REVIEW OF RESEARCH
IMPACT FACTOR : 5.2331(UIF) UGC APPROVED JOURNAL NO. 48514 ISSN: 2249-894X
VOLUME - 7 | ISSUE - 8 | MAY - 2018

SUGAR INDUSTRY

Dr. A. G. POLICEPATIL
Assistant Professor, Department of Commerce,
HKES'S S. S. MARGOL Degree College of Arts,
Science & Commerce, SHAHABAD Dist: Kalaburagi, (Karnataka State).

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 Rs.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 Rs.30,000 crores, and cane growers, use to get Rs.6,000 crores, as sugarcane price.

The area under sugarcane cultivation in India, comes to 44 lakh hectares. The sugar industry contributes to the state and the central exchequers, to the tune of Rs.17,625 crores per annum, as state and central taxes. The sugarcane yield stands nearly 68 M.T. per hectare, with 10 per cent of sugar recovery. It is also noticed, that the recovery of Indian sugar industry is lowering around 10 per cent, since last 50 years. Recently, the industry has gone for cogeneration, and use to supply the surplus power to the national grid, which is based on its by-product, i.e. bagasse. It has also started producing ethanol, a renewable energy for blending with petrol, at five per cent.

'Dual Pricing System' is adopted in the Indian sugar industry, which includes price in Public Distribution System and the free sale sugar price. As the industry is a fragmented one, even leading players cannot control the market in India. However, the situation is changing and the players of late are striving to increase their market share, either by acquiring smaller mills, or by going for green field capacity addition.

India represents one sixth of the world population. The country is the largest consumer of sugar in the world, which generally corresponds to the output, although in recent years, the production has so far outstripped the consumption level, due to some aberrations in the sugar policy.

1.2 HISTORICAL RECORD

Sugar is one of the oldest commodities in the world and traces its origin in 4th century AD, in India and China. Sugarcane has been known for at least 2200 years. Alexander's army saw sugar cane during its conquest of India, in 326 BC (Purseglove 1979). Nearchus mentioned sugar cane in western India, in 325 BC. Sugar cane was probably introduced into China around 110 BC, when a botanical garden was founded near Peking, for the introduction of exotic-plants (Deerr 1949). Theophrastus described "honey produced from reeds", while Dioscorides, in the first century AD, described "a honey called sakkharon collected from reeds in India and Arabia Felix, with the consistency of salt, and which could be crunched between the teeth".

The mountains and deserts of Afghanistan, Baluchistan, and eastern Persia served as natural barriers against the spread of cane to other areas for centuries. It eventually reached Persia in the sixth century. The Arabs were responsible for much of its spread, as they took it to Egypt in 641 AD, during their conquests.

They also carried it with them, as they advanced around the Mediterranean. Sugar cane spread by this means to Syria, Cyprus, and Crete, eventually reaching Spain around 714 AD.

The sugar industry in Spain was very successful, with about 30,000 hectares of cane being cultivated by about 1150 AD. Around 1420, the Portuguese introduced cane into Madeira, from where it soon reached the Canary Islands, the Azores, and West Africa (Purseglove 1979). Columbus transported sugar cane from the Canary Islands to Hispaniola (now the Dominican Republic) on his second voyage in 1493 (Deerr 1949, Purseglove 1979). The first New World sugar cane mill began grinding in about 1516, in the Dominican Republic. Sugar production spread to Cuba, Jamaica, Puerto Rico, and the other Greater Antilles by the end of the 1500's (Hagelberg 1985).

In those days sugar was manufactured only from sugarcane. But India and China lost their initiatives to the European, American and Oceanic countries, as the eighteenth century witnessed the development of new technology, to manufacture sugar from sugar beet. However, India is presently a dominant player in the global sugar industry, along with Brazil in terms of production. Given the growing sugar production and the structural changes witnessed in the Indian sugar industry, India is all set to continue its domination, at the global level.

Indian sugar industry is highly fragmented with organized and unorganized players. The unorganized players mainly produce Gur and Khandasari, the less refined forms of sugar. The government had a controlling grip over the industry, which has slowly, yet steadily, given way to liberalization. The production of sugarcane is cyclical in nature. Hence, the sugar production is also cyclical, as it depends on the sugarcane production in the country.

1.3 IMPORTANCE OF THE STUDY

Sugar industry, being an agro based industry, boosters the rural development, by providing employment opportunities, directly and indirectly. Millions of people get benefitted, by this industry. The facilities, such as road, water, power, transport, education, hospitals and much infrastructural facilities are made, if there exists a sugar mill. The country's economic development is possible, only if the mills run profitably. India, with huge population, has the largest consumers of sugar, in the world. Only a little amount is left for export. Though, it is the second largest producer of sugar, it is all there, only to meet the domestic market. Unlike India, Brazil gives equal importance to ethanol production and sugar production. Hence, it earns huge income, and it is the cost reducer.

In India, when prices are fixed, sometimes it cannot meet even the cost of production. Out of the 100 bags, each weighing 100 Kgs., 20 bags should be given to the government, for levy price. Only 80 bags will be sold of their own. Hence, taking all these factors into consideration, the mills should take up the earnest steps, to come out with profit and development. 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. The technical factors, all the cost items, capacity utilized, interest paid, crushing days, recovery per cent, overhead cost; all have to be analyzed, and to verify, which is the pulling factor, that brings down the profit of the mill. The most important factor to be analyzed is, how, with the same raw material, it is possible for the private sector sugar mills to run successfully than the cooperative sugar mill. Sugar industry is one of the important agro based industry which contributes significantly to the growth of the global economy by providing large scale direct employment to several thousands of peoples and indirect employment to several lakhs of farmers and agricultural workers in the rural areas who are involved in cultivation of cane, harvesting, transport and other services.

India ranks first in sugar consumption and second in sugar production in world but its share in global sugar trade is below 3%. Indian sugar industry has been facing raw material and resources as well as infrastructural problems. Globalization has brought a number of opportunities but at the same time posed certain challenges before sugar industry. Most of the sugar units utilize production capacity below 50%. Low capacities utilization and inadequacy of raw material led to closer of 100 sugar mills in India. Mounting losses and decreasing net worth of sugar mills have been responsible for sickness of sugar industry. Sickness in sugar industry has reached to an alarming proportion. Indian sugar industry has been cash striven for decades. Low cash inflow due to pilling stocks leads to serious financial crisis and finally to closing sugar mills. Sugar prices have been a political issue and rather than economical issue many a time it worsens economy of sugar Industry.

Sugar industry in Gulbarga district has been so much neglected that its value is not appreciated by general public. Even the response for government efforts to develop entrepreneurship is low as they say. Sugar is an essential commodity for human beings. To meet the existing high demand, the cost of production of sugar must be minimized.

The costing system aims at collection, tabulation of data to convert into valuable information to interpret the result. The cost per quintal and other overhead needs to be properly accounted under ideal system of costing, so also the fixed assets. An awareness of cost concept, cost benefit and system is a prerequisite. The calculation and assessment of minimum be attained will be easily managed. On the other hand funds must be mobilized at optimum cost of finance. There has been a great deal of literature generated over the past decade about the cost of production. The overall need for the study is to suggest new strategy by analyzing cost for benefit in sugar industry

1.4 STATEMENT OF THE PROBLEM

India is known as the second highest in the world in sugar production. But, its share in the international market is very negligible. The reasons are, the Indian sugar industry is not cost effective, as compared to the leading sugar-producing countries, in the world. Though the country has an advantage of the lowest field cost, in the world, and when the factory cost is included in the total cost of sugar production, it shows, that the Indian sugar industry is placed at the third highest, in the increasing order, in the world. Normally, it is the responsibility of the sugar industry, to provide the sugar for home consumption, at a cheaper rate. This can be achieved, only when all-round efforts are taken for minimizing its cost of production. Globalization has created obvious challenges for sugar producers, relating to cost. International sugar market is available, only to those, whose cost of production is cost effective.

Asia's share in the world production is around 29 per cent, whereas, its consumption is 37 per cent. It shows that consumption exceeds production, by almost eight per cent, in this continent. The Indian sugar industry has an advantage to export maximum sugar in the Asian market. But, this is possible, only, when the sugar industry is cost effective, as compared to its competitors. Therefore, it is the need of the time, to take a complete review of the cost structure of the sugar industry, so as to see, which cost component is more responsible, for the higher cost of sugar production, and to see that, how it can be controlled, so as to keep it, as minimum as possible.

The comparative study of these cost components will certainly help, to know, which factors are adversely affecting, for the higher cost of sugar production. Therefore, the study aims at, in the absence of cost data, to find out the cost trends of sugar production, with the help of the prevailing financial accounting system, as well as, to identify the most casual factors, which are responsible for unsatisfactory results, in the sugar industry. In addition to this, the study intends to know the impact of under utilization of plant capacity, to the total cost of sugar production. While judging the profitability of sugar mills, it also shows, that the incidence of administrative overheads and the interest and bank charges are too heavy, which led the mills in higher cost of sugar production. Therefore, it is equally important, to analyze the magnitude of each overhead carefully, and how it has affected to the cost of sugar production, between the private and the cooperative sugar mills, over a period of time.

The sugar industry in India has certain peculiar characteristics than other manufacturing industry. As far as the industry concerned the sugar mills have to go on purchasing sugar cane during season, crush and produce sugar only to stock it and waiting for the government order to release for sale throughout the year bit by bit.The sales function in sugar industry differs from other industries. The release of sugar is fully under the control of union government. Currently, sugar mills are required to surrender 10% of the sugar produced by them as levy for the public distribution system. The remaining 90% free sale sugar can be sold in the open market, but even here it is the Government (the Sugar Directorate) that decides the quantum of sugar to be offloaded every month. Accordingly, mills are released a monthly free sale quota (FSQ), beyond which they cannot sell in the open market. The sugar industry has to face severe crisis due to steep fall in realization of free sale sugar price. Most of the sugar mills are incurring heavy losses. The main causes for this problem were periodic upward revision in the procurement price of sugar cane without increasing the sale prices. The operating environment of the sugar mills, control on price and movement of sugar has led to losses in all sectors in general and cooperative sector in particular

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. Diversification of activities is the characteristics feature the co-operative movement in the country performance of the co-operative have been rendered possible by peoples own efforts coupled with government policy of encouragement and support to the movement. State Govt and the central Govt placing the co-operative organization on a sound footing has been a major contributing factor of co-operative sugar factory is one of the life blood sector industries of India. The present study is confined to study of "Cost Management in Sugar Industry". In the opinion researcher the main focus of this research is to find out the soundness of cost benefit analysis and efficiency in the management to enhance the quality in cost management.

OBJECTIVES OF THE STUDY

The objectives of the present study are:

1) To examine the composition of various cost components and their magnitude, in the total cost of sugar production in Sugar factory.
2) To study the socioeconomic conditions of the sugar factory farmers in study area.
3) In the absence of cost data, to find out the cost trend and to identify the most casual factor, this gives unsatisfactory results.
4) To study the costing structure of sugar industry in Gulbarga district.
5) To study cost consciousness among the existing sugar industry.
6) To study and assess the cost of production, finance and profitability of the sugar industry in Gulbarga district.

HYPOTHESES TESTED:

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

- Total overhead does not affect on production cost significantly.
- The effect of raw material cost between the Bhusnoor Sugar Factor and Renuka Sugar Factory is significantly affected.
- The effect of average gross profit between Bhusnoor and Renuka Sugar Factories has significant difference.

The study is restricted to the Gulbarga Distract 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 THE 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., 2004-2005 to 2011-2012 It has been considered as an appropriate period, for the analysis of cost.

RESEARCH 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 visiting personally, from the sample respondents and sugar factory. The interviews with the officials and executives will be conducted, 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 Reports published by the factory & journals, books, websites.

Sample Design

There are two sugar industries in Gulbarga district; both are 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

1. Two sugar industries in Gulbarga district has been studied thoroughly.
2. 200 farmers from the catchment area of both sugar factories will be randomly selected for the study of 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

LIMITATIONS OF THE STUDY

This study concentrates only on two important areas:

(a) The study is limited to the Gulbarga District only.
(b) The study is limited to the period of 2004-05 to 2011-12.

The period of study is from 2004-2005 to 2011-2012, and therefore, the conclusions drawn are based on the changing economic scenario, at the national and the international level, and the impact of the government policy on the sugar industry, during the study period. In some cases, if the details are not available, the researcher framed appropriate formula to arrive at those particulars. It is very difficult to segregate the data available. However, an equitable method, by simply dividing the total cost by the number of units, has been followed by the researcher, for data segregation. Therefore, conclusions drawn in this study are based on the data made available, by these sugar industries and general in India.

CONCLUSION :

The comparative study of these cost components will certainly help, to know, which factors are adversely affecting, for the higher cost of sugar production. Therefore, the study aims at, in the absence of cost data, to find out the cost trends of sugar production, with the help of the prevailing financial accounting system, as well as, to identify the most casual factors, which are responsible for unsatisfactory results, in the sugar industry.

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 Market Furzuker Agrawirtchartt, Vol. 37, No.12, 1988.
5. Render H.A "Structural Concept for Improving the Competitiveness of the Sugar Industry in the North of GFR", Agarwirts C Gaft, Vol.38, No.7, and 1988.

Dr. A. G. POLICEPATIL
Assistant Professor, Department of Commerce,
HKES'S S. S. MARGOL Degree College of Arts,
Science & Commerce, SHAHABAD Dist: Kalaburagi, (Karnataka State).