CHAPTER - I : INTRODUCTION AND RESEARCH METHODOLOGY

1) Introduction
2) Objectives of the Study
3) General Information of Miraj Taluka
4) Area of Study
5) Sccpe of the Study
6) Design of the Study
7) Limitations of the Study
8) Research Methodology
9) Selection of Sample Size.

CHAPTER - ONE

INTRODUCTION AND RESEARCH METHODOLOGY

I. INTRODUCTION

Provision of agricultural credit to the Indian farmers helps in increasing agricultural productivity. Long term financing by the institutional agencies helps in permanent improvement of land development of irrigation which together helps the farmer to develop intensive cash crop cultivation. With the development of water available to farmers in India have shown a tendency to diversify production and develop cash crop cultivation. The Maharashtra State Cooperative Land Development Bank through its Sangli Branch has provided long term loans, to the farmers of Sangli district. Since 1970's the Bank has introduced Grape Farm Development Projects through which long term loans are given to farmers to encourage them to undertake grape farming. As a result of this financing in recent years we see that Sangli district specially Tasgaon and Miraj talukas have become well-known for grape production. Grape farming is essentially a high-investment, high-risk, high-profit form of cash crop cultivation. Grape farming needs heavy investment, individual attention by the farmer in the grape garden development, scientific method of cultivation

and adequate supply of farm labour specialised in grape farming. In addition the standing crop is immediately affected by pests and changes in weather conditions. With the encouragement and loan finance provided by the Land Development Bank farmers in Miraj taluka have taken up grape farming by reducing the area under cultivation of sugarcane and other cash crop cultivation. In Miraj taluka grape farming has been undertaken by farmers having adequate water as well as by farmers having limited water supply in the rain shadow areas of east Miraj taluka. In such a situation where farmers have undertaken grape farming with scarce water supply it is wothwhile to study the impact of loan financing provided by Land Development Banks in increasing grape farming. Grape farming in such areas has a impact on cost of production, income-generation and employment generation in the area of cultivation. In addition grape farming also increases problems of the farmers relating to marketing of grapes, supply of agricultural inputs, supply of chemicals and pesticides and the influence of changing weather conditions on crop productivity. With the objective to study the above aspects of the impact of loan financing on grape farming the researcher has undertaken this study. While undertaking this study we have chosen farmers for our sample study from those villages which come in the rain-shadow

region of Miraj taluka and where grape farming has been introduced mainly on the basis of well-irrigation. In such a situation it is our contention that grape farming with less water availability has limited scope for development in future. Moreover, the average size of the grape farms is bound to be small as water availability is limited. Thus, the impact of loan financing on grape farming in such areas is bound to be less favourable to farmers in these regions as compared to farmers in areas having sufficient water supply. The farmers in western part of Miraj taluka have developed grape farming with the help of lift irrigation. Such facilities are not available in eastern part.

II. OBJECTIVES OF THE STUDY

While undertaking the above study we have studied the impact of loan financing for grape farming on selected farmers who have taken loans from the Miraj sub-branch of MSCLDB. The impact has been studied by finding out what have been the effects of development of grape farms on the production, cropping pattern, cost of production, income-generation, employment generation, on the farmers selected for study. In addition the problems associated with development of grape farming by the farmers have also been analysed. It has been found that the present existing system of marketing of

grapes is proving to be non-beneficial to the cultivating farmers. Moreover, rising cost of production too is a problem associated with grape farming.

Thus while undertaking the study the broad objectives of our study are -

(1) To study and analyse the working of the Grape Garden Financing Scheme of the MSCLDB under which the Miraj sub-branch provided long term loan finance to the farmers of Miraj taluka to develop grape farming.

(2) To study the impact of loans taken for development of grape farms on the farmers.

(3) To study the impact of loans on farmers, the following aspects of the impact are studied.

   (a) Cost of production/yield/and income generation on the grape farms developed by the farmers.

   (b) Additional employment generated in the area of study with the development of grape farms.

   (c) Problems faced by the farmers in the area of study, consequent to the development of the grape farms with

the help of loan finance made available by the Miraj sub-branch of MSCLDB.

III. GENERAL INFORMATION OF MIRAJ TALUKA

Miraj laying between 16 north latitude and 74-35 east longitude is 9.65 km. (six miles) north of Sangli, the district headquarter and 48.28 km. (30 miles) east of Kolhapur. Miraj city is the headquarters of the taluka Miraj.

PHYSICAL FEATURES OF MIRAJ TALUKA

The physical features of Miraj taluka area are given below :

(a) Physical Setting

The Miraj taluka is located in the rain shadow of Sangli one of the districts in southern Maharashtra. It is bounded on the west and south-west by Kolhapur district, on the north by Tasgaon tahsil on the north-east by Kavathe-Mahankal taluka and on the south and south-east by Belgaum and Bijapur districts of Karnataka State. According to 1981 census, there are 66 villages and three urban settlements viz., Sangli, Miraj and Madhavnagar in Miraj taluka.

(b) Area

The taluka measures about 57 km. from west to

east and 30 km. from north to south. The taluka is having an area of 909.6 sq.km.

(c) Topography and Soil

The topography of the taluka is undulating towards the north-east because of the existence of Dandoba Hills. Towards west and south-west the area is more or less plain as the area falls in Krishna valley. To the east also the area is plain. Towards north-east the highest area is about 850 meters and it gradually decreases to the west at Krishna river. The general slope of the area is towards south-west.

Geological formation in the tahsil is Deccan. The soil is derived from basalt rocks. Towards west and south-west and east in general the black cotton soil is found. Especially towards west i.e. in the proximity of Krishna river the depth of soil is about ten meters. Towards north-east the area consists largely of granular black-soil. Such soil is useful for the cultivation of jowar and pulses. In the irrigated areas sugar-cane is the predominant crop. In a few villages betel leaves and grape gardening has also developed. Grape farming has developed since 1970's in the following villages on a large scale - Narwad, Mhaisal, Bedag, Arag, Malgaon, Khanderajuri Belanki, Salgare, Bhose.

(d) Rainfall

Major portion of the rainfall occurs during the monsoon period. The details of the average rainfall is given in the Table No.1.1. The average rainfall of the taluka during the period 1980 to 1985 varied between 497.03 mm. to 317.07 mm. The rainfall in the taluka shows a considerable variation from year to year. The degree of variation is about plus or minus 28%. However, in recent years the average rainfall is showing a decline year-wise.

(e) Climate

The climate of the Miraj taluka is on the whole aggreable and is characterised by general dryness during the major part of the year. The cold season is from December to about the middle of February. The hot season which follows lasts till the end of May. June to September is the south-west monsoon season and the two months October and November constitute the post-monsoon or retreating monsoon period.

(f) Temperature

Mean maximum temperature is about 40^{o} centigrade and mean minimum temperature is about 9^{o} centigrade. May is the hotest month and December is the coldest month in this area. The Miraj taluka comes in

Table No.1.1

Table showing the average rainfall in the Sangli District for the the period from 1979-80 to 1984-85

Sr. No.	Name of the Taluka	1979-80 mm.	1980-81 mm.	1981-82 mm.	1982-83 mm.	1983-84 mm.	1984-85 mm.
1.	Miraj	489.06	497.03	439.50	423.20	417.20	317.07
2.	Tasgaon	602.80	968.04	577.60	459.00	432.00	426.00
3.	Khanapur (Vita)	617.62	1238.07	741.30	384.70	310.80	417.09
4.	Jath	331.05	483.00	355.10	277.00	239.00	480.04
5.	Walva	835.00	954.00	858.00	981.00	558.00	386.00
6.	Shirala	1065.05	1131.00	1013.00	1018.00	1012.00	705.00
7.	Atpadi	304.31	798.08	326.00	367.00	340.20	310.00
8.	Kavathe-Mahankal	312.42	671.06	190.00	249.50	243.05	270.60

Source : Grape Project No.6, Horticulture Scheme, MSCLDB, Sangli Branch, Annexure-II.

the rainshadow area and it is often affected by the recurring droughts. In recent years rainfall pattern shows that on an average, over the years annual rainfall is declining. In addition the rains have also become unpredictable and at times have a delayed onset. This has greatly reduced the water availability and water problem both for irrigation and drinking has become a problem.

(g) Rivers

The west of the taluka is bounded by river Krishna which measures about 28 miles and on the north-west, the tahsil is bounded by Verala river. And the remaining small part of the taluka is dependent upon the rainy season only. The river Krishna is very useful for irrigating sugar-cane farming. Number of lift irrigation schemes of the west Miraj taluka are responsible for sugar-cane cultivation.

(h) Vegetation (Forest)

The natural vegetation (forest) area is about one percent of the total area of the taluka. The vegetation is sparse and the trees are of dry decidues and thorny bush-types. Neem, Babul, Tamarind and Mango are the major trees found in this area. In the eastern parts especially on the fallow land thin grass is found.

(i) Crops

In Miraj taluka the cropping pattern is different in irrigated and non-irrigated areas. In the area where river water irrigation is available from the Krishna river, the farmers have undertaken increased cash crop cultivation, sugar-cane is the major cash crop cultivation. In these irrigated areas the other cash crops cultivated include grapes, betal leaves and chillies. In the dry areas where well irrigation is the only source of water, jowar, bajara, pulses, groundnuts are the major rain-fed crops. In this area some of the farmers with well irrigation are also undertaking grape farming. Due to less water availability the size of the grape farm is small. Alongwith grape farming pomogranate gardens are also being developed.

(j) Population of the Taluka

According to 1981 census population of Miraj taluka is 5,06,320.

IV. AREA OF STUDY

The Miraj sub-branch has increased at a rapid rate of lendings to farmers for grape farming. This increase in finances has led to farmers undertaking grape cultivation on a larger scale especially since 1970's. Grape farming undertaken in Miraj taluka falls into two broad patterns. In the areas where the river

water irrigation is available grape farming is undertaken instead of sugar-cane cultivated. In this irrigated area the grape farms have proved to be very profitable and the size of the grape farms are also large. However, in the rain-fed areas of Miraj where well irrigation is the only source of irrigation, grape farming has been undertaken by the farmers mainly with the help of the MSCLDB loans. In this part of Miraj taluka grape farming is a part of dry farming only. Hence, the average size of the grape farm is relatively small as water availability is a problem. Hence while selecting the area for study, we have selected the eastern part of the Miraj taluka, mainly because -

(1) The non-availability of water has made the size of the grape farm small.

(2) Grape farming in this part is commercial cash crop farming in dry land area.

(3) The grape farms were introduced mainly with the help of loans provided by the banks especially MSCLDB.

(4) We wanted to study the extent to which loan financing provided by MSCLDB has developed grape-farms in this area and what have been the effects of such a development.

V. SCOPE OF THE STUDY

The present study covers the eastern part of Miraj taluka where agriculture is dependent on monsoons and well irrigation. In the villages covered the farmers selected for the study on the average have less than one acre size of grape gardens. The effect of the MSCLDB lendings are studied after the grape garden finance project was introduced by the Sangli branch of MSCLDB.

VI. DESIGN OF THE STUDY

The study has been divided into two parts. Firstly, we have studied and tried to analyse the working of the MSCLDB and the long-term loans disbursed by the Sangli branch and Miraj sub-branch of MSCLDB. To promote and encourage the farmers to undertake grape garden farming the Sangli branch of MSCLDB, has developed a special Grape Garden Financing Scheme. We have analysed the working of this scheme and the details of financing, conditions associated with the loans, etc. are also studied. The above analysis, has been done by interpreting the secondary data, published by the MSCLDB, In addition, unpublished data available from the office records of the Sangli branch and Miraj sub-branch has also been used.

The Grape Garden Financing Scheme implemented by the Sangli branch of MSCLDB, through the Miraj sub-branch has led to increased grape farming undertaken by the farmers in Miraj taluka. To study the actual impact of this loan financing on the grape growing farmers, in Miraj taluka, we have as the second part of our study, collected primary data through survey method, and have tried to study the impact on the farmers. While undertaken this survey we have selected farmers from villages in the eastern part of Miraj taluka only. This has been done so, because grape gardens in this area have been developed by farmers with limited water availability, well-irrigation being the only source of irrigation. Impact of the grape garden development loans taken by the farmers in the area of study has been studied by analysing the impact of grape garden development on -

(a) The cost, production, yield and income of the grape growing farmers.

(b) Employment generation in the area of study due to growth of grape farms.

(c) Problems faced by farmers associated with the growth of grape farms.

VII. LIMITATIONS OF THE STUDY

While studying the impact of grape garden development loans taken by the farmers in Miraj taluka

through the Miraj sub-branch of MSCLDB, we have selected farmers from the villages which come in the eastern part of Miraj taluka only. Thus, the second part of our study, wherein we have surveyed the grape growing farmers is limited to eleven villages, of Miraj taluka only. In this part of Miraj taluka, grape farms are developed with limited water-availability and well-irrigation only. Hence, the study of the impact of grape garden development financed by loans taken from the Miraj sub-branch of MSCLDB, is limited as it is objective to study the impact on these farmers only.

VIII. RESEARCH METHODOLOGY

In the first part of our study with the help of secondary data, analysis is made of the working of MSCLDB and the purposewise loan sanctioned by the Sangli district branch and Miraj sub-branch of the MSCLDB. In the purposewise distribution of loans by the Miraj sub-branch, loans for grape garden farming is a important purpose of lending. Therefore, we have analysed the grape garden finance project introduced by MSCLDB to encourage grape farming in Sangli district in detail. In the second part of the study we have tried to study the impact of this lending on the farmers in the area selected for the study, the impact is essentially a sample survey oriented, based on primary data collected.

The primary data has been collected with the help of stratified random sampling method. The survey was undertaken during the year 1987-88. To undertake this sample survey the following methods of data collection were used.

(1) Questionnaire method,

(2) Interview method and Discussion method.

IX. SELECTION OF SAMPLE SIZE

The list of farmers who borrowed grape farming development loans from the MSCLDB sub-branch Miraj from all the villages in Miraj taluka was prepared. Such farmers numbered 250. Out of these villagewise farmers they were classified into three groups according to their size of holding. While classifying the farmers according to their size of holding, the classification followed by the Land Development Bank was adopted. The MSCLDB while classifying the farmers in drought prone areas classifies the farmers according to their size of holding as below :

(1) Big farmer - having a holding of more than 15 acres.

(2) Middle-size farmer - having a size of holding between 8 to 15 acres.

(3) Small farmer - having a size of holding of less than 8 acres.

As per the above classification the 250 grape growing farmers who took loans for grape farming from the Miraj sub-branch of MSCLDB were classified into three groups, villagewise. Groupwise total farmers are -

(a) 50 farmers came under Group 'A'.

(b) 98 farmers came under Group 'B'.

(c) 102 farmers came under Group 'C'.

Through stratified random sampling, the sample size of farmer for the study was selected. 20 percent sample size from each of the three groups was taken to prepare the list of farmers to be surveyed. The 20 percent farmers selected from each group were selected from the following eleven villages -

(1) Bolwad, (2) Malgaon, (3) Khanderajuri, (4) Gundewadi, (5) Waddi, (6) Takali, (7) Soni, (8) Bedag, (9) Shipur, (10) Tanang and (11) Erandoli.

These villages come in the north-eastern and eastern parts of Miraj taluka which is a rainfed area depending on well-irrigation. The farmers selected by random sampling method. The sample size thus selected is as follows :

Group according to size of holding	Total farmers coming under the Group	Sample size selected	
		Percent	No.of Farmers
'A'	50	20%	10
'B'	98	20%	20
'C'	102	20%	20
Total	250		50

After the selection of the samplesize by this method the researcher circulated the questionnaire and obtained the response of the farmers through personal visits. In these visits the researcher also had discussions with the farmers. In addition, some open ended questions were also asked to the farmers, which helped the researcher in gathering valuable information regarding grape farming, other than the information given by the farmers in reply to questionnaire. The information and the response thus got from the farmers was classified and tabulated for the purpose of data analysis and interpretation. Based on the data analysis, the researcher has drawn conclusions and has also given suggestions in the study.