



## NON-FINANCIAL PERFORMANCE OF THE SELECT PRIVATE SUGAR MILLS IN TAMILNADU

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### **Abstract**

Sugar industry is the second largest agro-based industry in India. India ranks first in sugar consumption and second in sugar production in world but its share in global sugar trade is below 3 per cent. The operating environment of the sugar mills, control on price and movement of sugar has led to losses in sugar industry. Low capacity utilization and inadequacy of sugarcane led to closer of sugar units 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. The main concern of sugar industry in India is fluctuation in sugarcane production due to inadequate irrigation facilities lower sugarcane yield. In this context, the researcher has made an attempt to have an insight into the non-financial performance of the private sugar mills in Tamilnadu. The present study is confined to only five private sugar mills, namely, Ponni Sugars, Erode; Bannari Amman Sugars, Sathyamangalam; E.I.D. Parry, Nellikuppam; Kothari Sugars and Chemicals Limited, Kattur; and Sakthi Sugars Limited, Sakthinagar, Erode. The study encompasses primary and secondary data. For collecting the primary data, personal discussions were held with the officials of the select private sugar mills. The secondary data were extracted from the published annual reports of the study units for a period of ten years. These reports are the financial statements, books of accounts, minutes, audit reports, annual reports, and circulars. The study covers a period of 10 years starting from 2005-06 to 2014-15. The study revealed that significant relationship is found in number of days cane crushed, capacity utilization, cane crushed and sugar bagged over the years. However, no significant relationship is found in yield rate over the years. Moreover, there is a significant relationship in number of days cane crushed, capacity utilization, yield rate, cane crushed and sugar bagged among the select private sugar mills. The researchers suggested suitable measures to improve the non-financial performance of the select private sugar mills in Tamilnadu.

**Keywords:** Physical Performance of Sugar Mills, Operational Performance, Sugar Mills, Yield Rate of Sugars, Sugar Bagged, Etc.

### **Introduction**

Indian economy is basically an agrarian economy with an overflowing population. Over 58 per cent of the rural households depend on agriculture as their principal means of livelihood and considerable portion of national income comes from this sector. In India, agriculture contributes 16 per cent of total gross domestic product and 10 per cent of total exports. The major crops grown in India are rice, wheat, maize, cotton, oranges, jute, sugarcane, tea, coffee, oil seeds, beans, onions, tomatoes and potatoes. These crops are grown all across India and are the country's largest produce outputs. They play a vital role in India's economy, which still relies greatly on the profit it makes from these crops. Geographically, the Indian subcontinent entirely lies to the south of equator and hence the climatic conditions are suitable for sugarcane cultivation in nearly all parts of the country. The states lying south of the Narmada River i.e. Maharashtra, Andhra Pradesh, Karnataka and Tamilnadu constitute the best suited area for sugarcane growing. India is the major sugar producing country in the world, the first three being Russia, Brazil and Cuba. India stood as the second largest producer of sugar in the world after Brazil in 2014-15 with 17 per cent share in world production. Of the total 704 mills in India, on the basis of ownership structure, 336 units are private limited companies, 325 co-operative societies while 43 are public limited companies. The states of Uttar Pradesh, Maharashtra and Tamilnadu occupy the first, second and third places in that order in having more sugar mills. Thus, there is no exaggeration in the claim that the sugar mills in India represent one of the most significant developments since independence.

### **Statement of the Problem**

Sugar industry is the second largest agro-based industry in India. India ranks first in sugar consumption and second in sugar production in world but its share in global sugar trade is below 3 per cent. Though the industry contributes a lot to the socio-economic development of the nation, it is plagued with a number of problems such as cyclical fluctuations, high support prices payable to farmers, lack of adequate working capital, partial decontrol and the uncertain export outlook. Global sugar prices have fallen sharply because of a huge glut of production driven by the world's leading producers such as Brazil, India and Thailand. India's sugar sector faces a fall in prices, rising raw material costs, limited export capacity and a lack of flexibility to produce ethanol for biofuel. As sugar is agro based industry, its prices always fluctuate with monsoon. The low yield of sugarcane, short crushing season, unsatisfactory location of sugar mills and inadequate supply of cane create problems for sugar mills having low milling efficiency. Low recovery of sugar from sugarcane also poses a problem for sugar



industry. Further Indian sugar mills do not have sugar plantations of their own and hence do not have control over quantity and quality of sugarcane supplied by various cane growers. Another problem of sugar industry is that the by-products of sugar mills are not fully utilized like molasses and bagasse. 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 per cent of the sugar produced by them as levy for the public distribution system. The remaining 90 per cent free sale sugar can be sold in the open market, but even here it is the government that decides the quantum of sugar to be offloaded every month. Levy sugar obligations causes huge financial burden on mills under which mills are bound to sell sugar for distribution under public distribution system at price determined by the Government which is way below the cost of production. Arbitrary fixation of cane prices by the state governments above the fair remunerative price fixed by the centre has been adversely affecting the sugar mills. Due to these reasons, 189 mills were out of operation in 2013-14 sugar season while 166 mills were not operating in 2012-13.

The operating environment of the sugar mills, control on price and movement of sugar has led to losses in sugar industry. Low capacity utilization and inadequacy of sugarcane led to closer of sugar units 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. The main concern of sugar industry in India is fluctuation in sugarcane production due to inadequate irrigation facilities lower sugarcane yield. Most of the sugar mills in Tamilnadu are incurring losses due to many reasons. Some of the reasons are increase in cost involved during production and recovery of sugar per tonne sugar cane crushed also not upto the international level. Further, most of sugar mills in India are having daily sugarcane crushing capacity of 1250 tonnes. These mills cannot have economies of scale so they have to incur high production costs. Thus, in the present scenario, the sugar industry is suffering from various problems. It is felt that these problems could be solved efficiently by making a detailed analysis. In this context, the researchers have made an attempt to have an insight into the non-financial performance of the private sugar mills in Tamilnadu.

### **Objectives of the Study**

The following are the objectives of the study:

1. To examine the non-financial performance of the select private sugar mills in Tamilnadu.
2. To suggest suitable measures to improve the non-financial performance of the select private sugar mills in Tamilnadu.

### **Testing of Hypotheses**

The study is based on the formulation of the following null hypotheses. The validity of some of them was tested with the available data through appropriate analysis.

**Ho<sub>1</sub>:** There is no significant relationship in non-financial performance over the years taken up for the study.

**Ho<sub>2</sub>:** There is no significant relationship in non-financial performance among the select private sugar mills.

### **Scope of the Study**

This study has been undertaken to assess the non-financial performance of the select private sugar mills in Tamilnadu. The present study is confined to only five private sugar mills, namely, Ponni Sugars, Erode; Bannari Amman Sugars, Sathyamangalam; E.I.D. Parry, Nellikuppam; Kothari Sugars and Chemicals Limited, Kattur; and Sakthi Sugars Limited, Sakthinagar, Erode. The study focuses its attention only on non-financial performance of the select private sugar mills.

### **Sampling Design**

There are 42 sugar mills in Tamilnadu, of which 37 mills are in operation, which include 16 co-operative sugar mills, 2 public sector mills, and 28 private sugar mills. Since the study is restricted to private sugar mills. As the researcher need of data for 10 years i.e. from 2005-06 to 2014-15, out of 28 private mills, 8 mills which are established after 2007-08 were ignored. The remaining 20 mills are categorized into 3 groups according to their crushing capacity namely, mills with 2500 and below tonnes capacity, mills with 2501 to 5000 tonnes capacity, and mills with above 5000 tonnes capacity. 25 per cent of the mills have been selected from each category by adopting simple random sampling. Therefore, one mill with 2500 and below tonnes capacity (Ponni Sugars, Erode), three mills with 2501 to 5000 tonnes capacity (Bannari Amman Sugars, Sathyamangalam; Kothari Sugars and Chemicals Limited, Kattur; and E.I.D. Parry, Nellikuppam), and one mill with above 5000 tonnes capacity (Sakthi Sugars Limited, Sakthinagar, Erode) were selected for this study.

### **Data Collection and Analysis**

The study is analytical in nature with a focus on assessing the non-financial of the select private sugar mills from the point of view of number of days cane crushed, capacity utilization, yield rate, cane crushed, and sugar bagged. The study



encompasses primary and secondary data. For collecting the primary data, personal discussions were held with the officials of the select private sugar mills. The secondary data were extracted from the published annual reports of the study units for a period of ten years. These reports are the financial statements, books of accounts, minutes, audit reports, annual reports, and circulars. Literature relating to the study was gathered from published reports, journals, magazines, books, etc. The collected data were analyzed and interpreted as intelligibly as possible to highlight the divergent activities related to the non-financial performance of the select sugar mills. The data were analyzed with the help of different statistical techniques such as ratios, analysis of two-way variance, co-efficient of variation, growth rates and multiple regression analysis.

### **Period of the Study**

The study covers a period of 10 years starting from 2005-06 to 2014-15. The period is considered sufficient to reveal the short and long-term fluctuations.

### **Findings**

1. A significant relationship is found in number of days cane crushed, capacity utilization, cane crushed and sugar bagged over the years. However, no significant relationship is found in yield rate over the years. Moreover, there is a significant relationship in number of days cane crushed, capacity utilization, yield rate, cane crushed and sugar bagged among the select private sugar mills.
2. Sakthi Sugars registered highest number of days cane crushed. There exists consistency in number of days cane crushed in Sakthi Sugars during the study period. Number of days cane crushed in Bannari Amman Sugars registered higher negative annual growth rate (8.14), followed by Kothari Sugars and Chemicals (7.01) and Ponni Sugars (5.92). Number of days cane crushed registered negative linear annual and compound annual growth rates in the select private sugar mills.
3. Ponni Sugars registered highest capacity utilization during the study period. There is stability in capacity utilization of the E.I.D Parry. Capacity utilization of E.I.D Parry registered higher annual growth rate (1.94), linear annual growth rate (1.71) and compound annual growth rate (1.79) during the study period. Ponni Sugars, Bannari Amman Sugars, Kothari Sugars and Chemicals and Sakthi Sugars registered negative annual, linear annual and compound annual growth rates during the study period. Ponni Sugars registered highest yield rate. Stability is found in yield rate of the Ponni Sugars during the study period. Yield rate of E.I.D. Parry registered higher annual growth rate (0.46), linear annual growth rate (0.19) and compound annual growth rate (0.19). Ponni Sugars, Bannari Amman Sugars, Kothari Sugars and Chemicals and Sakthi Sugars registered negative annual, linear annual and compound annual growth rates during the study period.
4. Sakthi Sugars registered highest cane crushed during the study period. There exists consistency in cane crushed in E.I.D Parry during the study period. Cane crushed in the E.I.D. Parry registered higher annual growth rate (1.94), linear annual growth rate (1.71) and compound annual growth rate (1.79). Ponni Sugars, Bannari Amman Sugars, Kothari Sugars and Chemicals and Sakthi Sugars registered negative annual, linear annual and compound annual growth rates.
5. Sakthi Sugars registered highest sugar bagged. There is consistency in sugar bagged in E.I.D. Parry during the study period. Sugar bagged in E.I.D. Parry registered higher annual growth rate (3.30), linear annual growth rate (2.68) and compound annual growth rate (2.71). Ponni Sugars, Bannari Amman Sugars, Kothari Sugars and Chemicals and Sakthi Sugars registered negative annual, linear annual and compound annual growth rates during the study period.

### **Suggestions**

1. The optimal physical performance of sugar mills is inevitable to maintain financial viability of their activities. The sugar mills under any circumstances are required to optimally utilize their resources. Therefore, the select private sugar mills are required to demonstrate a consistency in physical performance for their perpetual sustenance. The select private sugar mills have to utilize all resources for demonstrating their financial soundness, for overriding the unforeseen crisis and for providing livelihood to millions of cane growers.
2. The success of the sugar mills and their physical performance largely depends on skilled and trained human resources. Therefore, the select private sugar mills ought to make use of skilled and trained human resources so as to improve their physical performance.
3. The select private sugar mills must have their own additional facilities to produce byproducts. The state government should take realistic view in regard to feed the power produced by these sugar mills to the state grids. It not only enhances the financial viability of the sugar mills but it would also improve the cane price paying capacity of the select private sugar mills. Moreover, application of latest technologies in the fields of energy, product diversification, byproduct, power generation, multiple uses of sugarcane, use of improved design and equipment should attract the industry for its long-term survival. Therefore, research and development wings of the select private sugar mills should be developed on a continuous basis for the success of select private sugar mills.



4. Shortage of sugarcane leads to poor performance of the sugar mills as the existing crushing capacity is not balanced with the supply of sugarcane. Therefore, improved cane seeds should be supplied to the cane growers at the subsidized rates to cultivate more sugarcane. Therefore, the select private sugar mills have to concentrate on sugarcane development programme which will help to have quality sugarcane for crushing. Further, in spite of introduction of early maturing varieties, the sugarcane research centres should develop different varieties suiting to the diverse climatic and geographical conditions which would help to increase the recovery per cent.
5. There should be a less time gap between harvesting and juice extraction process in the select private sugar mills to achieve more sugar recovery of cane. Therefore, the select private sugar mills should take necessary efforts to reduce the time gap between harvesting and juice extraction process.
6. Cane growers in the specified area of the mill are required to supply cane to the specified mill and the mill is obliged to crush all cane bonded by the growers from the specified area for supply to the mill. Absence of this system, the select private sugar mills are facing difficulties to regulate the supply of cane by the farmers according to the crushing capacity available on each day, resulting in inadequate sugarcane available on some days and excessive cane coming to the mill on other days leading to long waiting period for the growers.
7. In order to strengthen the incentive for cane development by the select private sugar mills, it is suggested that reservation of area should be on permanent basis and any area should be transferred from reserved area of a mill to another only if cane availability in its area is surplus to its requirement for its existing capacity including expansion under implementation. Further, no new license for sugar units should be allowed within the reserved area of a sugar mill and within 25 km from the site of a sugar mill so that sugarcane produced within this area is available to the mill for crushing and loss in sugar production involved on account of its crushing by sugar units which have low sugar recovery is avoided.

### Conclusion

Sugar industry is the second largest agro-based industry in India. Sugar mills have been instrumental in building confidence among rural people and strengthening industrial base in rural India. In the era of globalization, sugar industry needs more competitive edge which can be given by way of modernization, enhancing productivity, and manufacturing excellent quality sugar at competitive prices. It needs quality management at every level of activity to enhance its performance. Most of the sugar units do not have byproduct utilization plants. Ethanol, alcohol and paper projects have tremendous scope for development in India. Bagasse based power generation projects installed adjacent to each sugar factory would fulfill need of power. The researchers suggested suitable measures to improve the non-financial performance of the select private sugar mills.

### References

1. Basavraj S. Benni (2005). "Econometric Analysis of Financial and Physical Performance Indicators of Sugar Factories in Kolhapur District", *Co-operative Sugar*, Vol.37, No.3, November.
2. Channappa M. Javalagi and Umesh M. Bhushi (2014). "Factor Analysis Approach to Investigate Productivity in Indian Sugar Industries: A Financial Ratios Approach", *Journal of Business Management & Social Sciences Research*, Vol.3, No.3, March.
3. Gopal Lallanji (1964). "Sugar-making in Ancient India", *Journal of Economic and Social History of the Orient*, Vol.VII, No.13.
4. Hinge, V.N, Pawar, J.R and Narwadkar D.S (1989). "Production Performance of Co-operative Sugar Units in Maharashtra", *Indian Journal of Agricultural Economics*, Vol.XIV, No.3.
5. Kuchhadiya, D.B, Shiyani, B.L and Parmar G.D (1988). "An Economic Analysis of Sugarcane", *Indian Journal of Agricultural Economics*, Vol.39, No.9.
6. Nadoni, et al. (2013). "Performance Appraisal of Co-operative and Private Sugar Factory in Belgaum District: An Economic Analysis", *Global Journal of Management and Business Studies*, Vol.3, No.10.
7. Pratapsinh Chauhan, et al. (2008), "Analysis of Performance Appraisal by Collective Action in Indian Sugar Industry", *The Journal of Management Research*, Vol.1, No.1.
8. Singh, S.P (2006). "Efficiency Measurement of Sugar Mills in Uttar Pradesh", *The ICAI Journal of Industrial Economics*, Vol. 3, No. 3.
9. Singh, S.P (2006). "Technical and Scale Efficiencies in the Indian Sugar Mills: An Inter-State Comparison", *Asian Economic Review*, Vol. 48, No. 1.
10. Singh, S.P (2007). "Performance of Sugar Mills in Uttar Pradesh by Ownership, Size and Location", *Prajnan*, Vol. 35, No. 4.