

**C H A P T E R -I**  
**INTRODUCTION AND RESEARCH METHODOLOGY**

## CHAPTER-I

### INTRODUCTION AND RESEARCH METHODOLOGY

#### 1 INTRODUCTION

India has been the home of sugarcane. Reference to it is found even in early vedic literature. The story goes that sugarcane was one of the luxuries provided by Vishwamitra to Trishanku in the special heaven created for him. In an interesting article on "Sugarcane Improvement in India", Mr. N.L.Dutt, Government Sugarcane Expert, wrote :

Cane has been grown in India from time immemorial. Mention of it occurs in the vedic literature [5000 B.C.]. Chinese writers of the 8th Century B.C. have recorded that, knowledge of sugarcane and its products was derived from India. Alexander the Great and his soldiers took back with them sugarcane which they called the 'honey reed' : There are many reasons for believing that India was the original home of sugarcane."<sup>1</sup>

Similarly, there are evidence to show that there has been export of gur and sugar from early times. According to Lacen, a researcher, the word "Gur" is derived from the word "Gour" which is the name of a city in Bergal. Prior to the grant of protection to the sugar industry in 1931, most of the sugarcane cultivators manufactured Gur. In rural area, Gur is used in everyday food items. Even at present, in many parts of the country gur is used even for tea making. Still recently,

more than fifty percent of the sugarcane production was used for gur making. During shortage of sugar, there is no other substitute than the gur. In India, there are three main industries competing with sugarcane consumption, viz. the white sugar, khandsari and gur industry. During times of shortage of sugarcane, there is virtually no mechanism to regulate equitable distribution of the available sugarcane amongst the three consuming industries. Thus, the production of gur is subject to fluctuations.

## 2 PRODUCTION OF JAGGERY (GUR) IN INDIA

The sugarcane is the irrigated crop and it requires water during the year. Hence, the production of sugarcane is not possible in all the states in India. The concentration of sugarcane crop is found only in few states such as Andhra, Bihar, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Tamil Nadu and West Bengal. Uttar Pradesh is producing more than 50% of the total production of jaggery. Maharashtra ranks the second in jaggery production. It accounts for 13.25 per cent of the total jaggery production of India. The statewise production of jaggery is shown in Table 1.1.

Table 1.1 : Production of Jaggery in Selected States in India

Sr.No.	State	Production in 000 tonnes	Percentage
1	Andhra Pradesh	1,163.10	11.88
2	Bihar	446.50	4.56
3	Harayana	514.00	5.25
4	Maharashtra	1,297.50	13.25
5	Punjab	407.00	4.16
6	Tamil Nadu	995.70	10.17
7	Utter Pradesh	4,966.30	50.73
Total		9,790.10	100.00

Source : Marathi Vishwakosh, Vol.5, P.176, Maharashtra State Literature and Cultural Board (Bombay), 1986.

### 3 JAGGERY PRODUCTION IN MAHARASHTRA

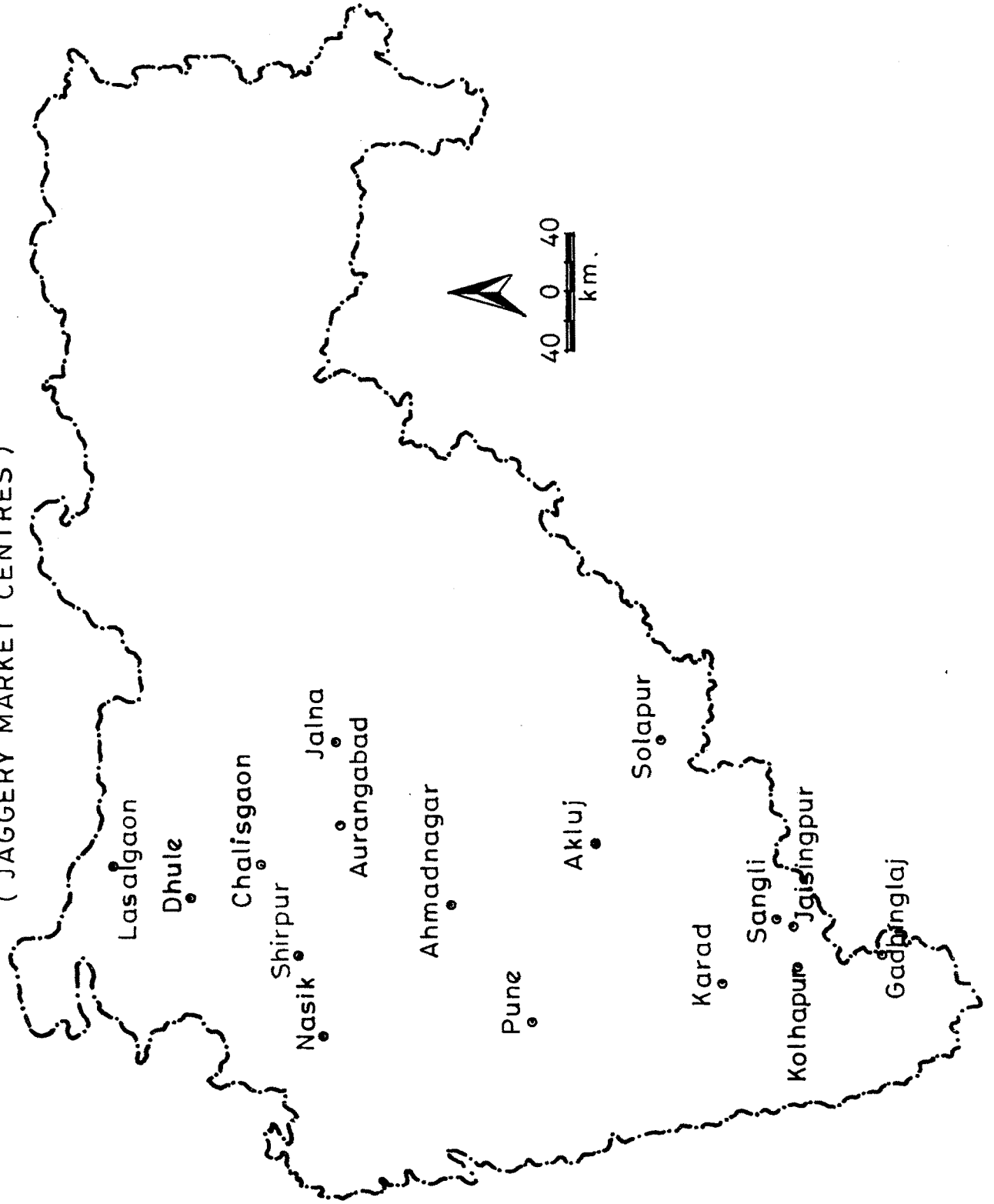
The important districts producing jaggery in Maharashtra are Ahmednagar, Kolhapur, Solapur, Pune, Nasik, Satara, Aurangabad, Osmanabad and Parabhani. Of course, the jaggery production in these districts is not even. There are 17 major jaggery marketing centres in the state. These centres handle about 53.50 percent of the total jaggery market in the state. The centrewise share of market is shown in Table 1.2

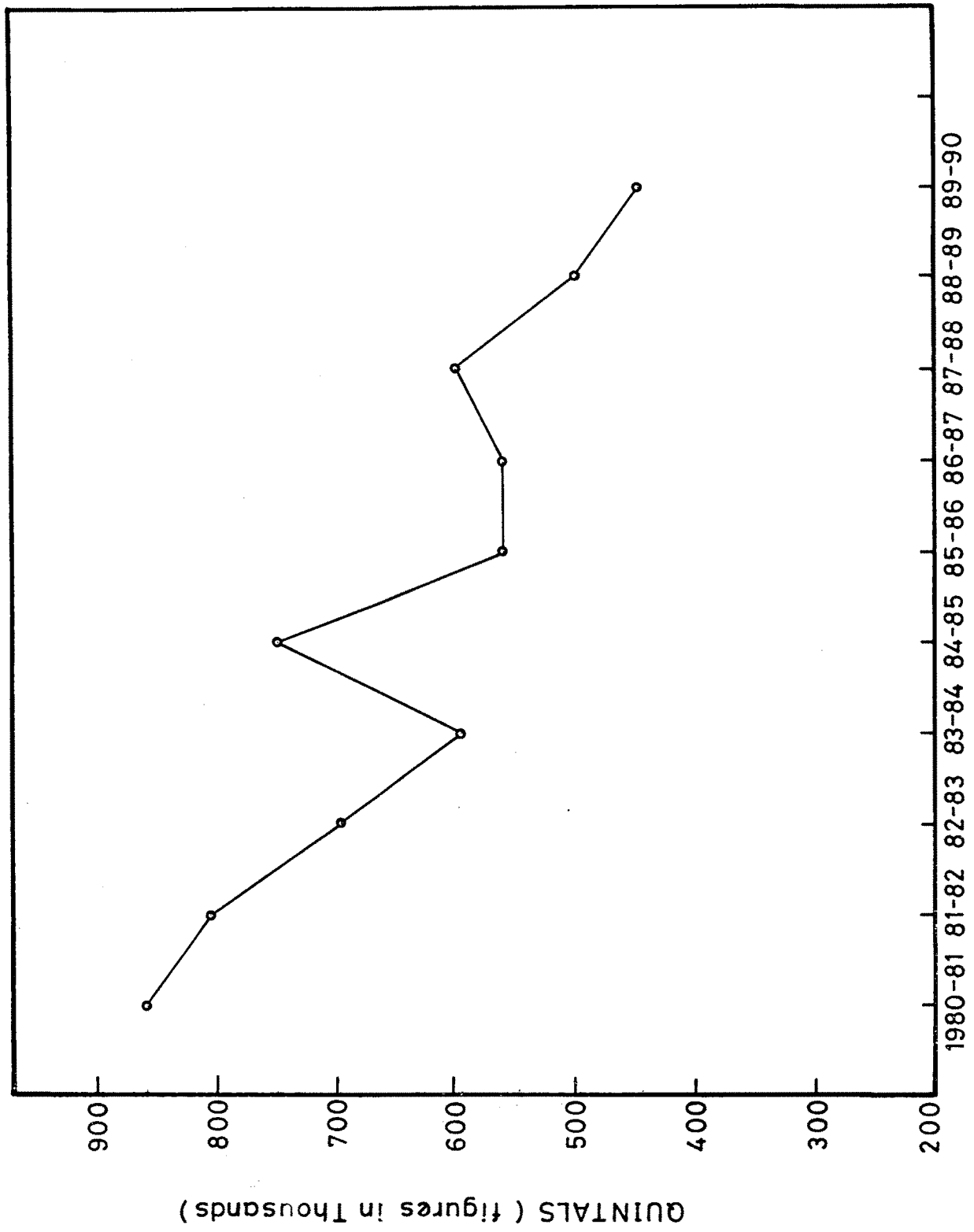
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**Table 1.2 : Centrewise Jaggery Market in Maharashtra 1990**

Sr.No.	Centre	Percentage of share
1	Kolhapur	22.48
2	Pune	9.00
3	Sangli	6.24
4	Jalana	1.77
5	Gadhinglaj	1.61
6	Dhule	1.56
7	Nasik	1.50
8	Lasalgaon	1.41
9	Aurangabad	1.41
10	Solapur	1.39
11	Akluj	1.35
12	Jaysingpur	1.28
13	Shrirpur	0.92
14	Chalisingaon	0.85
15	Ahmedabad	0.32
16	Karad	0.23
17	Other centres	46.50
Total		100.00

**MAHARASHTRA STATE**  
( JAGGERY MARKET CENTRES )





GUR ARRIVALS IN SHAHU MARKET YARD FROM 1980 TO 1992 .

The above table shows that Kolhapur market accounts for 22.48 percent of the total jaggery market, followed by Pune (9.0%) and Sangli (6.42%), while the share of other centres is negligible. The gur is consumed locally as well as it is exported to other states in the country. About 2 percent of the total gur is exported abroad. The major gur importing countries are Europe, America, Arab countries, Africa, Saudi Arabia, Iraq, Iran, Mombasa, etc. The export quality gur is prepared especially in Kolhapur District.

#### 4 JAGGERY PRODUCTION IN KOLHAPUR DISTRICT

Kolhapur District is famous for its quality jaggery. Its taste, colour, texture and durability is famous. About 1/3 rd of the villages in the district produce jaggery. The Karveer Tahsil is having maximum (1863) gur making units in the district as on 1991.<sup>3</sup>

#### 5 IMPORTANCE OF JAGGERY

Sugar and jaggery production plays an important role in the socio-economic life of people of Kolhapur District. The importance of jaggery is obviously from the following facts.

##### 5.1 FOOD ARTICLE

Jaggery is used as food article, especially in rural areas. Usually, the price of jaggery remains less than that of sugar. Therefore, the people of low income group prefer jaggery to sugar. Jaggery is used for tea and coffee making purposes as well as for many food items mostly in marriages



and in festivals. One can prefer jaggery to sugar, because jaggery contains fats, proteins, phosphorus, etc. which are useful for human body.

## **5.2 JAGGERY AS A MEDICINE**

In various types of medicines, jaggery is used. Jaggery is used in manufacturing of cattlefeed. Jaggery has a good medicinal value in Ayurveda. In Buddhist period the Buddhist followers were advised to consume jaggery in every day food. This shows that, jaggery is known to human beings since time immemorial.<sup>4</sup>

## **5.3 JAGGERY AS A SOURCE OF CASH GENERATION**

Sugarcane is the main cash crop for the people of Maharashtra. Due to the assured market for jaggery, farmers having enough water supply prefer to cultivate sugarcane and deliver it either to sugar factory or make jaggery. The demand for jaggery increases by 2 percent per annum and hence it is good source of income.<sup>5</sup>

## **5.4 EMPLOYMENT OPPORTUNITY**

Jaggery making is considered as a village industry using local raw material, local skill and local labour, and it has the local market too. Therefore, from employment point of view, it is very helpful to generate seasonal employment i.e. for 4 to 5 months. It has helped to generate employment for marginal and landless labourers during the season of manufacturing of jaggery.

## RESEARCH PROBLEM

It is observed that about 1/3 of villages in the district produce sugarcane. Major concentration of jaggery production is seen in northern part of Kolhapur District in general, and in Karveer Taluka in particular. The role of Karveer Taluka in jaggery production has been analysed in the third & fourth chapters of this study. It is analysed on the comparative basis. But when we consider the overall picture of the jaggery making units in Karveer Taluka alone we come to the conclusion that the absolute position of the taluka under study is not satisfactory. Day-by-day the jaggery making units in the said taluka are decreasing. There are three categories of the sugarcane growers in the taluka i.e. marginal and small farmers, medium farmers and large farmers. If we consider the economic position of the small or marginal sugarcane growers, we find that their economic position is not so good. As compared to the medium and big sugarcane farmers the proportion of the small as well as marginal sugarcane grower farmers is larger in jaggery making units. It means that, most of the small and marginal farmers have been providing their sugarcane to the jaggery making units. Unfortunately, these farmers are compelled to give their sugarcane crop to jaggery making units due to their weak economic conditions.

It is seen that, the medium and big farmers are not willing to make jaggery from their sugarcane. They prefer to

sell it to sugar factories. But all this depends upon which Jaggery making units/are generally owned by large farmers and marginal and small farmers have no alternative but to get Jaggery manufactured from these units or sell the sugarcane to sugar factory. Even though there are 12 sugarfactories in Kolhapur District, many farmers in Karveer Taluka prefer to manufacture the jaggery. This point created interest in researcher to undertake present study.

## **7 OBJECTIVES OF THE STUDY**

The study attempts to analyse the jaggery industry in Karveer Taluka, with the following objectives.

- 1 To study the trends in jaggery making industry in Karveer Taluka.
- 2 To study the costs structure of sugarcane cultivation in Karveer Taluka.
- 3 To analyse the costs structure of jaggery at various stages.
- 4 To study and compare the cost of jaggery manufacturing of selected units.

## **8 DATA COLLECTION**

The present study is based on the primary data and the secondary data. Primary data is collected by stratified sampling method. The data is collected in two parts. One is

for sugarcane growers and another for jaggery making units. In order to collect data from sugarcane growers (farmers) 53 farmers have been selected from the 27 villages on the basis of land holdings. The Karveer Tahsil was divided into two zones-East and West with Kolhapur city as mid point. From these two zones 27 villages were selected by lottery system. From these villages a stratified convenient sample of 53 farmers was drawn. Mainly farmers are divided into three categories i.e. marginal and small farmers, medium farmers and big farmers. Out of 53 farmers (Sugarcane growing) 26 farmers were marginal and small farmers. 21 and 6 were medium and big farmers respectively. Out of these 53 farmers 39 farmers are from Western Zone of the tahsil and rest of 14 are from Eastern Zone of the tahsil. Detailed questionnaires were prepared for data collection from sugarcane growers and from jaggery making units. Basis of classification of farmers is given ahead.

Alongwith the sugarcane producers five jaggery making units have been selected for the study. Out of these five, two are from Western Zone and rest of three from Eastern zone. For selection of jaggery making units first three villages from eastern zone and other villages from Western zone were selected by using lottery system. From these villages a convenient sample of units was drawn. Most of the jaggery making units have been located in Eastern Zone. Hence, more weightage is given to Eastern Zone..

Questionnaires were filled in by taking interviews of the owner of jaggery making units.

Cost of sugarcane growing are calculated by taking average from particular category of the farmer.

Secondary data is collected for the introduction and the the review of literature. Data and information have been collected from various sources. The relevent published and unpublished materials have been referred. The main secondary data is collected from socio-economic review and District Statistical Abstract as well as District Agricultural Census Reports. District Census Handbooks, District Gazetteers, Annual reports published by Kolhapur Sheti Utpanna Bajar Samiti, Kolhapur were referred.

## 9 DATA PROCESSING

Data collected from the sample farmers and jaggery making units holders is tabulated in order to interpret the various variables. For the data processing the simple mathematical tools such as percentages, averages, etc. are used. To indicate the sugarcane growing area as well as locations; the maps of India, Maharashtra, Kolhapur District and the Karveer Taluka have been utilised. The researcher has visited to the selected jaggery making units, sugarcane growing fields and some photographs from the concerned actions have been taken which are portrated in the dissertation.

## 10 DEFINITIONS AND CONCEPTS USED IN THE STUDY

The following definitions and concepts were used in this study.

### 10.1 WEAKER SECTION

Ghosh committee<sup>6</sup> defined the weaker section as follows :

- 1 Small and marginal farmers, landless labourer, tenant farmers and share croppers.
- 2 Artisans engaged in village and cottage industries.
- 3 IRDP beneficiaries
- 4 SC/ST people

The committee recognised that the above categories may be overlapping and are not mutually exclusive.

### 10.2 CATEGORIES OF FARMERS

The integrated rural development programme (IRDP) has defined the farmers categories as follows.<sup>7</sup>

#### 1 LANDLESS AGRICULTURAL LABOUR

A person without landholding but who derives atleast 50% of his income from wages.

#### 2 MARGINAL FARMER

A cultivator having dry land upto 2.5 acres, and in case of class one irrigated land, the ceiling would be upto 1.25 acres.

#### 3 SMALL FARMERS

A cultivator owning dry land between 2.5 to 5 acres is a small farmer and in case of irrigated land the holding should be between 1.25 to 2.5 acres of land.

**4 MEDIUM FARMER**

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Medium farmer is an agriculturist who holds dry land measuring more than 5.1 to 10 acres or irrigated land more than 2.5 to 5 acres.

**5 BIG FARMER**

Big farmer means an agriculturist who holds land measuring more than 10.1 acres of dry land or more than 5 acres of irrigated land.

**10.3 KHODAVA SUGARCANE**

1 Khodava is the cane crop which is planted before one year and when the crop is once reaped; the cut part that remain under earth and grows again is called khodava. In this type of crop no new cane plantation is required.<sup>8</sup>

**2 SURU SUGARCANE**

Suru is the cane crop which is planted in the same year. It means that it is the first crop of cane, usually for one year.

**11 CHAPTER SCHEME**

The entire work is divided into five chapters. The First Chapter elaborates introduction and research design. Special distribution of jaggery in India, Maharashtra and the Kolhapur District is in an introductory part of the dissertation.

The Second Chapter deals with the profile of Kolhapur District with special reference to Karveer Taluka. In this chapter, the various factors which are responsible for the cultivation of sugarcane are stated with marketing facilities.

of Jaggery in Kolhapur District.

In Chapter Third, costs analysis of sugarcane with problem in Karveer Taluka have been presented. This analysis is made on the basis of survey.

The Chapter Fourth, deals with costs structure of Jaggery of sample units. There are five case studies on which the costs structure of Jaggery making unit has been analysed.

Chapter Fifth deals with the major findings of the study and the suggestions for the problem under study.



## REFERENCES

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