



Impact of COVID-19 on sugarcane production and sugar industry in India

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Abstract

India is an agricultural country that has developed into a major producer of sugarcane and sugar. Sugar is one of the most important agro-based industries, employing over 50 million sugarcane producers and 5 lakh workers in sugar mills directly or indirectly. One of India's most important exports is sugar. Although the sugar industry contributes considerably to the national economy, it faces several challenges as a result of the corona virus. Sugarcane producers, sugar industries, stakeholders, employees, and their integrated businesses are all affected by the most recent pandemic new corona virus (Covid-19), which is affecting sugarcane producers, sugar industries, stakeholders, employees, and their integrated businesses not only in India but around the world. The entire value chain of the Indian sugar industries is affected by major spillover effects in the national economy, including cane production, sugar, molasses, and ethanol. As a result, the focus of this study is on the impact of covid-19 sugarcane harvesting issues, sugarcane marketing and crushing, new concerns in the sugar sector as a result of covid-19, and the impact on sugar demand in the domestic and international markets.

Keywords: COVID-19, national economy, sugar export, sugar industry, sugarcane production

Introduction

India, Thailand, China, and Pakistan are the major sugarcane producing countries in Southern Asia with a wide range of farm types ranging from smallholders to enormous plantations. Sugarcane is currently in the growing stage. The COVID-19 virus has wreaked havoc in India (Bonsucro, 2020) ^[2]. Due to all of the repercussions of COVID -19 and subsequent lockdowns, doubling the farmer's income initiative initiated and managed by the federal and state governments would almost probably be negatively impacted. Various issues, such as an unjustified price, its severity, unseasonal rainfall, and distribution, are already wreaking havoc on agricultural activities, affecting sowing, normal crop growth, disease and insect spectrum, quantitative and qualitative yields, and finally farmer remuneration (Khushboo Sheth, 2017). Farmers across India have been stung by a drop in wholesale pricing of fruits and vegetables as a result of an ongoing lockdown to prevent the spread of the corona virus, but outstanding payments to sugarcane growers have emerged as an additional source of pain for rural households. Sugar sales are down due to a drop in institutional demand from confectioners and manufacturers of a wide range of items such as ice cream, carbonated beverages, and chocolates. Furthermore, oil corporations are acquiring lesser volumes of ethanol, a sugar by-product, affecting sugar mill financial flows (Sayantan Bera, 2020) ^[12]. Due to restrictions on social meetings and activities, the current COVID-19 pandemic is projected to impose pressure on sugar consumption patterns. The industry is also facing reduced off-take from beverage and other FMCG companies amid the lockdown. This has even led fall in domestic & international sugar prices recently (Bureau 2020) ^[3]. The lockdown and the related challenges may adversely affect the sugarcane planting and field maintenance activities to a certain extent. Even though there is a prediction for an overall normal monsoon, a below-normal rainfall during June and an extent dry spell in July

that is being foreseen might add to the difficulties faced during the initial stages of the crop. Thus, the present is a possibility that the production of sugarcane will face a marginal decline during 2020-2021 but the overall prediction suggests that the sugarcane production will be more than that in the current year. The Indian Council of Agricultural Research (ICAR) has also issued an advisory for harvesting and threshing of Rabi crops and post-harvest, storage, and marketing of produce in the wake of COVID-19 threat, including sugarcane. This should also aid the stakeholders overcome the adverse situation, to a great extent.

Review of Literatures

S. Solomon *et al.*, (2020) ^[14] the impact of COVID-19 on the Indian sugar sector was the focus of this paper. This author emphasized the threat posed by the developing pandemic new coronavirus COVID-19, which is affecting sugar sector players and their linked industries not only in India but throughout the world. Sugarcane harvesting, sugar, molasses, ethanol, and their subsequent marketing and export are all affected by the coronavirus. The sugar industry is at a crossroads now as a result of the ongoing COVID-19 crisis, and micro-level planning for recognizing the sector's current and future developmental needs is critical. Santosh Gupta, (2020) ^[13] Assessment of the impact of Covid-19 on sugarcane growers and the sugar industry. This report was created through discussions with farmers, traders, cold storage owners, and other sugarcane value chain players, as well as a review of secondary literature. The government of India has prolonged the countrywide lockdown till May 15th in the fight against the Coronavirus pandemic. Despite the fact that sugar has been considered an important commodity and is exempt from the lockdown's limitations, institutional use has declined, as has domestic production, sales, and exports.

Objective of the Study

The objective of this paper is to view the impact of covid-19 on sugarcane harvesting problems, marketing and crushing of sugarcane, emerging challenges in sugar industry due to covid-19 and impact on-demand of sugar in domestic and export market.

Statement of The Problems

Majority of sugarcane farmers are small and medium level. They have limited resources and connectivity. The covid-19 impact there is no certainty about the lockdowns and closure of the sugarcane market and sugar industry. Sugarcane farmers a facing number of problems such as; Transportation, unavailable of inputs, lack of labour, and marketing problems. In this case, sugarcane farmers are take risk of harvesting sugarcane, so affecting the sugar industry.

Impact of Covid-19 on Agricultural Sector in India

According to "Grant Thornton," the COVID-19 issue and subsequent lockout have had a negative impact on India's agricultural sector's whole value chain. Agriculture is an

important part of India's economy and prosperity. The food sector meets the entire country of India's consumption needs, while also being surrounded by the world's top agricultural exporters of agricultural products. In recent years, the agriculture sector has faced numerous hurdles, but none have been as severe as the internal and international travel restrictions imposed during India's Covid-19 lockdown. When India's nationwide COVID 19 lockdown is announced on 25th March 2020, the knee-jerk reaction is a mass exodus of migrant labour back to rural hometowns, as workers moved to wait out the lockdown while at home for income. India is sugarcane harvesting is a process which usually starts in mid-April, is thrown completely of balance, resulting in major liquidity issues and so on effect Indian agriculture (agribusinessglobal, 2020) ^[4].

Sugarcane Seasonality in India

Sugarcane is an annual crop which takes around 12 to 18 months for maturity depending upon the variety and sowing time (Bureau, 2020) ^[3].

Table 1

S. No	Major sugarcane growing area	Planting months	Harvesting season
1	North India some parts	October to November	November to May
2	Tamil Nadu, Andhra Pradesh, Maharashtra, and Karnataka	December to February	October to may
3	Bihar	January to February	October to April
4	Uttar Pradesh	February to March	November to May
5	Haryana and Punjab	March	November to May
6	Maharashtra and parts of southern states	July	October to April

When India's statewide COVID 19 lockdown is revealed on March 25, 2020, the knee-jerk reaction is a huge exodus of migrant cane human labourers returning to rural hometowns to wait out the lockdown. The harvesting process, which generally begins in mid-April, was thrown entirely off-kilter, causing serious liquidity problems (Santosh Gupta, 2020) ^[13].

Impact of COVID-19 on Sugarcane Harvesting and Crushing

In Covid 19, sugarcane cultivators suffered crop delays and sugar supply concerns. India is facing a probable sugarcane harvest delay, jeopardizing global sugar supply, since millions of migrant labourers needed for the harvest may be afraid to travel due to corona virus infection, which will disrupt the sugar business across the country. When other major producers are winding down cane harvesting activities, India's sugarcane harvest begins in October. The country's sugar sector, on the other hand, is not mechanized, relying on migrant workers to cut cane across the country. However, with 3.7 million corona virus infections, India is concerned that the sugarcane harvest could serve as a vector for more infections (Reuters, 2020) ^[11].

The impact of lockdown due to COVID-19 has led to challenges in sugarcane harvesting and sugar mill the largest producing states. Sugarcane is predominantly harvesting manually, labour requirement during harvesting period's peaks. The last phase of harvesting in UP was the one that got the most affected sugar sector. The process of milling though was affected both on account of less quantum of the sugar crop harvested and shortages of measurement adequate labour to carry out milling functions. The lower

availability of sugarcane is forcing the mills to operate at less than 100% capacity. Often during the cane harvest season, sugar mills operate at 125-130%. The sugarcane industry is estimating a loss of about 2-3 million tons due to problems related to harvesting during the lockdown (Bureau, 2020) ^[3]. Due to a labour shortage, farmers were unable to harvest sugarcane on time. The majority of the farmers have received payment for their sugarcane, but one-third has not. During the shutdown, the mills' already-existing difficulties became far worse. During the shutdown, farmers received no "extra" support from the mill. The majority of them discovered no changes in mill operations. During the lockdown, however, ordinary issues were exacerbated. Payment delays, long wait times, and intermittent mill operations were all prevalent problems. Farmers are unconcerned about matters such as keeping social distance and wearing masks. There was no sanitization in the mill's common spaces.

Significance of Sugar Industry in India

In India, the sugar industry is a multibillion-dollar sector. In India's most recent crushing season, which lasted from October to April, 525 mills produced more than 30 million tonnes of sugar (Wikipedia, 2020) ^[16].

Multiple Linkages for the Sugar Industry

Sugar is a labor-intensive sector, from sugarcane cultivation to sugar manufacture, alcohol production, and all the way to sugarcane harvesting. It is the primary source of employment in several districts across Uttar Pradesh, Maharashtra, Tamil Nadu, Karnataka, and several other states (Drishti, 2019) ^[5].

Sugar Sector in Sources of Employment

In India, the sugar industry provides a living for 50 million farmers and their families. It employs around 5 lakh skilled people directly, as well as semi-skilled labourers in sugar mills and related sectors throughout the country (Drishti, 2019) ^[5].

Sugar Industry Byproducts

The many byproducts of the sugar industry contribute to India's economic prosperity and help to foster a variety of affiliated businesses. Sugarcane is a multi-product crop that generates supplementary products while also providing job opportunities (Drishti, 2019) ^[5].

For Livestock Feeding Uses

Molasses from sugar cane is utilized for alcohol manufacture and cattle feeding since it are abundant in nutrients (Drishti, 2019) ^[5].

Bio-Fuel

The great bulk of ethanol generated in India comes from sugarcane molasses, a by-product of sugar production. Ethanol-blend fuel can help reduce crude oil imports, resulting in greater job opportunities (Drishti, 2019) ^[5].

India's Sugarcane Export and Global Sugar Price

According to ISMA, Platt's Analytics predicts total sugar consumption of 25.5 million MT in 2019-20, implying that the country would produce a surplus of around 1 million MT of sugar to add to the massive ending stocks of 15 million MT at the end of September. If we anticipate that the new production average will be about 31 million-32 million MT per year under typical weather circumstances, we will continue to add roughly 5 million MT of exportable excess after 2020. As sugar consumption rises, this surplus will be shared, but India is likely to be a net exporter in the coming years. However, because Indian manufacturing costs are substantially above current market rates, exporters would require government assistance to be ready for action on the international market and to actually manage to export the predicted excess. Since mid-January 2020, worldwide sugar prices have been hovering around 14.5 percent per pound. However, as a result of the recent impact of lowering crude oil prices, the expectation of Brazil increasing sugar supplies, and the COVID-19 outbreak, global prices have plummeted. In March 2020, raw sugar prices on the worldwide market fell by 20% to 11.8 percent a pound, down from 14.8 percent in February. Because of the prolonged pandemic and low crude prices, CARE believes it is doubtful that global sugar prices would return to their January or February 2020 levels. This could put downward pressure on India's exports. It may be remembered that the government had previously introduced the Minimum indicative export quota (MIEQ) scheme to stimulate sugar exports and minimize the country's surplus. In SS19-20, the MIEQ permitted the sugar sector to export 6 million tonnes of duty-free sugar. Sugar export seemed promising for Indian producers as global sugar prices rose and the government increased its incentive. Sugar mills had collectively contracted for roughly 3.5 million tonnes of the allowed quota, according to industry data, and carried around 2.8 million tonnes out of their factories for export. India's commercial ports have declared major as results of the lockout, and government ports are acting at reduced

capacity thanks to a labour shortage; all of this has brought current sugar exports to a halt. Exports are expected to remain at 4 million tonnes, down from the target of 6 million tonnes, in step with CARE Rating (Bureau, 2020) ^[3]. Another factor to contemplate is that the discussion on raising yields within the south, which could take total sugar production up another notch. However, on one-panel local millers agreed with the talks and required collaboration between cane researchers, millers and farmers were at a preliminary stage and it's likely to require another three to four years to realize similar leads to terms of upper yields as in northern states.

Impact of COVID-19 on Demand of Sugar in Domestic and Export Market

The COVID-19 problem has the most obvious impact on sugar production. Institutional consumption contributes for 65 percent of India's total domestic sugar sales, estimated at 26 million tonnes per year. Sugar consumption in the United States may increase by 5-8 percent as a result of the pandemic (1-1.5 million tons). Weddings and other social events that are either postponed or cancelled are most likely to happen in April, May, and June. Sugar intake in the form of Indian sweets and confectioneries is at an all-time high during these events. Traditional candy stores and bakeries have also seen a decrease in demand. According to statistics, sugar and sugar mills have had a bumper crop in the last two years, setting a new high from previous years. The season for 2019-20 began in October 2019 with a balance of 14.58 million tonnes of sugar with sugar mills, and when you add in the expected output of 26.5 million tonnes for the current season 2019-20, you have a total accessibility of roughly 40.58 million tonnes. Finally, the accessibility of consumption, including exports, is expected to be around 29 million tonnes. (Bureau, 2020) ^[3].

Emerging Challenges of Sugarcane Farming and Sugar Industry Thanks to COVID-19

Sugarcane planting and harvesting took place on Annunciation Day, 2020, to combat the spread of the COVID-19 pandemic, which coincided with sugarcane planting, production, and harvesting stages in various production hubs across the country. Experts in the sugar industry estimate that over 80% of the harvesting was completed prior to the lockdown, with the remainder taking place during it. India's recent lockdown measures have had a significant impact on the sugarcane business. On the other side, farmers are disadvantaged by a lack of human labour as well as access to machinery and agricultural supplies. Sugar mills have been affected by the COVID 19 lockdown as a result of lower sugar demand in both domestic and foreign markets, as well as a lack of crushing and international markets along without crushing and distribution operation so affect sugarcane farmers and sugar sector employees (Bureau, 2020) ^[3].

Conclusion

Sugarcane production and export are being hampered by low demand from export destinations and inefficient port operations in India. India's private ports have been labeled a catastrophe as a result of the Covid-19 lockout, while government ports are also working at reduced capacity due to constrained customs procedures. Sugarcane prices have been set by the government to help farmers make a living.

The current price is far higher than that of other government-subsidized crops. This policy could be part of a larger social goal that goes beyond the logic of sugar markets. Furthermore, when combined with regulated bare minimum local sugar prices that are far above international levels, the sugar producing level remains high.

Suggestion

Sugarcane and sugar production costs in India are among the lowest in the world. As a result, in the Covid-19 situation, the Central Government has provided more additional help to sugarcane producers and the sugar business.

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