

## COST BENEFIT ANALYSIS OF SUGAR INDUSTRY IN GULBARGA DISTRICT



## COMMERCE

**KEYWORDS :** Production, Cost, material, Overhead, Profit.

**ASHOKKUMAR G.POLICE PATIL**

Head of the Department of Commerce H.K.E Society's SMT V.G.College for women, Aiwan-E-Shahi, Gulbarga

**DR.GIRAM S.J**

HOD and Research Guide Vaidhynath College, Parli(V) Dist: BHEED

### ABSTRACT

*The Indian sugar industry as green industry its future determines the livelihood of millions of farmers. The growth of these companies plays a prominent role in the economic development of the nation. The growth of an industry is based on its success and productivity. It is the primary test of the success of an industry. The consumers and the government are directly or indirectly involved in this industry. If the productivity is more, there will be the technological innovations and the economic will be growth high. The productivity and efficiency mainly depend upon the age and region of the industry.*

### INTRODUCTION

Sugar Industry is the second largest agro based industry in India, next to textile. This is the only industry, located in the rural part of the country. About five crores of sugarcane farmers, their dependants and a large mass of labourers are involved in sugarcane cultivation, harvesting and other related ancillary activities. This constitutes 7.5 per cent of the rural population. Besides, over a five lakhs of skilled and semi-skilled workers, mostly from the rural areas, are employed in the sugar industry, and the annual wage bill of the industry is around ` 1,000 crores, per year. Presently, Indian sugar industry contributes 15 per cent of the world sugar production. Though, there are more than 700 sugar mills in different stages of installation, almost 450 mills alone are in operation. The annual turnover of the industry goes to ` 30,000 crores, and cane growers, use to get ` 6,000 crores, as sugarcane price.

### IMPORTANCE OF THE STUDY

Sugar industry, being an agro based industry, boosts the rural development, by providing employment opportunities, directly and indirectly. Millions of people get benefitted, by this industry.

The first and foremost factor to be considered is the 'cost'. Each and every cost in sugar production should be analyzed, and the necessary steps are to be taken, to reduce the cost. There should be a keen watching, whether each and every rupee spent gives the maximum utilization.

### STATEMENT OF THE PROBLEM

Cost reduction is the essential part of the sugar industry so it's real and reduction in unit cost is utmost important. Cost efficiencies which is the key to survival and growth in present and future global cutthroat competition a rational approach for continues cost reduction programme to keep cost structure to the lowest possible level. In long run cost efficient organization has best chances for survival and growth and it is continues phenomena.

### OBJECTIVES OF THE STUDY

The objectives of the present study are:

To examine the composition of various cost components and their magnitude, in the total cost of sugar production in Sugar Industry.

In the absence of cost data, to find out the cost trend and to identify the most casual factor, this gives unsatisfactory results.

To study the impact of under utilization of plant capacity, this ultimately affects the operational efficiency of the sugar industry, and to judge the profitability of the sugar industry.

To study the costing structure of sugar industry in Gulbarga district.

To offer suitable suggestions on the basis of the findings through the study.

### HYPOTHESES

The researcher has framed the following hypotheses and tested in the study.

The effect of overheads on the net sales is not significant.

The effect of interest paid on the net sales is not significant.

### GEOGRAPHICAL AREA

The study is restricted to the Gulbarga District of Karnataka state. Since the researcher belongs to a farming community, interested in the economic development of Gulbarga District and interested in making a study of the cost Benefit analysis of sugar Industry in Gulbarga District of Karnataka the researcher has undertaken this study.

### PERIOD OF STUDY

The sugar industry is cyclical in its nature, which is normally of four to five years i.e. two years of bumper sugarcane crop, followed by two years as shortage of sugarcane - due to drought or of market position, and one year is a normal. Naturally, this cycle affects the cost effectiveness and the economy of the sugar industry. Therefore, the researcher has decided, to cover a period of two cycles i.e. five 2004-2005-2008-09. It has been considered as an appropriate period, for the analysis of cost.

### METHODOLOGY

In this study, the research work is based, mainly on primary, as well as, secondary sources of information. As a part of **primary source**, collected through structured questionnaire from farmers the researcher has visited personally, to some of the sample respondents and sugar industry. The interviews with the officials and executives were organized, to understand the financial and technical problems of the sugar industry.

### Secondary Source

In the absence of cost accounting systems in the sugar industry, the researcher had to rely more on the data, which are available, through financial accounting system. Therefore, the researcher took rounds to both of the sample sugar industry and collected the published annual reports.

For their researcher collected the secondary data through books journals website etc.

### Sample Design

selected for the study. For the study and observation of socioeconomic position of the farmers will be studied on the basis of primary data.

### Primary data

Two sugar industries in Gulbarga district has been studied thoroughly.

50 farmers from the catchment area of each sugar industry will be randomly selected for the study for their socioeconomic development.

### Framework of Analysis

The study is based on the primary as well as the secondary data, for analytical purpose, only the secondary data are considered. Data analysis is made by employing statistical tools, such as mean, standard deviation, co-efficient of variation, correlation, simple and multiple linear regressions, AGR, CAGR, t-test and ANOVA. Trend analysis has also been applied by the researcher, wherever necessary

### FINDINGS OF THE STUDY

#### Raw Material Cost

The average raw material cost per tonne of sugar for the Bhusnoor Sugar Factory is 15900 per year, whereas, in the case of the Renuka sugar factory is 13900. Except in the years 2005-2006 and 2006-2007 in all the remaining years of the study, the cost of the raw materials for the Bhusnoor sugar factory is much higher than the Renuka sugar factory. In the Bhusnoor Sugar Factory, an average of 70.64 per cent is spent for raw materials and in the Renuka sugar factory, the average is 64.41 per cent.

#### Employee Cost

The average employee cost per tonne of sugar in case of the Bhusnoor Sugar Factory is 11300 and in the Renuka sugar factory is 12000. Throughout the study period, the average employee cost is more in the Bhusnoor Sugar Factory, as compared to the Renuka sugar factory. The study reveals, that the Bhusnoor Sugar Factory try to bring down the employee cost. The average percentage of share of the employee cost to the total cost is 5.400 in the Bhusnoor Sugar Factory, whereas, it is 7500 in the Renuka sugar factory.

#### Selling and Administrative Overheads

The average selling and Administrative expenses per tonne of sugar for the Bhusnoor Sugar Factory is 1500 per year, whereas, in the case of the Renuka sugar factory is 1100. The average selling and Administrative expenses during the study period are high in the Bhusnoor Sugar Factory and low in the Renuka sugar factory.

#### Overheads

The average overheads per tonne of sugar for the Bhusnoor Sugar Factory is 5200 per year, whereas, in the case of the Renuka sugar factory is 4993.10. Except the years 2004-2005, 2005-2006 and 2006-2007, in all the years during the study period, the cost of overheads is higher in the Bhusnoor Sugar Factory. The average per cent of overheads to the total cost is 23.04 in the Bhusnoor sugar factory, and 24.96 in the Renuka sugar factory.

#### Manufacturing Cost

The average manufacturing cost of sugar per tonne of sugar in the Bhusnoor Sugar Factory is 120744.99 and in the Renuka sugar factory, it is 216017.39. Except in the year 2005-2006 in all the years during the study period, the average manufacturing cost is higher in the Bhusnoor Sugar Factory than in the Renuka sugar factory. The average per cent of share of manufactur-

ing cost to the total cost is 92.76 in the Bhusnoor Sugar Factory and 76.55 in the Renuka sugar factory.

#### Cost of Sugar

The Bhusnoor Sugar Factory incur an average of 22415.41 to manufacture a tonne of sugar and the Renuka sugar factory incur an average of 16420.40 only. Except in the year 2005-2006, in all the years during the study period, the cost of sugar remains higher in the Bhusnoor Sugar Factory than in the Renuka sugar factory.

#### Cost of goods sold

The average cost of goods sold per tonne of sugar is Bhusnoor Sugar Factory 22900 and for the Renuka sugar factory, it is 12000. During the study period, the cost of goods sold is higher in the Bhusnoor Sugar Factory in all the years. The per cent share of the cost of goods sold to net sales is 89 in the Bhusnoor Sugar Factory and 79 in the Renuka sugar factory.

### SUGGESTIONS

Following suggestions are made to improve the operational efficiency by creating higher yield and higher earning capacity, for all the stake-holders in the sugar industries in study area and in Indian sugar sector.

#### *Need to reduce the cost of sugarcane in the total cost of sugar production.*

In the normal course, the percentage share of the cost of sugarcane to the total cost of production should be within 70 to 71 per cent of the total cost. It is observed, that the sugarcane prices paid in India were always higher than the sugarcane prices paid per tonne in Brazil, Australia, Thailand and South Africa. Therefore, it is necessary for the sugar industry to design the sugarcane prices, which should be correlated to the CCS of primary juice of the sugarcane supplied to the individual sugar factory. It would, not only reduce the cost of sugarcane per tonne, but will also help to improve the quality of sugarcane supplied by the individual sugarcane grower. Therefore, it is necessary for the sugar industry to concentrate more on sugarcane development programme, which will help to have quality sugarcane for crushing. Naturally, this will reduce the cost of sugarcane, which is a major cost component, in the total cost of sugar production.

#### *Need to bring down the total cost of sugar production*

India has the lowest field production cost in the world followed by Australia, Thailand, world average and China; while factory production cost is the lowest in Thailand, followed by Australia, India, world average and China. When the total field and factory production cost is considered together, it is the lowest in Thailand, followed by Australia, India, world average and China. In spite of having the benefit of the lowest field production cost, the total cost of sugar production in India is not the lowest, in the world. It is due to the higher factory cost. Now, India is facing the stiff competition from Thailand and Australia in the world sugar trade, due to their lower factory production cost. Therefore, there is an urgent need, to take a resource on top priority, to reduce the factory production cost of Indian sugar.

The cost of production in Gulbarga District sugar industries are higher, because it is labour intensive. Sugar factories are shifting to mechanization and automation but the change is very slow. The pace of mechanization and automation will have to be accelerated.

### CONCLUSION

Sugar factories have been instrumental in initiating a number of entrepreneurial activities in rural area like Gulbarga District. Indian sugar industry can be a global leader, provided, it comes out of the vicious cycle of shortage and surplus of sugarcane, lower sugarcane yield, lower sugar recovery, ever increasing pro-

duction costs and mounting losses.

There is a considerable scope for further reduction in the cost of production of both sugarcane and sugar in India, with liberalization of controls on the sugar industry. Consolidation of land holdings and corporate farming on the raw material side and expansion of capacity on the unit size are important developments, and would lead to substantial improvements in productivity, thereby rendering India a cost-effective producer of sugar, in the world.

## REFERENCE

1. Nikam, G.A., "General Efficient of Sugar Co-Operatives; A Recovery Approach, Indian Co-Operative Review", Vol. No.1, 1988. | 2. 4Zaleza, T., "African Sugar on the World Market", Journal of Eastern Affairs Research and Development, No.18, 1988. | 3. Sudaryanto, T., "World Sugar Situation: The Seemingly Changes on Co-Operative Advantages", Indonesian Agriculture Research and Development Journal, Vol.10, No.2, 1988. | 4. Summer, U., "The Sugar Market", Der Markt Furzucker Agrarwirtschaft, Vol. 37, No.12, 1988. |