



Challenge faced by Sugar Industry in Bihar

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Abstract

Sugarcane is a traditional and relatively more remunerative crop amongst all the non-food and food grains cultivated in the country. Sugar is an important commodity for human consumption as well as trade. The main purpose of the paper is to analyse the difficulty faced by the Bihar Sugar Industries in Bihar. The data has been collected from secondary sources. For the evaluation of the objective of the study, the secondary data will be collected from various sources such as books, journals, reports, websites, etc. The study has found that Bihar's sugar industry is suffering from various types of problems which lead to at present, there are 28 sugar mills of which 18 are closed and only 9 are operating. To remove this problem government has introduced various types of schemes which are not enough to control the sickness of the sugar industry in Bihar. To wipe out the problem completely government should adopt more strong policy measures.

Keywords: Sugarcane, Sugar Industry

INTRODUCTION

The proportion of Indian sugar to global sugar production was close to 14%. By utilising rural resources, creating employment and higher incomes, as well as providing transportation and communication infrastructure, the sugar business in India has served as a focal point for socioeconomic development in rural areas. For many additional purposes, including the production of paper, feed, and most significantly biofuels, sugarcane is in high demand. In typical sugar mills, 100 tonnes of sugarcane yield 10 tonnes of sugar, 4 tonnes of molasses from which ethanol is produced, 3 tonnes of press mud which is converted into bio-fertilizer, and 30 tonnes of bagasse which is used for co-generation of power to yield 1, 500KW of electricity and paper manufacturing. Furthermore, approximately 30 tonnes of cane tops and leaves are often left in the field, which adds to the crop's economic value through recycling (More, 2018).

Bihar's primary industrial crop is sugarcane. In the years 1939-40. Bihar, like Uttar Pradesh, was a major sugar producer. The first sugar mill was founded in 1904 at Marhowrah, Bihar. From 1904 until 1932, Bihar had 130 factories. It is worth noting that during the early years of the twentieth century. Bihar not only accounts for up to 40% of the country's sugar production. On April 1, 1905, the viceroy and Governor-General of India Lord Curzon lay the foundation stone of the first agricultural Research Institute in Pusa, Bihar. In 1911, the institute was renamed the Imperial Institute of Agricultural Research (Singh et al, 2021).

The sugar industry is Bihar's most important Agro-based industry, affecting the rural livelihoods of millions of farmers as well as a large number of workers who are either directly or indirectly employed in sugar mills or various ancillary activities such as transportation, trade, machinery servicing, and agricultural input supply. Sugarcane would be grown on 2.41 lakh hectares of gross cropped area in Bihar in 2021-22. In the fiscal year 2021-22, 473.1 lakh quintals of sugarcane were crushed in nine operating sugar mills across Bihar. Total sugar production was 45.6 lakh quintals, with a 9.6% recovery rate. The volume of sugarcane crushed has grown by 2.8% from 460.2 lakh quintals in 2020-21 to 473.1 lakh quintals in 2021-22 (Economic Survey, 2021-22). Despite this, the sugar industry in recent India has been plagued by several issues that have impeded production. This study report attempts to identify the problem with the sugar Industry.

LITERATURE REVIEW

An individual's or group's socioeconomic standing is determined by their social rank or class. It is often assessed based on factors such as education, wealth, and occupation. Sugarcane has contributed significantly to poverty alleviation and social development. Sugarcane prices have an impact on socio-economic growth (Bharati et al., 2018). In comparison to international standards, India's sugar recovery rate is low. Once harvested, a fully ripe crop rapidly loses its sugar content. Such losses rise during storage, transportation, and processing, particularly in units that do not maintain sufficient hygiene levels (Chandra, 2018). Sugar Industries manufactures a variety of organic products that can improve soil physical, chemical, and biological qualities, as well as crop productivity. Products are organic and high in nutrients absorbed by the sugarcane crop. This feature enables these organic wastes to be used in agriculture while posing no environmental risk (Raza et al., 2021). Sugarcane is a long-term, irrigated crop. Sugar mill harvest seasons in India are 12-18 months, 13-14 months in Iran, 16 months in Mauritius, 13-19 months in Jamaica, 15 months in Queensland (Australia), and 20-24 months in Hawaii. Sugarcane requires 1500 to 2500 mm of water per season, depending on the climate (Shukla et al., 2017). Sugarcane is a globally significant crop, accounting for nearly 80% of global sugar consumption. This sugar mill, among other things, provides food, fodder, and bio-energy, and it contributes considerably to the economies of 130 countries and territories located in the tropics and subtropics around the world (Senties-Herrera and Trejo-Tellez, 2017).

OBJECTIVE OF THE STUDY

To investigate the issue confronting Bihar's sugar industry

METHODOLOGY

The data has been obtained from secondary sources. Secondary data will be gathered from numerous sources such as books, journals, papers, websites, and so on to evaluate the study's purpose.

PROBLEM FACED BY BIHAR'S SUGAR INDUSTRY

- Sugar Recovery:** The most essential component of the industry and a problem for scientists and technicians is sugar recovery from sugarcane. Sugar recovery is primarily determined by sugarcane variety, crop conditions at harvest, weather conditions prevalent throughout crop growth, and the length of the crushing season. Sugar recovery rates in Bihar are low due to poor seed quality or the considerable distance between

the mill and the farmers. Because of the state's aging sugar plants, Bihar has the greatest variation in sugar recoveries in India.

2. **Cost of production:** Sugar production costs more than other major countries' exports due to high cane prices. The government establishes a Minimum Cane Price (FRP) that is artificially high to protect farmers' incomes. Cane provides farmers with the highest yields of any crop, resulting in the overproduction of sucrose in India (Zancaner, 2022). The cost of producing sugar is determined by the rate of sugar recovery and the length of the crushing season. The cost of producing sugar rises in inverse proportion to the length of the crushing season.
3. **Economic Size:** In India, the minimum economic size is 2500 tonnes of crushed cane per day. This is significantly smaller than the minimum economic size required in other countries. The economics of scale suffer greatly as a result of the minimal size. Furthermore, because of the minimum economic scale, efficient use of by-products is impossible.
4. **Natural Calamities:** Flood damage the sugarcane crop and it is impacted owing to excessive water increasing the weight of the cane but not reducing the sugar content in the cane. The main reason for the decrease in recovery rate was the surplus water caused by severe floods. As a result, the sugarcane crop absorbed an excessive amount of water, lowering the sugar content and increasing the weight of the crop. The crushed sugarcane is more or less the same, but the sugar production has fallen due to a decline in the recovery %.
5. **By-product:** The complete utilisation of byproducts, particularly bagasse, and molasses. Bagasse was once utilised as a fuel. At the moment, limited amounts of paper and sugar mills are produced to generate paper and paper boards, packaging paper, and so on.
6. **Government Control:** Sugar is a necessary commodity, and the government regulates sugarcane prices, sugarcane procurement, sugar production, and sugar mill sales in domestic and foreign markets.
7. **Locational Pattern:** The location of the sugar industry is mostly determined by its closeness to sugarcane growing areas, as this is its basic material. The sugar industry began in UP and Bihar, which together accounted for almost 60% of sugar production in 1960. Analytical investigations on production costs highlighted the irrationality of the regional production pattern. Because the sucrose content of sugarcane starts to deteriorate shortly after the stalks have been cut, the mill must be placed close to the raw material sources.
8. **Financial Distress:** Bihar's sugar industry is in the middle of a severe financial crisis. Sugarcane price has been increasing over the year as the cost of production has been rising. Cane prices account for as much as 60% of the cost of producing sugar. This led that the cost of producing sugar has been increasing year after year. The scale of sugar is not raising adequately to meet increasing costs resulting in heavy losses to sugar units. Naturally, the arrears of sugarcane due to farmers are raising.
9. **Cane Price Arrears:** Price: Compared to food price volatility sugar prices tend to be more volatile with more extreme up and downs. Due to surplus sugar production, the price of sugar had been subdued in the domestic market, adversely affecting the liquidity of the sugar mills and their ability to pay the cane dues to the sugarcane farmers in time.
10. **Sugarcane production:** Sugarcane production fluctuation is inadequate irrigation facilities, lower sugarcane yield, and frequent drought

11. Productivity Sugarcane: Bihar has the lowest productivity amount of the major sugarcane-growing states.

The main Factor Behind the low productivity of sugarcane is varietal deterioration, biotic and biotic stress, the decline in soil productivity, low technology adoption, and climate vagaries.

12. Old machinery: In the North, most of the mills are old which accentuates the inefficiency of that area. The cooperative mill in the south with a new sugar mill involving high capital costs and high-interest charges, also could not show much profit. So, the profitability of the industry has been more than old industries.

13. Levy Sugar obligation: Under levy obligation, sugar mill is required to sell % of their output to the government at below-cost rates for supply to ration shop. A/c to the sugar mill association, they supply levy sugar at % of the cost of production, resulting in an annual industry loss of about Rs 2500-300 crore.

Graph1. Closed Sugar Industries in Bihar's District



Source: Department of Sugar Industries, Bihar

According to the graph above, there are a total of 6 sugar mills in West Champaran, comprising 4 private sugar mills that are operational and 2 sugar mills (1 Bihar State Sugar Corporation Limited (BSSC), 1 Bihar Industry Corporation (BIC) that is closed). East Champaran has three sugar mills: one private sugar mill and two public sugar mills (one BIC and one BSSC are defunct). Sitamarhi has one sugar mill, a 1pvt sugar mill that closed recently in 2020. There is one sugar mill in Muzaffarpur & Vaishali (2 BSSC is closed), There are two sugar mills in Samastipur, one of which is a private one, while the other is a closed BSSC plant. One sugar mill is located in Nawada (1 BSSC sugar mill is closed), while 1 BIC sugar mill is located in Saran. One (1BSC sugar mill closed) exists in Gaya. There is just one (1BSSC sugar mill is closed) in Purnia. There are two sugar mills in Madhubani (two BSSC sugar mills are closed), There is just one sugar mill in Darbhanga (1 BSSC is closed), and Two BSSCs

in Siwan are closed. There is only one sugar mill in Patna. There are a total of 4 sugar mills in Gopalganj, comprising 3 private sugar mills and 1 closed BSSC plant.

At present, there are 28 sugar mills of which 18 are closed and only 9 are operating (Bihar Sugar Industry Department)

GOVERNMENT INITIATIVE FOR THE SOLVING THE PROBLEM OF BIHAR'S SUGAR INDUSTRY

1. An expenditure of Rs. 14.11 crore was spent in 2016-17 from the sanctioned amount of Rs. 18.65 crore under the Mukhyamantri Sugarcane Development Policy.
2. The sugar mill promotion program received an approved sum of Rs. 81.84 crores in 2016-17.
3. The seed displacement rate in 2016-17 was 10.94%, compared to the aim of 13%.
4. The sugar recovery rate was 9.17%, compared to the aim of 10.50%.
5. Under the sugar mill promotion strategy, an expenditure of Rs. 62.53 crores was incurred in 2017-18, out of an authorised sum of Rs. 78.00 crores.
6. For the fiscal year 2018-19, Rs. 8.68 crore was spent under the Chief Minister's Sugarcane Development Programme, compared to the budgeted sum of Rs. 26.21 crore.
7. A budget of Rs.58.77 crore has been allocated for the sugar mill incentive plan in 2018-19. So far, a total of Rs. 22.52 crore has been spent against the permitted total of Rs. 46.69 crore.
8. In the seed production and distribution sector in 2018-19, 4.21 lakh quintals were accomplished against the aim of 11.7 lakh quintals of seed production and distribution, and 4.97% of seed displacement was obtained against the target of 13.82%. Sugarcane productivity is 182.97 lakhs mega tonne per hectare. Sugar recovery has been accomplished at 10.37%, compared to the aim of 11%.

Conclusion

The sugar Industry is one of the most important agro-based industries in Bihar which employ millions of farmers and workers. In Bihar's economy, sugar industries occupied a vital position. It suitable environment and climate for producing sugarcane and the development of the sugar Industry. Because sugarcane is a water-guzzling crop that needs a huge amount of water for its cultivation. The study has found that Bihar's sugar industry is suffering from various types of problems which lead to at present, there are 28 sugar mills of which 18 are closed and only 9 are operating. To remove this problem government has introduced various types of schemes which are not enough to control the sickness of the sugar industry in Bihar. To wipe out the problem completely government should adopt more strong policy measures.

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