value.

The MVP of x_5 (machineri es) of beneficiaries under marginal and medium farm size groups was found out to have negative values, indicating that addition of one unit of these inputs would decrease the gross return, while the small and the overall group was found to have positive values. The non size groups all had a negative value under non-beneficiaries and only the overall had a positive value. The additional investment of one unit to these

puts would be decrease the gross returns and would not contribute their ue to the gross return of the farm.

The MVP of x_6 (transportation) in small, medium and overall farm size oup under beneficiaries was found to be positive, indicating that addition of e unit of this input will increase gross return by 16.83 to 244.00. While der non-beneficiaries, it was found to be positive for all the groups and also the overall groups with value ranging from 1.24 to 70.07.

The MVP of x_7 (marketing cost) was found to be positive on the entire m size groups. Under beneficiaries, an addition of one unit of the x_7 input ould be adding a value ranging from 1846.51 to a maximum of 9547.08, hereas, in the non-beneficiaries it would be adding a value return in the nge of 3.35 to 1031.55.

The MVP of x_8 (miscellaneous) for beneficiaries under marginal, small d overall farm size groups was found to be negative, indicating that ddition of one unit of these inputs will decree their gross return, and only e medium farm size had a positive value. The marginal and small farm size der non-beneficiaries had a negative value, whereas the medium and the erall groups had a positive value.

The cross-sectional data of overall farm size was aggregated and the tio of MVP to its factor cost was computed. It was observed that ratio of to x_8 was found to have positive as well as negative values. Positive value dicates increase return, the greater than unity the higher the gross return hich highlight that the farmers can earned more by investment on those puts for getting better returns, while the negative values indicates either cess use of inputs or adverse response towards the gross return, which eds to be curtailed immediately. Further investment of such inputs must be fted towards other higher results inputs which will provide a positive ntribution to the gross return.

Table 5.35 L: Marginal Value Product analysis of boneDecorice Corn size groups

SN	Variables	Geometric Mean	MVP	MFC	Efficiency
(i).	**Marginal farm**				
1	x_1	7712.69	4.21	98	0.04305
2	x_2	239.363	932.56	23	40.5465
3	x_3	49.4956	-420.76	22	-19.126
4	x_4	118.756	7.00E+17	17	4.10E+16
5	x_5	406.416	-11576	200	-57.881
6	x_6	260.841	244.01	4	61.0008
7	x_7	282.096	49745.2	175	284.258
8	x_6	760.037	-7.00E+15	1	-7.00E+15
9	y	6635.75	-450560	24	-18773

S.N	Variables	Geometric Mean	MVP	MFC	Elasticity
(ii).	**Small farm**				
1	x_1	10404.1	44.86	98	0.45778
2	x_2	1146.43	181.77	23	7.9032
3	x_3	48.933	-182.76	22	-8.3072
4	x_4	305.331	1594.58	17	93.7986
5	x_5	1188.44	-4184.5	200	-20.922
6	x_6	929.477	-8.12	4	-2.0297
7	x_7	725.483	1846.51	175	10.5515
8	x_8	795.914	-0.39	1	-0.3868
9	y	16865.6	102143	24	4255.95

S/n	Variables	Geometric Mean	SSSI	SEC	Efficiency
(iii).	**Medium farm**				
1	x_1	14158.1	16.18	98	0.1651
2	x_2	1956.09	199.5	23	8.67391
3	x_3	57.1146	727.59	22	33.0727
4	x_4	516.804	-2339.4	17	-137.61
5	x_5	1953.82	-3004.2	200	-15.021
6	x_6	1713.19	91.45	4	22.8633
7	x_7	1248.93	9547.08	175	54.5547
8	x_8	1289	6.73	1	6.736
9	y	28374.6	-162457	24	-6769

S/N	Variables	Geometric Mean	MVP	MFC	Efficiency
(iv).	**Overall farm**				
1	x_1	10419.3	45.79	98	0.46729
2	x_2	965.251	43.47	10	4.34703
3	x_3	50.306	-58.86	22	-2.6757
4	x_4	284.781	-735.4	17	-43.259
5	x_5	1079.68	2942.42	200	14.7121
6	x_6	832.766	16.83	4	4.20875
7	x_7	678.538	2380.3	175	13.6017
8	x_8	855.905	-0.59	1	-0.5913
9	y	15744.8	22255.9	24	927.33

SN	Variables	Geometric Mean	MVP	MFC	Efficiency
(i).	**Marginal farm**				
1	x_1	2757.18	155.52	98	1.58693
2	x_2	330.073	31.79	23	1.38255
3	x_3	36.312	-18.84	22	-0.8561
4	x_4	98.3419	-170.56	17	-10.033
5	x_5	369.376	-2582.4	200	-12.912
6	x_6	283.641	70.08	4	17.5198
7	x_7	284.39	1031.55	175	5.89458
8	x_8	369.376	-7.00E+15	1	-7.00E+15
9	y	4652.31	19871.9	24	827.994

S/n	Variables	Geometric Mean	MVP	MPC	Efficiency
(ii).	**Small farm**				
1	x_1	4976.64	217.61	98	2.22052
2	x_2	583.298	41.35	23	1.79803
3	x_3	36.2255	-21.52	22	-0.9786
4	x_4	95.5636	19.61	17	1.15387
5	x_5	762.246	439.46	200	2.19731
6	x_6	550.167	3.87	4	0.96855
7	x_7	564.656	8.98	175	0.05133
8	x_8	773.486	-0.64	1	-0.6428
9	y	8418.94	9805.34	24	408.556

S/N	Variables	Geometric Mean	MVP	MFC	Efficiency
(iii).	**Medium farm**				
1	x_1	7772.05	34.55	98	0.35256
2	x_2	919.278	108.51	23	4.71794
3	x_3	78.0913	120.52	22	5.47799
4	x_4	88.9051	-942.24	17	-55.426
5	x_5	1284.39	-1024.6	200	-5.1229
6	x_6	963.289	49.87	4	12.4682
7	x_7	967.87	25.85	175	0.14774
8	x_8	1284.39	6.6	1.15	5.74433
9	y	13452.2	-80899	24	-3370.8

SN	Variables	Geometrical Mean	SEGF	MEC	Efficiency
(iv).	**Overall farm**				
1	x_1	5336.71	185.31	100	1.85312
2	x_2	629.176	33.14	23	1.44109
3	x_3	46.8111	32.21	22	1.46418
4	x_4	93.6476	23.69	17	1.39364
5	x_5	823.528	397.11	200	1.98553
6	x_6	607.041	1.25	4	0.31133
7	x_7	616.707	3.35	175	0.01916
8	x_6	829.983	1.47	1.1	1.33282
9	y	9094.06	497.41	24	20.7255

The above result showed that none of the resources were used with optimum efficiency since MVP to factor cost ratio was not equal to unity. It further need shift of input variables for getting better prospects from the same investment of inputs.

5.3. STATUS OF BANK LOAN RECEIVED BY THE BORROWERS

5.3.1. Loan received

The distribution of loan received by the borrowers is given in Table 5.36. Under Group I (Marginal farm size) there are ten (10) loanees who took loan for animal husbandry. Under Group II (Small size) there are 3 borrowers for agriculture, 15 for fishery and 22 for animal husbandry. Under Group III (Medium Size) there are 4 agricultural loanees, 5 fishery loanees and 1 animal husbandry loanee. Categorizing the loanees under different enterprise, the maximum amount disbursed per loanee was found highest under animal husbandry with an average amount of ₹ 63,969.70, followed by agriculture with ₹ 57,685.71 and then by Fishery with ₹ 48,890.

5.3.2. Repayment performance of the borrowers

The distribution of the borrowers' loan repayment is given in Table 5.37. The findings revealed that the borrowers as a whole borrowed an amount of ₹ 34,92,600, with an additional interest amount of ₹ 4,19,112. The total amount due for repayment was found to be ₹ 39,11,712, out of which ₹ 14,71,000 (37.61 per cent) was paid and with a balance of ₹ 24,40,712.00 (62.39 per cent). Across the different Groups, Group I have a balance of 36.36 per cent, Group II with 63.64 per cent and Group III with 64.38 per cent. Under the mode of repayment, partial repayment was found to be dominant

Groups		Sample Size	Agriculture		Fishery		Animal Husbandry		Total Amount (in ₹)	Average per Group (in ₹)
			Nos.	Amount (in ₹)	Nos.	Amount (in ₹)	Nos.	Amount (in ₹)		
BORROWERS	Group I	10	0	0 (0.00)	0	0 (0.00)	10	6,20,100 (17.75)	6,20,100 (17.75)	62,010
	Group II	40	3	1,86,300 (5.33)	15	7,01,400 (20.08)	22	14,18,300 (40.61)	23,06,000 (66.03)	57,650
	Group III	10	4	2,17,500 (6.23)	5	2,76,400 (7.91)	1	72,600 (2.08)	5,66,500 (16.22)	56,650
	Total	60	7	4,03,800 (11.56)	20	9,77,800 (28.00)	33	21,11,000 (60.44)	34,92,600 (100)	58,210
	Average	1	57,685.71		48,890		63,969.70		-	-

(Figure in the parentheses represents the percentage)

Groups	Sample Size	Amount to be repaid (in ₹)	Interest rate	Amount Borrowed (in ₹)	Interest Amount (in ₹)	Amount paid (in ₹)	Balance (in ₹)	Mode of payment		
								Paid	Partial	Not Paid
Group I	10 (16.67)	6,94,512.00 (100.00)	12	6,20,100 (89.29)	74,412 (10.71)	3,06,000 (44.06)	3,88,512 (55.94)	0 (0.00)	9 (15.00)	1 (1.67)
Group II	40 (66.67)	25,82,720 (100.00)	12	23,06,000 (89.29)	2,76,720 (10.71)	9,39,000 (36.36)	16,43,720 (63.64)	2 (3.33)	31 (51.67)	7 (11.67)
Group III	10 (16.67)	6,34,480 (100.00)	12	5,66,500 (89.29)	67,980 (10.71)	2,26,000 (35.62)	4,08,480 (64.38)	0 (0.00)	9 (15.00)	1 (1.67)
Total	60 (100)	39,11,712 (100.00)	12	34,92,600 (89.29)	4,19,112 (10.71)	14,71,000 (37.61)	24,40,712 (62.39)	2 (3.33)	49 (81.67)	9 (15.00)

(Figure in the parentheses represents the percentage)

with 81.67 per cent. The balance due for repayment was found to increase with the increase in the farm size, which indicates that, the marginal farmers was found better in repayment of loan than the small and medium size farmers.

5.33. Borrowers utilization of bank loan

The nature of utilization of bank loan for which it has been sanctioned is given in Table 5.38.1 and 5.38.2. The overall utilization of the bank loan for which it was sanctioned was found out to be 41.70 per cent; the remaining was used for other productive uses on the farm (14.52 per cent) as well as non-productive uses for home consumption (43.78 per cent). Apart from the actual usage, the maximum funds were diverted towards household consumption needs which accounts for 33.13 per cent of the total loan. Under the different categories of borrowers, Group I utilized 46.28 per cent for the actual loan purpose, 2.82 for other productive purpose and 50.90 per cent for non-productive uses. Group II utilized 40.78 per cent for the loan purpose, 15.52 per cent for other productive uses and 43.70 per cent for non-productive uses. Group III utilized 40.42 per cent for the actual loan purpose, 23.25 per cent for other productive uses and 36.33 per cent for non-productive uses. The purpose utilization of bank loan was found better in Group I (46.28 per cent), followed by Group II (40.72 per cent) and then by Group III (40.42 per cent).

Table 5.38.1: Distribution of borrowers' utilization of bank loan

(in Rs.)

Loan Purpose		Amount Loaned	Actually Utilized	Other Productive Uses					Non-Productive Uses			
				Agricultural	Fishery	Animals	Plantation	Total	Household Needs	Education	Others	Total
Group I	Agriculture	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	Fishery	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	Animal Husbandry	6,20,100 (100)	2,87,000 (46.28)	4,500 (0.73)	6,000 (0.97)	5,000 (0.81)	2,000 (0.32)	17,500 (2.82)	2,53,600 (40.90)	38,000 (6.13)	24,000 (3.87)	3,15,600 (50.90)
	Total	6,20,100 (100)	2,87,000 (46.28)	4,500 (0.73)	6,000 (0.97)	5,000 (0.81)	2,000 (0.32)	17,500 (2.82)	2,53,600 (40.90)	38,000 (6.13)	24,000 (3.87)	3,15,600 (50.90)
Group II	Agriculture	1,86,300 (100)	20,500 (11.00)	0 (0.00)	1,500 (0.81)	1,15,000 (61.73)	0 (0.00)	1,16,500 (62.53)	36,000 (19.32)	10,000 (5.37)	3,300 (1.77)	49,300 (26.46)
	Fishery	7,01,400 (100)	2,86,000 (40.78)	29,500 (4.21)	0 (0.00)	34,500 (4.92)	1,500 (0.21)	65,500 (9.34)	2,31,400 (32.99)	77,000 (10.98)	41,500 (5.92)	3,49,900 (49.89)
	Animal Husbandry	14,18,300 (100)	6,34,000 (44.70)	39,000 (2.75)	37,800 (2.67)	90,000 (6.35)	9,000 (0.63)	1,75,800 (12.40)	4,84,000 (34.13)	87,000 (6.13)	37,500 (2.64)	6,08,500 (42.90)
	Total	23,06,000 (100)	9,40,500 (40.78)	68,500 (2.97)	39,300 (1.70)	2,39,500 (10.39)	10,500 (0.46)	3,57,800 (15.52)	7,51,400 (32.58)	1,74,000 (7.55)	82,300 (3.57)	10,07,700 (43.70)
Group III	Agriculture	2,17,500 (100)	65,000 (29.89)	0 (0.00)	27,000 (12.41)	35,000 (16.09)	0 (0.00)	62,000 (28.51)	69,000 (31.72)	14,000 (6.44)	7,500 (3.45)	90,500 (41.61)
	Fishery	2,76,400 (100)	1,30,000 (47.03)	18,200 (6.58)	0 (0.00)	29,500 (10.67)	2,000 (0.72)	49,700 (17.98)	73,000 (26.41)	17,200 (6.22)	6,500 (2.35)	96,700 (34.99)
	Animal Husbandry	72,600 (100)	34,000 (46.83)	5,000 (6.89)	0 (0.00)	15,000 (20.66)	0 (0.00)	20,000 (27.55)	10,000 (13.77)	5,000 (6.89)	3,600 (4.96)	18,600 (25.62)
	Total	5,66,500 (100)	2,29,000 (40.42)	23,200 (4.10)	27,000 (4.77)	79,500 (14.03)	2,000 (0.35)	1,31,700 (23.25)	1,52,000 (26.83)	36,200 (6.39)	17,600 (3.11)	2,05,800 (36.33)

(Figure in the parentheses represents the percentage)

Table 5.36.2 Distribution of borrowers' overall utilization of bank loan

Loan Purpose		Amount Loaned	Actually Utilized	Other Productive Uses (on farm)					Non-Productive Uses (home use)			
				Agricultural	Fishery	Animals	Plantation	Total	Household Needs	Education	Others	Total
Total	Agriculture	4,03,800 (100)	85,500 (21.17)	0 (0.00)	28,500 (7.06)	1,50,000 (37.15)	0 (0.00)	1,78,500 (44.21)	1,05,000 (26.00)	24,000 (5.94)	10,800 (2.67)	1,39,800 (34.62)
	Fishery	9,77,800 (100)	4,16,000 (42.54)	47,700 (4.88)	0 (0.00)	64,000 (6.55)	3,500 (0.36)	1,15,200 (11.78)	3,04,400 (31.13)	94,200 (9.63)	48,000 (4.91)	4,46,600 (45.67)
	Animal Husbandry	21,11,000 (100)	9,55,000 (45.24)	48,500 (2.30)	43,800 (2.07)	1,10,000 (5.21)	11,000 (0.52)	2,13,300 (10.10)	7,47,600 (35.41)	1,30,000 (6.16)	65,100 (3.08)	9,42,700 (44.66)
	Total	34,92,600 (100)	14,56,500 (41.70)	96,200 (2.75)	72,300 (2.07)	3,24,000 (9.28)	14,500 (0.42)	5,07,000 (14.52)	11,57,000 (33.13)	2,48,200 (7.11)	1,23,900 (3.55)	15,29,100 (43.78)

(Figure in the parentheses represents the percentage)

5.14. PROBLEMS FACED BY THE BORROWERS

5.14.1. Problems faced in utilization of bank loans

The problem faced by the respondents in utilizing bank loan is given in Table 5.39. The highest incidence of problem faced in utilization of the loan was found to be the time of disbursement of bank loans, with 60 (100 per cent) respondents facing such problems, followed by problems faced in disbursement of loan (instalment release) faced by 33 respondents (55 percent), other needs (46.67 per cent) and the amount (21.67 per cent).

5.14.2 Problems faced in acquiring bank loans

The problems faced by the borrowers in acquiring loans are given in Table 5.40. The highest problem faced was getting a Guarantor/ Securities/ Certificates was faced by 60 respondents (100 per cent), followed by guidance provided by the bank, faced by 71.67 per cent, bank process faced by 66.67 per cent, form issued by the bank faced by 60 per cent, knowledge about type of loan faced by 51.67 per cent, filling up of forms faced by 48.33 per cent and knowledge about banks faced by 38.33 per cent.

5.14.3.Other problems faced by the respondents

The other related problem faced by the respondents is given in Table 5.41. The highest incidence faced by the respondents was with the supervision and also other agricultural and allied problems faced by 100 per cent each, followed by interest rates faced by 81.67 per cent, funds & capital faced by 80 per cent, knowledge & skill problem faced by 76.67 per cent and other problems viz., transportation, bank knowledge, repayment period, insect-pest & diseases and marketing.

Table 5.29. Problems faced in utilization of bank loan (in number)

Groups	Sample Size	Amount		Disbursement of loan		Time of disbursement		Other Needs	
		Faced	Not Faced	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced
Group I	10	1	9	6	4	10	0	3	7
Group II	40	8	32	23	17	40	0	17	23
Group III	10	4	6	4	6	10	0	8	2
Total	60 (100)	13 (21.67)	47 (78.33)	33 (55.00)	27 (45.00)	60 (100)	0 (0.00)	28 (46.67)	32 (53.33)

(Figure in the parentheses represents the percentage)

Table 5.40. Problems faced in acquiring bank loan

(In numbers)

Problems	Group-I		Group-II		Group-III		Total	
	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced
Guarantor/ Securities/ Certificates	10 (16.67)	0 (0.00)	40 (66.67)	0 (0.00)	10 (16.67)	0 (0.00)	60 (100)	0 (0.00)
Guidance from bank	6 (10.00)	4 (6.67)	29 (48.33)	11 (18.33)	8 (13.33)	2 (3.33)	43 (71.67)	17 (28.33)
Bank process	7 (11.67)	3 (5.00)	27 (45.00)	13 (21.67)	6 (10.00)	4 (6.67)	40 (66.67)	20 (33.33)
Form issued by the bank	7 (11.67)	3 (5.00)	22 (36.67)	18 (30.00)	7 (11.67)	3 (5.00)	36 (60.00)	24 (40.00)
Knowledge about type of loan	3 (5.00)	7 (11.67)	20 (33.33)	20 (33.33)	8 (13.33)	2 (3.33)	31 (51.67)	29 (48.33)
Filling up of forms	5 (8.33)	5 (8.33)	17 (28.33)	23 (38.33)	7 (11.67)	3 (5.00)	29 (48.33)	31 (51.67)
Knowledge about banks	4 (6.67)	6 (10.00)	13 (21.67)	27 (45.00)	6 (10.00)	4 (6.67)	23 (38.33)	37 (61.67)

(Figure in the parentheses represents the percentage)

Table 5.41. Other problems faced by the borrowers

(in number)

Problems	Group-I		Group-II		Group-III		Total	
	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced
Supervision	10 (16.67)	0 (0.00)	40 (66.67)	0 (0.00)	10 (16.67)	0 (0.00)	60 (100)	0 (0.00)
Others	10 (16.67)	0 (0.00)	40 (66.67)	0 (0.00)	10 (16.67)	0 (0.00)	60 (100)	0 (0.00)
Interest rates	7 (11.67)	3 (5.00)	33 (55.00)	7 (11.67)	9 (15.00)	1 (1.67)	49 (81.67)	11 (18.33)
Funds & capital	8 (13.33)	2 (3.33)	32 (53.33)	8 (13.33)	8 (13.33)	2 (3.33)	48 (80.00)	12 (20.00)
Knowledge & Skill	7 (11.67)	3 (5.00)	34 (56.67)	6 (10.00)	5 (8.33)	5 (8.33)	46 (76.67)	14 (23.33)
Transportation	6 (10.00)	4 (6.67)	24 (40.00)	16 (26.67)	7 (11.67)	3 (5.00)	37 (61.67)	23 (38.33)
Bank Knowledge	3 (5.00)	7 (11.67)	20 (33.33)	20 (33.33)	8 (13.33)	2 (3.33)	31 (51.67)	29 (48.33)
Repayment period	5 (8.33)	5 (8.33)	19 (31.67)	21 (35.00)	4 (6.67)	6 (10.00)	28 (46.67)	32 (53.33)
Insects-pest & diseases	2 (3.33)	8 (13.33)	19 (31.67)	21 (35.00)	4 (6.67)	6 (10.00)	25 (41.67)	35 (58.33)
Marketing	5 (8.33)	5 (8.33)	16 (26.67)	24 (40.00)	2 (3.33)	8 (13.33)	23 (38.33)	37 (61.67)

(Figure in the parentheses represents the percentage)

5.14.4 Ranking of constraints faced by the borrowers

Table 5.42 reveals that respondents were facing many constraints during acquisition of bank loan from co-operative bank. Amount of loan was the foremost challenge to the borrowers and has been ranked as the most perceived constraint with a RBQ 33.33, followed by preparation of DPR (RBQ 30.67), lack of technical guidance from bank (RBQ 30.00), time of disbursement (RBQ 28.33) were highly ranked constraints reported by the respondents. On the other hand, subsidiary/ rebate on loan (RBQ 20.00), disbursement of loan (RBQ 14.67), credit facilities and miscellaneous (RBQ 12.00), form issued by the bank (RBQ 11.00), knowledge about type of loan (RBQ 9.00), bank interest rate (RBQ 8.00), filling up of loan forms (RBQ 5.33), repayment period (RBQ 4.67) were perceived as constraints of co-operative bank finance, but on a lower scale.

5.15. PROBLEMS FACED BY THE BANK(ERS)

The following problems were faced by the bankers in financing agricultural and allied activities.

5.15.1. Repayment/ Overdues

The foremost important problem faced by the bankers in general was the existence of high overdues. This was caused by non-repayment of dues. Most of the borrowers were not sincere in repaying their dues, and this has caused stagnation in lending for further developmental activities and others aspiring beneficiaries wanting to take loan.

Table 5.42. Ranking of constraints faced by the borrowers during acquisition of co-operative bank finance

SN	Constraints	Ranks					R. B. Q.	Overall Rank
		I	II	III	IV	V		
1.	Amount of loan	20	12	11	14	3	33.33	I
2.	Disbursement of loan	11	18	8	18	5	14.67	VI
3.	Time of disbursement	17	12	11	9	11	28.33	IV
4.	Credit facilities	12	23	8	3	14	12.00	VII
5.	Technical guidance from bank	18	15	14	11	2	30.00	III
6.	Bank loan formalities	12	13	9	11	15	12.00	VII
7.	Form issued by the bank	11	16	12	10	11	11.00	VIII
8.	Knowledge about type of loan	9	11	11	21	8	9.00	IX
9.	Filling up of loan forms	8	9	14	22	7	5.33	XII
10.	Repayment Period	7	7	12	24	10	4.67	XIII
11.	Bank interest rate	8	6	21	18	7	8.00	X
12.	Preparation of DPR	23	5	17	9	6	30.67	II
13.	Subsidiary / rebate on loan	15	12	16	9	8	20.00	V
14.	Guarantor / securities required	9	11	15	11	14	6.00	XI
15.	Miscellaneous	12	14	13	13	8	12.00	VII

5.15.2 Distance and Supervision

The co-operative bank in general gives financial assistance to people from all walks of life, even financing to the remote areas and other localities, and which has caused supervision problems due to poor connectivity and the distance between the bank branch and the loanees. Bank related information that needs to be passed to them (farmers) gets delayed. Also, the distance has caused the problems in imparting training to them.

5.15.3. Uneven distribution of borrowers

The bankers also face uneven distribution of borrowers which has led to supervision problems. Though they have come up with the idea of group borrowing and area approach system for better supervision yet, the problems are not always solved as there are no respondents from the target area while there are individuals who want loan are not from the target groups/area.

5.15.4. Unfaithful nature and misutilization of funds by the borrowers

It has also been found that there are borrowers who are unfaithful towards supervision officials especially when the official/staff goes for evaluating the projects of the borrowers. The problem is such that the banker finds it difficult to evaluate the actual benefits or significance of bank loans to the borrowers as they divert the loan to other activities or towards consumption purposes. The misutilization of bank loan in the study may not be due to lack/inadequate funds but due to unfaithful nature of the borrowers. Misutilization of the funds allotted to them is one of the major factors leading to problems of non-repayment of the dues on time.

5.15.5. Untimely submission of form

The bankers also observed that borrowers submitted their loan proposal late. If the loan is sanctioned to these borrowers, there may be a possibility of diversion of the loan. There is also a chance of repayment problem as the loan sanctioned may not be able to generate returns to repay the installment on due date. Thus, the bankers face the problem of advancing the loans in odd times.

5.15.6. Human resource and Logistic support

One of the main reasons why co-operatives bank are lacking in the state is due to lack of human resources. Lack of manpower has limited the bank's expansion as well as supervision. Due to limited bank branches more areas has to be covered by a bank branch in that locality, this has caused work load on the bankers especially on the limited field staff who has to cover more areas/villages. The limited bank staff that are work loaded with are faced with poor or lack of logistic support and poor communication to do their works efficiently.

5.15.7. Productivity

Apart from misutilization and diversion of loans for other uses, the use of modern technology in the farming system is lacking which reduces their productivity. The farmers neither are ready to participate in trainings on modern means of farming nor are willing to use modern technology in the farming system.

CHAPTER-VI

SUMMARY & CONCLUSION

CHAPTER – VI

SUMMARY & CONCLUSION

Agriculture is the mainstay of Indian economy not only in terms of contribution to the gross domestic product but also the people dependent upon it. In the last few years, the Indian economy has emerged as one of the fastest growing economies in the world. Many economist and policy makers believe that the future growth of the domestic economy, to a large extent, will depend on the robust performance of the agricultural and rural sector. The manufacturing and service sectors cannot sustain the economy's growth if the rural sector underperforms.

The role of banks in rural upliftment and the effectiveness of banks as a tool for socio-economic, and over all development of the rural people consists of a broad spectrum. The success or failures of any enterprises depends to a large extend on availability of finance.

The contribution of the banking and financial sector to the current economic growth of the Indian economy is very significant. However, the access of banking services to the rural, agriculture and the common man in general is not as promising. In India, the focus of the financial inclusion at present is more or less confined to ensuring a bare minimum access to a savings bank account without frills to all. The rural population in India suffers from a great deal of indebtedness and is subject to exploitation in the credit market due to high interest rates and the lack of convenient access to credit. Rural households need credit for investing in agriculture and smoothening out seasonal fluctuations in earnings. Since cash flows and savings in rural areas for the majority of households are small, rural households typically tend to rely on credit for other consumption needs like education, food, housing, household functions, etc. Rural households need access to financial institutions that can provide them with credit at

lower rates and at reasonable terms than the traditional money-lenders and thereby, help them avoid debt-traps that are common in rural India.

Micro finance is a broad term that includes deposits, loans, payment services and insurances to poor. A success indicator of micro finance lies in a 'credit-plus' approach, where the focus has not only been on providing credit, but to integrate it with other development activities. One such agency that provides micro finance is the co-operative bank. A co-operative bank is a financial entity which belongs to its members, who are at the same time, the owners and the customers of their bank.

Agriculture along with livestock rearing and other allied agricultural activities is a common aspect seen in most tribal houses of India and plays an important part, especially in the lives of the North-Eastern Hill Region people. Since agricultural operations are seasonal, family labour may become ideal, leading to decreased labour efficiency and unemployment problems. Agriculture and allied activities helps to supplement the farm income as well as utilizes the surplus resources of the farm. To remove or suppress such problems, one important measure is financing them to take up productive enterprises through banking sectors.

Although a few studies on macro aspects of agricultural credit have been undertaken, yet specific studies to highlight the status of agricultural finance in the Northeastern India is lacking.

The broad objective of the study is to examine the magnitude of financing made by Co-operative Bank on Agricultural and Allied activities and the impact on the borrowers in promoting productivity, income generation and the employment generated in the study area. Also, to consider the broad based impact of credit on production potential and all round development of rural people, the present study entitled," A study on Co-operative Bank in financing agricultural and allied activities with special reference to Dimapur district of Nagaland" has been undertaken during the year 2010-12.

6.1 SUMMARY OF THE FINDINGS

6.1.1. Status of bank network in Nagaland

The findings on the status of bank branch showed that as on 31st March 2012, there are 19 Commercial Banks with 93 branches, 1 Regional Rural Bank with 9 branches and 1 Co-operative Bank with 21 branches with a total of 123 bank branches operating in Nagaland. At present there are 52 bank branches located in rural areas and 71 in semi-urban areas. Data showed that there is a least growth in the bank branches in the past few years. The current network of banking in the state is however far from being adequate. Out of the 74 Development Blocks in Nagaland, 32 Blocks are still un-banked. The people living in the un-banked areas have to travel a long way to the nearest banks. The bank branches failed to reach the areas where they are needed the most, the rural areas. Most of the Banks are situate in the commercial hubs like Dimapur, Kohima, Mokokchung and Wokha.

The status of loan and advances from NABARD in Nagaland over the past years showed that there was an increase in the overall growth rate from 10.34 per cent in 2010-11 to 16.10 in 2011-12. The major share of advances during the year 2011-12 was released to the Commercial Banks followed by the RRB and then the SCB. The agency-wise break-up indicates that the SCB has the highest growth rate of 59.79 per cent.

As on March 2012, the aggregate deposits showed an increased growth rate of 64.08 per cent from 24.37 per cent in 2010-11, with RRB having the highest growth rate of 36.41 per cent.

The Credit-Deposit (CD) ratio of all the banks as on March 2012 showed an increase from 27.79 during 2010-11 to 28.28. Bank-wise analysis revealed that only the SCB has an increase in the CD ratio to 36.24 from 25.80 during 2010-11. On analysing the table the SCB has the highest credit deposit growth rate of 40.46 per cent. This indicates that the SCB had

performed better than their counterpart in terms of bank credits and deposits.

The Annual Credit Plan for the entire bank in Nagaland was estimated to the tune of ₹ 32,479.32 lakhs during the year 2011-12, for the disbursement to the priority sector. The overall flow of the credit during the year 2011-12 showed that the credit plan for Agri and Allied sector had increased, while Other sector and Industries was seen to have decreased.

A total of 16,800 numbers of Kisan Credit Card were fixed under the Annual Credit Plan (2011-12) of which the highest achievement was made by the CBs whose achievement percentage was 59.71 per cent, followed by the SCB with 51.06 per cent achievement and the RRB with only 21.71 per cent achievement. The overall achievement was found out to be 55.40 per cent which is only half the mark of the total sanction amount and numbers.

NABARD refinance support for meeting investment credit of banks during the year 2011-12 showed that of the total amount 81 per cent (₹ 500 lakhs) was refinanced to the SCB and the other 19 per cent (₹ 115.04 lakhs) was refinanced to the CBs, whereas the RRB was not refinanced.

6.1.2. Status co-operative bank in Nagaland

The Nagaland State Co-operative Bank management is governed by Board of Directors comprising of 16 Directors, of whom the State Government is represented by the Addl. Chief Secretary & Finance Commissioner, Commissioner & Secretary Co-operation & the Registrar of Co-operative Societies, representative from NABARD as ex-officio Member, besides one Director representing Primary Agricultural Co-operative Societies from each District and the Managing Director of NSCB who is the Member Secretary.

It was observed that the SCB investment was seen to have a negative growth rate of -2.66 per cent, but the CD Ratio was recorded the highest over the years with 36.00 per cent during the year 2011-12 with a growth rate of 41.29 per cent which was a drastic improvement over the previous year (2010-11) with a growth rate of only 3.92 per cent. The recovery performance was also observed to have improved, with a recovery performance of 60.78 per cent. The overall Net Profit-Loss was found out to be highest during the year 2011-12 with a net profit growth rate of 42.09 per cent.

The total membership rose to 13,150 with a growth rate of 15.05 during 2011-12.

Funds required for lending and investments are raised through owned funds, public deposits and borrowings from the State Govt., and NABARD.

The share capital was observed to have increased with a growth rate from 3.54 per cent (during 2010-11) to 7.88 per cent (during 2011-12). It was observed that the highest share of capitals in all the years comes from the contribution share of the State Government.

The total reserves was found highest during the year 2011-12 which stood at ₹ 382.79 lakhs (growth rate of 7.29 per cent) as on 31 March 2012, but the growth rate was found highest during the year 2007-08 with a growth rate of 36.39 per cent.

The own funds was found to be ₹ 3,932.28 with a growth rate of 7.84 percent as on March 2012 which was also recorded the highest.

The deposits of the Bank have increased from ₹ 32,310.50 lakhs as on March 2011 to ₹ 36,683.45 lakhs as on March 2012, making it the highest total deposits (growth rate of 13.53 per cent). Though the total deposits have increased, the growth rate of total deposits was observed decreasing during the past years.

Under borrowings, there has been only a marginal growth in the overall borrowings during the year 2011-12. The highest source of borrowings during the year 2011-12 was seen from the NABARD ARF (Refinance) to the tune of ₹ 580 lakhs, followed by NABARD SAO with ₹ 375.10 lakhs and then by NSTFDC borrowings of ₹ 69.13 lakhs.

The distribution of the annual flow of loan and advances showed that it was increasing year after year in an increasing order. The total flow of credit from the SCB reached a new height of ₹ 9,242.91 lakhs (during 2011-12) from ₹ 4,762.74 lakhs (during 2010-11). The flow of credit to the consumer loan was found highest, followed by cash credit, then agriculture and allied sector and then the SHG for medium term loan.

The recovery position of the State Co-operative Bank showed a significantly increased in the recovery of the principal credit distributed from 58.40 per cent as on March 2011 to 60.78 per cent as on March 2012.

6.1.3. Socio-economic status of the respondents

There were a total of 120 respondents, 60 respondents from the borrowers and 60 from the non-borrowers. The borrowers had 10 respondents with marginal land holdings, 40 respondents with small land holdings and 10 respondents with medium sized land holdings. On the other hand the non-borrowers had 8 respondents with marginal land holdings, 32 respondents with small land holdings and 20 respondents with medium sized land holdings.

Both the borrowers and non-borrowers each had 7 respondents with agricultural based activities, 20 respondents with fishery based activities and 33 respondents with animal husbandry activities.

The average family size of the borrowers was found to be 5.53 with male population (55.20 per cent) higher that the female (44.80 per cent). The

non-borrowers also have a male population (52.25 per cent) higher than the female (47.74 per cent) with an average family size of 4.80.

The sample respondent's farm family illiteracy rate was found to be 6.18 per cent for the borrowers and 15.63 per cent for the non-borrowers. The proportion of male and female literacy under borrowers was found to be 55.20 per cent for male and 44.80 per cent for female, whereas for the non-borrowers it was found to be 52.74 per cent for male and 47.74 per cent for the female. On the type of education level attained, High School level was found to be prevalent (48.27 per cent) under borrowers and Primary schooling (37.85 per cent) under non-borrowers.

The borrowers' primary occupation was observed to be agriculture (44.77 per cent) and also with a dominant agriculture as their secondary occupation (70.93 per cent). Under non-borrowers, agriculture was found to be the primary occupation (48.70 per cent) and also their secondary occupation (41.75 per cent). These findings revealed that agricultural activity played a dominant role in the study area.

The total work force of the borrowers was found to be 81.60 per cent and 78.13 per cent for the non-borrowers. The male workers in both the case (borrowers and non-borrowers) was found to be higher than the female workers.

5.1.4. Land inventories of the respondents

The overall average land holding was found to be 0.73 ha for the borrowers and 0.89 ha for the non-borrowers. Under borrowers, Group I have an average holdings of 0.43 ha, Group II with 0.69 ha and Group III with an average of 1.19. The non-borrowers Group I have and average holdings of 0.44 ha, Group II with 0.78 ha and Group III with 1.24 ha.

The borrowers' maximum utilization of land was found to be for the use of agricultural operation. Land under vegetable cultivation accounts

for30.16 per cent and land under paddy accounts for 27.11 per cent of the total land holdings. The non-borrowers maximum land use was seen under agriculture for the production of paddy accounting for 35.87 per cent and vegetable cultivation with 15.39 per cent of the total available land.

6.1.5. Agriculture and allied activities of the respondents

The borrowers had a total cropped area of 46.34 ha, with a total production of 4,163.78 kg and a sold out value of ₹ 46,369.50. Observation revealed that, majority of the production comes from cereals accounting for 66.15 per cent of the total production and also with the highest sold out value (61.97 per cent) of the total sold out value. On the other hand the non-borrowers have a total cropped area of 36.69 ha, with a total production of 4,361.84 kg and a total sold out value of ₹ 19,292.85. The income generated from the borrowers had a higher sold out values than the non-borrowers.

The average cost of cropping for the borrowers was found to be ₹ 48,276.65 and ₹ 28,595.69 for the non-borrowers. The maximum cost incurred under cropping for both the borrowers and non-borrowers was the cost of labour. The cost of production was found to increase with increase in the land holding i.e. from marginal to medium size land holding.

The distribution of respondents' livestock inventories showed that the borrowers, on an average have a total current livestock value of ₹32,663 and the non-borrowers with a current average value of ₹ 15,173.33. The maximum present value was found to be from piggery with an average value of ₹ 23,800 per borrower family and ₹ 11,500 per non-borrower family.

The cost of livestock production on an average was found to be ₹ 32,496.73 and ₹ 14,653.45 for the borrower and the non-borrowers

respectively. Under both the cases (borrowers and non-borrowers), the highest cost was incurred on the purchase of animals for rearing accounting to an average of ₹ 11,278.40 (34.71 per cent) and ₹ 5,264.18 (35.92 per cent) respectively, followed by the feeding cost, with an average of ₹ 8,243.25 (25.37 per cent) for the borrowers and ₹ 3,779.96 (25.80 per cent) for non-borrowers.

The borrowers' average net return from livestock production was found to be ₹ 55,371.26 and ₹ 33,648.17 for the non-borrowers. The highest average return for the borrowers was found to be from cattle with a return of ₹ 27,979.33 (50.53 per cent) and for the non-borrowers it was from piggery with an average of ₹ 23,741.50 (70.56 per cent). The item-wise breakup of return from different source revealed that sale of mature animals contributed the highest, with an average sold out value of ₹ 30,422 (54.94 per cent) for the borrowers and ₹ 23,686.04 (70.39 per cent) for the non-borrowers.

The overall average cost of fish production was found to be ₹ 11,455.63 for the borrowers and ₹ 8,091.96 for the non-borrowers. The total cost incurred was found increasing with the increase in the farm size under both the cases of borrowers and non-borrowers. The highest cost incurred for fish production was the feeding cost, with an average cost of ₹ 4,626.53 (40.39 per cent) and ₹ 3,610.25 (44.62 per cent) for borrowers and non-borrowers respectively.

The respondents' average yield from fish production was found to be 250 kg, with a worth value of ₹ 25,026.67 for the borrowers, whereas for the non-borrowers, it was found to be 154.73 kg, worth ₹ 15,472.50. The average sold out value of fish for the borrowers was found to be ₹ 23,670.83 and ₹ 14,760.83 for the non-borrowers. Comparatively, in terms of yield and return from fish, the borrower was found to be better off than its counterpart, the non-borrower.

The average cost of plantation was found to be ₹ 2,029.73 for the borrowers and ₹ 4,086.33 for the non-borrowers. The highest cost incurred was the labour cost under both the cases. The average total return from plantation for the borrowers was found to be ₹ 1,136.67 and ₹ 1,926.56 for the non-borrowers. The borrowers' total return from sale of the products accounts for 61.58 per cent and for the non-borrowers it was 60.77 per cent.

6.1.6. Expenditure and income of the respondents

The borrowers on an average, per annum have a total expenditure of ₹1,22,3 4656 , whereas for the non-borrowers it was found to be ₹ 88,838.89. The total expenditure for the borrowers was incurred from on-farm expenditure (50.74 per cent) and the family-needs expenditure (49.26 per cent), whereas for the non-borrowers it was found to be 30.15 per cent for on-farm expenditure and 59.07 per cent for family-needs expenditure. The highest expenditure incurred was for animal husbandry with an expenditure amount of 26.56 per cent for the borrowers and for the non-borrowers the highest expenditure was incurred for the household needs amounting to 30.15 per cent.

The respondents' annual income from different sources was found to be ₹ 1,38,136.10 per respondents for the borrowers and ₹ 83,389.81 for the non-borrowers. Of the different source of income, animal husbandry contributes a major share, on an average contributing 40.08 per cent to the borrower's income and 34.02 per cent to the non-borrowers income. The income was found to increase with the increase in the farm size under borrowers. On comparison, borrowers' income generated from agricultural, animal husbandry and fishery was found higher than the non-borrowers in all the cases. This implies that the income impact was positive on the borrowers.

6.1.7. Impact of co-operative bank finance on employment and income

The total average number of mandays generated for the borrowers was found to be 305.62 mandays, with male employed for 161.64 days (52.89 per cent) and female for 143.98 mandays (47.11 per cent). The non-borrowers average number of mandays was out to be 211.65 mandays, with male employed for 117.95 mandays (55.73 per cent) and female for 93.70 mandays (44.27 per cent). Of the different agricultural activities, crop production was found to generate the highest employment mandays, generating 134.33 mandays (43.95 per cent) for the borrowers, whereas for the non-borrowers it generated 68.76 mandays (32.49 per cent). The borrower's average number of person employed was found out to be 11.17 perfamily and 9.02 persons per family for the non-borrowers.

There was a significant increasing trend on the borrower overall groups. The increase in income from crop production was found to be 26.27 per cent, animal husbandry with 48.12 per cent, fishery enterprise with 10.79 per cent, plantation enterprise with 16.33 per cent and other agriculture and allied activity had increased to 42.55 per cent on the sample respondents after getting the co-operative bank finance. It also showed a significant increase on the overall group employment. Employment from crop production was increased to 27.32 per cent, animal husbandry to 45.25 percent, fishery enterprise to 10.12 per cent, plantation enterprise to 15.83 percent and other agriculture and allied activity had increased to 35.34 per cent.

6.1.8. Resource use efficiency of the respondents

Cobb-Douglas Production Functions was used in the present study for the assessment of the resource use efficiency of different enterprises. The production function of different enterprises were fitted as regressing gross return (y), x_1, x_2, x_3, x_4, x_5, x_6, x_7 and x_8 in terms of rupees (₹) as

independent variables on marginal, small and medium farm size groups as well as overall farm size group.

By aggregating the cross-sectional data of all the farms in various farm size groups under beneficiaries, the value of R^2 was found to be 0.9956, which shows that 99 per cent of the variation of dependent variable explained by the independent variation chosen in the equation. Even on the non-beneficiaries the overall of R^2 was found to be 99.96 per cent, which shows a good fit of the selected model. The remaining variation of dependent variable might be due to other variables, which have been used in excess or not properly used.

The overall regression co-efficient of input a (constant) was found to have a positive significant at 1 per cent and 10 per cent level for the beneficiaries and non-beneficiaries respectively, which indicate that the model is a good fit.

The regression co-efficient of x_1 (human labour cost) for beneficiaries was found maximum (0.24) on the overall and minimum on the small size group (0.19) and was found significant at 10 per cent level of significance, while on marginal and medium size group it was found non-significant. The non-beneficiaries human labour had significance on the marginal (0.94) and small (0.96) size group at 10 and 5 per cent level of significance respectively.

In case of x_2 (seed/sapling/animal/fingerling cost) it was found to be positive and significant at 10 per cent level of significance in the entire size group under beneficiaries. x_2 was also found significant under non-beneficiaries in all the group size. It indicates a good fit with more potential in compare to other inputs toward the gross returns.

The regression co-efficient of x_3 (fertilizer) on the beneficiaries was found to be statistically significant at 1 per cent level only in medium farm size group (25.75), while on the non-beneficiaries it was found significant on the medium and the overall.

The x_4 (plant protection) was found significant only in the small size group under beneficiaries and significant at 10 per cent level of significance, whereas, it was not found significant in any of the group under non-beneficiaries.

The value of x_5 (machineries) was found significant only in the overall group under beneficiaries and significant at 1 per cent level, while on the non-beneficiaries it was found significant on the small and overall group, significant al 10 per cent level of significance.

The value of x_6 (transportation) for the beneficiaries was found to be statistically significant at 10 per cent level in small size and medium farm group and the overall groups at 1 per cent level of significant, which shows a positive significant contribution of the input to the gross returns. Under non-beneficiaries marginal and medium size group was found significant at 10 per cent level of significance.

The value of x_7 (marketing cost) was found significant in all the groups and also on the overall under beneficiaries and non-beneficiaries, which shows a positive significant contribution of the inputs to the gross return.

The value of x_8 (miscellaneous) was found to be significant only in the medium size and statistically significant at 10 per cent level under beneficiaries, while under non-beneficiaries it was not found significant.

To evaluate how efficiently the farmers of the study area have been utilizing their resources, the Marginal Value Product (MVP) of an input was compared with its respective factor cost. The gross sectional data of overall farm size have been aggregated and the ratio of MVP to its factor cost was computed. It was observed that ratio of x_1 to x_8 was found to be positive as well as negative values. Positive value indicates increase return, the greater than unity the higher the gross return which highlight that the farmers can incurred more investment on those inputs for getting better returns, while the negative values indicating either excess use of inputs and

adverse response towards the gross return, which needs to be curtailed immediately and further investment of such inputs must be shifted towards the higher results inputs which will provide the positive contribution to the gross return.

The value of MVP for x_1 (human labour cost) was found to be positive for the entire farm size groups. Under beneficiaries, an addition of one unit of the x_1 input would be adding a value ranging from 4.21 to a maximum of 45.79, whereas in the non-beneficiaries it would be adding a value in the range of 34.55 to 217.61.

The value of MVP for x_2 (seed/sapling/animal/fingerling cost) was found to be positive for all the farm size groups. The value ranges from 43.47 to 932.56 for the beneficiaries and from 31.79 to 108.51 for the non-beneficiaries.

The MVP of x_3 (fertilizer) was found to be positive for medium farm size (t20.51) and negative for the marginal (-18.83) and the small (-21.52) farm size on the beneficiaries. The negative MVP means that addition of one unit of the input x_3 would reduce the return ranging from 18.83 to 21.52. Also the MVP of x_3 for the non-beneficiaries was found to be positive on medium farm size (727.59) and negative on the marginal (-420.76) and small (-182.76) farm size of the beneficiaries.

The MVP of x_4 (plant protection) in marginal size and small size was found to be positive and negative for the medium size group and the overall group on the beneficiaries. Whereas, for the non-beneficiaries the marginal, small and medium farm size had a negative value indicating that the addition of a unit will reduce the return and only the overall had a positive value.

The MVP of x_5 (machineries) of beneficiaries under marginal and medium farm size groups was found to have negative values, indicating that addition of one unit of these inputs would decrease the gross return, while the small and the overall group was found to have positive values.

The farm size groups all had negative values under non-beneficiaries, only the overall had a positive value. The additional investment of one unit to these inputs would be decreasing the gross returns and would not contribute their share to the gross return of a farm.

The MVP of x_6 (transportation) in small, medium and overall farm size group under beneficiaries was found to be positive, indicating that addition of one unit of this input will increase gross return by 16.83 to 244.00. While under non-beneficiaries it was found to be positive for all the groups and the overall groups with value ranging from 1.24 to 70.07.

The MVP of x_7 (marketing cost) was found to be positive on the entire farm size groups. Under beneficiaries, an addition of one unit of the $x_7$input would be adding a value ranging from 1846.51 to a maximum of 9547.08, whereas, in the non-beneficiaries it would be adding a value return in the range of 3.35 to 1031.55.

The MVP of x_8 (miscellaneous) for beneficiaries under marginal, small and overall farm size groups was found to be negative, indicating that addition of one unit of these inputs will decree their gross return, and only the medium farm size had a positive value. The marginal and small farm size under non-beneficiaries had negative values, whereas, the medium and the overall groups had a positive value.

6.1.9. Status of bank loan received by the borrowers

Group I (Marginal farm size) had ten (10) loanees who took loan for animal husbandry. Under Group II (Small size) there are 3 borrowers for agriculture, 15 for fishery and 22 for animal husbandry. Under Group III (Medium Size) there are 4 agricultural loanees, 5 fishery loanees and 1 animal husbandry loanees. Categorizing the loanees under different enterprises, the maximum amount disbursed per loanee was found highest

under animal husbandry with an average amount of ₹ 63,969.70, followed by agriculture with ₹ 57,685.71 and then by Fishery with ₹ 48,890.

The finding revealed that the borrowers a whole borrowed an amount of ₹ 34,92,600, with an additional interest amount of ₹ 4,19,112. The total amount due for repayment was found to be ₹ 39,11,712, out of which ₹ 14,71,000 (37.61 per cent) was paid and with a balance of ₹ 24,40,712.00 (62.39 per cent). Across the different Groups, Group I have a balance of 55.94 per cent, Group II with 63.64 per cent and Group III with 64.38 per cent. Under the mode of repayment, partial repayment was found to be dominant with 81.67 per cent. The balance due for repayment was found to increase with the increase in the farm size, which indicates that, the marginal farmers was found more punctual in repayment of the loans than the small and medium size farmers.

The overall utilization of the bank loan for which it was sanctioned was found out to be 41.70 per cent; the remaining was used for other productive uses on the farm (14.52 per cent) as well as non-productive uses for home consumption (43.78 per cent). Apart from the actual usage, the maximum funds were diverted to household consumption needs which accounted for 33.13 per cent of the total loan. Under the different categories of borrowers, Group I utilized 46.28 per cent for the actual loan purpose, 2.82 for other productive purpose and 50.90 per cent for non-productive uses. Group II utilized 40.78 per cent for the loan purpose, 15.52 per cent for other productive uses and 43.70 per cent for non-productive uses. Group III utilized 40.42 per cent for actual loan purpose, 23.25 per cent for other productive uses and 36.33 per cent for non-productive uses. The purpose utilization of bank loan was found to be better in Group I (46.28 per cent), followed by Group II (40.72 per cent) and then by Group III (40.42 per cent).

6.1.10. Problems faced by the borrowers

The highest incidence of the problems faced in utilization of the loan was found to be for, the time of disbursement of bank loans, with 60 (100 per cent) respondents facing such problems, followed by problems faced in disbursement of loan (instalment release) faced by 33 respondents (55 per cent), other needs (46.67 per cent) and the amount (21.67 per cent).

The highest problems faced in acquiring loans was the Guarantor/ Securities/ Certificates, faced by 60 respondents (100 per cent), followed by guidan ce provided by the bank faced by 71.67 per cent, bank process faced by 66.67 per cent, form issued by the bank faced by 60 per cent, knowledge about type of loan faced by 51.67 per cent, filling up of forms faced by 48.33 per cent and by knowledge about banks faced by 38.33 per cent.

The other related problems faced by the respondents was found highest with the supervision and other agricultural and allied problems faced by 100 per cent, followed by interest rates faced by 81.67 per cent, funds & capital faced by 80 per cent, knowledge & skill problems faced by 76.67 per cent and other problems viz., transportation, bank knowledge, repayment period, insect-pest & diseases and marketing.

Amount of loan was the foremost challenge to the borrowers and has been ranked as the most perceived constraint with a RBQ 33.33, followed by preparation of DPR (RBQ 30.67), lack of technical guidance from bank (RBQ 30.00), time of disbursement (RBQ 28.33) were highly ranked constraints reported by the respondents. On the other hand, subsidiary/ rebate on loan (RBQ 20.00), disbursement of loan (RBQ 14.67), credit facilities and miscellaneous (RBQ 12.00), form issued by the bank (RBQ 11.00), knowledge about type of loan (RBQ 9.00), bank interest rate (RBQ 8.00), filling up of loan forms (RBQ 5.33), repayment period (RBQ 4.67) were perceived as constraints of co-operative bank finance, on a lower scale.

6.1.11. Problems faced by the bank(ers)

The foremost important problem faced by the bankers in general was the existence of high overdues. This was caused by non-repayment of dues. Most of the borrowers were not sincere in repaying their dues, and this has caused stagnation in lending.

The co-operative bank in general gives financial assistance to people from all walks of life, even financing to the remote areas and other localities, and which has caused supervision problems due to poor connectivity and the distance between the bank branch and the loanees.

The bankers also face uneven distribution of borrowers which has led to supervision problems.

It has also been found that there are borrowers who are unfaithful towards supervision officials. The misutilization of bank loan in the study may not be due to lack/inadequate funds but due to unfaithful nature of the borrowers.

The bankers also observed that borrowers submitted their loan proposal late. If the loan is sanctioned to these borrowers, there may be a possibility of diversion of the loan. There is also a chance of repayment problem as the loan sanctioned may not be able to generate returns to repay the installment on due date.

One of the main reasons why co-operatives bank are lacking in the state is due to lack of human resources. Lack of manpower has limited the bank's expansion as well as supervision.

Apart from misutilization and diversion of loans for other uses, the use of modern technology in the farming system is lacking which reduces their productivity. The farmers neither are ready to participate in trainings on modern means of farming nor are willing to use modern technology in the farming system.

6.2. CONCLUSION & SUGGESTIONS

The co-operative bank finance was observed to have a positive impact on 42.55 per cent of the beneficiaries to enhance their income and further it had the capacity to generate more income through agriculture and allied enterprises. Bank finance also had a positive impact on 35.34 per cent enhancement of mandays employment, which further showed prospect of generating more mandays employment by taking up the different enterprises.

As more entrepreneurs/farmers come forward to start any agriculture related activities, financial support by the co-operative banks must be extended to them as being socially acceptable and economically feasible. One enterprise alone is not sufficient enough to raise the employment and income level and further if more employment and income are to be generate throughout the year more enterprise have to be incorporate for which, loan/credit must be provided to the beneficiaries by extending micro-finance required based on the performance.

The foregoing study had brought out the following suggestions, which are expected to result greater success to the beneficiaries and bankers of co-operative banks in Nagaland.

1. The main reasons co-operatives bank lacking in the state are due to lack of human resources and connectivity. Lack of manpower has hindrance on the bank expansion as well as supervision. There is a need to employ more staff for the functioning and expansion of the bank.

2. Slackness in recovery of loans, resulting in mounting overdues is undermining the soundness of credit structure in many areas and has led to stagnation. These high overdues have created obstacle for other beneficiaries from getting the required amount. This points to the deficiencies in loaning policies, inadequate arrangements for supervision and weaknesses of internal management of the bank

officials. Systematic efforts need to be made both by the State Government and by the bankers towards substantial reduction of overdues. Attention is also needed to incorporate and strengthening the recovery staff and other concerned departments.

3. Development programmes at block level with facilities and extension services must be strengthened in order to make the rural people aware, to set up enterprises efficiently in terms of increasing their income and employment, to enhance the production/ productivity through the agriculture and allied enterprises to achieve self-sufficiency of the state in the days to come.

4. Apart from misutilization and diversion of loans for other uses, the use of modern technology in the farming system is lacking which reduces their productivity. Concern Government department should train and encourage the farmers. The department of agriculture and allied department should take the initiative to conduct training and equip the farmers with the modern techniques of cultivation practices so as to increase their productivity and thereby increased their economy.

5. The bankers also faces uneven distribution of borrowers, which also leads them is supervision problem. The idea of group borrowing and area approach system should be practised by the bank.

6. Misutilization of the funds allotted to the farmers is one of the major factors in the problems of non-repayment of the dues on time for which the loan was taken. Instalment releases should be encouraged with strict guidance and supervision.

7. The bankers should make public through mass media about the type of loans and criteria's and also the date of submission of forms in order to prevent late submission of loan proposals.

8. Self Help Groups should be encouraged by the co-operative banks even to the remote areas.

9. Government should take appropriate steps to establish connectivity, adequate marketing facilities and transport system to better communication.

10. Other institutional credit facilities at a nominal rate of interest should be made available to the farmers to take up new enterprises.

11. Formation of co-operative organisations should be encouraged in the village level.

6.3. LIMITATIONS OF THE STUDY

The present study was conducted with a view that its result may be useful to the researcher, planners, co-operative bank personnel's, administrators and extension workers who are engaged in generating and disseminating credit schemes for the upliftment of the farmers of all groups in general and marginal farmers in specific. An attempt was made in this study to analyzed these factors, which would affect the availing, utilization and repayment of agriculture credit by farmers and to suggest measures to formulate strategies to increase the utility of agriculture credit.

The limitations of the study are as follows-

- The major limitation of the present study was with regards to the time, study area and other research facilities usually faced by a single researcher.

- The present study confined to only one district of Nagaland and the selection of the district was purposive hence scope of generalizations with respect to Agricultural credit and its impact on overall development of borrowers in other districts as is limited. Hence, the study does not claim to generalize the findings on large scale.

- Study is based on individual's perception and expressed opinion. Although attempts had been made to extract information from the respondents nearest to the truth but possibility arises that information provided by some respondents might not be accurate as there was no written record maintained by the respondents, therefore they had to rely on the recall memory.

- Most of the utilized variables were measured at nominal and/or ordinal levels not permitting the use of parametric statistical tests extensively.

- Some borrowers as well as non-borrowers were found to hesitate to give their responses easily on income, expenditure etc. aspects, which posed limitations in the present study.

- The study was conducted based on the expressed opinion of the respondent's viz., beneficiaries and non-beneficiaries. Therefore, possibility of error in recollecting or recalling can't be ruled out.

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APPENDIX

APPENDIX - I

SURVEY SCHEDULE

Name of the respondent :

Date :

Type : **BORROWER/ NON-BORROWER**

Resp No :

Father's Name :

Block	Village	Contact (if any)

1. DEMOGRAPHIC FEATURES

1.1 DEMOGRAPHY

SN	Name	Education				Primary occupation				Secondary occupation			Work force		
		Il.	Pr	HS	G	Ag	Se	Bu	Ot	Ag	Se	Bu	Wr	Hl	D
1															
2															
3															
4															
5															
6															
7															
8															
9															

Il- Illiterate; Pr- Primary; HS- High School; G- Graduate & above;
Ag- Agriculture; Se- Service; Bu- Business; Ot- Others
W- Worker; Hl- Helper; D- Dependent

1.2. OPERATIONAL LAND HOLDINGS

Owned Land	Leased out	Leased in	TotalLand

1.3. LAND USE PATTERN (Sq. Ft)/ Land Inventories

Land Use	Area	Land Use	Area
Settled land		Livestock area	
Paddy		Forest & Plantation area	
Vegetables		Barren Land	
Fisheries		Others	
		Total	

2. CROPPING

2.1 CROPPING PATTERN AND YIELD

Types	Crops	Area (in Sq. Ft)		Yield (in kg)		Consumed Value (in Rs.)		Sold out value (in Rs.)	
		Presently	Before Loan	Presently	Before Loan	Presently	Before Loan	Presently	Before loan
(a) Rabi (winter) oct/dec – apr/jun									
(b) Karif (summer) apr/may – sep/oct									
(c) Zaid									

2.2. COST OF CROPPING PER ANNUM

(in Rs.)

1.	Human Labour	
	a) Owned	
	b) Hired	
2.	Seed/ Seedling	
3.	Chemicals	
4.	Equipment	
5.	Bullock/ Machinery	
6.	Transportation	
7.	Marketing	
8.	Other	
Total		

3. ANIMAL HUSBANDRY

3.1. ANIMALS INVENTORIES

Animals		Nos. reared		Value (in Rs.)	
		Presently	Before loan	Presently	Before loan
1.	Cattle				
2.	Poultry				
3.	Piggery				
4.	Goat				
5.	Others				

3.2. COST OF ANIMAL PRODUCTION PER ANNUM

(in Rs.)

SN	Items	Cattle	Poultry	Piggery	Goat	Others
1.	Labour Input					
2.	Animal cost					
3.	Chemical					
4.	Equipment					
5.	Transportation					
6.	Marketing					
7.	Other					
Total						

3.3. RETURN FROM ANIMAL HUSBANDRY

SN	Items Sold	Cattle		Poultry		Piggery		Goat		Others	
		Nos	Value	Nos	Value	Nos	Value	Nos	Value	Nos	Value
1.	Young stock										
2.	Mature stock										
3.	Eggs										
4.	Milk										
5.	Manure/ Dung's										
6.	Other										
7.											
	Total										

4. FISHERY

4.1. COST OF FISH PRODUCTION PER ANNUM

(in Rs.)

1.	Human Labour	
	a) Owned	
	b) Hired	
2.	Fingerlings/ Seedling	
3.	Chemicals	
4.	Feeds	
5.	Transportation	
6.	Marketing	
7.	Other	
Total		

4.2. RETURN FROM FISHERY

Items	Yield		Consumed Value		Sold out Value	
	Kg	Rs.	Kg	Rs.	Kg	Rs.
1. Fish						
2. Fingerlings						

5. PLANTATION

5.1 COST OF PLANTATION CROPS PER ANNUM

(in Rs.)

1.	Human Labour	
	a) Owned	
	b) Hired	
2.	Planting materials	
3.	Chemicals	
4.	Transportation	
5.	Marketing	
6.	Other	
	Total	

5.2. RETURN FROM PLANTATION

SN	Items	Home Consumption (in Rs.)	Sold (in Rs.)
1.	Timber		
2.	Fire wood		
3.	Fruit crops		
4.	Seedlings		
5.	Others		
6.			

6. TOTAL EXPENDITURE PER ANNUM

SN	Items	Amount(in Rs.)
1.	Total Farm Expenditure (A) Cropping (B) Animal Husbandry (C) Fish Production (D) Plantation (E) Others	
2.	Household needs	
3.	Education	
4.	Transportation	
5.	Others	
6.	Total	
7.		
	Total	

7. TOTAL INCOME PER ANNUM

SN	Items	Amount (in Rs.)
1.	Cropping	
2.	Animal Husbandry	
3.	Fish Production	
4.	Plantation	
5.	Service	
6.	Business	
7.	Others	
Total		

8. EMPLOYMENT GENERATED UNDER DIFFERENT CATEGORY

Category		Employment (in nos.)		Working Days			
		Presently	Before loan	Presently	Before loan		
1.	Crop production						
2.	Animal Husbandry						
3.	Fishery						
4.	Forest & Plantation						
5.	Others						
6.							
Total							

9. MAGNITUDE OF FINANCIAL ASSISTANCE FROM CO-OPERATIVE BANK

(in Rs.)

Scheme Name	Amount	As Loan	As Subsidy	Mode of financing	Remarks

10. LOAN BORROWED FROM OTHER SOURCES (OTHER THAN COOPERATIVE BANK)

SN	Amount	From	Purpose	Interest	Repayment period	Securities

11. REPAYMENT PERFORMANCE OF THE BORROWERS

Amount Borrowed	Interest rate	Interest Amount	Amount to be repaid	Amount paid	Balance	Mode of payment	Remarks

12. UTILIZATION OF LOAN

Purpose of the Loan:

SN	Activities	Amount	Remarks
1.	Agricultural		
2.	Cattle		
3.	Poultry		
4.	Piggery		
5.	Goatry		
6.	Fishery		
7.	Plantation		
8.	Household Needs		
9.	Education		
10.	Others		
TOTAL			

13. PROBLEMS IN UTILIZATION OF BANK LOAN

Problems		Yes	No
1.	Amount		
2.	Disbursement of loan		
3.	Time of disbursement		
4.	Others Need		

15. PROBLEMS FACED IN ACQUIRING BANK LOAN

Sl	Problems	Yes	No	Remarks
1.	Knowledge about type of loan			
2.	Knowledge about type of Banks			
3.	Form issued by the bank			
4.	Filling up of forms			
5.	Guidance from bank			
6.	Bank process			
7.	Guarantor/ Securities/ Certificates			
8.	Others			

16. PROBLEMS FACED BY LOANERS

Sl	Problems	Yes	No	Remarks
1.	Amount			
2.	Disbursement of loan			
3.	Time of disbursement			
4.	High Interest rates			
5.	Repayment period			
6.	Supervision			
7.	Knowledge & Skill			
8.	Insects pest & diseases			
9.	Funds & capital			
10.	Marketing			
11.	Transportation			
12.	Others			

(FOR BANK OFFICIALS)

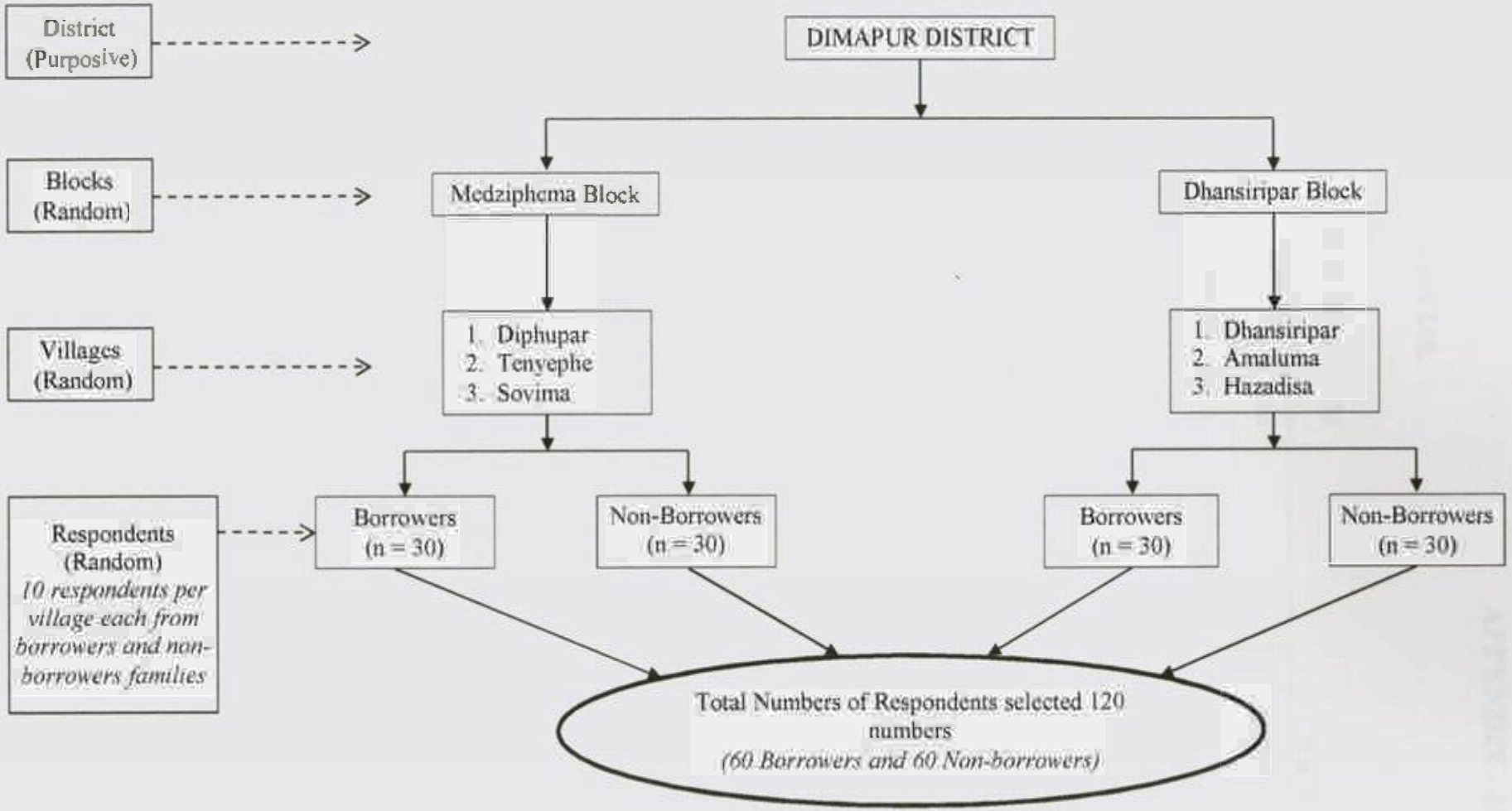
1. TERMS AND CONDITIONS

Invitation of application	
Loan and subsidy amount	
Rate of interest	
Securities	
Repayment period	

2. PROBLEMS FACED BY THE BANKERS

3. SUGGESTIONS

SAMPLING DESIGN OF THE STUDY



APPENDIX - III

Nagaland State Co-operative Bank Ltd.
Dimapur: Nagaland

BUDGET AT A GLANCE as on 31 March 2013

(₹ in Lakh)

SN	Head of Account	Revised					Estimated	
		2006-07	2007-08	2008-09	2010-11	2011-12	2012-13	2013-14
1	Income	1548.05	2398.50	2802.43	3888.94	4816.79	5690.80	6544.55
2	Expenditure	1912.01	2373.54	2742.42	3827.38	4729.32	5264.57	5880.84
3	Net Working Result	-363.96	24.96	60.01	61.56	87.47	426.23	663.71
4	Target of Deposits	16218.45	18726.34	22597.40	23105.0	36683.45	85449.00	98256.00
	(a) Normal	16218.45	18726.34	22597.40	23105.0	36683.45	42172.00	48491.00
	(b) Ambitious	0.00	0.00	0.00	0.00	0.00	43277.00	49765.00
5	Fresh Lending	5406.34	5919.28	6339.80	8232.37	13209.04	15185.00	17132.00
6	Fresh Borrowing	131.31	89.66	74.39	1013.82	1027.98	1269.13	1369.13
7	Target of Loan Recovery	635.08	230.725	308.775	335.193	369.884	422.000	472.000
8	Other Capital Receipts	3008.72	3062.89	3117.48	3290.08	3549.49	3760.00	4000.00
9	Other Capital Expenditure	93.41	91.37	325.69	164.85	213.27	397.15	497.05
10	Investment in Approved Securities &Others	994642	1092074	141025.51	2422186	23568.54	30000.00	35000.00

APPENDIX - IV

Nagaland State Co-operative Bank Ltd.
Dimapur: Nagaland

HUMAN RESOURCE DEVELOPMENT as on 31 March 2013

(in Nos)

SN	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	Resigned	0	0	1	0	2	1
	(a)Officers	0	0	0	0	0	0
	(b)Others	0	0	1	0	2	1
2	Superannuated	3	1	0	0	3	4
	(a) Officers	2	1	0	0	2	3
	(b)Others	1	0	0	0	1	1
3	Availed VRS	8	8	2	4	0	1
	(a) Officers	3	1	1	3	0	0
	(b)Others	5	7	1	1	0	1
4	Terminated	1	2	0	0	0	0
	(a)Officers	0	0	0	0	0	0
	(b)Others	1	2	0	0	0	0
5	UnderCRS	0	0	0	0	0	0
	(a)Officers	0	0	0	0	0	0
	(b)Others	0	0	0	0	0	0
6	Expired	1	0	1	2	1	2
	(a)Officers	0	0	0	1	0	1
	(b) Others	1	0	1	1	1	1
7	Total Strength as on 31-3-11	222	229	230	230	224	232
	(a) Officers	44	54	71	67	75	82
	(b)Others	178	175	159	163	149	150
8	Of which cadre on deputation toICDP	2	0	0	0	4	4
	(a)Officers	1	0	0	0	2	2
	(b) Others	1	0	0	0	2	2
9	Employee Recruited	3	18	5	6	0	0
	(a)Officers	0	3	0	0	0	0
	(b)Others	3	15	5	6	0	0
10	Staff undergoing Training	31	27	40	85	50	59
	(a) Officers	17	12	25	36	31	44
	(b)Others	14	15	15	49	19	15

APPENDIX–V

Nagaland State Co-operative Bank Ltd.
Dimapur: Nagaland

BALANCE SHEET as on 31 March 2012

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs.)	CAPITAL AND LIABILITIES		AMOUNT (Rs.)	CURRENT YEAR AS ON 31.03.2012
		1. CAPITAL :			
		i) Authorised Capital			
900000000.00		1,80,000 'A' Class shares of Rs.5000/- each			900000000.00
95000000.00		950,000 'B' Class shares of Rs. 1000/-each			95000000.00
150000000.00		3,00,000 'C' Class shares of Rs. 500/-each (Nominal)			150000000.00
2000000000.00					2000000000.00
		ii) Subscribed Capital			
		34,485 'A' class shares of Rs.5000/-each			
		25315 'B' class shares of Rs. 1000/-each			
		71096 'C' class shares of Rs.500/-each			
		iii) Amounts like due paid up on			
		53,585 shares of Rs.5000/-each in arrears call unpaid			
		at Rs.0.25 each on 16,000 shares.			
		26,534 shares of Rs. 1000/-each in arrears call unpaid			
		at Rs.0.06 each on 1000 shares.			
		1,11,138 shares of Rs.500/-each in arrears call unpaid			
		at Rs.0.06 each on 1000 shares.			
		Of (iii) above held by:-			
-		a) Individuals		-	
25114840.00		b) Co-operative Institutions-3571 Societies		26393940.00	
267921000.00		c) State Government		272421000.00	
3554753900		d) Others (Nominal Members)		33568939.00	
3290883979.00	425000.00	e) Share Capital Deposit		425000.00	3549488879.00
		2. RESERVE FUND AND OTHER RESERVES			
3506916.78		i) Statutory Reserve		3506916.78	
6276656.00		ii) Agriculture Credit Stabilisation Fund		6462896.00	
973484386		iii) Building Fund		1107164286	
16929.91		iv) Dividend Equalisation Fund		16982991	
1018013.60		v) Special Bad Debts Reserve		1018013.60	
1146343206		vi) Bad and Doubtful Debts Reserve		1166343206	
1220048.90		vii) Investment Depreciation Reserve		1220048.90	
11023179434		viii) Provision for NPAs		13483179434	
5865087.24		ix) Provision for Inter-Branch Adjustment		5865087.24	
98367050.11		x) Provision for Other assets		87331462.73	
1619862.174		xi) Other Funds and Reserves (to be specified)		1815768.474	
	2877380.1	a) Share Capital Redemption Fund	2877380.1		
	227634.00	b) SMFDA Risk Fund	227634.00		
	8465249.59	c) Capital Reserve Fund	8465195.59		
	3941.25	f) Agriculture Relief Fund	3941.25		
	50000.00	g) Revolving Fund	50000.00		
	200000.00	h) Rehabilitation Fund	200000.00		
	23617.477	i) Revision of Pay Fund	23617477		
	4591.32	j) Voluntary Retirement Fund	4591.37		
	31.485.74	k) Proposed Dividend	31448574		
	119028.65	l) Co-operative Development Fund	1190286.5		
	924778.36	m) Staff Welfare Fund	1004895.36		
3865580294.54	2915000.00	n) Provision for Gratuity	5058000.00		2832788889.16
-		**3. PRINCIPAL/SUBSIDIARY STATE PARTNERSHIP FUND ACCOUNT:** For share participation			-
		i) Central Co-operative Banks			
		ii) Primary agriculture credit societies			
		iii) Other societies			
		4. DEPOSITS AND OTHER ACCOUNTS:			
		i) FIXED DEPOSITS			
1147141663.61	1146858963.61	a) Individuals	1258490264.11	1239773464.11	
-	-	b) Central Co-operative Banks	-		
	282700.00	c) Other Societies	1282700.00		
6155586673.54		**Balance Carried Over**			6382476888.16

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs.)	PROPERTY & ASSETS		AMOUNT (Rs.)	CURRENT YEAR AS ON 31.03.2012
		1. CASH:			
	399071 02.20	i) Cash in hand		[illegible]	
	21015E_3 1	ii) With Reserve Bank of India		11 015 E_3 1	
891563 53. 98	4913911 2.47	iii) With [illegible]		46983974.07	1007758 06.07
		2. BALANCE WITH OTHER BANKS:			
	245 70994 05	i) In Current Deposit		699212 9205	
	-	ii) In Saving Bank Deposit		-	
	3753538 9.58	iii) CC & OL/Loaned Current A/C with (CICI Bank		10 768791 .75	
		iv) Fixed Deposits -			
	4182221 8.00	a) With SBI	13747 5606.00		
8436 3125 8881	3907027 13.00	b) With Commercial Bank	283076534.00	4205521 40.00	5613 43 21 5.75
		Note: FD earmarked (at book value) towards			
	8501327.00	a) Statutory Reserve	8525262.00		
	75934 8.00	b) A C S Fund	7036418.00		
	3351218.00	c) Building fund	3617945100		
	262178.00	d) Dividend Equalisation Fund	274019.00		
	20068807.00	Total	20975130.00		
		20915150.00			
		3. MONEY AT CALL AND SHORT NOTICE:			
	4523 8 232500	i) With SBI		31 474173.00	
3576 32131 .88	3250496 16.00	ii) With Other Banks		414101133.00	88 8444 88 31 88
		4. INVESTMENTS			
	8576 29 24486	i) In Central and State Government Securities (at Book Value)		9934 39150.00	
		a) Face value - Rs.	1046690000.00		
		b) Market value - Rs.	1060690000.00		
	100000000	ii) Other Trustee securities		-	
	-	iii) Shares in co-operative institutions other than those in (5) below		-	
	500000000	iv) Other investments (to be specified)		500000000	
	500000000	(A) UTI Centre Fund - 4885997355 Units	500000000		
		a) Face value - Rs.	4885975.53		
		b) Market value - Rs.	136919.32		
88 443 8243 1 88					88 7400 00.00
-		5. INVESTMENT OUT OF THE PRINCIPAL/SUBSIDIARY STATE PARTNERSHIP FUND:			-
		Inshare of			
		i) Central Co-operative Bank			
		ii) Primary agricultural credit societies			
		iii) Other societies			
20100 1871 .57		6. ADVANCES:			
		i) Short-term loans, cash credits, overdrafts and bills discounted		226224291 .52	
		Of which secured against			
	-	a) Govt. and other approved securities	-		
2593449026.59		Balance Carried Over			2543319310.85

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs)	CAPITAL AND LIABILITIES		AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2012
615558673.54		Balance Brought Forward			638247688.16
	-	A) Apex Banks	-		
	282700.00	B) Societies & Others	1282 700.00		
	-	C) Primary Coop. Banks	-		
		i) SAVINGS BANK DEPOSITS			
17593706666.57	17314742 17.24	a) Individuals	1980135566.23	2034913096.56	
	-	b) Central Co-operative Banks	-		
	27896449.33	c) Other Societies	5477553 0.33		
	-	A) Apex Banks			
	27758134 0.7	B) Societies & Others	5477216907		
	138315.26	C) Primary Coop. Banks (UCB)	5361 26		
		ii) CURRENT DEPOSITS			
9 21 75150.90	87417161.24	a) Individuals	73613 847 .19	74023251.93	
	-	b) Central Co-operative Banks	-		
	4758049.74	c) Other Societies	40940474		
	598000	A) Apex Banks	598000		
	4752069.74	B) Societies & Others	40342474		
	-	C) Primary Coop. Banks (UCB)	-		
		iv) MONEY AT CALL AND SHORT NOTICE			
12925 9450.55	1292594 50.55	a) Individuals	1714148 02 .75	1714148 02.75	
	-	b) Central Co-operative Banks	-		
	-	c) Other Societies:	-		
	-	A) Apex Banks	-		
	-	B) Societies & Others	-		
	-	C) Primary Coop Banks	-		
		v) OTHER DEPOSITS:			
1031033 05.56	81671759.00	a) Recurring Deposit	9960885656	1282199 06.56	
	81671759.00	A) Of Individuals	9960885600		
	-	B) Of Staff	-		
	10980752.00	b) Other types of monthly deposit scheme	1592 4614 .00		
	10450 794.56	c) Staff Service Deposit	126 854 36.56		
3231850237.27					366 83 44 5 21.91
		5. BORROWINGS:			
		i) From NABARD			
9446900094	2000000000	a) Short-term loan (SAO) u/s 21(1)(i) of NB Act 1981	37510000.00	95885200.00	
	7400000000	b) Schematic loan (ARF) u/s 25(1)(b) of NBA ct 1981	58000000.00		
	469000.00	c) Infrastructure assistance under CDF scheme	375200.00		
		ii) From State Bank of India			
-		iii) From State Government		-	
-	-	a) Short-term loan	-	-	
	-	b) Medium-term loan	-		
6912 550.00		iv) From Other Sources (NSTFDC)		691255 0.00	
1013 81 558 .06					102797 758.06
666730.66		6. BILLS FOR COLLECTION BEING BILLS RECEIVABLE (AS PER CONTRA)			815 744.66
12995145.17		7. BRANCH ADJUSTMENTS			1382622 3.48
		8. INTEREST SUSPENSE:			
		Out of which towards			
	102127112.31	a) Overdue interest receivable a/c		1171542 15.33	
11499742.84	1287063073	b) Capitalised Interest in NPA a/cs		1147 1354.25	1286259 49.58
4076650 07.82		Balance Carried Over			4551957877.13

PREVIOUS YEAR AS ON 31/03/2013	AMOUNT (Rs)	PROPERTY & ASSETS		AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2014
2553449826.59		Balance Brought Forward			2943319318.85
	2010018715.52	b) Other tangible securities	2265342511.12		
	1450839151.11	Of the advances, amount due from individuals	1658237704.15		
	-	Of the advances, amount due from liquidated societies	-		
	1024263146.37	Of the advances, amount due to vendue	1208880845.50		
	859390603.37	Of the advances, amount of NPA	1014230214.44		
	224002446.67	Considered bad & doubtful of recovery	224002446.67		
6201510940.01		ii) Medium-term loans		1092602692.17	
		Of which secured against			
	-	a) Govt. and other approved securities	-		
	6201510940.01	b) Other tangible securities	1092602692.17		
	5079963779.98	Of the advances, amount due from individuals	9273119239.98		
	-	Of the advances, amount due from liquidated societies	-		
	8658152.00	Of the advances, amount sanctioned & issued by NSTFDC through NSCB (channelising agency)	8450332.00		
	1412895081.39	Of the advances, amount over due	1668293762.32		
	2049264381.39	Of the advances, amount of NPA	2419694873.31		
	7403213.67	Considered bad & doubtful of recovery	7403213.67		
2084486.00		iii) Long-term loans		1767001.00	
		Of which secured against			
	-	a) Govt. and other approved securities	-		
	2084486.00	b) Other tangible securities	1767001.00		
	1975223.00	Of the advances, amount due from individuals	1641603.00		
	-	Of the advances, amount due from liquidated societies	-		
	102263.00	Of the advances, amount overdue	102263.00		
	102263.00	Of the advances, amount of NPA	102263.00		
	102263.00	Considered bad & doubtful of recovery	102263.00		
-		iv) Amount receivable from Govt under Agricultural Debt Waiver Scheme 2008		-	13209039444.29
82237.45 1.Sa					
13904580.00		7. INTEREST RECEIVABLE			
	13904580.00	i) On loans & advances		16025297.761	
		Out of which-			
	10212711231	a) Int. On NPA A/cs	11715421533		
	3691869430	b) Int. On Standard A/cs	4309876228		
	NIL	Of which overdue Rs. 11715421533			
2944110511		Considered bad & doubtful of recovery Rs. NIL			
22648469812.31		ii) On Investments (accrued but not due)		13120243400	29145541161
666730.00		8. BILLS RECEIVABLE BEING BILLS FOR COLLECTION (AS PER CONTRA)			1157744.00
-		9. BRANCH ADJUSTMENTS			-
54347628.99		10. PREMISES [Less Depreciation]			53281683.99
		11. FIXED & FLOATING ASSETS [Less Depreciation]			
	2415151.00	i) Furniture & fixtures		2669491.00	
	456589.00	ii) Motor Vehicle		1385086.00	
	1650777.00	iii) Office Machinery Items & Equipments		2585888.00	
	2008965.00	iv) Computers		1570251.91	
6531582.00					8211718.91
36667193131.27		Balance Carried Over			42172087731.65

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs.)	CAPITAL AND LIABILITIES	AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2012
4076650878.82		**Balance Brought Forward**		4551957877.13
		9. INTEREST PAYABLE:		
	121370049.12	a) On Deposits	162523733.63	
128950473.12	7580424.00	b) On Borrowings	7942150.00	170465883.63
		10. OTHER LIABILITIES & PROVISION		
	40000.00	a) Nabard Subsidy (RWHS)	-	
	4736981.89	b) Sundry Creditors	14773969.19	
	628750.00	c) Shares Suspense	572950.00	
	165000.00	d) Provision for Audit fee	100000.00	
	295273.00	e) Professional Tax payable	176926.00	
	1582249.38	f) Provident Fund payable	-	
	32318.00	g) G.S.L. Insurance premium payable	19898.00	
	496395.00	h) Provision for TDS refund receivable	517263.00	
	2055336.00	i) Contingent Provision for Standard Assets	3755336.00	
	-	j) Drafts Payable	70236.00	
	3256975.00	k) Subsidy Reserve Fund Account	3737243.00	
	-	l) Demand Draft	21145.00	
	-	m) Bank-Adjustment	1409084.00	
	-	n) Account Un-reconciled	1976.00	
132289281.27	-	o) Outstanding Liability	6586380.00	31742486.19
		11. PROFIT & LOSS ACCOUNT		
-	-	Profit as per last balance - sheet	-	-
	-	Less: Appropriations	-	
	-	Add: Profit for the year brought from P&L Account	-	
		12. CONTINGENT LIABILITIES		
	-	i) Outstanding liabilities for guarantee issued -		
	-	ii) Others -		
4218889833.21		**GRAND TOTAL**		4754166166.95

Dated : DIMAPUR
25th Sept. 2012

Sd/-
B.K.THADANI
MANAGING DIRECTOR

Sd/-
T.IMKONGLEMLA LONGKUMER
DIRECTOR

Sd/-
RAJUSE[illegible]E LHOUSA
VICE-CHAIRMAN

PREVIOUS YEARASON 31.03.2011	AMOUNT (Rs)	PROPERTY & ASSETS		AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2012
3666719331.27		Balance Brought Forward			4217206731.65
		12. OTHER ASSETS			
	8520421.57	i)Suspense		11550784.08	
	896135.82	ii)Stock of Printed Materials & Stationery		1248668.82	
	22000.00	iii)Security Deposit with Post & Telegraph		22000.00	
	2447186.83	iv)Income Tax Refund Receivable		2479524.83	
	35942819.53	v)Amortizing Investment under US-64		26267508.66	
	800000.00	vi)Assistance Receivable from State Govt.		-	
	2267858.00	vii)Disputed Income Tax with I.T.Deptt.		2267858.00	
	-	viii)Staff PFC Pending Adjustment		601 79.62	
	28498159.77	ix)Sundries		28498159.77	
		x)Amount realisable from staff:			
	967735.00	(a)Festival advance	1114613.00		
	364154.00	(b)T.A.advance	436556.00	1551 169.00	
	182523.02	xi)Salary Savings A/C pending adjustment		224726.32	
	123600.00	xii)Advance Payment of Income-Tax		262303.00	
	2481816.00	xiii) Disputed P.F.C.		2481816.00	
	17398.00	xiii)Books & Periodicals		18163.00	
	4698200	xiii)Interest relief receivable		4698200	
	-	xiv) Receivable from State Govt.(as per contra Institutional Debts)		-	
	-	xv)Account Un-reconciled		27800022.44	
111243763.98	2766494844				104779870.54
-		12. NON-BANKING ASSETS ACQUIRED IN SATISFACTION OF CLAIMS			-
		13. PROFIT & LOSS ACCOUNT			
	44708307729	Accumulated losses		440926737.96	
	0.00	Add: Loss transferred from P & L Appropriation A/C		0.00	
440926737.96	6156339.83	Less: Profit for the year brought from P & L Account		8747173.20	432179564.76
4218889833.21		GRAND TOTAL			4754166166.95

AS PER OUR REPORT OF EVEN DATE ATTACHED
AJIT K. JAIN & ASSOCIATES,
CHARTERED ACCOUNTANTS

Sd/-
TOSHI AIER, IAS
CHAIRMAN

Sd/-AJIT K. JAIN

PREVIOUS YEAR 2010-2011	AMOUNT (Rs.)	EXPENDITURE	AMOUNT (Rs.)	CURRENT YEAR 2011-2012
		1) Interest paid on deposits, borrowings, etc.		
	134532566.00	a) Int. On deposits	135 6345.32	
	2778644.88	b) Int. On borrowings	6885 750.11	
28812105.88	1475 1609400	c) Int. on inter-branch	170 15370.00	349366678.43
		2) Salaries, allowances & provisions and contributions		
5512935899				61312000.00
		3) Director's & local committee member's fees & allowances		
	30100.00	a) Sitting fees	23400.00	
	19248.50	b) Meeting expenses	4117.00	
	9336.00	c) Travelling allowance	1926.00	
417853.50	9336.00	d) Annual General Meeting expenses	19444.00	441877.44
3455194.75		4) Rent, taxes, insurance, lighting, etc.		242 3882.88
211333.20		5) Law charges		33 444.00
661661.00		6) Postage, telegram & telephone charges		131486.11
882888.00		7) Audit fee		88 4444.44
1139 26.73		8) Stationary, printing & advertisement, etc.		119.671.55
5535712.52		9) Depreciation on and repairs to Property		4888888.88
-		10) Loss from sale of or dealing with Non-banking assets		-
		11) Other Expenditure:		
	3544.54	a) Commission & exchange	77977.05	
	78425.00	b) TA to staff	10215.00	
	41877.21	c) Miscellaneous expenditure	454582.91	
	7988567.88	d) Amortization of investment loss	9875 31.87	
	000	e) Amortisation Expenditure on Investment	000	
	54044.00	f) Ex-Gratia	3235 44.00	
	15530.00	g) Subscription	35050.00	
	1558.00	h) Clearing House & Rent paid	104 12.06	
	5545.00.00	i) Premium for Staff Gratuity Fund	104 4727.00	
	2249.92.00	k) Deposit insurance premium	2845730.89	
	109220.00	l) Leave encashment	25 1563.00	
	000	m) Payment on VRS/CR Schemes	65.55.00	
	5027 84.43	n) Loss on NPA/Collocs	10532 14.55	
88 48 8.34	6156.30	o) Unrealisable assets written-off	1549783.84	33 823 737.58
		12) Provisions		
	192757.00	a) Interest Provision for ACB Fund	19824.00	
	6231 12.00	b) For Overdue & unrealisable amounts	15230769.74	
	000	c) For Investment Depreciation Reserve	-	
	1276 15.00	d) For NPAs	4100000.00	
	000	f) For Others assets	0.00	
12 0424 2.00	74827.00	g) For Standard assets	7000000.00	21218444.74
6252774.53		13) Profit before Prior Period Provisions c/d		6661369.60
3 87 1184 37.18				49 68 1 56.51
125438.20		To Payments towards Prior Period Items		48 54.00
615633.83		To Balance c/f from transferred to Balance Sheet		3747 173.29
6243774.03				6243774.03

Dated: DIMAPUR
25th Sept. 2012

Sd/-
B.K. THADANI
MANAGING DIRECTOR

Sd/-
T.IMKONGLEMLA LONGKUMER
DIRECTOR

Sd/-
RA.KUSELIE LHOUSA
VICE-CHAIRMAN

PREVIOUS YEAR 2010-2011	AMOUNT (Rs.)	INCOME		AMOUNT (Rs.)	CURRENT YEAR 2011-2012
		1) Interest & Discount:			
	86955652.81	a) Int. on Loans & Advances		111793944.67	
		b) Int. on Investments:			
	12268134.00	i) In term deposits	23788964.76		
	42986905.81	ii) In approved securities	70178537.34	1938382.10	
380330699.43	147855094.00	c) Int. on Inter-branch		170118370.00	47 8887138.57
4183284.76		2) Commission, Brokerage & Underwriting			26 87285.75
376669.69		3) Sub-sales and Additions			3
-		4) Income from Non-Banking Assets & Profit from sale or dealing with such assets			-
		5) Other Receipts:			
	22 4400.00	i) Member's admission fees		226 53000	
	1483225200	ii) Incidental charges		2136849.45	
	244347104	iv) Miscellaneous income		4876585.31	
	580000	vi) Locker rent received		4200.00	
	802839789	vii) De-provisioning from Assets		1135587.38	
	-	viii) Income from Trading of Securities		-	
	2093000	ix) Prior Period Items (TDS Refund)		-	
12269743.26	3500.00	x) Interest on ITR refund		0.00	18 0837 5 2.12
		6) Net Loss transferred to Balance sheet			
337718437.18					425226 826.48

6282774.83	By Net Profit b/d	8868838.20
	By Receipts from Prior Period Items	1200007.00
6282774.83	By Balance of Loss transferred to Balance Sheet	
		2758237.13

Sd/-
TOSHI AIER, IAS
CHAIRMAN

AS PER OUR REPORT OF EVEN DATE ATTACHED
FOR AJIT K. JAIN & ASSOCIATES, CHARTERED ACCOUNTANT

Sd/- AJIT K. JAIN

Employment and income level of sample respondents after receiving co-operative bank finance (N = 60)

SN	Particulars	Crop Production		Animal husbandry		Fishery		Plantation		Others		Overall	
		Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
A.	Employment (Mandays / Annum)												
1.	Low (<70)	1	0	1	0	1	0	1	0	1	1	5	1
2.	Medium (71-272)	10	9	30	28	8	7	5	5	0	0	53	49
3.	High (273 >)	1	3	1	4	0	2	0	1	0	0	2	10
Total		12	12	32	32	9	9	6	6	1	1	60	60
B.	Income (Rs. / Annum)												
1.	Low (< 48,431)	1	0	1	0	2	0	2	0	1	1	6	1
2.	Medium (48,432-59,636)	11	8	31	27	7	6	4	4	0	0	52	48
3.	High (59,637 >)	0	4	0	5	0	3	0	2	0	0	2	11
Total		12	12	32	32	9	9	6	6	1	1	60	60

CURRICULUM VITAE

The author of this manuscript, KEVIU SHUYA, s/o N. SHUYA, was born on the 2nd Jan 1980 at 4th Mile, Dimapur, Nagaland. He passed out his HSLC Examination in the year 1997 from High Mountain School, Signal Angami Dimapur under Nagaland Board of School Education and HSSLC Examination from Union Christian College, Meghalaya under Meghalaya Board of School Education. He passed out is B.Sc (Agri.) from School of Agricultural Sciences and Rural Development under Nagaland University during 2004 and also his M.Sc (Agril. Economics) in the year 2006.

After which he worked under ICAR (Indian Council of Agricultural Research) ad-hoc Scheme in the establishment of Nagaland University, in the Department of Agricultural Economics, Medziphema Campus as SRF (Senior Research Fellow) during the period May 2007 - Sep 2009. He later joined Agricultural Technology Management Agency in the capacity of Deputy Project Director, under Support to State Extension Programmes for Extension Reforms' Scheme, department of Agriculture & Co-operation, Ministry of Agriculture, Government of India.

He registered his Ph.D on 14th November 2008, a part time, started his research work since then and completed all necessary requirements in July 2013.

Table 5.23: Distribution of respondents' livestock inventories

Groups		Cattle		Poultry		Piggery		Goatery		Others		Total Value (in ₹)
		Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	Reared (in Nos.)	Value (in ₹)	
BOR ROWERS	Group I	7	35,600	64	7,890	59	3,81,000	4	9,600	6	6,400	4,40,490
	Group II	60	2,76,000	157	1,4620	150	9,07,500	17	42,400	22	20,000	12,60,520
	Group III	22	1,01,200	24	2,270	23	1,39,500	4	9,600	5	6,200	2,58,770
	TOTAL	89	4,12,800	245	24,780	232	14,28,000	25	61,600	33	32,600	19,59,780
	Average	1.48	6,880	4.08	413	3.87	23,800	0.42	1,026.67	0.55	543.33	32,663
NON-BORROWERS	Group I	1	1,200	48	5,410	14	96,000	0	0	2	1,700	1,04,310
	Group II	11	54,000	186	18,390	63	3,34,500	25	45,600	5	3,600	4,56,090
	Group III	10	46,000	131	11,750	53	2,59,500	10	27,200	9	5,550	3,50,000
	TOTAL	22	1,01,200	365	35,550	130	6,90,000	35	72,800	16	10,850	9,10,400
	Average	0.37	1,686.67	6.08	592.50	2.17	11,500	0.58	1,213.33	0.27	180.83	15,173.33

(Figure in the parentheses represents the percentage)

birds respectively. The maximum present value was seen from piggery with an average value of ₹ 23,800 per borrower family and ₹ 11,500 per non-borrower family.

5.2. Respondents' cost of livestock production

The cost of livestock production on an average incurred was found out to be ₹ 32,496.73 and ₹ 14,653.45 for the borrower and the non-borrowers respectively as given in Table 5.24. Under both the cases (borrowers and non-borrowers), the highest cost was incurred on the purchase of animals for rearing, accounting to an average of ₹ 11,278.40 (34.71 per cent) and ₹ 5,264.18 (35.92 per cent) respectively, followed by an average feeding cost of ₹ 8,243.25 (25.37 per cent) for the borrowers and ₹ 3,779.96 (25.80 per cent) for non-borrowers.

5.3. Returns from livestock production

The average return from livestock production for borrowers was found out to be ₹ 55,371.26 and ₹ 33,648.17 for non-borrowers as given in Table 5.25.1. Under borrowers, the highest average return was found out to be from cattle with a return of ₹ 27,979.33 (50.53 per cent) and for the non-borrowers the highest average return was from piggery with an average of ₹ 23,741.50 (70.56 per cent).

The item-wise breakup of return from different source as given in Table 5.25.2, revealed that of the different items sold, the sale of mature animals contributed the highest, with an average sold out value of ₹ 30,422 (54.94 per cent) for the borrowers and ₹ 23,686.04 (70.39 per cent) for the non-borrowers.

Table 5.14: Distribution of respondents' cost of livestock production (₹ in average)

Groups		Construction cost	Cost of animals	Feeding cost	Medication	Equipment's	Labour Input	Transportation cost	Marketing cost	Others	Total Cost
BORROWERS	Group I	3,871.00 (10.06)	13,606.80 (35.36)	11,148.00 (28.97)	194.00 (0.50)	1,077.50 (2.80)	5,978.70 (15.54)	1,383.00 (3.59)	348.00 (0.90)	870.00 (2.26)	38,477.00 (100)
	Group II	3,333.38 (10.66)	10,884.60 (34.80)	7,725.75 (24.70)	329.50 (1.05)	979.13 (3.13)	5,391.96 (17.24)	1,410.50 (4.51)	244.13 (0.78)	975.00 (3.12)	31,273.94 (100)
	Group III	3,101.00 (11.18)	9,343.80 (33.68)	5,856.00 (21.11)	457.00 (1.65)	952.50 (3.43)	5,230.45 (18.86)	1,511.00 (5.45)	177.50 (0.64)	1,110.00 (4.00)	27,739.25 (100)
	Average	3,435.13 (10.57)	11,278.40 (34.71)	8,243.25 (25.37)	326.83 (1.01)	1,003.04 (3.09)	5,533.70 (17.03)	1,434.83 (4.42)	256.54 (0.79)	985.00 (3.03)	32,496.73 (100)
NON-BORROWERS	Group I	1,005.00 (8.88)	3,859.50 (34.11)	3,365.00 (29.74)	20.63 (0.18)	323.75 (2.86)	1,943.63 (17.18)	450.00 (3.98)	121.25 (1.07)	225.00 (1.99)	11,313.75 (100)
	Group II	1,327.50 (9.38)	5,186.94 (36.67)	3,469.38 (24.52)	85.00 (0.60)	463.91 (3.28)	2,534.47 (17.92)	602.19 (4.26)	142.97 (1.01)	334.38 (2.36)	14,146.72 (100)
	Group III	1,782.75 (9.64)	6,746.10 (36.47)	4,505.50 (24.35)	115.25 (0.62)	589.25 (3.19)	3,316.03 (17.92)	797.50 (4.31)	182.50 (0.99)	465.00 (2.51)	18,499.88 (100)
	Average	1,371.75 (9.36)	5,264.18 (35.92)	3,779.96 (25.80)	73.63 (0.50)	458.97 (3.13)	2,598.04 (17.73)	616.56 (4.21)	148.91 (1.02)	341.46 (2.33)	14,653.45 (100)

(Figure in the parentheses represents the percentage)

Table 5.25.1. Distribution of respondents' return from livestock production

(₹ in average)

	Groups	Cattle	Poultry	Piggery	Goatery	Total
BORROWERS	Group I	15,734.00 (28.35)	225.00 (0.41)	38,669.70 (69.66)	880.00 (1.59)	55,508.70 (100)
	Group II	28,230.00 (51.39)	212.50 (0.39)	25,453.18 (46.33)	1,040.00 (1.89)	54,935.68 (100)
	Group III	39,974.00 (71.81)	100.00 (0.18)	13,995.40 (25.14)	1,600.00 (2.87)	55,669.40 (100)
	Average	27,979.33 (50.53)	179.17 (0.32)	26,039.43 (47.03)	1,173.33 (2.12)	55,371.26 (100)
NON-BORROWERS	Group I	2,252.50 (8.77)	1,187.50 (4.62)	22,240.00 (86.60)	0.00 (0.00)	25,680.00 (100)
	Group II	8,875.63 (26.87)	1,296.88 (3.93)	20,432.50 (61.86)	2,425.00 (7.34)	33,030.00 (100)
	Group III	11,035.00 (26.13)	1,487.50 (3.52)	28,552.00 (67.60)	1,160.00 (2.75)	42,234.50 (100)
	Average	7,387.71 (21.96)	1,323.96 (3.93)	23,741.50 (70.56)	1,195.00 (3.55)	33,648.17 (100)

(Figure in the parentheses represents the percentage)

Table 5.10.2: Distribution of respondents according return from animal husbandry (₹ in average)

Groups		Items								
		Young		Mature		Milk	Egg	Manure	Others	Total
		Nos.	Value	Nos.	Value					
BORROWERS	Group I	1.70 (0.003)	3,760.00 (6.77)	4.10 (0.01)	39,305.00 (70.81)	9,720.00 (17.51)	0.00 (0.00)	2,453.70 (4.42)	270.00 (0.49)	55,508.70 (100)
	Group II	0.73 (0.001)	1,585.00 (2.89)	3.35 (0.01)	30,402.50 (55.34)	18,225.00 (33.18)	0.00 (0.00)	4,536.18 (8.26)	187.00 (0.34)	54,935.68 (100)
	Group III	0.20 (0.0004)	600.00 (1.08)	2.30 (0.004)	21,560.00 (38.73)	26,730.00 (48.02)	0.00 (0.00)	6,639.40 (11.93)	140.00 (0.25)	55,669.40 (100)
	Average	0.88 (0.002)	1,981.67 (3.58)	3.25 (0.01)	30,422.50 (54.94)	18,225.00 (32.91)	0.00 (0.00)	4,543.09 (8.20)	199.00 (0.36)	55,371.26 (100)
NON-BORROWERS	Group I	2.25 (0.01)	5,050.00 (19.67)	6.25 (0.02)	20,387.50 (79.39)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	242.50 (0.94)	25,680.00 (100)
	Group II	2.19 (0.01)	4,606.25 (13.95)	7.22 (0.02)	22,503.13 (68.13)	4,556.25 (13.79)	0.00 (0.00)	1,125.00 (3.41)	239.38 (0.72)	33,030.00 (100)
	Group III	2.90 (0.01)	6,220.00 (14.73)	8.20 (0.02)	28,167.50 (66.69)	6,075.00 (14.38)	0.00 (0.00)	1,500.00 (3.55)	272.00 (0.64)	42,234.50 (100)
	Average	2.45 (0.01)	5,292.08 (15.73)	7.22 (0.02)	23,686.04 (70.39)	3,543.75 (10.53)	0.00 (0.00)	875.00 (2.60)	251.29 (0.75)	33,648.17 (100)

(Figure in the parentheses represents the percentage)

PHOTO GALLERY

Glimpse of animal husbandry (Cattle) undertaken by the respondents':

(1) Researcher with respondent at Medziphema block

(2) Researcher interacting with female respondent at Medziphema block

(3) Researcher with respondent at Dhansiripar block

(4) Researcher interacting with female respondent at Dhansiripar block

(5) Researcher interacting with female respondent at Medziphema block

(6) Researcher with respondent at Medziphema block

(7) Researcher interacting with respondent at Medziphema block

(8) Researcher interacting with female respondent form Medziphema block

(9) Atypical cattle shed at Dhansiripar Block

(10) Cattle shed at Medziphema block

(11) Free-range Cattle rearing at Dhansiripar block

(12) Cattle shed at Medziphema block

PHOTO GALLERY

Glimpse of animal husbandry (Piggery) undertaken by the respondents':

(1) Researcher interacting with respondent at Dhansiripar block

(2) Researcher interacting with female respondent at Medziphema block

(3) Researcher interacting with female respondent at Dhansiripar block

(4) Researcher with female respondent at Medziphema block

(5) Researcher interacting with respondent at Medziphema block

(6) Researcher interacting with female respondent at Medziphema block

(7) Researcher interacting with female respondent at Medziphema block

(8) Researcher interacting with respondent at Medziphema block

(9) Researcher interacting with female respondent at Dhansiripar block

(10) Researcher interacting with female respondent at Dhansiripar block

(11) Researcher interacting with female respondent at Medziphema block

(12) Semi-open system of pig rearing at Medziphema block

(13) Female respondent of Dhansiripar block caring for the piglet

(14) Typical traditional pig sty at Medziphema block

(15) Typical modern pig sty at Medziphema block

(16) piggery and fishery integrated farming practiced at Dhansiripar block

(17) A view of items used in preparation of pig feed at Dhansiripar block

(18) A view of preparation of pig feed at Medziphema block

PHOTO GALLERY

mpse of animal husbandry (Poultry) undertaken by the respondents':

) Researcher with respondent family at Medziphema block

(2) Researcher with male respondent at Medziphema block

Researcher with female respondent at Medziphema block

(4) A view of poultry farm at Medziphema block

A view of traditional poultry farm

(6) A view of traditional chicken coop

(7) Chicks at modern type of poultry farm at Dhansiripar block

(8) Ready for market broilers at Medziphema block

(9) View ofswan goose reared by respondent at Medziphema block

(10) Integrated farming system practiced by respondents at Dhansiripar block

(11) View of poultry feeds used by respondents at Medziphema block

(12) Poultry nutrients and medication used by the respondent

5.2. FISH PRODUCTION OF THE RESPONDENTS

5.2.1. Respondents' cost of fish production

The cost of fish production of the respondents is given in Table 5.26. The overall average cost of fish production was found to be ₹ 11,455.63 for the borrowers and ₹ 8,091.96 for the non-borrowers. The total cost incurred was found increasing with the increase in the farm size under both the cases of borrowers and non-borrowers. The highest cost incurred for fish production was the feed cost, with an average cost of ₹ 4,626.53 (40.39 per cent) and ₹ 3,610.25 (44.62 per cent) for borrowers and non-borrowers respectively.

5.2.2. Respondents' yield and income from fish production

The respondents' average yield from fish production was found to be 250 kg, with a worth value of ₹ 25,026.67 for the borrowers, whereas for the non-borrowers, it was found out to be 154.73 kg, worth ₹ 15,472.50 as given in Table 5.27. The average sold out value of fish for the borrowers was found to be ₹ 23,670.83 and ₹ 14,760.83 for the non-borrowers. Comparatively, in terms of yield and returns from sales of fish, the borrower was found to be better off than its counterpart, the non-borrowers.

5.3. RESPONDENTS' PLANTATION

5.3.1. Respondents' cost of plantation

The cost of plantation for the respondents is given in the Table 5.28. The average cost of plantation for the borrowers was found out to be ₹ 2,029.73 and ₹ 4,086.33 for the non-borrowers. The highest cost incurred for plantation under both the cases was from the labour cost. The borrowers' human labour cost was found to be 59.78 per cent, contributed by 34.16 per cent owned

Table 5.27. **Distribution of respondents yield and income from fish production**

(in average)

	Groups	Yield		Consumed		Sold	
		Kg	Value (Rs.)	Kg	Value (Rs.)	Kg	Value (Rs.)
BORROWERS	Group I	24.00	2,400.00	3.00	300.00	21.00	2,100.00
	Group II	256.40	25,640.00	16.28	1,627.50	240.13	24,012.50
	Group III	470.40	47,040.00	21.40	2,140.00	449.00	44,900.00
	Average	250.27	25,026.67	13.56	1,355.83	236.71	23,670.83
NON-BORROWERS	Group I	76.50	7,650.00	3.75	375.00	72.75	7,275.00
	Group II	183.38	18,337.50	8.50	850.00	174.88	17,487.50
	Group III	204.30	20,430.00	9.10	910.00	195.20	19,520.00
	Average	154.73	15,472.50	7.12	711.67	147.61	14,760.83

(Figure in the parentheses represents the percentage)

PHOTO GALLERY

Glimpse of fishery activities undertaken by the respondents':

(1) Researcher with respondent at Medziphema block

(2) Researcher with female respondent at Medziphema block

(3) Researcher with female respondent at Medziphema block

(4) Respondent from Medziphema block

(5) Researcher with respondent at Medziphema block

(6) Researcher with female respondent at Medziphema block

(7) Researcher with respondent at Dhansiripar block

(8) Researcher with female respondent at Dhansiripar block

(9) Researcher with respondent at Dhansiripar block

(10) Researcher with respondent at Medziphema block

(11) Researcher with respondent at Dhansiripar block

(12) Researcherwith respondent at Dhansiripar block

(13) View of respondent fishery at Dhansiripar block

(14) View of respondent fishery at Medziphema block

(15) View of respondent fishery at Dhansiripar block

(16) View of respondent fishery at Dhansiripar block

(17) View of respondent fishery at Dhansiripar block

(18) View of respondent fishery at Medziphema block

(19) View of respondent fishery at Medziphema block

(20) View of respondent fishery at Dhansiripar block

(21) View of respondent fishery at Medziphema block

(22) View of respondent fishery at Medziphema block

(23) A view of integrated farming at Dhansiripar block

(24) Pump-set used for dual purpose by the respondent at Dhansiripar block

labour and 25.62 per cent hired labour. Whereas, the non-borrowers had a human labour cost of 60.62 per cent contributed by 31.35 per cent owned labour and 39.26 per cent hired labour. The next highest cost was the cost of planting materials, which was 33.82 per cent for the borrowers and 33.11 per cent for the non-borrowers.

5.8.2. Respondents' returns from plantation

The return from plantation for the respondents is given in the Table 5.29. The average total return from plantation for the borrowers was found to be ₹ 1,136.67 and ₹ 1,926.56 for the non-borrowers. The borrowers' total return from sale of the products accounts for 61.58 per cent and for the non-borrowers it was 60.77 per cent. The highest sales return from plantation came from the sale of fruit crops, both for the borrowers and the non-borrowers with 57.18 per cent and 44.34 per cent of the total value respectively.

5.9. EXPENDITURE AND INCOME OF THE RESPONDENTS

5.9.1. Respondents' annual expenditure

The total annual expenditure of the respondents' family is given in Table 5.30. The borrowers on an average per annum had a total expenditure of ₹ 1,22,346.56, whereas for the non-borrowers it was ₹ 88,838.89. The total expenditure for the borrowers was incurred from on-farm expenditure amounting to ₹ 62,074.31 (50.74 per cent) and the family-needs expenditure amounting to ₹ 60,272.25 (49.26 per cent), whereas for the non-borrowers, it was found out to be ₹ 36,363.64 (30.15 per cent) for on-farm expenditure and ₹ 52,475.25 (59.07 per cent) for family-needs expenditure. The highest

Table 5.28. Distribution of respondents cost of plantation (₹ in average)

Groups		Human Labour			Planting Materials	Chemicals	Transportation	Marketing	Others	Total Cost
		Hired	Owned	Total						
BORROWERS	Group I	660.00 (25.62)	880.00 (34.16)	1,540.00 (59.78)	871.20 (33.82)	82.50 (3.20)	82.50 (3.20)	0.00 (0.00)	0.00 (0.00)	2,576.20 (100)
	Group II	480.00 (25.62)	640.00 (34.16)	1,120.00 (59.78)	633.60 (33.82)	60.00 (3.20)	60.00 (3.20)	0.00 (0.00)	0.00 (0.00)	1,873.60 (100)
	Group III	420.00 (25.620	560.00 (34.16)	980.00 (59.78)	554.40 (33.82)	52.50 (3.20)	52.50 (3.20)	0.00 (0.00)	0.00 (0.00)	1,639.40 (100)
	Average	520.00 (25.62)	693.33 (34.16)	1,213.33 (59.78)	686.40 (33.82)	65.00 (3.20)	65.00 (3.20)	0.00 (0.00)	0.00 (0.00)	2,029.73 (100)
NON-BORROWERS	Group I	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Group II	437.50 (29.26)	468.75 (31.35)	906.25 (60.62)	495.00 (33.11)	46.88 (3.14)	46.88 (3.14)	0.00 (0.00)	0.00 (0.00)	1,495.00 (100)
	Group III	3,150.00 (29.26)	3,375.00 (31.35)	6,525.00 (60.62)	3,564.00 (33.11)	337.50 (3.14)	337.50 (3.14)	0.00 (0.00)	0.00 (0.00)	10,764.00 (100)
	Average	1,195.83 (29.26)	1,281.25 (31.35)	2,477.08 (60.62)	1,353.00 (33.11)	128.13 (3.14)	128.13 (3.14)	0.00 (0.00)	0.00 (0.00)	4,086.33 (100)

(Figure in the parentheses represents the percentage)

Table 5.29: Distribution of respondents average return from plantation (₹ in average)

Groups		Timber (Rs.)		Firewood (Rs.)		Fruit crops (Rs.)		Seedlings (Rs.)		Others (Rs.)		Total Value (Rs.)		
		Home	Sold	Home	Sold	Home	Sold	Home	Sold	Home	Sold	Home	Sold	Total
BORROWERS	Group I	82.50 (6.12)	0.00 (0.00)	137.50 (10.20)	0.00 (0.00)	110.00 (8.16)	825.00 (61.22)	82.50 (6.12)	0.00 (0.00)	110.00 (8.16)	0.00 (0.00)	522.50 (38.78)	825.00 (61.22)	1,347.50 (100)
	Group II	147.50 (12.11)	150.00 (12.32)	100.00 (8.21)	0.00 (0.00)	80.00 (6.57)	600.00 (49.28)	60.00 (4.93)	0.00 (0.00)	80.00 (6.57)	0.00 (0.00)	467.50 (38.40)	750.00 (61.60)	1,217.50 (100)
	Group III	40.00 (4.73)	0.00 (0.00)	87.50 (10.36)	0.00 (0.00)	70.00 (8.28)	525.00 (62.13)	52.50 (6.21)	0.00 (0.00)	70.00 (8.28)	0.00 (0.00)	320.00 (37.87)	525.00 (62.13)	845.00 (100)
	Average	90.00 (7.92)	50.00 (4.40)	108.33 (9.53)	0.00 (0.00)	86.67 (7.62)	650.00 (57.18)	65.00 (5.72)	0.00 (0.00)	86.67 (7.62)	0.00 (0.00)	436.67 (38.42)	700.00 (61.58)	1,136.67 (100)
NON-BORROWERS	Group I	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Group II	31.25 (4.60)	0.00 (0.00)	42.18 (6.21)	0.00 (0.00)	168.75 (24.83)	312.50 (45.98)	62.50 (9.20)	0.00 (0.00)	62.50 (9.20)	0.00 (0.00)	367.18 (54.02)	312.50 (45.98)	679.69 (100)
	Group III	225.00 (4.41)	950.00 (18.63)	212.50 (4.17)	0.00 (0.00)	562.50 (11.03)	2,250.00 (44.12)	450.00 (8.82)	0.00 (0.00)	450.00 (8.82)	0.00 (0.00)	1,900.00 (37.25)	3,200.00 (62.75)	5,100.00 (100)
	Average	85.42 (4.43)	316.67 (16.44)	84.90 (4.41)	0.00 (0.00)	243.75 (12.65)	854.17 (44.34)	170.83 (8.87)	0.00 (0.00)	170.83 (8.87)	0.00 (0.00)	755.73 (39.23)	1,170.83 (60.77)	1,926.56 (100)

(Figure in the parentheses represents the percentage)

Table 5.30. Distribution of the respondents annual expenditure

(₹ in Average per annum)

Groups		On Farm expenditure						Farm family needs					Total Expenditure
		Agricultural Production	Animal Husbandry	Fishery Production	Plantation	Others	Total	Household Needs	Education	Transportation	Others	Total	
BORROWERS	Group I	7,743.00 (8.16)	38,477.00 (40.56)	1,092.00 (1.15)	2,576.20 (2.72)	0.00 (0.00)	49,888.20 (52.59)	23,460.00 (24.73)	15,570.00 (16.41)	3,835.00 (4.04)	2,112.00 (2.23)	44,977.00 (47.41)	94,865.20 (100)
	Group II	14,640.15 (11.70)	31,273.94 (24.99)	11,634.10 (9.30)	1,873.60 (1.50)	0.00 (0.00)	59,421.79 (47.49)	38,797.50 (31.00)	19,297.50 (15.42)	4,463.75 (3.57)	3,156.00 (2.52)	65,714.75 (52.51)	1,25,136.54 (100)
	Group III	25,893.50 (17.61)	27,739.25 (18.87)	21,640.80 (14.72)	1,639.40 (1.11)	0.00 (0.00)	76,912.95 (52.31)	43,080.00 (29.30)	20,160.00 (13.71)	4,485.00 (3.05)	2,400.00 (1.63)	70,125.00 (47.69)	1,47,037.95 (100)
	Average	16,092.22 (13.15)	32,496.73 (26.56)	11,455.63 (9.36)	2,029.73 (1.66)	0.00 (0.00)	62,074.31 (50.74)	35,112.50 (28.70)	18,342.50 (14.99)	4,261.25 (3.48)	2,556.00 (2.09)	60,272.25 (49.26)	1,22,346.56 (100)
NON-BORROWERS	Group I	6,346.75 (8.39)	11,313.75 (14.95)	3,972.00 (5.25)	0.00 (0.00)	0.00 (0.00)	21,632.50 (28.59)	24,750.00 (32.71)	23,400.00 (30.92)	3,968.75 (5.24)	1,920.00 (2.54)	54,038.75 (71.41)	75,671.25 (100)
	Group II	9,494.44 (11.01)	14,146.72 (16.41)	9,624.50 (11.16)	1,495.00 (1.73)	0.00 (0.00)	34,760.66 (40.31)	26,343.75 (30.55)	18,515.63 (21.47)	4,240.63 (4.92)	2,370.00 (2.75)	51,470.00 (59.69)	86,230.66 (100)
	Group III	12,754.50 (12.19)	18,499.88 (17.68)	10,679.40 (10.21)	10,764.00 (10.29)	0.00 (0.00)	52,697.78 (50.37)	29,250.00 (27.96)	15,825.00 (15.13)	4,190.00 (4.01)	2,652.00 (2.54)	51,917.00 (49.63)	1,04,614.78 (100)
	Average	9,531.90 (10.73)	14,653.45 (16.49)	8,091.97 (9.11)	4,086.33 (4.60)	0.00 (0.00)	36,363.64 (40.93)	26,781.25 (30.15)	19,246.88 (21.66)	4,133.13 (4.65)	2,314.00 (2.60)	52,475.25 (59.07)	88,838.89 (100)

(Figure in the parentheses represents the percentage)

PHOTO GALLERY

Glimpse of respondents' engaged in other activities:

(1) A view of respondents areca nut and teak plantation at Dhansiripar block

(2) A view of respondents passion fruit plantation at Medziphema block

(3) Rabbit farming undertaken by respondent at Medziphema block

(4) Jute production by respondent at Dhansiripar block

(5) Indigenous indoor bee keeping by respondent at Medziphema block

(6) Indigenous on farm bee keeping by respondent at Medziphema block

expenditure incurred was for animal husbandry with an amount of ₹ 32,496.73 (8.56 per cent) for the borrowers and for the non-borrowers, the highest expenditure was incurred for household needs amounting to ₹ 26,781.25 (31.15 per cent).

5.32 Respondents' annual income

The distribution of respondents' annual income from different sources is given in Table 5.31. The findings revealed that the average annual income from different sources was found to be ₹ 1,38,136.10 per respondents for the borrowers and ₹ 83,389.81 for the non-borrowers. Of the different sources of income of the respondents, animal husbandry contributed a major share, on an average contributing ₹ 55,371.26 (40.08 per cent) to the borrowers income and ₹28,368.85 (34.02 per cent) to the non-borrowers income. The income was found to increase with the increase in the farm size for the borrowers. Under the non-borrowers category the income was found highest under Group II (small size), followed by Group I (marginal size) and then by Group III (medium size). On comparison of the findings, the borrowers' income generated from agricultural, animal husbandry and fishery activities was found higher than the non-borrowers in all the cases. This implies that the income generated from agricultural and allied activities was found to have a positive impact on the borrowers.

5.33 EMPLOYMENT GENERATED

The distribution of respondents' employment generated from different agricultural and allied activities in mandays is given in Table 5.32.1. Under the category of borrowers, the total average number of mandays generated was 305.62 mandays, with male employed for 161.64 days (52.89 per cent) and

Table 5.31: Distribution of the respondent annual income (₹ in average)

Groups		Agricultural Production	Animal Husbandry	Fishery	Forest & Plantation	Service	Business	Others	TOTAL
BORROWERS	Group I	4,855.90 (4.90)	55,508.70 (56.01)	2,100.00 (2.12)	825.00 (0.83)	18,000.00 (18.16)	15,720.00 (15.86)	2,100.00 (2.12)	99,109.60 (100)
	Group II	11,467.90 (8.36)	54,935.68 (40.05)	24,012.50 (17.50)	750.00 (0.55)	28,275.00 (20.61)	11,430.00 (8.33)	6,307.50 (4.60)	1,37,178.60 (100)
	Group III	30,045.70 (16.87)	55,669.40 (31.25)	44,900.00 (25.21)	525.00 (0.29)	30,900.00 (17.35)	16,080.00 (9.03)	0.00 (0.00)	1,78,120.10 (100)
	Average	15,456.50 (11.19)	55,371.26 (40.08)	23,670.83 (17.14)	700.00 (0.51)	25,725.00 (18.62)	14,410.00 (10.43)	2,802.50 (2.03)	1,38,136.10 (100)
NON-BORROWERS	Group I	1,142.37 (1.32)	25,680.00 (29.77)	7,275.00 (8.43)	0.00 (0.00)	12,750.00 (14.78)	34,050.00 (39.47)	5,375.00 (6.23)	86,272.38 (100)
	Group II	6,654.34 (7.15)	33,030.00 (35.50)	17,487.50 (18.79)	312.50 (0.34)	10,875.00 (11.69)	21,375.00 (22.97)	3,318.75 (3.57)	93,053.09 (100)
	Group III	7,184.90 (10.14)	26,396.56 (37.26)	12,200.00 (17.22)	2,000.00 (2.82)	8,250.00 (11.65)	10,762.50 (15.19)	4,050.00 (5.72)	70,843.97 (100)
	Average	4,993.87 (5.99)	28,368.85 (34.02)	12,320.83 (14.77)	770.83 (0.92)	10,625.00 (12.74)	22,062.50 (26.46)	4,247.91 (5.09)	83,389.81 (100)

(Figure in the parentheses represents the percentage)

Table 5.13.1 Distribution of respondents' employment generated in mandays

(In mandays)

Groups		Crop production			Animal Husbandry			Fishery			Plantation			Others			Total		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	38.00 (15.23)	37.50 (15.03)	75.50 (30.27)	53.50 (21.45)	67.59 (27.10)	121.09 (48.55)	1.00 (0.40)	0.00 (0.00)	1.00 (0.40)	6.60 (2.65)	3.25 (1.30)	9.85 (3.95)	24.00 (9.62)	18.00 (7.22)	42.00 (16.84)	123.10 (49.35)	126.34 (50.65)	249.44 (100)
	Group II	65.05 (22.92)	53.25 (18.76)	118.30 (41.68)	48.10 (16.95)	43.35 (15.27)	91.45 (32.22)	13.40 (4.72)	4.55 (1.60)	17.95 (6.32)	4.18 (1.47)	1.90 (0.67)	6.08 (2.14)	28.50 (10.04)	21.56 (7.60)	50.06 (17.64)	159.23 (56.10)	124.60 (43.90)	283.83 (100)
	Group III	109.80 (28.62)	99.40 (25.91)	209.20 (54.54)	36.60 (9.54)	40.59 (10.58)	77.19 (20.12)	23.10 (6.02)	21.10 (5.50)	44.20 (11.52)	3.10 (0.81)	1.90 (0.50)	5.00 (1.30)	30.00 (7.82)	18.00 (4.69)	48.00 (12.51)	202.60 (52.82)	180.99 (47.18)	383.59 (100)
	Total	70.95 (23.22)	63.38 (20.74)	134.33 (43.95)	46.07 (15.07)	50.51 (16.53)	96.58 (31.60)	12.50 (4.09)	8.55 (2.80)	21.05 (6.89)	4.63 (1.51)	2.35 (0.77)	6.98 (2.28)	27.50 (9.00)	19.19 (6.28	46.69 (15.28)	161.64 (52.89)	143.98 (47.11)	305.62 (100)
NON-BORROWERS	Group I	26.50 (16.87)	24.13 (15.36)	50.63 (32.23)	23.25 (14.80)	25.48 (16.22)	48.73 (31.03)	8.13 (5.17)	7.70 (4.90)	15.83 (10.08)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	25.00 (15.92)	16.88 (10.74)	41.88 (26.66)	82.88 (52.77)	74.18 (47.23)	157.05 (100)
	Group II	38.28 (18.58)	29.03 (14.09)	67.31 (32.67)	28.13 (13.65)	40.51 (19.66)	68.64 (33.31)	19.47 (9.45)	9.23 (4.48)	28.69 (13.92)	3.38 (1.64)	1.80 (0.87)	5.17 (2.51)	23.13 (11.22)	13.13 (6.37)	36.25 (17.59)	112.38 (54.53)	93.69 (45.47)	206.07 (100)
	Group III	51.90 (19.09)	36.45 (13.41)	88.35 (32.50)	31.10 (11.44)	35.35 (13.00)	66.45 (24.44)	21.35 (7.85)	9.18 (3.38)	30.53 (11.23)	29.25 (10.76)	18.00 (6.62)	47.25 (17.38)	25.00 (9.20)	14.25 (5.24)	39.25 (14.44)	158.60 (58.35)	113.23 (41.65)	271.83 (100)
	Total	38.89 (18.38)	29.87 (14.11)	68.76 (32.49)	27.49 (12.99)	33.78 (15.96)	61.27 (28.95)	16.31 (7.71)	8.70 (4.11)	25.02 (11.82)	10.88 (5.14)	6.60 (3.12)	17.47 (8.26)	24.38 (11.52)	14.75 (6.97)	39.13 (18.49)	117.95 (55.73)	93.70 (44.27)	211.65 (100)

M- Male; F- Female; T- Total

(Figure in the parentheses represents the percentage)

Table 5.32.2. Distribution of respondents' employment generated in numbers

(in numbers)

Groups		Cropping			Animal Husbandry			Fishery			Plantation			Others			Total		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
BORROWERS	Group I	1.20 (11.32)	1.20 (11.32)	2.40 (22.64)	2.10 (19.81)	2.00 (18.87)	4.10 (38.68)	0.10 (0.94)	0.20 (1.89)	0.30 (2.83)	0.90 (8.49)	0.50 (4.72)	1.40 (13.21)	1.20 (11.32)	1.20 (11.32)	2.40 (22.64)	5.50 (51.89)	5.10 (48.11)	10.60 (100)
	Group II	1.43 (12.32)	1.41 (12.22)	2.84 (24.54)	1.60 (13.84)	1.70 (14.70)	3.30 (28.54)	0.71 (6.16)	0.90 (7.78)	1.61 (13.95)	0.65 (5.62)	0.30 (2.59)	0.95 (8.22)	1.43 (12.32)	1.44 (12.43)	2.86 (24.76)	5.81 (50.27)	5.75 (49.73)	11.56 (100)
	Group III	1.50 (13.22)	1.20 (10.57)	2.70 (23.79)	1.60 (14.10)	1.50 (13.22)	3.10 (27.31)	0.80 (7.05)	0.85 (7.49)	1.65 (14.54)	0.80 (7.05)	0.40 (3.52)	1.20 (10.57)	1.50 (13.22)	1.20 (10.57)	2.70 (23.79)	6.20 (54.63)	5.15 (45.37)	11.35 (100)
	Total	1.38 (12.31)	1.27 (11.38)	2.65 (23.69)	1.77 (15.81)	1.73 (15.52)	3.50 (31.33)	0.54 (4.81)	0.65 (5.82)	1.19 (10.63)	0.78 (7.01)	0.40 (3.58)	1.18 (10.59)	1.38 (12.31)	1.28 (11.45)	2.65 (23.76)	5.84 (52.26)	5.33 (47.74)	11.17 (100)
NON-BORROWERS	Group I	1.25 (16.67)	1.13 (15.00)	2.38 (31.67)	0.63 (8.33)	1.63 (21.67)	2.25 (30.00)	0.13 (1.67)	0.38 (5.00)	0.50 (6.67)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1.25 (16.67)	1.13 (15.00)	2.38 (31.67)	3.25 (43.33)	4.25 (56.67)	7.50 (100)
	Group II	1.22 (14.47)	1.03 (12.24)	2.25 (26.72)	0.69 (8.16)	1.50 (17.81)	2.19 (25.97)	0.50 (5.94)	0.64 (7.61)	1.14 (13.54)	0.56 (6.68)	0.25 (2.97)	0.81 (9.65)	1.16 (13.73)	0.88 (10.39)	2.03 (24.12)	4.13 (48.98)	4.30 (51.02)	8.42 (100)
	Group III	1.25 (11.24)	1.05 (9.44)	2.30 (20.67)	1.05 (9.44)	1.45 (13.03)	2.50 (22.47)	0.70 (6.29)	0.73 (6.52)	1.43 (12.81)	1.75 (15.73)	0.95 (8.54)	2.70 (24.27)	1.25 (11.24)	0.95 (8.54)	2.20 (19.78)	6.00 (53.93)	5.13 (46.07)	11.13 (100)
	Total	1.24 (13.75)	1.07 (11.85)	2.31 (25.60)	0.79 (8.73)	1.53 (16.92)	2.31 (25.65)	0.44 (4.90)	0.58 (6.44)	1.02 (11.33)	0.77 (8.55)	0.40 (4.44)	1.17 (12.99)	1.22 (13.52)	0.98 (10.91)	2.20 (24.43)	4.46 (49.45)	4.56 (50.55)	9.02 (100)

M- Male; F- Female; T- Total

(Figure in the parentheses represents the percentage)

female for 143.98 mandays (47.11 per cent). In the non-borrowers category, average number of mandays was 211.65 mandays, with male employed for 117.95 mandays (55.73 per cent) and female for 93.70 mandays (44.27 per cent). Of the different agricultural activities, crop production was found to generate the highest employment mandays, generating 134.33 mandays (43.95 per cent), with 70.95 male mandays (23.22 per cent) and 63.38 female mandays (20.74 per cent) for the borrowers, whereas for the non-borrowers it generated 68.76 mandays (32.49 per cent) with 29.87 male mandays (14.11 per cent) and 38.89 female mandays.

The distribution of respondents' employment generated in numbers is given in Table 5.32.2. The average number of persons employed for the borrowers was found to be 11.17 per family of which 5.84 (52.26 per cent) male and 5.33 (47.74 per cent) female were employed. The non-borrowers employed 9.02 persons per family with 4.56 (49.45 per cent) male and 4.56 (50.55 per cent) female.

5.33. IMPACT OF CO-OPERATIVE BANK FINANCE ON EMPLOYMENT AND INCOME

Table 5.33 reveals the impact of co-operative bank finance on income and employment. A significant increasing trend on overall group was observed. The increase in income from crop production was found to be 38.27 per cent, animal husbandry with 48.12 per cent, fishery enterprise with 16.79 per cent, plantation enterprise with 16.33 per cent and other agriculture and allied activity had increased to 42.55 per cent on the sample respondents after getting the co-operative bank finance, which was found to be statistically significant at 1 per cent level during 't' test, except on other enterprises which has 1.39 per cent increase and statistically non-significant. Further it showed that such activities could be further explored for generating more income by

Table 8.33 Impact of co-operative bank finance on income and employment status

SN	Parameters	Before		After		% Change	't' test
		Mean	SD	Mean	SD		
A.	Income (₹)						
1.	Crop Production	3192.50	1218.01	4330.05	2062.34	26.27	4.577963**
2.	Animal Husbandry	14670.83	9784.27	28279.17	21990.56	48.12	6.702508 **
3.	Fishery	975.33	351.35	1093.33	481.83	10.79	3.085567 **
4.	Plantation	1099.42	342.55	1313.96	521.76	16.32	4.156683 **
5.	Others	405.54	223.70	411.29	239.11	1.39	- 2.36075 NS
Total		20349.38	11415.22	35422.00	24216.08	42.55	4.94287**
B.	Employment						
1.	Crop Production	21.28	8.120	28.86	13.74	27.32	5.215270 **
2.	Animal Husbandry	58.68	39.13	113.11	87.96	45.25	5.679833 **
3.	Fishery	21.86	9.63	24.38	8.78	10.12	2.260137**
4.	Plantation	4.39	1.37	5.25	2.08	15.82	3.727963 **
5.	Others	1.62	0.89	1.64	0.95	1.28	- 2.05863 NS
Total		110.39	55.53	170.73	101.21	35.33	4.156683 **

*(NS - Non Significant & ** - Significant at 1 per cent level of significance.)*

the farmers. It also showed a significant increase on overall group employment. Employment from crop production was to have increased to 27.32 per cent, animal husbandry with 45.25 per cent, fishery enterprise with 18.12 per cent, plantation enterprise with 15.83 per cent and other agriculture and allied activity has increased to 35.34 per cent on the sample respondents after getting the co-operative bank finance, which was found to be statistical significant at 1 per cent level during 't' test, except on other enterprise it was 1.29 per cent increased with statistically non-significant, further it shows that more potentiality can be explored for generating more emptoyment by the farmers in the coming days.

5.12. RESOURCE USE EFFICIENCY

Cobb-Douglas Production Functions was used in the present study for the assessment of the resource use efficiency of different enterprises viz., crop production, livestock and plantation crops on different farm size groups in the selected area. The production function of different enterprises were fitted as regressing gross return (y), x_1, x_2, x_3, x_4, x_5, x_6, x_7 and x_8 in terms of rupees (₹) as independent variables on marginal, small and medium farm size groups as well as overall farm size group.

5.12.1. Resource Productivity

The Ordinary Least Square (O.L.S.) estimates of parameters of Cobb-Douglas type of production with respect to different farm size groups and overall farm size samples are presented in Table 5.34.1 and 5.34.2.

It is clear from the tables that the value of co-efficient of multiple determinations (R^2) for beneficiaries ranges from 99.56 per cent (in marginal

sizegroup of farm) to 87.08 per cent (in small size group of farm), and with an overall of 94.76 per cent, which explains the variation in the dependent variables by the selected independent variables chosen in the equation in different farm size groups and in overall farms. By aggregating the cross-sectional data of all the farms in various farm size groups under beneficiaries, the value of R^2 in all farm samples was found to be 0.9956, which shows that 99 per cent of the variation of dependent variable is explained by the independent variation chosen in the equation. Even on the non-beneficiaries farm size group it was found out to be in the range of 99.99 per cent to 94.55 per cent with an overall of 99.96 per cent, which shows a good fit of the selected model. The remaining variation of dependent variable might be due to other variables, which have been used in excess or not properly used.

The overall regression co-efficient of input a (constant) was found to have positive significant at 1 per cent and 10 per cent level for the beneficiaries and non-beneficiaries respectively, which indicates that the model is a good fit. The negative and non-significant values, indicate that constant have very little role towards the gross return.

The regression co-efficient of x_1 (human labour cost) for beneficiaries was found maximum (0.24) on the overall and minimum on the small size group (0.19) and was found significant at 10 per cent level of significance, while on marginal and medium size group it was found non-significant. The non-beneficiaries human labour had significance on the marginal (0.94) and small (0.96) size group at 10 and 5 per cent level of significance respectively. The non-significant character may mean that it contributes less or that their role is very less to the return. Even the investment of selected input was found to have negative impact, so it is better to re-allocate the input variables for further investment and have meaningful contribution with regard to the input investment.

In case of x_2 (seed/sapling/animal/fingerling cost) it was found to be positive and significant at 10 per cent level of significance in the entire size group under beneficiaries. x_2 was also found significant under non-beneficiaries in all the group size. It indicates a good fit with more potential in comparison to other inputs toward the gross returns.

The regression co-efficient of x_3 (fertilizer) was found to be statistically significant at 1 per cent level only in medium farm size group (25.75) on the beneficiaries, while on the non-beneficiaries, it was found significant on the medium and the overall. The result shows that in comparison to the other farm size groups, it could be betier utilized on the farm, because of its positive role in gaining more net return. While on other farms, its contribution was less or may be utilized in excess, which ultimately provides a negative response towards the gross return. So it may be concluded that the investment in the medium farm size group may further have more potential after the investment or by shifting the other inputs for getting better returns.

The value of x_4 (plant protection) was found to be significant only in the small size group under beneficiaries and significant at 10 per cent level of significance, whereas, it was not found significant in any of the group under non-beneficiaries. So it will be better to shift the inputs as an investment to potential areas for getting better prospects as well as returns as compared to other inputs as it contributes little towards the gross return.

The value of x_5 (machineries) was found to be significant only in the overall group under beneficiaries significant at 1 per cent level, while on the non-beneficiaries, it was found to be significant on the small size group and in the overall group significant at 10 per cent level of significance.

The value of x_6 (transportation) for the beneficiaries was found to be statistically significant at 10 per cent level in small size and medium farm group and the overall groups at 1 per cent level of significant, which shows a

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(i).	**Marginal farm size group**				
1.	10	a	-16384^{NS} (5.09E+10)	-3.2E-07^{NS}	0.995627*** (312.048)
2.		x_1	0.025571^{NS} (0.038727)	0.660283^{NS}	
3.		x_2	33.91158* (24.25238)	1.398279*	
4.		x_3	-15.3005^{NS} (8.979653)	-1.70391^{NS}	
5.		x_4	3.17E+16^{NS} (2.96E+16)	1.072674^{NS}	
6.		x_5	-42.0953^{NS} (27.14217)	-1.55092^{NS}	
7.		x_6	44.36427*** (30.91366)	1.435103***	
8.		x_7	244.4481*** (131.2289)	1.862762***	
9.		x_8	-5E+15^{NS} (4.62E+15)	-1.07267^{NS}	

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(ii).	**Small farm size group**				
1.	40	a	2723.806^{***} (3.912539)	1.886113^{***}	0.870789^{***} (1527.016)
2.		x_1	0.19939^{*} (0.088797)	2.245466^{*}	
3.		x_2	4.847295^{*} (3.912539)	1.238913^{*}	
4.		x_3	-4.87357^{NS} (4.984829)	-0.97768^{NS}	
5.		x_4	53.15255^{*} (259.3595)	0.204938^{*}	
6.		x_5	-11.1585^{NS} (67.17767)	-0.1661^{NS}	
7.		x_6	-1.0825^{NS} (1.791139)	-0.60436^{NS}	
8.		x_7	6.654108^{*} (17.58313)	0.378437^{*}	
9.		x_8	-0.20627^{NS} (2.452675)	-0.0841^{NS}	

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(iii).	**Medium farm size group**				
1.	10	a	-5750.69^{NS} (5319.275)	-1.0811^{NS}	0.99505^{***} (849.6419)
2.		x_1	0.095459^{NS} (0.204114)	0.467673^{NS}	
3.		x_2	7.061947^{*} (6.164715)	1.145543^{*}	
4.		x_3	25.75573^{***} (15.20491)	1.693909^{***}	
5.		x_4	-103.514^{NS} (92.39518)	-1.12034^{NS}	
6.		x_5	-10.6342^{NS} (7.810345)	-1.36155^{NS}	
7.		x_6	16.18642^{***} (2.428331)	6.665657^{***}	
8.		x_7	45.66887^{***} (37.39815)	1.221153^{***}	
9.		x_8	4.768853^{*} (3.139343)	1.519061^{*}	

SN	No's of observation	Variables	Regression Co-efficiency	t-Statistics	R^2
(iv)	**Overall farm size group**				
1.	60	a	716.0078*** (947.6455)	3.246245***	0.947637*** (1787.897)
2.		x_1	0.245545* (0.07564)	0.755565*	
3.		x_2	1.398507* (1.995703)	0.700759*	
4.		x_3	-1.89379NS (4.724446)	-0.40085NS	
5.		x_4	-29.5739NS (39.16007)	-0.75521NS	
6.		x_5	9.466241*** (4.491117)	2.10777***	
7.		x_6	2.708045* (1.695795)	1.596917*	
8.		x_7	10.34837** (15.08908)	0.685819**	
9.		x_8	-0.38046NS (1.41825)	-0.26826NS	

(Figures in parenthesis indicates the Standard Error of regression Co-efficient)

*(*** Significant at 1 per cent, ** significant at 5 per cent and * significant at 10 per cent level)*

SN	No's of observation	Variables	Regression Co-efficiency	t- Statistics	R^2
(i).	**Marginal farm size group**				
1.	8	a	722.6128^{***} (241.2675)	2.995069^{***}	0.999967^{***} (16.71651)
2.		x_1	0.942542^{*} (0.023498)	40.11149^{*}	
3.		x_2	1.156315^{**} (0.122511)	9.438457^{**}	
4.		x_3	-0.6849^{NS} (0.770485)	-0.88892^{NS}	
5.		x_4	-7.75261^{NS} (2.923082)	-2.6522^{NS}	
6.		x_5	-9.39066^{NS} (4.15061)	-2.26248^{NS}	
7.		x_6	12.74165^{***} (3.522442)	3.617278^{***}	
8.		x_7	5.209856^{***} (2.55363)	2.040176^{***}	
9.		x_8	$-5E+15^{NS}$ (-0.0000231)	-0.0121^{NS}	

Sl. No.	No's of observation	Variables	Regression Coefficients	t-value	R^2
(ii).	**Small farm size group**				
1.	32	a	261.4756*** (98.52987)	2.65377***	0.998825*** (66.51042)
2.		x_1	0.96716** (0.016182)	59.76906**	
3.		x_2	1.102792* (0.198469)	5.55649*	
4.		x_3	-0.57408NS (0.696591)	-0.82413NS	
5.		x_4	0.653858NS (0.376943)	1.734635NS	
6.		x_5	1.1719* (0.250646)	4.675523*	
7.		x_6	0.51656NS (0.217086)	2.379517NS	
8.		x_7	2.994106* (0.597837)	5.008234*	
9.		x_8	-0.34281NS (0.486553)	-0.70458 NS	

(iii)	**Medium farm size group**				
1.	20	x	-2863.69^{NS} (1538.522)	-1.86133^{NS}	0.945508*** (713.0072)
2.		x_1	0.203841^{NS} (0.06347)	3.211612*	
3.		x_2	3.841157** (1.680644)	2.285527**	
4.		x_3	4.266043* (4.18209)	1.020074*	
5.		x_4	-41.692^{NS} (33.66562)	-1.23842^{NS}	
6.		x_5	-3.62684^{NS} (3.485446)	-1.04057^{NS}	
7.		x_6	8.827077*** (1.386537)	6.366275***	
8.		x_7	11.44018* (13.64558)	0.83838*	
9.		x_8	4.676801^{NS} (1.143489)	4.089941^{NS}	

No.	No. of observation	Variables	Regression Co-efficient	t- Statistics	R^2
(iv).	**Overall farm size group**				
1.	60	a	16.16413* (42.62756)	0.379194*	0.999662*** (69.96485)
2.		X_1	0.993629NS (0.0084)	118.2938NS	
3.		X_2	1.066331* (0.086997)	12.2571*	
4.		X_3	1.036308* (0.166168)	6.236491*	
5.		X_4	0.952754NS (0.267153)	3.566325*	
6.		X_5	1.27755* (0.247783)	5.155922*	
7.		X_6	0.21086NS (0.207801)	1.014721NS	
8.		X_7	1.382999* (0.415286)	3.330234*	
9.		X_8	0.982642NS (0.365714)	2.686917NS	

(Figures in parenthesis indicates the Standard Error of regression Co-efficient)

*(*** Significant at 1 per cent, ** significant at 5 per cent and * significant at 10 per cent level)*

tive significant contribution of the input to the gross returns. Under beneficiaries marginal and medium size group was found significant at 10 cent level of significance.

The value of x_7 (marketing cost) was found significant in all the groups d also on the overall groups under beneficiaries and non-beneficiaries, ich shows a positive significant contribution of the inputs to the gross rn. So it will be better to continue the investment on these inputs for ing better prospects as well as benefiting the farmers after reshuffling the et cost.

The value of x_8 (miscellaneous) was found to be significant only in the dium size group and was found statistically significant at 10 per cent level der beneficiaries, while under non-beneficiaries it was non-significant.

522. Resource use efficiency

To evaluate how efficiently the farmers of the study area have been izing their resources, the Marginal Value Product (MVP) of an input was mpared with its respective factor cost. An optimal use of that factor was alized as the ratio approach unity. The value of ratio greater than unity ans that returns could be increased by using more of that resource and if ue of ratio is less than unity, it indicates improper use of the resources. The rginal value products of a particular resource indicates the expected dition of that resource to the gross return caused by an addition of one unit that resource, while other inputs are held constant. The marginal value oducts of these factors were computed by multiplying the regression efficient of that resource with the geometric mean of gross return to the ometric mean of each resource. The computed MVP of different strategic ables is shown in Table 5.35.1 and 5.32.2.

The value of MVP for x_1 (human labour cost) was found to be positive for the entire farm size groups. Under beneficiaries, an addition of one unit of the x_1 input would be adding a value ranging from 4.21 to a maximum of 679, whereas in the non-beneficiaries it would be adding a value in the range 34.55 to 217.61.

The value of MVP for x_2 (seed/sapling/animal/fingerling cost) was found to be positive for all the farm size groups. The value ranges from 0.47 to 932.56 for the beneficiaries and from 31.79 to 108.51 for non-beneficiaries.

The MVP of x_3 (fertilizer) was found to be positive for medium farm size (120.51) and negative for the marginal (-18.83) and the small (-21.52) farm size of the beneficiaries. The negative MVP means that addition of one unit of the input x_3 would reduce the return ranging from 18.83 to 21.52. Also the MVP of x_3 for the non-beneficiaries was found to be positive on medium farm size (727.59) and negative on the marginal (-420.76) and small (-182.76) farm size of the beneficiaries.

The MVP of x_4 (plant protection) in marginal size and small size was found to be positive and negative for the medium size group and the overall group of the beneficiaries. Whereas for the non-beneficiaries, the marginal, small and medium farm size had a negative value indicating that the addition of unit will reduce the return and only the overall will have a positive value.

The MVP of x_5 (machineri es) of beneficiaries under marginal and medium farm size groups was found out to have negative values, indicating that addition of one unit of these inputs would decrease the gross return, while the small and the overall group was found to have positive values. The non size groups all had a negative value under non-beneficiaries and only the overall had a positive value. The additional investment of one unit to these

puts would be decrease the gross returns and would not contribute their ue to the gross return of the farm.

The MVP of x_6 (transportation) in small, medium and overall farm size oup under beneficiaries was found to be positive, indicating that addition of e unit of this input will increase gross return by 16.83 to 244.00. While der non-beneficiaries, it was found to be positive for all the groups and also the overall groups with value ranging from 1.24 to 70.07.

The MVP of x_7 (marketing cost) was found to be positive on the entire m size groups. Under beneficiaries, an addition of one unit of the x_7 input ould be adding a value ranging from 1846.51 to a maximum of 9547.08, hereas, in the non-beneficiaries it would be adding a value return in the nge of 3.35 to 1031.55.

The MVP of x_8 (miscellaneous) for beneficiaries under marginal, small d overall farm size groups was found to be negative, indicating that ddition of one unit of these inputs will decree their gross return, and only e medium farm size had a positive value. The marginal and small farm size der non-beneficiaries had a negative value, whereas the medium and the erall groups had a positive value.

The cross-sectional data of overall farm size was aggregated and the tio of MVP to its factor cost was computed. It was observed that ratio of to x_8 was found to have positive as well as negative values. Positive value dicates increase return, the greater than unity the higher the gross return hich highlight that the farmers can earned more by investment on those puts for getting better returns, while the negative values indicates either cess use of inputs or adverse response towards the gross return, which eds to be curtailed immediately. Further investment of such inputs must be fted towards other higher results inputs which will provide a positive ntribution to the gross return.

Table 5.35 L: Marginal Value Product analysis of boneDecorice Corn size groups

SN	Variables	Geometric Mean	MVP	MFC	Efficiency
(i).	**Marginal farm**				
1	x_1	7712.69	4.21	98	0.04305
2	x_2	239.363	932.56	23	40.5465
3	x_3	49.4956	-420.76	22	-19.126
4	x_4	118.756	7.00E+17	17	4.10E+16
5	x_5	406.416	-11576	200	-57.881
6	x_6	260.841	244.01	4	61.0008
7	x_7	282.096	49745.2	175	284.258
8	x_6	760.037	-7.00E+15	1	-7.00E+15
9	y	6635.75	-450560	24	-18773

S.N	Variables	Geometric Mean	MVP	MFC	Elasticity
(ii).	**Small farm**				
1	x_1	10404.1	44.86	98	0.45778
2	x_2	1146.43	181.77	23	7.9032
3	x_3	48.933	-182.76	22	-8.3072
4	x_4	305.331	1594.58	17	93.7986
5	x_5	1188.44	-4184.5	200	-20.922
6	x_6	929.477	-8.12	4	-2.0297
7	x_7	725.483	1846.51	175	10.5515
8	x_8	795.914	-0.39	1	-0.3868
9	y	16865.6	102143	24	4255.95

S/n	Variables	Geometric Mean	SSSI	SEC	Efficiency
(iii).	**Medium farm**				
1	x_1	14158.1	16.18	98	0.1651
2	x_2	1956.09	199.5	23	8.67391
3	x_3	57.1146	727.59	22	33.0727
4	x_4	516.804	-2339.4	17	-137.61
5	x_5	1953.82	-3004.2	200	-15.021
6	x_6	1713.19	91.45	4	22.8633
7	x_7	1248.93	9547.08	175	54.5547
8	x_8	1289	6.73	1	6.736
9	y	28374.6	-162457	24	-6769

S/N	Variables	Geometric Mean	MVP	MFC	Efficiency
(iv).	**Overall farm**				
1	x_1	10419.3	45.79	98	0.46729
2	x_2	965.251	43.47	10	4.34703
3	x_3	50.306	-58.86	22	-2.6757
4	x_4	284.781	-735.4	17	-43.259
5	x_5	1079.68	2942.42	200	14.7121
6	x_6	832.766	16.83	4	4.20875
7	x_7	678.538	2380.3	175	13.6017
8	x_8	855.905	-0.59	1	-0.5913
9	y	15744.8	22255.9	24	927.33

SN	Variables	Geometric Mean	MVP	MFC	Efficiency
(i).	**Marginal farm**				
1	x_1	2757.18	155.52	98	1.58693
2	x_2	330.073	31.79	23	1.38255
3	x_3	36.312	-18.84	22	-0.8561
4	x_4	98.3419	-170.56	17	-10.033
5	x_5	369.376	-2582.4	200	-12.912
6	x_6	283.641	70.08	4	17.5198
7	x_7	284.39	1031.55	175	5.89458
8	x_8	369.376	-7.00E+15	1	-7.00E+15
9	y	4652.31	19871.9	24	827.994

S/n	Variables	Geometric Mean	MVP	MPC	Efficiency
(ii).	**Small farm**				
1	x_1	4976.64	217.61	98	2.22052
2	x_2	583.298	41.35	23	1.79803
3	x_3	36.2255	-21.52	22	-0.9786
4	x_4	95.5636	19.61	17	1.15387
5	x_5	762.246	439.46	200	2.19731
6	x_6	550.167	3.87	4	0.96855
7	x_7	564.656	8.98	175	0.05133
8	x_8	773.486	-0.64	1	-0.6428
9	y	8418.94	9805.34	24	408.556

S/N	Variables	Geometric Mean	MVP	MFC	Efficiency
(iii).	**Medium farm**				
1	x_1	7772.05	34.55	98	0.35256
2	x_2	919.278	108.51	23	4.71794
3	x_3	78.0913	120.52	22	5.47799
4	x_4	88.9051	-942.24	17	-55.426
5	x_5	1284.39	-1024.6	200	-5.1229
6	x_6	963.289	49.87	4	12.4682
7	x_7	967.87	25.85	175	0.14774
8	x_8	1284.39	6.6	1.15	5.74433
9	y	13452.2	-80899	24	-3370.8

SN	Variables	Geometrical Mean	SEGF	MEC	Efficiency
(iv).	**Overall farm**				
1	x_1	5336.71	185.31	100	1.85312
2	x_2	629.176	33.14	23	1.44109
3	x_3	46.8111	32.21	22	1.46418
4	x_4	93.6476	23.69	17	1.39364
5	x_5	823.528	397.11	200	1.98553
6	x_6	607.041	1.25	4	0.31133
7	x_7	616.707	3.35	175	0.01916
8	x_6	829.983	1.47	1.1	1.33282
9	y	9094.06	497.41	24	20.7255

The above result showed that none of the resources were used with optimum efficiency since MVP to factor cost ratio was not equal to unity. It further need shift of input variables for getting better prospects from the same investment of inputs.

5.3. STATUS OF BANK LOAN RECEIVED BY THE BORROWERS

5.3.1. Loan received

The distribution of loan received by the borrowers is given in Table 5.36. Under Group I (Marginal farm size) there are ten (10) loanees who took loan for animal husbandry. Under Group II (Small size) there are 3 borrowers for agriculture, 15 for fishery and 22 for animal husbandry. Under Group III (Medium Size) there are 4 agricultural loanees, 5 fishery loanees and 1 animal husbandry loanee. Categorizing the loanees under different enterprise, the maximum amount disbursed per loanee was found highest under animal husbandry with an average amount of ₹ 63,969.70, followed by agriculture with ₹ 57,685.71 and then by Fishery with ₹ 48,890.

5.3.2. Repayment performance of the borrowers

The distribution of the borrowers' loan repayment is given in Table 5.37. The findings revealed that the borrowers as a whole borrowed an amount of ₹ 34,92,600, with an additional interest amount of ₹ 4,19,112. The total amount due for repayment was found to be ₹ 39,11,712, out of which ₹ 14,71,000 (37.61 per cent) was paid and with a balance of ₹ 24,40,712.00 (62.39 per cent). Across the different Groups, Group I have a balance of 36.36 per cent, Group II with 63.64 per cent and Group III with 64.38 per cent. Under the mode of repayment, partial repayment was found to be dominant

Groups		Sample Size	Agriculture		Fishery		Animal Husbandry		Total Amount (in ₹)	Average per Group (in ₹)
			Nos.	Amount (in ₹)	Nos.	Amount (in ₹)	Nos.	Amount (in ₹)		
BORROWERS	Group I	10	0	0 (0.00)	0	0 (0.00)	10	6,20,100 (17.75)	6,20,100 (17.75)	62,010
	Group II	40	3	1,86,300 (5.33)	15	7,01,400 (20.08)	22	14,18,300 (40.61)	23,06,000 (66.03)	57,650
	Group III	10	4	2,17,500 (6.23)	5	2,76,400 (7.91)	1	72,600 (2.08)	5,66,500 (16.22)	56,650
	Total	60	7	4,03,800 (11.56)	20	9,77,800 (28.00)	33	21,11,000 (60.44)	34,92,600 (100)	58,210
	Average	1	57,685.71		48,890		63,969.70		-	-

(Figure in the parentheses represents the percentage)

Groups	Sample Size	Amount to be repaid (in ₹)	Interest rate	Amount Borrowed (in ₹)	Interest Amount (in ₹)	Amount paid (in ₹)	Balance (in ₹)	Mode of payment		
								Paid	Partial	Not Paid
Group I	10 (16.67)	6,94,512.00 (100.00)	12	6,20,100 (89.29)	74,412 (10.71)	3,06,000 (44.06)	3,88,512 (55.94)	0 (0.00)	9 (15.00)	1 (1.67)
Group II	40 (66.67)	25,82,720 (100.00)	12	23,06,000 (89.29)	2,76,720 (10.71)	9,39,000 (36.36)	16,43,720 (63.64)	2 (3.33)	31 (51.67)	7 (11.67)
Group III	10 (16.67)	6,34,480 (100.00)	12	5,66,500 (89.29)	67,980 (10.71)	2,26,000 (35.62)	4,08,480 (64.38)	0 (0.00)	9 (15.00)	1 (1.67)
Total	60 (100)	39,11,712 (100.00)	12	34,92,600 (89.29)	4,19,112 (10.71)	14,71,000 (37.61)	24,40,712 (62.39)	2 (3.33)	49 (81.67)	9 (15.00)

(Figure in the parentheses represents the percentage)

with 81.67 per cent. The balance due for repayment was found to increase with the increase in the farm size, which indicates that, the marginal farmers was found better in repayment of loan than the small and medium size farmers.

5.33. Borrowers utilization of bank loan

The nature of utilization of bank loan for which it has been sanctioned is given in Table 5.38.1 and 5.38.2. The overall utilization of the bank loan for which it was sanctioned was found out to be 41.70 per cent; the remaining was used for other productive uses on the farm (14.52 per cent) as well as non-productive uses for home consumption (43.78 per cent). Apart from the actual usage, the maximum funds were diverted towards household consumption needs which accounts for 33.13 per cent of the total loan. Under the different categories of borrowers, Group I utilized 46.28 per cent for the actual loan purpose, 2.82 for other productive purpose and 50.90 per cent for non-productive uses. Group II utilized 40.78 per cent for the loan purpose, 15.52 per cent for other productive uses and 43.70 per cent for non-productive uses. Group III utilized 40.42 per cent for the actual loan purpose, 23.25 per cent for other productive uses and 36.33 per cent for non-productive uses. The purpose utilization of bank loan was found better in Group I (46.28 per cent), followed by Group II (40.72 per cent) and then by Group III (40.42 per cent).

Table 5.38.1: Distribution of borrowers' utilization of bank loan

(in Rs.)

Loan Purpose		Amount Loaned	Actually Utilized	Other Productive Uses					Non-Productive Uses			
				Agricultural	Fishery	Animals	Plantation	Total	Household Needs	Education	Others	Total
Group I	Agriculture	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	Fishery	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	Animal Husbandry	6,20,100 (100)	2,87,000 (46.28)	4,500 (0.73)	6,000 (0.97)	5,000 (0.81)	2,000 (0.32)	17,500 (2.82)	2,53,600 (40.90)	38,000 (6.13)	24,000 (3.87)	3,15,600 (50.90)
	Total	6,20,100 (100)	2,87,000 (46.28)	4,500 (0.73)	6,000 (0.97)	5,000 (0.81)	2,000 (0.32)	17,500 (2.82)	2,53,600 (40.90)	38,000 (6.13)	24,000 (3.87)	3,15,600 (50.90)
Group II	Agriculture	1,86,300 (100)	20,500 (11.00)	0 (0.00)	1,500 (0.81)	1,15,000 (61.73)	0 (0.00)	1,16,500 (62.53)	36,000 (19.32)	10,000 (5.37)	3,300 (1.77)	49,300 (26.46)
	Fishery	7,01,400 (100)	2,86,000 (40.78)	29,500 (4.21)	0 (0.00)	34,500 (4.92)	1,500 (0.21)	65,500 (9.34)	2,31,400 (32.99)	77,000 (10.98)	41,500 (5.92)	3,49,900 (49.89)
	Animal Husbandry	14,18,300 (100)	6,34,000 (44.70)	39,000 (2.75)	37,800 (2.67)	90,000 (6.35)	9,000 (0.63)	1,75,800 (12.40)	4,84,000 (34.13)	87,000 (6.13)	37,500 (2.64)	6,08,500 (42.90)
	Total	23,06,000 (100)	9,40,500 (40.78)	68,500 (2.97)	39,300 (1.70)	2,39,500 (10.39)	10,500 (0.46)	3,57,800 (15.52)	7,51,400 (32.58)	1,74,000 (7.55)	82,300 (3.57)	10,07,700 (43.70)
Group III	Agriculture	2,17,500 (100)	65,000 (29.89)	0 (0.00)	27,000 (12.41)	35,000 (16.09)	0 (0.00)	62,000 (28.51)	69,000 (31.72)	14,000 (6.44)	7,500 (3.45)	90,500 (41.61)
	Fishery	2,76,400 (100)	1,30,000 (47.03)	18,200 (6.58)	0 (0.00)	29,500 (10.67)	2,000 (0.72)	49,700 (17.98)	73,000 (26.41)	17,200 (6.22)	6,500 (2.35)	96,700 (34.99)
	Animal Husbandry	72,600 (100)	34,000 (46.83)	5,000 (6.89)	0 (0.00)	15,000 (20.66)	0 (0.00)	20,000 (27.55)	10,000 (13.77)	5,000 (6.89)	3,600 (4.96)	18,600 (25.62)
	Total	5,66,500 (100)	2,29,000 (40.42)	23,200 (4.10)	27,000 (4.77)	79,500 (14.03)	2,000 (0.35)	1,31,700 (23.25)	1,52,000 (26.83)	36,200 (6.39)	17,600 (3.11)	2,05,800 (36.33)

(Figure in the parentheses represents the percentage)

Table 5.36.2 Distribution of borrowers' overall utilization of bank loan

Loan Purpose		Amount Loaned	Actually Utilized	Other Productive Uses (on farm)					Non-Productive Uses (home use)			
				Agricultural	Fishery	Animals	Plantation	Total	Household Needs	Education	Others	Total
Total	Agriculture	4,03,800 (100)	85,500 (21.17)	0 (0.00)	28,500 (7.06)	1,50,000 (37.15)	0 (0.00)	1,78,500 (44.21)	1,05,000 (26.00)	24,000 (5.94)	10,800 (2.67)	1,39,800 (34.62)
	Fishery	9,77,800 (100)	4,16,000 (42.54)	47,700 (4.88)	0 (0.00)	64,000 (6.55)	3,500 (0.36)	1,15,200 (11.78)	3,04,400 (31.13)	94,200 (9.63)	48,000 (4.91)	4,46,600 (45.67)
	Animal Husbandry	21,11,000 (100)	9,55,000 (45.24)	48,500 (2.30)	43,800 (2.07)	1,10,000 (5.21)	11,000 (0.52)	2,13,300 (10.10)	7,47,600 (35.41)	1,30,000 (6.16)	65,100 (3.08)	9,42,700 (44.66)
	Total	34,92,600 (100)	14,56,500 (41.70)	96,200 (2.75)	72,300 (2.07)	3,24,000 (9.28)	14,500 (0.42)	5,07,000 (14.52)	11,57,000 (33.13)	2,48,200 (7.11)	1,23,900 (3.55)	15,29,100 (43.78)

(Figure in the parentheses represents the percentage)

5.14. PROBLEMS FACED BY THE BORROWERS

5.14.1. Problems faced in utilization of bank loans

The problem faced by the respondents in utilizing bank loan is given in Table 5.39. The highest incidence of problem faced in utilization of the loan was found to be the time of disbursement of bank loans, with 60 (100 per cent) respondents facing such problems, followed by problems faced in disbursement of loan (instalment release) faced by 33 respondents (55 percent), other needs (46.67 per cent) and the amount (21.67 per cent).

5.14.2 Problems faced in acquiring bank loans

The problems faced by the borrowers in acquiring loans are given in Table 5.40. The highest problem faced was getting a Guarantor/ Securities/ Certificates was faced by 60 respondents (100 per cent), followed by guidance provided by the bank, faced by 71.67 per cent, bank process faced by 66.67 per cent, form issued by the bank faced by 60 per cent, knowledge about type of loan faced by 51.67 per cent, filling up of forms faced by 48.33 per cent and knowledge about banks faced by 38.33 per cent.

5.14.3.Other problems faced by the respondents

The other related problem faced by the respondents is given in Table 5.41. The highest incidence faced by the respondents was with the supervision and also other agricultural and allied problems faced by 100 per cent each, followed by interest rates faced by 81.67 per cent, funds & capital faced by 80 per cent, knowledge & skill problem faced by 76.67 per cent and other problems viz., transportation, bank knowledge, repayment period, insect-pest & diseases and marketing.

Table 5.29. Problems faced in utilization of bank loan (in number)

Groups	Sample Size	Amount		Disbursement of loan		Time of disbursement		Other Needs	
		Faced	Not Faced	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced
Group I	10	1	9	6	4	10	0	3	7
Group II	40	8	32	23	17	40	0	17	23
Group III	10	4	6	4	6	10	0	8	2
Total	60 (100)	13 (21.67)	47 (78.33)	33 (55.00)	27 (45.00)	60 (100)	0 (0.00)	28 (46.67)	32 (53.33)

(Figure in the parentheses represents the percentage)

Table 5.40. Problems faced in acquiring bank loan

(In numbers)

Problems	Group-I		Group-II		Group-III		Total	
	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced
Guarantor/ Securities/ Certificates	10 (16.67)	0 (0.00)	40 (66.67)	0 (0.00)	10 (16.67)	0 (0.00)	60 (100)	0 (0.00)
Guidance from bank	6 (10.00)	4 (6.67)	29 (48.33)	11 (18.33)	8 (13.33)	2 (3.33)	43 (71.67)	17 (28.33)
Bank process	7 (11.67)	3 (5.00)	27 (45.00)	13 (21.67)	6 (10.00)	4 (6.67)	40 (66.67)	20 (33.33)
Form issued by the bank	7 (11.67)	3 (5.00)	22 (36.67)	18 (30.00)	7 (11.67)	3 (5.00)	36 (60.00)	24 (40.00)
Knowledge about type of loan	3 (5.00)	7 (11.67)	20 (33.33)	20 (33.33)	8 (13.33)	2 (3.33)	31 (51.67)	29 (48.33)
Filling up of forms	5 (8.33)	5 (8.33)	17 (28.33)	23 (38.33)	7 (11.67)	3 (5.00)	29 (48.33)	31 (51.67)
Knowledge about banks	4 (6.67)	6 (10.00)	13 (21.67)	27 (45.00)	6 (10.00)	4 (6.67)	23 (38.33)	37 (61.67)

(Figure in the parentheses represents the percentage)

Table 5.41. Other problems faced by the borrowers

(in number)

Problems	Group-I		Group-II		Group-III		Total	
	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced	Faced	Not Faced
Supervision	10 (16.67)	0 (0.00)	40 (66.67)	0 (0.00)	10 (16.67)	0 (0.00)	60 (100)	0 (0.00)
Others	10 (16.67)	0 (0.00)	40 (66.67)	0 (0.00)	10 (16.67)	0 (0.00)	60 (100)	0 (0.00)
Interest rates	7 (11.67)	3 (5.00)	33 (55.00)	7 (11.67)	9 (15.00)	1 (1.67)	49 (81.67)	11 (18.33)
Funds & capital	8 (13.33)	2 (3.33)	32 (53.33)	8 (13.33)	8 (13.33)	2 (3.33)	48 (80.00)	12 (20.00)
Knowledge & Skill	7 (11.67)	3 (5.00)	34 (56.67)	6 (10.00)	5 (8.33)	5 (8.33)	46 (76.67)	14 (23.33)
Transportation	6 (10.00)	4 (6.67)	24 (40.00)	16 (26.67)	7 (11.67)	3 (5.00)	37 (61.67)	23 (38.33)
Bank Knowledge	3 (5.00)	7 (11.67)	20 (33.33)	20 (33.33)	8 (13.33)	2 (3.33)	31 (51.67)	29 (48.33)
Repayment period	5 (8.33)	5 (8.33)	19 (31.67)	21 (35.00)	4 (6.67)	6 (10.00)	28 (46.67)	32 (53.33)
Insects-pest & diseases	2 (3.33)	8 (13.33)	19 (31.67)	21 (35.00)	4 (6.67)	6 (10.00)	25 (41.67)	35 (58.33)
Marketing	5 (8.33)	5 (8.33)	16 (26.67)	24 (40.00)	2 (3.33)	8 (13.33)	23 (38.33)	37 (61.67)

(Figure in the parentheses represents the percentage)

5.14.4 Ranking of constraints faced by the borrowers

Table 5.42 reveals that respondents were facing many constraints during acquisition of bank loan from co-operative bank. Amount of loan was the foremost challenge to the borrowers and has been ranked as the most perceived constraint with a RBQ 33.33, followed by preparation of DPR (RBQ 30.67), lack of technical guidance from bank (RBQ 30.00), time of disbursement (RBQ 28.33) were highly ranked constraints reported by the respondents. On the other hand, subsidiary/ rebate on loan (RBQ 20.00), disbursement of loan (RBQ 14.67), credit facilities and miscellaneous (RBQ 12.00), form issued by the bank (RBQ 11.00), knowledge about type of loan (RBQ 9.00), bank interest rate (RBQ 8.00), filling up of loan forms (RBQ 5.33), repayment period (RBQ 4.67) were perceived as constraints of co-operative bank finance, but on a lower scale.

5.15. PROBLEMS FACED BY THE BANK(ERS)

The following problems were faced by the bankers in financing agricultural and allied activities.

5.15.1. Repayment/ Overdues

The foremost important problem faced by the bankers in general was the existence of high overdues. This was caused by non-repayment of dues. Most of the borrowers were not sincere in repaying their dues, and this has caused stagnation in lending for further developmental activities and others aspiring beneficiaries wanting to take loan.

Table 5.42. Ranking of constraints faced by the borrowers during acquisition of co-operative bank finance

SN	Constraints	Ranks					R. B. Q.	Overall Rank
		I	II	III	IV	V		
1.	Amount of loan	20	12	11	14	3	33.33	I
2.	Disbursement of loan	11	18	8	18	5	14.67	VI
3.	Time of disbursement	17	12	11	9	11	28.33	IV
4.	Credit facilities	12	23	8	3	14	12.00	VII
5.	Technical guidance from bank	18	15	14	11	2	30.00	III
6.	Bank loan formalities	12	13	9	11	15	12.00	VII
7.	Form issued by the bank	11	16	12	10	11	11.00	VIII
8.	Knowledge about type of loan	9	11	11	21	8	9.00	IX
9.	Filling up of loan forms	8	9	14	22	7	5.33	XII
10.	Repayment Period	7	7	12	24	10	4.67	XIII
11.	Bank interest rate	8	6	21	18	7	8.00	X
12.	Preparation of DPR	23	5	17	9	6	30.67	II
13.	Subsidiary / rebate on loan	15	12	16	9	8	20.00	V
14.	Guarantor / securities required	9	11	15	11	14	6.00	XI
15.	Miscellaneous	12	14	13	13	8	12.00	VII

5.15.2 Distance and Supervision

The co-operative bank in general gives financial assistance to people from all walks of life, even financing to the remote areas and other localities, and which has caused supervision problems due to poor connectivity and the distance between the bank branch and the loanees. Bank related information that needs to be passed to them (farmers) gets delayed. Also, the distance has caused the problems in imparting training to them.

5.15.3. Uneven distribution of borrowers

The bankers also face uneven distribution of borrowers which has led to supervision problems. Though they have come up with the idea of group borrowing and area approach system for better supervision yet, the problems are not always solved as there are no respondents from the target area while there are individuals who want loan are not from the target groups/area.

5.15.4. Unfaithful nature and misutilization of funds by the borrowers

It has also been found that there are borrowers who are unfaithful towards supervision officials especially when the official/staff goes for evaluating the projects of the borrowers. The problem is such that the banker finds it difficult to evaluate the actual benefits or significance of bank loans to the borrowers as they divert the loan to other activities or towards consumption purposes. The misutilization of bank loan in the study may not be due to lack/inadequate funds but due to unfaithful nature of the borrowers. Misutilization of the funds allotted to them is one of the major factors leading to problems of non-repayment of the dues on time.

5.15.5. Untimely submission of form

The bankers also observed that borrowers submitted their loan proposal late. If the loan is sanctioned to these borrowers, there may be a possibility of diversion of the loan. There is also a chance of repayment problem as the loan sanctioned may not be able to generate returns to repay the installment on due date. Thus, the bankers face the problem of advancing the loans in odd times.

5.15.6. Human resource and Logistic support

One of the main reasons why co-operatives bank are lacking in the state is due to lack of human resources. Lack of manpower has limited the bank's expansion as well as supervision. Due to limited bank branches more areas has to be covered by a bank branch in that locality, this has caused work load on the bankers especially on the limited field staff who has to cover more areas/villages. The limited bank staff that are work loaded with are faced with poor or lack of logistic support and poor communication to do their works efficiently.

5.15.7. Productivity

Apart from misutilization and diversion of loans for other uses, the use of modern technology in the farming system is lacking which reduces their productivity. The farmers neither are ready to participate in trainings on modern means of farming nor are willing to use modern technology in the farming system.

CHAPTER-VI

SUMMARY & CONCLUSION

CHAPTER – VI

SUMMARY & CONCLUSION

Agriculture is the mainstay of Indian economy not only in terms of contribution to the gross domestic product but also the people dependent upon it. In the last few years, the Indian economy has emerged as one of the fastest growing economies in the world. Many economist and policy makers believe that the future growth of the domestic economy, to a large extent, will depend on the robust performance of the agricultural and rural sector. The manufacturing and service sectors cannot sustain the economy's growth if the rural sector underperforms.

The role of banks in rural upliftment and the effectiveness of banks as a tool for socio-economic, and over all development of the rural people consists of a broad spectrum. The success or failures of any enterprises depends to a large extend on availability of finance.

The contribution of the banking and financial sector to the current economic growth of the Indian economy is very significant. However, the access of banking services to the rural, agriculture and the common man in general is not as promising. In India, the focus of the financial inclusion at present is more or less confined to ensuring a bare minimum access to a savings bank account without frills to all. The rural population in India suffers from a great deal of indebtedness and is subject to exploitation in the credit market due to high interest rates and the lack of convenient access to credit. Rural households need credit for investing in agriculture and smoothening out seasonal fluctuations in earnings. Since cash flows and savings in rural areas for the majority of households are small, rural households typically tend to rely on credit for other consumption needs like education, food, housing, household functions, etc. Rural households need access to financial institutions that can provide them with credit at

lower rates and at reasonable terms than the traditional money-lenders and thereby, help them avoid debt-traps that are common in rural India.

Micro finance is a broad term that includes deposits, loans, payment services and insurances to poor. A success indicator of micro finance lies in a 'credit-plus' approach, where the focus has not only been on providing credit, but to integrate it with other development activities. One such agency that provides micro finance is the co-operative bank. A co-operative bank is a financial entity which belongs to its members, who are at the same time, the owners and the customers of their bank.

Agriculture along with livestock rearing and other allied agricultural activities is a common aspect seen in most tribal houses of India and plays an important part, especially in the lives of the North-Eastern Hill Region people. Since agricultural operations are seasonal, family labour may become ideal, leading to decreased labour efficiency and unemployment problems. Agriculture and allied activities helps to supplement the farm income as well as utilizes the surplus resources of the farm. To remove or suppress such problems, one important measure is financing them to take up productive enterprises through banking sectors.

Although a few studies on macro aspects of agricultural credit have been undertaken, yet specific studies to highlight the status of agricultural finance in the Northeastern India is lacking.

The broad objective of the study is to examine the magnitude of financing made by Co-operative Bank on Agricultural and Allied activities and the impact on the borrowers in promoting productivity, income generation and the employment generated in the study area. Also, to consider the broad based impact of credit on production potential and all round development of rural people, the present study entitled," A study on Co-operative Bank in financing agricultural and allied activities with special reference to Dimapur district of Nagaland" has been undertaken during the year 2010-12.

6.1 SUMMARY OF THE FINDINGS

6.1.1. Status of bank network in Nagaland

The findings on the status of bank branch showed that as on 31st March 2012, there are 19 Commercial Banks with 93 branches, 1 Regional Rural Bank with 9 branches and 1 Co-operative Bank with 21 branches with a total of 123 bank branches operating in Nagaland. At present there are 52 bank branches located in rural areas and 71 in semi-urban areas. Data showed that there is a least growth in the bank branches in the past few years. The current network of banking in the state is however far from being adequate. Out of the 74 Development Blocks in Nagaland, 32 Blocks are still un-banked. The people living in the un-banked areas have to travel a long way to the nearest banks. The bank branches failed to reach the areas where they are needed the most, the rural areas. Most of the Banks are situate in the commercial hubs like Dimapur, Kohima, Mokokchung and Wokha.

The status of loan and advances from NABARD in Nagaland over the past years showed that there was an increase in the overall growth rate from 10.34 per cent in 2010-11 to 16.10 in 2011-12. The major share of advances during the year 2011-12 was released to the Commercial Banks followed by the RRB and then the SCB. The agency-wise break-up indicates that the SCB has the highest growth rate of 59.79 per cent.

As on March 2012, the aggregate deposits showed an increased growth rate of 64.08 per cent from 24.37 per cent in 2010-11, with RRB having the highest growth rate of 36.41 per cent.

The Credit-Deposit (CD) ratio of all the banks as on March 2012 showed an increase from 27.79 during 2010-11 to 28.28. Bank-wise analysis revealed that only the SCB has an increase in the CD ratio to 36.24 from 25.80 during 2010-11. On analysing the table the SCB has the highest credit deposit growth rate of 40.46 per cent. This indicates that the SCB had

performed better than their counterpart in terms of bank credits and deposits.

The Annual Credit Plan for the entire bank in Nagaland was estimated to the tune of ₹ 32,479.32 lakhs during the year 2011-12, for the disbursement to the priority sector. The overall flow of the credit during the year 2011-12 showed that the credit plan for Agri and Allied sector had increased, while Other sector and Industries was seen to have decreased.

A total of 16,800 numbers of Kisan Credit Card were fixed under the Annual Credit Plan (2011-12) of which the highest achievement was made by the CBs whose achievement percentage was 59.71 per cent, followed by the SCB with 51.06 per cent achievement and the RRB with only 21.71 per cent achievement. The overall achievement was found out to be 55.40 per cent which is only half the mark of the total sanction amount and numbers.

NABARD refinance support for meeting investment credit of banks during the year 2011-12 showed that of the total amount 81 per cent (₹ 500 lakhs) was refinanced to the SCB and the other 19 per cent (₹ 115.04 lakhs) was refinanced to the CBs, whereas the RRB was not refinanced.

6.1.2. Status co-operative bank in Nagaland

The Nagaland State Co-operative Bank management is governed by Board of Directors comprising of 16 Directors, of whom the State Government is represented by the Addl. Chief Secretary & Finance Commissioner, Commissioner & Secretary Co-operation & the Registrar of Co-operative Societies, representative from NABARD as ex-officio Member, besides one Director representing Primary Agricultural Co-operative Societies from each District and the Managing Director of NSCB who is the Member Secretary.

It was observed that the SCB investment was seen to have a negative growth rate of -2.66 per cent, but the CD Ratio was recorded the highest over the years with 36.00 per cent during the year 2011-12 with a growth rate of 41.29 per cent which was a drastic improvement over the previous year (2010-11) with a growth rate of only 3.92 per cent. The recovery performance was also observed to have improved, with a recovery performance of 60.78 per cent. The overall Net Profit-Loss was found out to be highest during the year 2011-12 with a net profit growth rate of 42.09 per cent.

The total membership rose to 13,150 with a growth rate of 15.05 during 2011-12.

Funds required for lending and investments are raised through owned funds, public deposits and borrowings from the State Govt., and NABARD.

The share capital was observed to have increased with a growth rate from 3.54 per cent (during 2010-11) to 7.88 per cent (during 2011-12). It was observed that the highest share of capitals in all the years comes from the contribution share of the State Government.

The total reserves was found highest during the year 2011-12 which stood at ₹ 382.79 lakhs (growth rate of 7.29 per cent) as on 31 March 2012, but the growth rate was found highest during the year 2007-08 with a growth rate of 36.39 per cent.

The own funds was found to be ₹ 3,932.28 with a growth rate of 7.84 percent as on March 2012 which was also recorded the highest.

The deposits of the Bank have increased from ₹ 32,310.50 lakhs as on March 2011 to ₹ 36,683.45 lakhs as on March 2012, making it the highest total deposits (growth rate of 13.53 per cent). Though the total deposits have increased, the growth rate of total deposits was observed decreasing during the past years.

Under borrowings, there has been only a marginal growth in the overall borrowings during the year 2011-12. The highest source of borrowings during the year 2011-12 was seen from the NABARD ARF (Refinance) to the tune of ₹ 580 lakhs, followed by NABARD SAO with ₹ 375.10 lakhs and then by NSTFDC borrowings of ₹ 69.13 lakhs.

The distribution of the annual flow of loan and advances showed that it was increasing year after year in an increasing order. The total flow of credit from the SCB reached a new height of ₹ 9,242.91 lakhs (during 2011-12) from ₹ 4,762.74 lakhs (during 2010-11). The flow of credit to the consumer loan was found highest, followed by cash credit, then agriculture and allied sector and then the SHG for medium term loan.

The recovery position of the State Co-operative Bank showed a significantly increased in the recovery of the principal credit distributed from 58.40 per cent as on March 2011 to 60.78 per cent as on March 2012.

6.1.3. Socio-economic status of the respondents

There were a total of 120 respondents, 60 respondents from the borrowers and 60 from the non-borrowers. The borrowers had 10 respondents with marginal land holdings, 40 respondents with small land holdings and 10 respondents with medium sized land holdings. On the other hand the non-borrowers had 8 respondents with marginal land holdings, 32 respondents with small land holdings and 20 respondents with medium sized land holdings.

Both the borrowers and non-borrowers each had 7 respondents with agricultural based activities, 20 respondents with fishery based activities and 33 respondents with animal husbandry activities.

The average family size of the borrowers was found to be 5.53 with male population (55.20 per cent) higher that the female (44.80 per cent). The

non-borrowers also have a male population (52.25 per cent) higher than the female (47.74 per cent) with an average family size of 4.80.

The sample respondent's farm family illiteracy rate was found to be 6.18 per cent for the borrowers and 15.63 per cent for the non-borrowers. The proportion of male and female literacy under borrowers was found to be 55.20 per cent for male and 44.80 per cent for female, whereas for the non-borrowers it was found to be 52.74 per cent for male and 47.74 per cent for the female. On the type of education level attained, High School level was found to be prevalent (48.27 per cent) under borrowers and Primary schooling (37.85 per cent) under non-borrowers.

The borrowers' primary occupation was observed to be agriculture (44.77 per cent) and also with a dominant agriculture as their secondary occupation (70.93 per cent). Under non-borrowers, agriculture was found to be the primary occupation (48.70 per cent) and also their secondary occupation (41.75 per cent). These findings revealed that agricultural activity played a dominant role in the study area.

The total work force of the borrowers was found to be 81.60 per cent and 78.13 per cent for the non-borrowers. The male workers in both the case (borrowers and non-borrowers) was found to be higher than the female workers.

5.1.4. Land inventories of the respondents

The overall average land holding was found to be 0.73 ha for the borrowers and 0.89 ha for the non-borrowers. Under borrowers, Group I have an average holdings of 0.43 ha, Group II with 0.69 ha and Group III with an average of 1.19. The non-borrowers Group I have and average holdings of 0.44 ha, Group II with 0.78 ha and Group III with 1.24 ha.

The borrowers' maximum utilization of land was found to be for the use of agricultural operation. Land under vegetable cultivation accounts

for30.16 per cent and land under paddy accounts for 27.11 per cent of the total land holdings. The non-borrowers maximum land use was seen under agriculture for the production of paddy accounting for 35.87 per cent and vegetable cultivation with 15.39 per cent of the total available land.

6.1.5. Agriculture and allied activities of the respondents

The borrowers had a total cropped area of 46.34 ha, with a total production of 4,163.78 kg and a sold out value of ₹ 46,369.50. Observation revealed that, majority of the production comes from cereals accounting for 66.15 per cent of the total production and also with the highest sold out value (61.97 per cent) of the total sold out value. On the other hand the non-borrowers have a total cropped area of 36.69 ha, with a total production of 4,361.84 kg and a total sold out value of ₹ 19,292.85. The income generated from the borrowers had a higher sold out values than the non-borrowers.

The average cost of cropping for the borrowers was found to be ₹ 48,276.65 and ₹ 28,595.69 for the non-borrowers. The maximum cost incurred under cropping for both the borrowers and non-borrowers was the cost of labour. The cost of production was found to increase with increase in the land holding i.e. from marginal to medium size land holding.

The distribution of respondents' livestock inventories showed that the borrowers, on an average have a total current livestock value of ₹32,663 and the non-borrowers with a current average value of ₹ 15,173.33. The maximum present value was found to be from piggery with an average value of ₹ 23,800 per borrower family and ₹ 11,500 per non-borrower family.

The cost of livestock production on an average was found to be ₹ 32,496.73 and ₹ 14,653.45 for the borrower and the non-borrowers

respectively. Under both the cases (borrowers and non-borrowers), the highest cost was incurred on the purchase of animals for rearing accounting to an average of ₹ 11,278.40 (34.71 per cent) and ₹ 5,264.18 (35.92 per cent) respectively, followed by the feeding cost, with an average of ₹ 8,243.25 (25.37 per cent) for the borrowers and ₹ 3,779.96 (25.80 per cent) for non-borrowers.

The borrowers' average net return from livestock production was found to be ₹ 55,371.26 and ₹ 33,648.17 for the non-borrowers. The highest average return for the borrowers was found to be from cattle with a return of ₹ 27,979.33 (50.53 per cent) and for the non-borrowers it was from piggery with an average of ₹ 23,741.50 (70.56 per cent). The item-wise breakup of return from different source revealed that sale of mature animals contributed the highest, with an average sold out value of ₹ 30,422 (54.94 per cent) for the borrowers and ₹ 23,686.04 (70.39 per cent) for the non-borrowers.

The overall average cost of fish production was found to be ₹ 11,455.63 for the borrowers and ₹ 8,091.96 for the non-borrowers. The total cost incurred was found increasing with the increase in the farm size under both the cases of borrowers and non-borrowers. The highest cost incurred for fish production was the feeding cost, with an average cost of ₹ 4,626.53 (40.39 per cent) and ₹ 3,610.25 (44.62 per cent) for borrowers and non-borrowers respectively.

The respondents' average yield from fish production was found to be 250 kg, with a worth value of ₹ 25,026.67 for the borrowers, whereas for the non-borrowers, it was found to be 154.73 kg, worth ₹ 15,472.50. The average sold out value of fish for the borrowers was found to be ₹ 23,670.83 and ₹ 14,760.83 for the non-borrowers. Comparatively, in terms of yield and return from fish, the borrower was found to be better off than its counterpart, the non-borrower.

The average cost of plantation was found to be ₹ 2,029.73 for the borrowers and ₹ 4,086.33 for the non-borrowers. The highest cost incurred was the labour cost under both the cases. The average total return from plantation for the borrowers was found to be ₹ 1,136.67 and ₹ 1,926.56 for the non-borrowers. The borrowers' total return from sale of the products accounts for 61.58 per cent and for the non-borrowers it was 60.77 per cent.

6.1.6. Expenditure and income of the respondents

The borrowers on an average, per annum have a total expenditure of ₹1,22,3 4656 , whereas for the non-borrowers it was found to be ₹ 88,838.89. The total expenditure for the borrowers was incurred from on-farm expenditure (50.74 per cent) and the family-needs expenditure (49.26 per cent), whereas for the non-borrowers it was found to be 30.15 per cent for on-farm expenditure and 59.07 per cent for family-needs expenditure. The highest expenditure incurred was for animal husbandry with an expenditure amount of 26.56 per cent for the borrowers and for the non-borrowers the highest expenditure was incurred for the household needs amounting to 30.15 per cent.

The respondents' annual income from different sources was found to be ₹ 1,38,136.10 per respondents for the borrowers and ₹ 83,389.81 for the non-borrowers. Of the different source of income, animal husbandry contributes a major share, on an average contributing 40.08 per cent to the borrower's income and 34.02 per cent to the non-borrowers income. The income was found to increase with the increase in the farm size under borrowers. On comparison, borrowers' income generated from agricultural, animal husbandry and fishery was found higher than the non-borrowers in all the cases. This implies that the income impact was positive on the borrowers.

6.1.7. Impact of co-operative bank finance on employment and income

The total average number of mandays generated for the borrowers was found to be 305.62 mandays, with male employed for 161.64 days (52.89 per cent) and female for 143.98 mandays (47.11 per cent). The non-borrowers average number of mandays was out to be 211.65 mandays, with male employed for 117.95 mandays (55.73 per cent) and female for 93.70 mandays (44.27 per cent). Of the different agricultural activities, crop production was found to generate the highest employment mandays, generating 134.33 mandays (43.95 per cent) for the borrowers, whereas for the non-borrowers it generated 68.76 mandays (32.49 per cent). The borrower's average number of person employed was found out to be 11.17 perfamily and 9.02 persons per family for the non-borrowers.

There was a significant increasing trend on the borrower overall groups. The increase in income from crop production was found to be 26.27 per cent, animal husbandry with 48.12 per cent, fishery enterprise with 10.79 per cent, plantation enterprise with 16.33 per cent and other agriculture and allied activity had increased to 42.55 per cent on the sample respondents after getting the co-operative bank finance. It also showed a significant increase on the overall group employment. Employment from crop production was increased to 27.32 per cent, animal husbandry to 45.25 percent, fishery enterprise to 10.12 per cent, plantation enterprise to 15.83 percent and other agriculture and allied activity had increased to 35.34 per cent.

6.1.8. Resource use efficiency of the respondents

Cobb-Douglas Production Functions was used in the present study for the assessment of the resource use efficiency of different enterprises. The production function of different enterprises were fitted as regressing gross return (y), x_1, x_2, x_3, x_4, x_5, x_6, x_7 and x_8 in terms of rupees (₹) as

independent variables on marginal, small and medium farm size groups as well as overall farm size group.

By aggregating the cross-sectional data of all the farms in various farm size groups under beneficiaries, the value of R^2 was found to be 0.9956, which shows that 99 per cent of the variation of dependent variable explained by the independent variation chosen in the equation. Even on the non-beneficiaries the overall of R^2 was found to be 99.96 per cent, which shows a good fit of the selected model. The remaining variation of dependent variable might be due to other variables, which have been used in excess or not properly used.

The overall regression co-efficient of input a (constant) was found to have a positive significant at 1 per cent and 10 per cent level for the beneficiaries and non-beneficiaries respectively, which indicate that the model is a good fit.

The regression co-efficient of x_1 (human labour cost) for beneficiaries was found maximum (0.24) on the overall and minimum on the small size group (0.19) and was found significant at 10 per cent level of significance, while on marginal and medium size group it was found non-significant. The non-beneficiaries human labour had significance on the marginal (0.94) and small (0.96) size group at 10 and 5 per cent level of significance respectively.

In case of x_2 (seed/sapling/animal/fingerling cost) it was found to be positive and significant at 10 per cent level of significance in the entire size group under beneficiaries. x_2 was also found significant under non-beneficiaries in all the group size. It indicates a good fit with more potential in compare to other inputs toward the gross returns.

The regression co-efficient of x_3 (fertilizer) on the beneficiaries was found to be statistically significant at 1 per cent level only in medium farm size group (25.75), while on the non-beneficiaries it was found significant on the medium and the overall.

The x_4 (plant protection) was found significant only in the small size group under beneficiaries and significant at 10 per cent level of significance, whereas, it was not found significant in any of the group under non-beneficiaries.

The value of x_5 (machineries) was found significant only in the overall group under beneficiaries and significant at 1 per cent level, while on the non-beneficiaries it was found significant on the small and overall group, significant al 10 per cent level of significance.

The value of x_6 (transportation) for the beneficiaries was found to be statistically significant at 10 per cent level in small size and medium farm group and the overall groups at 1 per cent level of significant, which shows a positive significant contribution of the input to the gross returns. Under non-beneficiaries marginal and medium size group was found significant at 10 per cent level of significance.

The value of x_7 (marketing cost) was found significant in all the groups and also on the overall under beneficiaries and non-beneficiaries, which shows a positive significant contribution of the inputs to the gross return.

The value of x_8 (miscellaneous) was found to be significant only in the medium size and statistically significant at 10 per cent level under beneficiaries, while under non-beneficiaries it was not found significant.

To evaluate how efficiently the farmers of the study area have been utilizing their resources, the Marginal Value Product (MVP) of an input was compared with its respective factor cost. The gross sectional data of overall farm size have been aggregated and the ratio of MVP to its factor cost was computed. It was observed that ratio of x_1 to x_8 was found to be positive as well as negative values. Positive value indicates increase return, the greater than unity the higher the gross return which highlight that the farmers can incurred more investment on those inputs for getting better returns, while the negative values indicating either excess use of inputs and

adverse response towards the gross return, which needs to be curtailed immediately and further investment of such inputs must be shifted towards the higher results inputs which will provide the positive contribution to the gross return.

The value of MVP for x_1 (human labour cost) was found to be positive for the entire farm size groups. Under beneficiaries, an addition of one unit of the x_1 input would be adding a value ranging from 4.21 to a maximum of 45.79, whereas in the non-beneficiaries it would be adding a value in the range of 34.55 to 217.61.

The value of MVP for x_2 (seed/sapling/animal/fingerling cost) was found to be positive for all the farm size groups. The value ranges from 43.47 to 932.56 for the beneficiaries and from 31.79 to 108.51 for the non-beneficiaries.

The MVP of x_3 (fertilizer) was found to be positive for medium farm size (t20.51) and negative for the marginal (-18.83) and the small (-21.52) farm size on the beneficiaries. The negative MVP means that addition of one unit of the input x_3 would reduce the return ranging from 18.83 to 21.52. Also the MVP of x_3 for the non-beneficiaries was found to be positive on medium farm size (727.59) and negative on the marginal (-420.76) and small (-182.76) farm size of the beneficiaries.

The MVP of x_4 (plant protection) in marginal size and small size was found to be positive and negative for the medium size group and the overall group on the beneficiaries. Whereas, for the non-beneficiaries the marginal, small and medium farm size had a negative value indicating that the addition of a unit will reduce the return and only the overall had a positive value.

The MVP of x_5 (machineries) of beneficiaries under marginal and medium farm size groups was found to have negative values, indicating that addition of one unit of these inputs would decrease the gross return, while the small and the overall group was found to have positive values.

The farm size groups all had negative values under non-beneficiaries, only the overall had a positive value. The additional investment of one unit to these inputs would be decreasing the gross returns and would not contribute their share to the gross return of a farm.

The MVP of x_6 (transportation) in small, medium and overall farm size group under beneficiaries was found to be positive, indicating that addition of one unit of this input will increase gross return by 16.83 to 244.00. While under non-beneficiaries it was found to be positive for all the groups and the overall groups with value ranging from 1.24 to 70.07.

The MVP of x_7 (marketing cost) was found to be positive on the entire farm size groups. Under beneficiaries, an addition of one unit of the $x_7$input would be adding a value ranging from 1846.51 to a maximum of 9547.08, whereas, in the non-beneficiaries it would be adding a value return in the range of 3.35 to 1031.55.

The MVP of x_8 (miscellaneous) for beneficiaries under marginal, small and overall farm size groups was found to be negative, indicating that addition of one unit of these inputs will decree their gross return, and only the medium farm size had a positive value. The marginal and small farm size under non-beneficiaries had negative values, whereas, the medium and the overall groups had a positive value.

6.1.9. Status of bank loan received by the borrowers

Group I (Marginal farm size) had ten (10) loanees who took loan for animal husbandry. Under Group II (Small size) there are 3 borrowers for agriculture, 15 for fishery and 22 for animal husbandry. Under Group III (Medium Size) there are 4 agricultural loanees, 5 fishery loanees and 1 animal husbandry loanees. Categorizing the loanees under different enterprises, the maximum amount disbursed per loanee was found highest

under animal husbandry with an average amount of ₹ 63,969.70, followed by agriculture with ₹ 57,685.71 and then by Fishery with ₹ 48,890.

The finding revealed that the borrowers a whole borrowed an amount of ₹ 34,92,600, with an additional interest amount of ₹ 4,19,112. The total amount due for repayment was found to be ₹ 39,11,712, out of which ₹ 14,71,000 (37.61 per cent) was paid and with a balance of ₹ 24,40,712.00 (62.39 per cent). Across the different Groups, Group I have a balance of 55.94 per cent, Group II with 63.64 per cent and Group III with 64.38 per cent. Under the mode of repayment, partial repayment was found to be dominant with 81.67 per cent. The balance due for repayment was found to increase with the increase in the farm size, which indicates that, the marginal farmers was found more punctual in repayment of the loans than the small and medium size farmers.

The overall utilization of the bank loan for which it was sanctioned was found out to be 41.70 per cent; the remaining was used for other productive uses on the farm (14.52 per cent) as well as non-productive uses for home consumption (43.78 per cent). Apart from the actual usage, the maximum funds were diverted to household consumption needs which accounted for 33.13 per cent of the total loan. Under the different categories of borrowers, Group I utilized 46.28 per cent for the actual loan purpose, 2.82 for other productive purpose and 50.90 per cent for non-productive uses. Group II utilized 40.78 per cent for the loan purpose, 15.52 per cent for other productive uses and 43.70 per cent for non-productive uses. Group III utilized 40.42 per cent for actual loan purpose, 23.25 per cent for other productive uses and 36.33 per cent for non-productive uses. The purpose utilization of bank loan was found to be better in Group I (46.28 per cent), followed by Group II (40.72 per cent) and then by Group III (40.42 per cent).

6.1.10. Problems faced by the borrowers

The highest incidence of the problems faced in utilization of the loan was found to be for, the time of disbursement of bank loans, with 60 (100 per cent) respondents facing such problems, followed by problems faced in disbursement of loan (instalment release) faced by 33 respondents (55 per cent), other needs (46.67 per cent) and the amount (21.67 per cent).

The highest problems faced in acquiring loans was the Guarantor/ Securities/ Certificates, faced by 60 respondents (100 per cent), followed by guidan ce provided by the bank faced by 71.67 per cent, bank process faced by 66.67 per cent, form issued by the bank faced by 60 per cent, knowledge about type of loan faced by 51.67 per cent, filling up of forms faced by 48.33 per cent and by knowledge about banks faced by 38.33 per cent.

The other related problems faced by the respondents was found highest with the supervision and other agricultural and allied problems faced by 100 per cent, followed by interest rates faced by 81.67 per cent, funds & capital faced by 80 per cent, knowledge & skill problems faced by 76.67 per cent and other problems viz., transportation, bank knowledge, repayment period, insect-pest & diseases and marketing.

Amount of loan was the foremost challenge to the borrowers and has been ranked as the most perceived constraint with a RBQ 33.33, followed by preparation of DPR (RBQ 30.67), lack of technical guidance from bank (RBQ 30.00), time of disbursement (RBQ 28.33) were highly ranked constraints reported by the respondents. On the other hand, subsidiary/ rebate on loan (RBQ 20.00), disbursement of loan (RBQ 14.67), credit facilities and miscellaneous (RBQ 12.00), form issued by the bank (RBQ 11.00), knowledge about type of loan (RBQ 9.00), bank interest rate (RBQ 8.00), filling up of loan forms (RBQ 5.33), repayment period (RBQ 4.67) were perceived as constraints of co-operative bank finance, on a lower scale.

6.1.11. Problems faced by the bank(ers)

The foremost important problem faced by the bankers in general was the existence of high overdues. This was caused by non-repayment of dues. Most of the borrowers were not sincere in repaying their dues, and this has caused stagnation in lending.

The co-operative bank in general gives financial assistance to people from all walks of life, even financing to the remote areas and other localities, and which has caused supervision problems due to poor connectivity and the distance between the bank branch and the loanees.

The bankers also face uneven distribution of borrowers which has led to supervision problems.

It has also been found that there are borrowers who are unfaithful towards supervision officials. The misutilization of bank loan in the study may not be due to lack/inadequate funds but due to unfaithful nature of the borrowers.

The bankers also observed that borrowers submitted their loan proposal late. If the loan is sanctioned to these borrowers, there may be a possibility of diversion of the loan. There is also a chance of repayment problem as the loan sanctioned may not be able to generate returns to repay the installment on due date.

One of the main reasons why co-operatives bank are lacking in the state is due to lack of human resources. Lack of manpower has limited the bank's expansion as well as supervision.

Apart from misutilization and diversion of loans for other uses, the use of modern technology in the farming system is lacking which reduces their productivity. The farmers neither are ready to participate in trainings on modern means of farming nor are willing to use modern technology in the farming system.

6.2. CONCLUSION & SUGGESTIONS

The co-operative bank finance was observed to have a positive impact on 42.55 per cent of the beneficiaries to enhance their income and further it had the capacity to generate more income through agriculture and allied enterprises. Bank finance also had a positive impact on 35.34 per cent enhancement of mandays employment, which further showed prospect of generating more mandays employment by taking up the different enterprises.

As more entrepreneurs/farmers come forward to start any agriculture related activities, financial support by the co-operative banks must be extended to them as being socially acceptable and economically feasible. One enterprise alone is not sufficient enough to raise the employment and income level and further if more employment and income are to be generate throughout the year more enterprise have to be incorporate for which, loan/credit must be provided to the beneficiaries by extending micro-finance required based on the performance.

The foregoing study had brought out the following suggestions, which are expected to result greater success to the beneficiaries and bankers of co-operative banks in Nagaland.

1. The main reasons co-operatives bank lacking in the state are due to lack of human resources and connectivity. Lack of manpower has hindrance on the bank expansion as well as supervision. There is a need to employ more staff for the functioning and expansion of the bank.

2. Slackness in recovery of loans, resulting in mounting overdues is undermining the soundness of credit structure in many areas and has led to stagnation. These high overdues have created obstacle for other beneficiaries from getting the required amount. This points to the deficiencies in loaning policies, inadequate arrangements for supervision and weaknesses of internal management of the bank

officials. Systematic efforts need to be made both by the State Government and by the bankers towards substantial reduction of overdues. Attention is also needed to incorporate and strengthening the recovery staff and other concerned departments.

3. Development programmes at block level with facilities and extension services must be strengthened in order to make the rural people aware, to set up enterprises efficiently in terms of increasing their income and employment, to enhance the production/ productivity through the agriculture and allied enterprises to achieve self-sufficiency of the state in the days to come.

4. Apart from misutilization and diversion of loans for other uses, the use of modern technology in the farming system is lacking which reduces their productivity. Concern Government department should train and encourage the farmers. The department of agriculture and allied department should take the initiative to conduct training and equip the farmers with the modern techniques of cultivation practices so as to increase their productivity and thereby increased their economy.

5. The bankers also faces uneven distribution of borrowers, which also leads them is supervision problem. The idea of group borrowing and area approach system should be practised by the bank.

6. Misutilization of the funds allotted to the farmers is one of the major factors in the problems of non-repayment of the dues on time for which the loan was taken. Instalment releases should be encouraged with strict guidance and supervision.

7. The bankers should make public through mass media about the type of loans and criteria's and also the date of submission of forms in order to prevent late submission of loan proposals.

8. Self Help Groups should be encouraged by the co-operative banks even to the remote areas.

9. Government should take appropriate steps to establish connectivity, adequate marketing facilities and transport system to better communication.

10. Other institutional credit facilities at a nominal rate of interest should be made available to the farmers to take up new enterprises.

11. Formation of co-operative organisations should be encouraged in the village level.

6.3. LIMITATIONS OF THE STUDY

The present study was conducted with a view that its result may be useful to the researcher, planners, co-operative bank personnel's, administrators and extension workers who are engaged in generating and disseminating credit schemes for the upliftment of the farmers of all groups in general and marginal farmers in specific. An attempt was made in this study to analyzed these factors, which would affect the availing, utilization and repayment of agriculture credit by farmers and to suggest measures to formulate strategies to increase the utility of agriculture credit.

The limitations of the study are as follows-

- The major limitation of the present study was with regards to the time, study area and other research facilities usually faced by a single researcher.

- The present study confined to only one district of Nagaland and the selection of the district was purposive hence scope of generalizations with respect to Agricultural credit and its impact on overall development of borrowers in other districts as is limited. Hence, the study does not claim to generalize the findings on large scale.

- Study is based on individual's perception and expressed opinion. Although attempts had been made to extract information from the respondents nearest to the truth but possibility arises that information provided by some respondents might not be accurate as there was no written record maintained by the respondents, therefore they had to rely on the recall memory.

- Most of the utilized variables were measured at nominal and/or ordinal levels not permitting the use of parametric statistical tests extensively.

- Some borrowers as well as non-borrowers were found to hesitate to give their responses easily on income, expenditure etc. aspects, which posed limitations in the present study.

- The study was conducted based on the expressed opinion of the respondent's viz., beneficiaries and non-beneficiaries. Therefore, possibility of error in recollecting or recalling can't be ruled out.

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APPENDIX

APPENDIX - I

SURVEY SCHEDULE

Name of the respondent :

Date :

Type : **BORROWER/ NON-BORROWER**

Resp No :

Father's Name :

Block	Village	Contact (if any)

1. DEMOGRAPHIC FEATURES

1.1 DEMOGRAPHY

SN	Name	Education				Primary occupation				Secondary occupation			Work force		
		Il.	Pr	HS	G	Ag	Se	Bu	Ot	Ag	Se	Bu	Wr	Hl	D
1															
2															
3															
4															
5															
6															
7															
8															
9															

Il- Illiterate; Pr- Primary; HS- High School; G- Graduate & above;
Ag- Agriculture; Se- Service; Bu- Business; Ot- Others
W- Worker; Hl- Helper; D- Dependent

1.2. OPERATIONAL LAND HOLDINGS

Owned Land	Leased out	Leased in	TotalLand

1.3. LAND USE PATTERN (Sq. Ft)/ Land Inventories

Land Use	Area	Land Use	Area
Settled land		Livestock area	
Paddy		Forest & Plantation area	
Vegetables		Barren Land	
Fisheries		Others	
		Total	

2. CROPPING

2.1 CROPPING PATTERN AND YIELD

Types	Crops	Area (in Sq. Ft)		Yield (in kg)		Consumed Value (in Rs.)		Sold out value (in Rs.)	
		Presently	Before Loan	Presently	Before Loan	Presently	Before Loan	Presently	Before loan
(a) Rabi (winter) oct/dec – apr/jun									
(b) Karif (summer) apr/may – sep/oct									
(c) Zaid									

2.2. COST OF CROPPING PER ANNUM

(in Rs.)

1.	Human Labour	
	a) Owned	
	b) Hired	
2.	Seed/ Seedling	
3.	Chemicals	
4.	Equipment	
5.	Bullock/ Machinery	
6.	Transportation	
7.	Marketing	
8.	Other	
Total		

3. ANIMAL HUSBANDRY

3.1. ANIMALS INVENTORIES

Animals		Nos. reared		Value (in Rs.)	
		Presently	Before loan	Presently	Before loan
1.	Cattle				
2.	Poultry				
3.	Piggery				
4.	Goat				
5.	Others				

3.2. COST OF ANIMAL PRODUCTION PER ANNUM

(in Rs.)

SN	Items	Cattle	Poultry	Piggery	Goat	Others
1.	Labour Input					
2.	Animal cost					
3.	Chemical					
4.	Equipment					
5.	Transportation					
6.	Marketing					
7.	Other					
Total						

3.3. RETURN FROM ANIMAL HUSBANDRY

SN	Items Sold	Cattle		Poultry		Piggery		Goat		Others	
		Nos	Value	Nos	Value	Nos	Value	Nos	Value	Nos	Value
1.	Young stock										
2.	Mature stock										
3.	Eggs										
4.	Milk										
5.	Manure/ Dung's										
6.	Other										
7.											
	Total										

4. FISHERY

4.1. COST OF FISH PRODUCTION PER ANNUM

(in Rs.)

1.	Human Labour	
	a) Owned	
	b) Hired	
2.	Fingerlings/ Seedling	
3.	Chemicals	
4.	Feeds	
5.	Transportation	
6.	Marketing	
7.	Other	
Total		

4.2. RETURN FROM FISHERY

Items	Yield		Consumed Value		Sold out Value	
	Kg	Rs.	Kg	Rs.	Kg	Rs.
1. Fish						
2. Fingerlings						

5. PLANTATION

5.1 COST OF PLANTATION CROPS PER ANNUM

(in Rs.)

1.	Human Labour	
	a) Owned	
	b) Hired	
2.	Planting materials	
3.	Chemicals	
4.	Transportation	
5.	Marketing	
6.	Other	
	Total	

5.2. RETURN FROM PLANTATION

SN	Items	Home Consumption (in Rs.)	Sold (in Rs.)
1.	Timber		
2.	Fire wood		
3.	Fruit crops		
4.	Seedlings		
5.	Others		
6.			

6. TOTAL EXPENDITURE PER ANNUM

SN	Items	Amount(in Rs.)
1.	Total Farm Expenditure (A) Cropping (B) Animal Husbandry (C) Fish Production (D) Plantation (E) Others	
2.	Household needs	
3.	Education	
4.	Transportation	
5.	Others	
6.	Total	
7.		
	Total	

7. TOTAL INCOME PER ANNUM

SN	Items	Amount (in Rs.)
1.	Cropping	
2.	Animal Husbandry	
3.	Fish Production	
4.	Plantation	
5.	Service	
6.	Business	
7.	Others	
Total		

8. EMPLOYMENT GENERATED UNDER DIFFERENT CATEGORY

Category		Employment (in nos.)		Working Days			
		Presently	Before loan	Presently	Before loan		
1.	Crop production						
2.	Animal Husbandry						
3.	Fishery						
4.	Forest & Plantation						
5.	Others						
6.							
Total							

9. MAGNITUDE OF FINANCIAL ASSISTANCE FROM CO-OPERATIVE BANK

(in Rs.)

Scheme Name	Amount	As Loan	As Subsidy	Mode of financing	Remarks

10. LOAN BORROWED FROM OTHER SOURCES (OTHER THAN COOPERATIVE BANK)

SN	Amount	From	Purpose	Interest	Repayment period	Securities

11. REPAYMENT PERFORMANCE OF THE BORROWERS

Amount Borrowed	Interest rate	Interest Amount	Amount to be repaid	Amount paid	Balance	Mode of payment	Remarks

12. UTILIZATION OF LOAN

Purpose of the Loan:

SN	Activities	Amount	Remarks
1.	Agricultural		
2.	Cattle		
3.	Poultry		
4.	Piggery		
5.	Goatry		
6.	Fishery		
7.	Plantation		
8.	Household Needs		
9.	Education		
10.	Others		
TOTAL			

13. PROBLEMS IN UTILIZATION OF BANK LOAN

Problems		Yes	No
1.	Amount		
2.	Disbursement of loan		
3.	Time of disbursement		
4.	Others Need		

15. PROBLEMS FACED IN ACQUIRING BANK LOAN

Sl	Problems	Yes	No	Remarks
1.	Knowledge about type of loan			
2.	Knowledge about type of Banks			
3.	Form issued by the bank			
4.	Filling up of forms			
5.	Guidance from bank			
6.	Bank process			
7.	Guarantor/ Securities/ Certificates			
8.	Others			

16. PROBLEMS FACED BY LOANERS

Sl	Problems	Yes	No	Remarks
1.	Amount			
2.	Disbursement of loan			
3.	Time of disbursement			
4.	High Interest rates			
5.	Repayment period			
6.	Supervision			
7.	Knowledge & Skill			
8.	Insects pest & diseases			
9.	Funds & capital			
10.	Marketing			
11.	Transportation			
12.	Others			

(FOR BANK OFFICIALS)

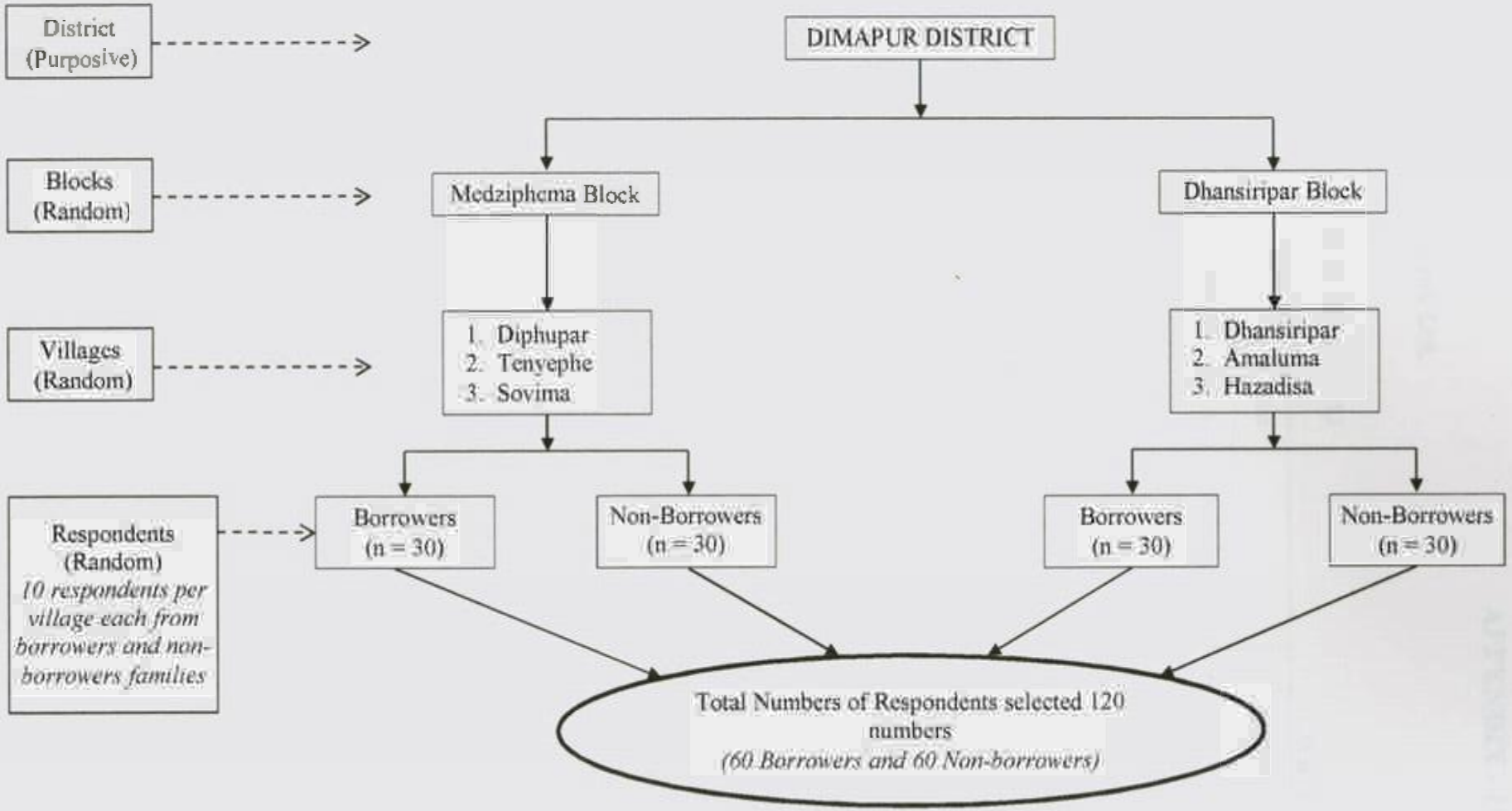
1. TERMS AND CONDITIONS

Invitation of application	
Loan and subsidy amount	
Rate of interest	
Securities	
Repayment period	

2. PROBLEMS FACED BY THE BANKERS

3. SUGGESTIONS

SAMPLING DESIGN OF THE STUDY



APPENDIX - III

Nagaland State Co-operative Bank Ltd.
Dimapur: Nagaland

BUDGET AT A GLANCE as on 31 March 2013

(₹ in Lakh)

SN	Head of Account	Revised					Estimated	
		2006-07	2007-08	2008-09	2010-11	2011-12	2012-13	2013-14
1	Income	1548.05	2398.50	2802.43	3888.94	4816.79	5690.80	6544.55
2	Expenditure	1912.01	2373.54	2742.42	3827.38	4729.32	5264.57	5880.84
3	Net Working Result	-363.96	24.96	60.01	61.56	87.47	426.23	663.71
4	Target of Deposits	16218.45	18726.34	22597.40	23105.0	36683.45	85449.00	98256.00
	(a) Normal	16218.45	18726.34	22597.40	23105.0	36683.45	42172.00	48491.00
	(b) Ambitious	0.00	0.00	0.00	0.00	0.00	43277.00	49765.00
5	Fresh Lending	5406.34	5919.28	6339.80	8232.37	13209.04	15185.00	17132.00
6	Fresh Borrowing	131.31	89.66	74.39	1013.82	1027.98	1269.13	1369.13
7	Target of Loan Recovery	635.08	230.725	308.775	335.193	369.884	422.000	472.000
8	Other Capital Receipts	3008.72	3062.89	3117.48	3290.08	3549.49	3760.00	4000.00
9	Other Capital Expenditure	93.41	91.37	325.69	164.85	213.27	397.15	497.05
10	Investment in Approved Securities &Others	994642	1092074	141025.51	2422186	23568.54	30000.00	35000.00

APPENDIX - IV

Nagaland State Co-operative Bank Ltd.
Dimapur: Nagaland

HUMAN RESOURCE DEVELOPMENT as on 31 March 2013

(in Nos)

SN	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	Resigned	0	0	1	0	2	1
	(a)Officers	0	0	0	0	0	0
	(b)Others	0	0	1	0	2	1
2	Superannuated	3	1	0	0	3	4
	(a) Officers	2	1	0	0	2	3
	(b)Others	1	0	0	0	1	1
3	Availed VRS	8	8	2	4	0	1
	(a) Officers	3	1	1	3	0	0
	(b)Others	5	7	1	1	0	1
4	Terminated	1	2	0	0	0	0
	(a)Officers	0	0	0	0	0	0
	(b)Others	1	2	0	0	0	0
5	UnderCRS	0	0	0	0	0	0
	(a)Officers	0	0	0	0	0	0
	(b)Others	0	0	0	0	0	0
6	Expired	1	0	1	2	1	2
	(a)Officers	0	0	0	1	0	1
	(b) Others	1	0	1	1	1	1
7	Total Strength as on 31-3-11	222	229	230	230	224	232
	(a) Officers	44	54	71	67	75	82
	(b)Others	178	175	159	163	149	150
8	Of which cadre on deputation toICDP	2	0	0	0	4	4
	(a)Officers	1	0	0	0	2	2
	(b) Others	1	0	0	0	2	2
9	Employee Recruited	3	18	5	6	0	0
	(a)Officers	0	3	0	0	0	0
	(b)Others	3	15	5	6	0	0
10	Staff undergoing Training	31	27	40	85	50	59
	(a) Officers	17	12	25	36	31	44
	(b)Others	14	15	15	49	19	15

APPENDIX–V

Nagaland State Co-operative Bank Ltd.
Dimapur: Nagaland

BALANCE SHEET as on 31 March 2012

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs.)	CAPITAL AND LIABILITIES		AMOUNT (Rs.)	CURRENT YEAR AS ON 31.03.2012
		1. CAPITAL :			
		i) Authorised Capital			
900000000.00		1,80,000 'A' Class shares of Rs.5000/- each			900000000.00
95000000.00		950,000 'B' Class shares of Rs. 1000/-each			95000000.00
150000000.00		3,00,000 'C' Class shares of Rs. 500/-each (Nominal)			150000000.00
2000000000.00					2000000000.00
		ii) Subscribed Capital			
		34,485 'A' class shares of Rs.5000/-each			
		25315 'B' class shares of Rs. 1000/-each			
		71096 'C' class shares of Rs.500/-each			
		iii) Amounts like due paid up on			
		53,585 shares of Rs.5000/-each in arrears call unpaid			
		at Rs.0.25 each on 16,000 shares.			
		26,534 shares of Rs. 1000/-each in arrears call unpaid			
		at Rs.0.06 each on 1000 shares.			
		1,11,138 shares of Rs.500/-each in arrears call unpaid			
		at Rs.0.06 each on 1000 shares.			
		Of (iii) above held by:-			
-		a) Individuals		-	
25114840.00		b) Co-operative Institutions-3571 Societies		26393940.00	
267921000.00		c) State Government		272421000.00	
3554753900		d) Others (Nominal Members)		33568939.00	
3290883979.00	425000.00	e) Share Capital Deposit		425000.00	3549488879.00
		2. RESERVE FUND AND OTHER RESERVES			
3506916.78		i) Statutory Reserve		3506916.78	
6276656.00		ii) Agriculture Credit Stabilisation Fund		6462896.00	
973484386		iii) Building Fund		1107164286	
16929.91		iv) Dividend Equalisation Fund		16982991	
1018013.60		v) Special Bad Debts Reserve		1018013.60	
1146343206		vi) Bad and Doubtful Debts Reserve		1166343206	
1220048.90		vii) Investment Depreciation Reserve		1220048.90	
11023179434		viii) Provision for NPAs		13483179434	
5865087.24		ix) Provision for Inter-Branch Adjustment		5865087.24	
98367050.11		x) Provision for Other assets		87331462.73	
1619862.174		xi) Other Funds and Reserves (to be specified)		1815768.474	
	2877380.1	a) Share Capital Redemption Fund	2877380.1		
	227634.00	b) SMFDA Risk Fund	227634.00		
	8465249.59	c) Capital Reserve Fund	8465195.59		
	3941.25	f) Agriculture Relief Fund	3941.25		
	50000.00	g) Revolving Fund	50000.00		
	200000.00	h) Rehabilitation Fund	200000.00		
	23617.477	i) Revision of Pay Fund	23617477		
	4591.32	j) Voluntary Retirement Fund	4591.37		
	31.485.74	k) Proposed Dividend	31448574		
	119028.65	l) Co-operative Development Fund	1190286.5		
	924778.36	m) Staff Welfare Fund	1004895.36		
3865580294.54	2915000.00	n) Provision for Gratuity	5058000.00		2832788889.16
-		**3. PRINCIPAL/SUBSIDIARY STATE PARTNERSHIP FUND ACCOUNT:** For share participation			-
		i) Central Co-operative Banks			
		ii) Primary agriculture credit societies			
		iii) Other societies			
		4. DEPOSITS AND OTHER ACCOUNTS:			
		i) FIXED DEPOSITS			
1147141663.61	1146858963.61	a) Individuals	1258490264.11	1239773464.11	
-	-	b) Central Co-operative Banks	-		
	282700.00	c) Other Societies	1282700.00		
6155586673.54		**Balance Carried Over**			6382476888.16

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs.)	PROPERTY & ASSETS		AMOUNT (Rs.)	CURRENT YEAR AS ON 31.03.2012
		1. CASH:			
	399071 02.20	i) Cash in hand		[illegible]	
	21015E_3 1	ii) With Reserve Bank of India		11 015 E_3 1	
891563 53. 98	4913911 2.47	iii) With [illegible]		46983974.07	1007758 06.07
		2. BALANCE WITH OTHER BANKS:			
	245 70994 05	i) In Current Deposit		699212 9205	
	-	ii) In Saving Bank Deposit		-	
	3753538 9.58	iii) CC & OL/Loaned Current A/C with (CICI Bank		10 768791 .75	
		iv) Fixed Deposits -			
	4182221 8.00	a) With SBI	13747 5606.00		
8436 3125 8881	3907027 13.00	b) With Commercial Bank	283076534.00	4205521 40.00	5613 43 21 5.75
		Note: FD earmarked (at book value) towards			
	8501327.00	a) Statutory Reserve	8525262.00		
	75934 8.00	b) A C S Fund	7036418.00		
	3351218.00	c) Building fund	3617945100		
	262178.00	d) Dividend Equalisation Fund	274019.00		
	20068807.00	Total	20975130.00		
		20915150.00			
		3. MONEY AT CALL AND SHORT NOTICE:			
	4523 8 232500	i) With SBI		31 474173.00	
3576 32131 .88	3250496 16.00	ii) With Other Banks		414101133.00	88 8444 88 31 88
		4. INVESTMENTS			
	8576 29 24486	i) In Central and State Government Securities (at Book Value)		9934 39150.00	
		a) Face value - Rs.	1046690000.00		
		b) Market value - Rs.	1060690000.00		
	100000000	ii) Other Trustee securities		-	
	-	iii) Shares in co-operative institutions other than those in (5) below		-	
	500000000	iv) Other investments (to be specified)		500000000	
	500000000	(A) UTI Centre Fund - 4885997355 Units	500000000		
		a) Face value - Rs.	4885975.53		
		b) Market value - Rs.	136919.32		
88 443 8243 1 88					88 7400 00.00
-		5. INVESTMENT OUT OF THE PRINCIPAL/SUBSIDIARY STATE PARTNERSHIP FUND:			-
		Inshare of			
		i) Central Co-operative Bank			
		ii) Primary agricultural credit societies			
		iii) Other societies			
20100 1871 .57		6. ADVANCES:			
		i) Short-term loans, cash credits, overdrafts and bills discounted		226224291 .52	
		Of which secured against			
	-	a) Govt. and other approved securities	-		
2593449026.59		Balance Carried Over			2543319310.85

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs)	CAPITAL AND LIABILITIES		AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2012
615558673.54		Balance Brought Forward			638247688.16
	-	A) Apex Banks	-		
	282700.00	B) Societies & Others	1282 700.00		
	-	C) Primary Coop. Banks	-		
		i) SAVINGS BANK DEPOSITS			
17593706666.57	17314742 17.24	a) Individuals	1980135566.23	2034913096.56	
	-	b) Central Co-operative Banks	-		
	27896449.33	c) Other Societies	5477553 0.33		
	-	A) Apex Banks			
	27758134 0.7	B) Societies & Others	5477216907		
	138315.26	C) Primary Coop. Banks (UCB)	5361 26		
		ii) CURRENT DEPOSITS			
9 21 75150.90	87417161.24	a) Individuals	73613 847 .19	74023251.93	
	-	b) Central Co-operative Banks	-		
	4758049.74	c) Other Societies	40940474		
	598000	A) Apex Banks	598000		
	4752069.74	B) Societies & Others	40342474		
	-	C) Primary Coop. Banks (UCB)	-		
		iv) MONEY AT CALL AND SHORT NOTICE			
12925 9450.55	1292594 50.55	a) Individuals	1714148 02 .75	1714148 02.75	
	-	b) Central Co-operative Banks	-		
	-	c) Other Societies:	-		
	-	A) Apex Banks	-		
	-	B) Societies & Others	-		
	-	C) Primary Coop Banks	-		
		v) OTHER DEPOSITS:			
1031033 05.56	81671759.00	a) Recurring Deposit	9960885656	1282199 06.56	
	81671759.00	A) Of Individuals	9960885600		
	-	B) Of Staff	-		
	10980752.00	b) Other types of monthly deposit scheme	1592 4614 .00		
	10450 794.56	c) Staff Service Deposit	126 854 36.56		
3231850237.27					366 83 44 5 21.91
		5. BORROWINGS:			
		i) From NABARD			
9446900094	2000000000	a) Short-term loan (SAO) u/s 21(1)(i) of NB Act 1981	37510000.00	95885200.00	
	7400000000	b) Schematic loan (ARF) u/s 25(1)(b) of NBA ct 1981	58000000.00		
	469000.00	c) Infrastructure assistance under CDF scheme	375200.00		
		ii) From State Bank of India			
-		iii) From State Government		-	
-	-	a) Short-term loan	-	-	
	-	b) Medium-term loan	-		
6912 550.00		iv) From Other Sources (NSTFDC)		691255 0.00	
1013 81 558 .06					102797 758.06
666730.66		6. BILLS FOR COLLECTION BEING BILLS RECEIVABLE (AS PER CONTRA)			815 744.66
12995145.17		7. BRANCH ADJUSTMENTS			1382622 3.48
		8. INTEREST SUSPENSE:			
		Out of which towards			
	102127112.31	a) Overdue interest receivable a/c		1171542 15.33	
11499742.84	1287063073	b) Capitalised Interest in NPA a/cs		1147 1354.25	1286259 49.58
4076650 07.82		Balance Carried Over			4551957877.13

PREVIOUS YEAR AS ON 31/03/2013	AMOUNT (Rs)	PROPERTY & ASSETS		AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2014
2553449826.59		Balance Brought Forward			2943319318.85
	2010018715.52	b) Other tangible securities	2265342511.12		
	1450839151.11	Of the advances, amount due from individuals	1658237704.15		
	-	Of the advances, amount due from liquidated societies	-		
	1024263146.37	Of the advances, amount due to vendue	1208880845.50		
	859390603.37	Of the advances, amount of NPA	1014230214.44		
	224002446.67	Considered bad & doubtful of recovery	224002446.67		
6201510940.01		ii) Medium-term loans		1092602692.17	
		Of which secured against			
	-	a) Govt. and other approved securities	-		
	6201510940.01	b) Other tangible securities	1092602692.17		
	5079963779.98	Of the advances, amount due from individuals	9273119239.98		
	-	Of the advances, amount due from liquidated societies	-		
	8658152.00	Of the advances, amount sanctioned & issued by NSTFDC through NSCB (channelising agency)	8450332.00		
	1412895081.39	Of the advances, amount over due	1668293762.32		
	2049264381.39	Of the advances, amount of NPA	2419694873.31		
	7403213.67	Considered bad & doubtful of recovery	7403213.67		
2084486.00		iii) Long-term loans		1767001.00	
		Of which secured against			
	-	a) Govt. and other approved securities	-		
	2084486.00	b) Other tangible securities	1767001.00		
	1975223.00	Of the advances, amount due from individuals	1641603.00		
	-	Of the advances, amount due from liquidated societies	-		
	102263.00	Of the advances, amount overdue	102263.00		
	102263.00	Of the advances, amount of NPA	102263.00		
	102263.00	Considered bad & doubtful of recovery	102263.00		
-		iv) Amount receivable from Govt under Agricultural Debt Waiver Scheme 2008		-	13209039444.29
82237.45 1.Sa					
13904580.00		7. INTEREST RECEIVABLE			
	13904580.00	i) On loans & advances		16025297.761	
		Out of which-			
	10212711231	a) Int. On NPA A/cs	11715421533		
	3691869430	b) Int. On Standard A/cs	4309876228		
	NIL	Of which overdue Rs. 11715421533			
2944110511		Considered bad & doubtful of recovery Rs. NIL			
22648469812.31		ii) On Investments (accrued but not due)		13120243400	29145541161
666730.00		8. BILLS RECEIVABLE BEING BILLS FOR COLLECTION (AS PER CONTRA)			1157744.00
-		9. BRANCH ADJUSTMENTS			-
54347628.99		10. PREMISES [Less Depreciation]			53281683.99
		11. FIXED & FLOATING ASSETS [Less Depreciation]			
	2415151.00	i) Furniture & fixtures		2669491.00	
	456589.00	ii) Motor Vehicle		1385086.00	
	1650777.00	iii) Office Machinery Items & Equipments		2585888.00	
	2008965.00	iv) Computers		1570251.91	
6531582.00					8211718.91
36667193131.27		Balance Carried Over			42172087731.65

PREVIOUS YEAR AS ON 31.03.2011	AMOUNT (Rs.)	CAPITAL AND LIABILITIES	AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2012
4076650878.82		**Balance Brought Forward**		4551957877.13
		9. INTEREST PAYABLE:		
	121370049.12	a) On Deposits	162523733.63	
128950473.12	7580424.00	b) On Borrowings	7942150.00	170465883.63
		10. OTHER LIABILITIES & PROVISION		
	40000.00	a) Nabard Subsidy (RWHS)	-	
	4736981.89	b) Sundry Creditors	14773969.19	
	628750.00	c) Shares Suspense	572950.00	
	165000.00	d) Provision for Audit fee	100000.00	
	295273.00	e) Professional Tax payable	176926.00	
	1582249.38	f) Provident Fund payable	-	
	32318.00	g) G.S.L. Insurance premium payable	19898.00	
	496395.00	h) Provision for TDS refund receivable	517263.00	
	2055336.00	i) Contingent Provision for Standard Assets	3755336.00	
	-	j) Drafts Payable	70236.00	
	3256975.00	k) Subsidy Reserve Fund Account	3737243.00	
	-	l) Demand Draft	21145.00	
	-	m) Bank-Adjustment	1409084.00	
	-	n) Account Un-reconciled	1976.00	
132289281.27	-	o) Outstanding Liability	6586380.00	31742486.19
		11. PROFIT & LOSS ACCOUNT		
-	-	Profit as per last balance - sheet	-	-
	-	Less: Appropriations	-	
	-	Add: Profit for the year brought from P&L Account	-	
		12. CONTINGENT LIABILITIES		
	-	i) Outstanding liabilities for guarantee issued -		
	-	ii) Others -		
4218889833.21		**GRAND TOTAL**		4754166166.95

Dated : DIMAPUR
25th Sept. 2012

Sd/-
B.K.THADANI
MANAGING DIRECTOR

Sd/-
T.IMKONGLEMLA LONGKUMER
DIRECTOR

Sd/-
RAJUSE[illegible]E LHOUSA
VICE-CHAIRMAN

PREVIOUS YEARASON 31.03.2011	AMOUNT (Rs)	PROPERTY & ASSETS		AMOUNT (Rs)	CURRENT YEAR AS ON 31.03.2012
3666719331.27		Balance Brought Forward			4217206731.65
		12. OTHER ASSETS			
	8520421.57	i)Suspense		11550784.08	
	896135.82	ii)Stock of Printed Materials & Stationery		1248668.82	
	22000.00	iii)Security Deposit with Post & Telegraph		22000.00	
	2447186.83	iv)Income Tax Refund Receivable		2479524.83	
	35942819.53	v)Amortizing Investment under US-64		26267508.66	
	800000.00	vi)Assistance Receivable from State Govt.		-	
	2267858.00	vii)Disputed Income Tax with I.T.Deptt.		2267858.00	
	-	viii)Staff PFC Pending Adjustment		601 79.62	
	28498159.77	ix)Sundries		28498159.77	
		x)Amount realisable from staff:			
	967735.00	(a)Festival advance	1114613.00		
	364154.00	(b)T.A.advance	436556.00	1551 169.00	
	182523.02	xi)Salary Savings A/C pending adjustment		224726.32	
	123600.00	xii)Advance Payment of Income-Tax		262303.00	
	2481816.00	xiii) Disputed P.F.C.		2481816.00	
	17398.00	xiii)Books & Periodicals		18163.00	
	4698200	xiii)Interest relief receivable		4698200	
	-	xiv) Receivable from State Govt.(as per contra Institutional Debts)		-	
	-	xv)Account Un-reconciled		27800022.44	
111243763.98	2766494844				104779870.54
-		12. NON-BANKING ASSETS ACQUIRED IN SATISFACTION OF CLAIMS			-
		13. PROFIT & LOSS ACCOUNT			
	44708307729	Accumulated losses		440926737.96	
	0.00	Add: Loss transferred from P & L Appropriation A/C		0.00	
440926737.96	6156339.83	Less: Profit for the year brought from P & L Account		8747173.20	432179564.76
4218889833.21		GRAND TOTAL			4754166166.95

AS PER OUR REPORT OF EVEN DATE ATTACHED
AJIT K. JAIN & ASSOCIATES,
CHARTERED ACCOUNTANTS

Sd/-
TOSHI AIER, IAS
CHAIRMAN

Sd/-AJIT K. JAIN

PREVIOUS YEAR 2010-2011	AMOUNT (Rs.)	EXPENDITURE	AMOUNT (Rs.)	CURRENT YEAR 2011-2012
		1) Interest paid on deposits, borrowings, etc.		
	134532566.00	a) Int. On deposits	135 6345.32	
	2778644.88	b) Int. On borrowings	6885 750.11	
28812105.88	1475 1609400	c) Int. on inter-branch	170 15370.00	349366678.43
		2) Salaries, allowances & provisions and contributions		
5512935899				61312000.00
		3) Director's & local committee member's fees & allowances		
	30100.00	a) Sitting fees	23400.00	
	19248.50	b) Meeting expenses	4117.00	
	9336.00	c) Travelling allowance	1926.00	
417853.50	9336.00	d) Annual General Meeting expenses	19444.00	441877.44
3455194.75		4) Rent, taxes, insurance, lighting, etc.		242 3882.88
211333.20		5) Law charges		33 444.00
661661.00		6) Postage, telegram & telephone charges		131486.11
882888.00		7) Audit fee		88 4444.44
1139 26.73		8) Stationary, printing & advertisement, etc.		119.671.55
5535712.52		9) Depreciation on and repairs to Property		4888888.88
-		10) Loss from sale of or dealing with Non-banking assets		-
		11) Other Expenditure:		
	3544.54	a) Commission & exchange	77977.05	
	78425.00	b) TA to staff	10215.00	
	41877.21	c) Miscellaneous expenditure	454582.91	
	7988567.88	d) Amortization of investment loss	9875 31.87	
	000	e) Amortisation Expenditure on Investment	000	
	54044.00	f) Ex-Gratia	3235 44.00	
	15530.00	g) Subscription	35050.00	
	1558.00	h) Clearing House & Rent paid	104 12.06	
	5545.00.00	i) Premium for Staff Gratuity Fund	104 4727.00	
	2249.92.00	k) Deposit insurance premium	2845730.89	
	109220.00	l) Leave encashment	25 1563.00	
	000	m) Payment on VRS/CR Schemes	65.55.00	
	5027 84.43	n) Loss on NPA/Collocs	10532 14.55	
88 48 8.34	6156.30	o) Unrealisable assets written-off	1549783.84	33 823 737.58
		12) Provisions		
	192757.00	a) Interest Provision for ACB Fund	19824.00	
	6231 12.00	b) For Overdue & unrealisable amounts	15230769.74	
	000	c) For Investment Depreciation Reserve	-	
	1276 15.00	d) For NPAs	4100000.00	
	000	f) For Others assets	0.00	
12 0424 2.00	74827.00	g) For Standard assets	7000000.00	21218444.74
6252774.53		13) Profit before Prior Period Provisions c/d		6661369.60
3 87 1184 37.18				49 68 1 56.51
125438.20		To Payments towards Prior Period Items		48 54.00
615633.83		To Balance c/f from transferred to Balance Sheet		3747 173.29
6243774.03				6243774.03

Dated: DIMAPUR
25th Sept. 2012

Sd/-
B.K. THADANI
MANAGING DIRECTOR

Sd/-
T.IMKONGLEMLA LONGKUMER
DIRECTOR

Sd/-
RA.KUSELIE LHOUSA
VICE-CHAIRMAN

PREVIOUS YEAR 2010-2011	AMOUNT (Rs.)	INCOME		AMOUNT (Rs.)	CURRENT YEAR 2011-2012
		1) Interest & Discount:			
	86955652.81	a) Int. on Loans & Advances		111793944.67	
		b) Int. on Investments:			
	12268134.00	i) In term deposits	23788964.76		
	42986905.81	ii) In approved securities	70178537.34	1938382.10	
380330699.43	147855094.00	c) Int. on Inter-branch		170118370.00	47 8887138.57
4183284.76		2) Commission, Brokerage & Underwriting			26 87285.75
376669.69		3) Sub-sales and Additions			3
-		4) Income from Non-Banking Assets & Profit from sale or dealing with such assets			-
		5) Other Receipts:			
	22 4400.00	i) Member's admission fees		226 53000	
	1483225200	ii) Incidental charges		2136849.45	
	244347104	iv) Miscellaneous income		4876585.31	
	580000	vi) Locker rent received		4200.00	
	802839789	vii) De-provisioning from Assets		1135587.38	
	-	viii) Income from Trading of Securities		-	
	2093000	ix) Prior Period Items (TDS Refund)		-	
12269743.26	3500.00	x) Interest on ITR refund		0.00	18 0837 5 2.12
		6) Net Loss transferred to Balance sheet			
337718437.18					425226 826.48

6282774.83	By Net Profit b/d	8868838.20
	By Receipts from Prior Period Items	1200007.00
6282774.83	By Balance of Loss transferred to Balance Sheet	
		2758237.13

Sd/-
TOSHI AIER, IAS
CHAIRMAN

AS PER OUR REPORT OF EVEN DATE ATTACHED
FOR AJIT K. JAIN & ASSOCIATES, CHARTERED ACCOUNTANT

Sd/- AJIT K. JAIN

Employment and income level of sample respondents after receiving co-operative bank finance (N = 60)

SN	Particulars	Crop Production		Animal husbandry		Fishery		Plantation		Others		Overall	
		Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
A.	Employment (Mandays / Annum)												
1.	Low (<70)	1	0	1	0	1	0	1	0	1	1	5	1
2.	Medium (71-272)	10	9	30	28	8	7	5	5	0	0	53	49
3.	High (273 >)	1	3	1	4	0	2	0	1	0	0	2	10
Total		12	12	32	32	9	9	6	6	1	1	60	60
B.	Income (Rs. / Annum)												
1.	Low (< 48,431)	1	0	1	0	2	0	2	0	1	1	6	1
2.	Medium (48,432-59,636)	11	8	31	27	7	6	4	4	0	0	52	48
3.	High (59,637 >)	0	4	0	5	0	3	0	2	0	0	2	11
Total		12	12	32	32	9	9	6	6	1	1	60	60

CURRICULUM VITAE

The author of this manuscript, KEVIU SHUYA, s/o N. SHUYA, was born on the 2nd Jan 1980 at 4th Mile, Dimapur, Nagaland. He passed out his HSLC Examination in the year 1997 from High Mountain School, Signal Angami Dimapur under Nagaland Board of School Education and HSSLC Examination from Union Christian College, Meghalaya under Meghalaya Board of School Education. He passed out is B.Sc (Agri.) from School of Agricultural Sciences and Rural Development under Nagaland University during 2004 and also his M.Sc (Agril. Economics) in the year 2006.

After which he worked under ICAR (Indian Council of Agricultural Research) ad-hoc Scheme in the establishment of Nagaland University, in the Department of Agricultural Economics, Medziphema Campus as SRF (Senior Research Fellow) during the period May 2007 - Sep 2009. He later joined Agricultural Technology Management Agency in the capacity of Deputy Project Director, under Support to State Extension Programmes for Extension Reforms' Scheme, department of Agriculture & Co-operation, Ministry of Agriculture, Government of India.

He registered his Ph.D on 14th November 2008, a part time, started his research work since then and completed all necessary requirements in July 2013.