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# CHAPTER-I

## INTRODUCTION AND RESEARCH METHODOLOGY

### 1.1 Introduction:

Agro-based industry plays significant role in economic development of agrarian countries like India. Jaggery producing business can be categorized as agro-based industry or food processing industry. Jaggery making is a seasonal activity. This business has become an important source of income for the rural people in Kolhapur district.

Jaggery is known as Kolhapur Molten Gold<sup>1</sup>. Karveer is the taluka having largest production of Jaggery in Kolhapur. It is famous for quality Jaggery, its taste, color, texture and durability. It is known for Ayurvedic medicine property. Jaggery manufacture is one of the important businesses of the rural population in Karveer taluka. Jaggery is used as food ingredient, especially in rural areas. Kolhapur Jaggery is famous throughout the world. The number of producers of Jaggery in Kolhapur district is concentrated mainly in Karveer taluka. Sugarcane is one of the important commercial crops used for the manufacture of sugar, Jaggery and other products. Jaggery provides an alternative market to sugarcane growers. The quality of the Jaggery is dependent on the cane juice which in turn is determined by the variety and the environment in which the cane is grown.

Jaggery is produced from sugarcane juice. Sugarcane is an annual crop that is sown between the months of May to July and harvested between Februarys to May. Sugarcane is the most preferred source of Jaggery. Jaggery has been used as a sugar proxy. Jaggery producers are facing problems in financial management of their units. The fluctuation in prices of sugar and Jaggery affect the performance of Jaggery producing units. For understanding proper financial management needed for such units, the present researcher has selected the topic of study “Financial Management of Jaggery Production units: A study of selected units in Karveer Taluka.”

#### 1.1.1 Jaggery:

Jaggery is a sweet made from sugarcane. Jaggery is crude form of raw sugar manufactured extensively in Maharashtra and several other states in India. It is solidified

cane juice after removal of the impurities suspended in the juice. About 30% of the total cane production in Maharashtra is utilized for white sugar manufacture in vacuum pan factories. Small quality of cane is used for manufacturing khandasari sugar by the open pan process. All the remaining quality of cane expects that used for planting and chewing etc is converted into Jaggery in this state. At is about 605 in Maharashtra. Jaggery is preferred for consumption in rural areas<sup>2</sup>.

Jaggery-making is a traditional family activity. It plays an important role in the socio-economic life of people and in economic development of India. Jaggery is produced from sugarcane juice. Sugarcane is the most preferred source of Jaggery. Jaggery is known to 'Ayurvedic medicine properly. Jaggery is an unrefined healthy sweetener produced using concentrated sugarcane juice<sup>3</sup>.

### 1.1.2 Production of sugarcane in India:

All India area production and Yield of sugarcane from 1997-98 to 2007-08 data has been given in table

**Table 1.1**  
**Year-wise production of Sugarcane in India**

Years	Sugarcane production (Million Tones)
1997-98	279.54
1998-99	288.72
1999-2000	299.32
2000-01	295.96
2001-02	297.21
2002-03	287.38
2003-04	233.86
2004-05	237.38
2005-06	281.17
2006-07	355.52
2007-08	340.56

Source: [http:// agropedia.iitk.ac.in/?q=content.year-wise-area-Production-and-yield-sugarcane](http://agropedia.iitk.ac.in/?q=content.year-wise-area-Production-and-yield-sugarcane)

Jaggery is the sugarcane based traditional Indian sweetener. Jaggery is nutritious and easily available to the rural people. Compared to white sugar, it requires low capita requirement in production and is manufactured at the farmer's individual units itself. Of the total world production, more than 70% of the Jaggery is produced in India. To meet the future sweetener requirement, the scope of Jaggery seems to be promising<sup>4</sup>.

Following table shows state-wise production of Jaggery in India.

**Table 1.2**  
**State-wise production of Jaggery in India**

State	Production of Jaggery (Million Tones)
Andhra Pradesh	13.73
Assam	1.29
Bihar	5.04
Gujarat	11.84
Haryana	7.55
Karnataka	28.33
Madhya Pradesh	2.11
Maharashtra	38.18
Orissa	1.14
Punjab	7.33
Rajasthan	1.16
Tamil Nadu	35.68
Uttar Pradesh	119.97
West Bengal	183
Other	1.07
All India	276.25

Source: sugar statistical reports.html

Table 1.2 shows that State-wise production of Jaggery in India. All India Jaggery production 276.25 million tones Now, it was seen from the Table 1.2 that the production of Uttar Pradesh is higher than the other stats, the production of Uttar Pradesh at Rs.119.97 million tones. Maharashtra is on the second rank in as 38.18 million tones production of Jaggery. Even in Rajasthan, Jaggery has a religious significance. Many of the festivals are incomplete without Jaggery as it is offered to the deity during worship. Also, it is regularly consumed as a sweetener and is a part of many sweet delicacies such as gur ka chawal. "Jaggery rice" a traditional Rajasthan dish"<sup>5</sup>.

### 1.1.3 Authorized Jaggery Markets in India:

Following tables are showing state-wise Jaggery markets in India

**Table 1.3**  
**List of Registered Markets in India**

<b>Sr.No.</b>	<b>State / Union /Territories</b>	<b>Total</b>
1.	Andhra Pradesh	556
2.	Assam	16
3.	Bihar	765
4.	Gujarat	304
5.	Hariyana	192
6.	Himachal Pradesh	40
7.	Karnataka	329
8.	Kerala	04
9.	Madhay Pradesh	431
10.	Maharashtra	635
11.	Orissa	91
12.	Punjab	639
13.	Rajasthan	353
14.	Tamil Nadu	261
15.	Tripura	05
16.	Uttar Pradesh	623
17.	West Bengal	320
	<b>Union /Territories</b>	
18.	Chandigad	03
19.	Delhi	08
20.	Goa, Diu, Daman	03
21.	Pandicherry	01
	<b>Total</b>	<b>5,579</b>

Source: S.S. Rupe 'Growth and prospect of Jaggery industry in Kolhapur District of Maharashtra State, Shivaji University, Kolhapur, 2007.

#### **1.1.4 Properties and contents of Jaggery:**

Jaggery is solid produce having various natural color shades from faint yellow to blackish gray. This solid produce starts free-flowing during rainy season due to the hygroscopic environment. Jaggery shows a somewhat similar chemical composition as that of the cane used for its preparation. This composition may be affected by the clarification materials used, for example, while boiling the juice, proteinous materials in the juice are affected and get lost somewhat, but the other composition remains unchanged.

#### **1.1.5 Chemical Composition of Jaggery:**

The moisture content of Jaggery may vary from season to season. The general

composition in detail is as follows.

**Table 1.4**  
**Chemical Composition of Jaggery**

Sr.No.	Composition	Composition in %
1.	Non-reducing sugars	65 to 85
2.	Reducing Sugar	10 to 15
3.	Ash content	1.5
4.	Moisture	3 to 10
5.	Protein	0.25
6.	Calcium	0.40
7.	Phosphorous	0.045
8.	Ferrous	11.0 mg per 100 gm
9.	Copper	08 mg per 100 gm
10.	Vitamin' B'	20.0 mg per 100 gm

Source: Sugarcane, J. Thuljaram Raw, Indian council of Agricultural Research New Delhi, 1983, P-92.

The market price of Jaggery is generally based on its appearance (color), taste, texture, and scientific have also graded the Jaggery, but there is no similarity. The Jaggery traders, Judges the quality of Jaggery by its external appearance (color, Luster), taste and granulation, small etc<sup>6</sup>.

### **1.2 The Problem of the Study:**

In Karveer taluka of Kolhapur distribution some of the farmers are producing the Jaggery. But most of the farmers are unaware of it. The price of Jaggery is always fluctuating. The Jaggery producers of Karveer Taluka are facing the problems of financial management for several years due to the seasonal nature of Jaggery production. It is the need of the study on financial management of Jaggery production units properly in the Karveer Taluka. 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 depend upon price of sugarcane. Jaggery making units which are generally owned by large farmers. Even though there are 12 sugar factories in Kolhapur district, many farmers in Karveer taluka prefer to manufacture the Jaggery. These units have some financial problems hence the present researcher has selected topic for the study as "FINANCIAL MANAGEMENT OF JAGGERY PRIODUCTION UNITS: A STUDY OF SELECTED UNITS IN KARVVER TALUKA."

### **1.3 Significance of the Study:**

Jaggery is one of the famous goods from Kolhapur indigenous culture. The present study has emphasis on the identification of financial management problems of Jaggery. It is significant for the government for the policy formulation regarding the Jaggery production. The present study is helpful to banks and financial institutions for identifying potential bankable units. The Jaggery industry may get remedies on their problems from this study which may assist in solving problems of manufacturing, marketing, transportation and storage etc.

### **1.4 The Objectives of the Study:**

The main objective of the study is to study financial management of Jaggery production units and specific objectives are as follows:

1. To study the process of Jaggery production practiced in the study area.
2. To study the Jaggery marketing system and its implication of financial management of units in the study area.
3. To study the various records that maintained for recording the various transactions in the Jaggery Production Units.
4. To study the price realization problem linked with quality of Jaggery.
5. To identify the cost and returns of Jaggery making and its opportunity costs.
6. To analyze the cost of Jaggery Production of selected units.
7. To evaluate the performance of the Jaggery making units in the study area.

### **1.5 Period of the study:**

The period of the study is five year i.e.-2005-2006-2009-10. It is a case study of one taluka. The present study encompasses the study of problems pertaining to the financial management of Jaggery production units. The present study has made an attempt of studying the production process, making system, accounting system, price realization problem, cost of production and performance of Jaggery production units in Karveer Taluka.



### **1.6 Hypotheses of the Study:**

1.6.1 Jaggery production units in Karveer Taluka are facing the problem in getting fund.

1.6.2 Jaggery production unit have failed to keep the cost of production at minimum level, hence they are bearing loss.

1.6.3 Jaggery producers are not utilizing resources properly due to unawareness among financial management.

### **1.7 Research Methodology:**

The following methodology has been adopted for the present study.

#### **1.7.1 Data collection:**

##### **a) Primary Data:**

The primary data have been collected by using structured questionnaires and non participative observation for this study.

The data have been collected from the selected Jaggery production units. In multistage sampling, Karveer taluka has been selected out of 12 talukas in Kolhapur District as first stage. There are 570 Jaggery production units in Karveer Taluka. Out of them 57 units have been selected by adopting random sample method. Due to homogeneous nature of all units, 10% sample is adequate.

##### **b) Secondary Data:**

The present researcher has collected the secondary data through Books, Research papers, Articles and various websites etc. The secondary data necessary for this purpose have been gathered from various archival reports, records of APMC, Kolhapur, government departments, etc. Moreover secondary data have also been collected from following libraries:

1. Barr. Khardekar, Library Shivaji University, Kolhapur
2. Library of College of Agriculture, Kolhapur
3. Library of Rajaram College, Kolhapur
4. Archives of 'Daily Sakal', Kolhapur
5. Archives of 'Daily Pudhari', Kolhapur
6. Regional Jaggery Research Centre, Kolhapur
7. Agricultural Product Market Committee (APMC), Kolhapur

### **1.7.2 Method of Analysis:**

The data have been processed by classification and tabulation. The frequency and percentage have been calculated for analyzing data. The tools of presentation like table and chart have been used wherever necessary. The 5 point Likert Scale has been used for unawareness of Jaggery house owners.

### **1.8 Conclusion:**

This study has been divided into five chapters. The first chapter has focused on introduction and the research methodology. The second chapter covers the review of literature which consists of the conceptual framework and review of earlier studies. The third chapter deals with the profile of Karveer taluka in terms of Jaggery production. The fourth chapter encompasses the analysis and interpretation of data in the light of financial management of Jaggery production units. The last chapter presents findings, observations, and suggestions, as the conclusion of the study.

### **References:**

1. Shri Chhatrapati Sahakari Gul Kharedi Vikas Sangh  
ltd, Kolhapur, Annual reports, 2008.
2. P.C. Das, Sugarcane in India, Kalyani Publishers New Delhi, 2006, P-44.
3. Marathi Vishwakosh, Vol-5, 1977, P-176.
4. [http:// agropedia.iitk.ac.in/?q=content.year-wise-area-Production-and-yield-sugarcane](http://agropedia.iitk.ac.in/?q=content.year-wise-area-Production-and-yield-sugarcane)
5. Sugar statistical reports.html
6. J. Thuljaram Raw, Sugarcane, Indian council of Agricultural Research New Delhi, 1983, P-94.