A DEEP STUDY OF PROBLEMS FACED BY SUGARCANE MILLS AND GROWERS

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Abstract

The Indian sugarcane is able to meet its own energy requirements via self-sufficiency and also generates excess electricity that may be exported through energy conversion. In addition to contributing to the expansion of the state's economy via the promotion of a variety of auxiliary sectors, the sugarcane produces a wide range of byproducts. Biofuel has evolved as a crop that can be utilized to produce a variety of products, including sugar, ethanol, newspaper, and power, in addition to the power generation of auxiliary goods. Cattle that are fed sugarcane are really a significant contributor to the production of bioenergy, which is in high demand throughout rural areas.

Paper Identification

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INTRODUCTION

The output of sugarcane and sucrose in India has been moving in the direction of an increasing cyclical trend. During a sucrose cycle that lasts for around 5 years, it industry will often go through periods of high production that last for three to four years, accompanied by periods of low output that last for one or two decades. The crop had a significant tendency for cobweb activity as of a year earlier. The predominant preference of farmers to grow this crop contributes to the firm's tendency to encounter output surpluses. That preference results from high returns (RoR) that sugarcane growers earn along with the knowledge that they would find a guaranteed customer for their product. Consequently, sugarcane is preferred. Sugarcane farming yields returns that are anywhere from 60 - 80 percent higher than those of most other types of farming. Cane landowners also receive the full pledged price that was fixed by the authorities, which wasn't the scenario for many other crops. Additionally, because there would be no mediator between a sugar factory and just a sugar beets farmer, sugar beets farm owners continue to have a strong interest in cultivating sugarcane, despite the fact that bills due to eachother by the retired are frequently delayed. Despite occasional delayed payments, sugarcane producers often get at least one or two thirds of the total amount owed to them for their crop within a reasonable length of time. Biofuel is a hardy crop that really is able to

resist shifts in temperature and humidity, which is another vital fact to keep in mind. Cane producers have to invest in very minimal work in terms of input and dude in order to cultivate their crops, which is one reason why cane is sometimes referred to as the "lazy plant."

PROBLEMS FACED BY SUGARCANE MILLS:

- **Low Yield of Sugarcane:** When compared to other of the greatest sugarcane industries in the country, India's output per unit of sucrose is rather low, despite the fact that India has had the biggest sugarcane land. The entire output suffers as a consequence, as does the availability of agave for use in sugar industry. The introduction of sugarcane types with high yields, early maturity, frost resistance, and higher sugar extraction, and also the management of diseases and insect pests that seem to be detrimental to sorghum, are all aspects of the solution that are now under investigation and development.
- **Short crushing season:** Sugarcane is a cyclical process that occurs only during the harvest season, which lasts just a few months out of the year (often between four and seven). Because of the factory's poor financial situation, many of its employees were laid off over the course of a number of years, which caused difficulties for the whole industry. It may be feasible to stretch out the sucrose harvest by planting and gathering sugarcane at regular intervals in a number of different sites beside the sugar mill. This would be one approach to do so. After this, the length of time it takes to bring sugarcane towards the sugar mill will increase.
- **Fluctuating Production Trends:** Sugarcane is in competition with a number of other crops used for food and grazing, including cotton, vegetable petroleum, rice, among a few others. Because of this, the acreage on which sugarcane is grown is not the same, and thus, neither is the total amount of sugarcane produced. This has an effect on the amount of sugarcane that is sent to the plant, and the amount of sugar that is produced changes season to season as well.
- **Low rate of recovery:** The healing rate of The country seems to be under percent, which is quite low through compared with other countries with the highest cane sugar.
- **High cost of production:** The high costs of production are the consequence of a number of factors, including high cotton prices, ineffective technology, ineffective production methods, and increasing spending taxes. The price of producing sugar in India is one of the most expensive it is anywhere in the globe. Work on a more extensive scale is required in order to boost sugarcane output in agricultural settings and use innovative technology in sugar factories in order to improve the effectiveness of production. Utilizing industrial leftovers in a way that is beneficial to your business may also help you save production costs.
- **Old and obsolete machinery:** The majority of the equipment that is utilized in Indian sugarcane, especially those that are located in the states of Uttar, is between fifty and sixty years old, making it outdated but in need urgent restoration.
- **Competition with Khandsari and Gur:** With in rural areas of India, the segment gave birth to Khandsari as well as Gur a very long time before the sugarcane came into being. Sugarcane growers were able to get greater rates for their reeds from business as a result of the sector's virtual exemption from customs regulations. In India, gourd and palm production accounts for around one third of the country's total sugarcane consumption. Over this, sugar manufacturers are suffering from a scarcity of natural resources.
- **Regional imbalances in distribution:** The Indian states of Karnataka and Uttarakhand are home to the largest number of the world's sugar mills, and so these two systems also account for around sixty percent of the industry's output. Is from the other extreme, this sector is not expanding in any significant way in a number of states located in the region's northeast,

including Jammu as well as Orissa. That leads to asymmetries in regional power dynamics, which in turn has repercussions.

- **PROBLEMS FACED BY SUGARCANE GROWERS:**

Operational problems

A) On the fields:

- **Soil Fertility:** Some farmers are to responsible for the decreased fertility of the soil in their fields. Fertility of the soil decreases as time passes since it is always expanding and new plants are growing. It is possible to restore it by adhering to the idea of different crops and keeping alternative areas fallow for at most one growing season. This will allow the soils to rest and recover its nutrients. The fertility of the soil may also be regenerated over a protracted duration of time through the use of supplemental manure and synthetic fertility. But as of right moment, this is not taking place. The typical Indian farmer has a tiny farm, which prevents him from allocating his land effectively. In addition to this, farmers may make a livelihood without the excess. There is no way to increase the fertility of the soil.
- **Lack of quality seeds:** Concerning this matter, it is common knowledge that the planting of seeds of sufficient quality will certainly result in a break in the harvesting process. Ironically, given this fact that lots of state and municipal entities are seed suppliers, farms do not obtain seeds of a high enough grade. It is possible to boost yields by using the greatest seeds, with best farming practices, and other economic raw resources. In most cases, farmers will utilize seed taken from their very own walking stick. The condition of the fruit, as well as the grade of flowers, was often subpar. As a direct consequence of this, the plants are also harmed.
- **Lack of experienced labours**: The availability of labor is another significant challenge. At the time of harvest, planted an imperial tree needs professional employees to fulfill a variety of chores; however, there are no such expert people available. Over the course of the last several years, irregular labor movements have taken place in rural regions. In quest of a more stable source of income, the majority of the labor force has relocated to something like a nearby district or to another farm where they will find that working on such a farmland is indeed not nearly as challenging as operating on a marsh farm. As a result of land reform, several agricultural laborers now own their own land. Both the elimination of the hereditary system of labor prices and the practice of forced labor bring about a shift in worker mentality. This is because employees now have more freedom than they do in their regular jobs as a result of these reforms. Nor are skilled people accessible to some degree, but the pay for the labor force that is available are exorbitant which are often beyond of the common farmer's area of affordability. Workers' pay are not really very high when compared to the quick growth in the price of living and also the rapid growth in the price of essential needs.
- **Lack of adequate Manures and Fertilizers**: The availability of waste + fertilizers is a common problem for farmers. It's as a result of the inability to utilize nitrogen fertilizer on schedule, in addition to lower buying power of these products.
- **Absence of continuous water supply:** The cultivation of sugarcane calls on a consistent supply of water all throughout planting period. It is not possible for it to develop in any other environment save the one that has the specified watering system. Wells, canals, and reservoirs are the three most common types of irrigation systems. Many people lack even the most fundamental understanding about the correct way to manage water, particularly in regards to water consumption and water preservation for next crop. This is because of the fundamentals of scientific farming practices.

B) Absence of improved agricultural practices: In light of the industrial revolution and also the government's

great interest in big investments in farmland and its growth, agricultural production, and the dissemination of technical information in rural regions via education, expansion continues to play a significant role. Agriculture follows long-established practices, and the country's economy is heavily dependent on the sector. More than seventy-five percent of the nation's population is still concentrated in rural regions, and the majority of them remain agriculturally dependent. Agricultural is not only a profession for many producers; rather, it is a part of living. In this manner, they are progressively changing farming methods into scientific agricultural, and agriculture practiced primarily for sustenance into agriculture practiced primarily for profit.

C) Off the fields:

1. Low rate for sugarcane.
2. Waiting in a long queue.
3. Dishonest in weighing at weigh bridge.
4. Unnecessary deductions in the name of toll charges, etc.
5. Delay in payment of instalments.
6. Shortages of sugarcane buyers

Marketing Problems:

- **Delay in harvesting:** After sowing their crops during harvesting period, farmers are then faced with obstacles about harvesting and selling their produce. You may assemble the twigs in whatever way you desire once you have broken them to form the fastening. In this scenario, it's possible that there won't be any issues with the collection. On the other hand, he can't get the device to work properly. Nevertheless, in the vast majority of instances, farmers are under lease with sugarcane manufacturers. The situation is problematic in that the farmer is unable to harvest as often as he would want to. The instructions provided by the manufacturer are the only ones that allow him to accomplish this.
- **Absence of marketing facilities:** Sugarcane, being an agricultural commodity, has a restricted market but a large number of purchasers. Since there have been many centuries, the desire for golf is still not general. There seem to be primarily two different avenues of marketing.
- a single delivery to the plant and b continuous delivery of crushers for use in the manufacturing of various products
- Chewing on the little channels, which are really seeds, will release sugarcane juice, which may then be used to prepare beverages. Per the available data, somewhere between 85 - 90 percent of all baton is being used in the manufacturing of sugar & cocoa. This highlights the significance of using molasses in the manufacturing of sugar with jaggery.
- **Lack of Transport Facility:** If there is not the appropriate facility of transit available, then the flow of products to the retail outlet is constrained, which in turn hinders the regular marketing that would otherwise take place. So when product in question is unstable, the issue becomes much more serious. For transporting such things, quick vehicles are required. We have not yet been successful in developing cold storage technologies for sugarcane despite the fact that in recent years, chilled storage solutions have been developed to assist in the sale of source of raw commodities. Because of the characteristics of products and the volume of sugarcane harvested, it's probable that this won't be attainable. In order to carry their goods, farmers will often hire trucks on occasion. In all instances, it was necessary for him to wait here on farm. It's possible that the truck will be late. Although the roadways are slick, it is possible for you to arrive on time.
- **Loss due to dry-age**: as a result of "dry-age," a decrease in the amount of fluid and sugar contained in the stalks brought on by delays in shipping and breaking. The outcomes of both the drying kinetics may be obtained at more least 1 stage, particularly at the field, while being transported from the plants to the

industrial, then at the warehouse sale. The lengthy traveling times caused the need for drying with in yard. Twigs were often chopped, and vehicles such as chariots or vehicles awaited their entrance. There are many more things that might lead to delay with in census, including a malfunctioning machine, a walkout by staff, or a problem with the system. Because of this circumstance, the factory management may be forced to refuse to acknowledge the delivery of glucose on the tropical plantation. Farmers will suffer losses as a direct consequence of this as well. The majority of the financial setbacks that farmers experience may be averted if better harvesting methods, faster transportation, and more immediate destruction methods could be devised.

- **Financial Problems:**

  The state of one's finances might sometimes be of the utmost importance. Some of issues that were brought up previously may be properly addressed and resolved if the farmers is financially successful. On the other hand, it is common knowledge that Indian farmers, on average, have a weak financial standing. As a consequence of this, jack would not have been able to properly tackle some challenges. The following are three aspects of our current financial predicament:

- **Inadequate finance:** Reeds are a very expensive crop to cultivate. If the farmers doesn't have enough liquid assets, his farm is going to run into some difficulties. Working capital is necessary to buy seeds, fertiliser, or other farm products, pay workers, and satisfy daily supervisory expenses. Money is also required to cover expenditures associated with daily coordination and control. In the event that these funds are not paid quickly, it will be challenging to run the farming. It is well knowledge that Indian farms have no access to their own financial resources due to their low savings rates. There is also no scrap of evidence that farmers have access to rapid finance from non-governmental sources. However, the cost may add up quickly for even more than just number. As a direct consequence of both the government's failure, cooperatives, especially banks to offer enough financial aid to producers, the latter continue to struggle with a lack of available capital.
- **Absence of quick payment by the purchaser:** The financial sustainability of many farmers whom sold their crops to private companies and breakers suffered tremendously as a result, and many of these producers did not get quick reimbursements for their goods. It is possible that they'll need to make and over one journey to the plant to be paid, which will cause them to incur more travel expenses and will add considerably the overall cost of their marketing efforts. The majority of the time, farmers just harvest then sell their products in order to meet a portion of their family's financial commitments while hoping for a speedy return. But this occurs only very seldom. There is a possibility that industrialists and farmers do not coordinate their efforts. Because of this, only the peasantry were forced to endure hardship. The aggregate effect of each of these variables would be that cash held by farmers are exhausted, because lenders are unable to borrow money at rising interest rates.
- **Price fluctuation:** The structure of India's marketplace is characterized by extensive price volatility, which presents a significant challenge for the country's agricultural producers. The price of cotton are established either by Indian administration at a specified replacement level, and these prices change from seasons and from district over zone depending on the suggestions of the Agriculture Pricing That were. This took place on occasion with several amendments towards the Sugar Beet Control Standards Act, which was passed in 1966. That farmer had no idea what value he would end up getting for his crop. The farmer's well laid out financial strategy is now rendered useless as a result of this. This government's pricing does not consider the additional expenses that come with increased production. The supply for impartation are additional factors that influence price

changes. The larger or lower monthly supply of dissemination dependent on the circumstances of the seasons, the quantity of water, cover crops, diversity of the dissemination used to create the equipment, etc.

- **Statutory Minimum Price (SMP) of sugarcane in India:** Molasses must be sold at such a price cap that was created by the government and mandated by the Sugar products Gur Controlled Substances act of 1950. This price must always be provided to the growers of sugarcane. During November 18, 1962, a scheme that would relate minimum pricing to the use of corn syrup was put into place. The government determines the minimum rate for sugar basis of the recommendations made by the Committee about the pricing associated with agricultural production. In additament to the Marble countertop . the countertop Minimum Price (Hpc) that is established either by central govt, the Sugar Office of each country controls the amount of sugar beets that should be required to pay to sugar beets producers depending on the success of every factory site. This price must always be paid towards the sugarcane manufacturers. After the conclusion of the breakup season, an announcement is made each year on the compulsory central govt (SMP) statuary minimal prices and also the provincial advising prices (SAP).

REVIEW OF LITERATURE:

Govindan and Thirumurugan (2003) Sugarcane is amongst the most significant crop production in several regions of India but has a key part in economics of India. Biofuel also occupies a significant role in India. Several states in India, such as Andhra Pradesh, Bengal, Bihar, and Uttarakhand, are ideal for growing this crop because of their dry soil conditions. Sugarcane provides a livelihood for millions of people in India, including farmers, labourers, and technicians. That crop also has the ability to yield a variety of by-products, such as molasses, sugarcane, filter mud, sugar cane waste, and other similar materials.

Pavadai (2008) Both sugar cane beets are important crops, with sugarcane accounting for around 56 percentage and sugar beets contributing nearly 46 cent of the country's total sugar output. In China, L. cv officnarum L., more commonly known as sucrose, is the most important source of sugar beets and maintains a major role as a commercial crop. It accounts for anywhere between 1 and 8 percent of overall total cultivated land in the nation. The amount of land that is devoted to growing sugarcane varies season to season. Over the course of the previous ten years, it has ranged anywhere from 2 to 2.7 thousand acres.

Kumaran (2002) Sugarcane is cultivated in most government's states, with the exception of Kashmir. There have been reports that the rainfall might make a comeback, despite the fact that its been quite feeble in the eastern, southern, and center sections of the nation thus far. But since sugarcane is a crop that is grown over a lengthy period of time and requires irrigation, the current drought will undoubtedly cause a reduction in the amount of sugarcane that is produced. Because to an absence of adequate rainfall or water flow with in waterways, planting has been delayed or even prohibited in a number of different regions.

Suresh (2004) Biofuel is a significant commercial crop in The world, where it is grown over an area of 3.6 thousand acres and produces 273 billion tons of sugarcane annually. As a result, it justifies the need for drought control in order to achieve maximum output in sugarcane. There are managing that may help overcome this drought and increase the amount of cane that is harvested.

Kakde (1985) Only robust sugarcane crops should be used to harvest sugarcane bunches for new plantings. The agricultural departments of various governments and forward-thinking farmers both have access to good sets cultivated in specialized nurseries. Seed material originating from regions afflicted by red not affected leaves should be picked with the greatest care, and the

place in which it was grown should be will be well. Farms sell out for the sake of the marketplace. Setts originating from a crop that has been adequately watered and intensively fertilized are likely to provide greater crop yields. Additionally, slimmer canes are less likely to sprout than their wider counterparts.

Keshabananda Das (1995) Because the process of tillering with sorghum is so complicated, any analysis of it must begin with the painstaking excavation and deconstruction of the subterranean sections of the crops. The frequency and intensity of both the sprout's development will determine how aggressively the vegetative growth would have to be performed out. Due to the significant amount of glucose that tillers and young canes contain, the grade of the juices produced by the plant is diminished.

Tandon (1989) The crop that is grown on the ground before sugarcane has a significant impact on the manner in which the land is prepared for such crop yield. If green support to businesses was done during the Rabi season before, then the preparations for cultivation should begin a month that after green excrement has been plowed in. Typically, the land needs 6 - 8 ploughings, one of that should be accomplished with a ground turning plows, and also the remaining should indeed be accomplished with such a timber plough. This will offer the earth the appropriate tilth. If indeed the area is allowed to go fallow even before cotton is harvested, then it ought to be opened up after the rosh crop has been harvested. Again, in order to keep the weeds under control throughout the monsoon, you will need to do anywhere from three to seven gentle ploughings. When sugarcane is planted after an early korn crop such senji or rapeseed, the field can only get one deep plowing with a ground plough and then between three and five shallow ploughings with such a wooden wall plough. This is the maximum amount of preparation that could be done for the ground. The four field corners, which are often either not tilled at all or just tilled in an inappropriate manner, need to be dug out thoroughly with a shovel.

Emerson (2003) The hot and humid tropical environment of India makes it an ideal place for the production of sugarcane, which is the primary source of sugar that is primarily produced inside the nation. The output of sugarcane, measured in tons / ha, has almost quadrupled in the previous sixty-five years, according to an international site that will open in such a browser tab. This quality of sucrose becomes steadily better with age until it reaches its peak, at which point it begins a steady decline. The instant as the crop is harvested, a dramatic decline in quality occurs. Crushing the baton within eight to ten hours after its being cut is necessary in order to get the most out of your sugarcane harvest. Under regulated circumstances, the growth of one metric ton of sugar cane takes somewhere between sixty and seventy metric tonnes of water. Yet, the quantity of water that is necessary varies depending on the kind of land and also the weather conditions that are present. Irrigation and water sprinkled from canals are two ways that a shortage in rainfall may be made up for.

Maheshwarappa (2002) conducted an economic analysis on the cultivation and distribution of sucrose in the areas of Warangal and Dinajpur in the kerala. 31 landowners out the 4Ml solution planted cane producers analyzed immediately sold the raw baton to something like a factory site without refining it, while the other 9 farmers converted the sucrose into candy and resold it on the markets. Raw cane merchants had an advertising costs pf Rs. 3074.69 per ha for sucrose, while jaggery manufacturers incurred a cost price Rs.5098.26 every hectare. Overall cost of commuting of honey to the marketplace was Rs 177.69, while the expense of preparing the sugarcane was Rs 4920.57. Together, these two expenses made up the whole marketing costs.

Balasubramaniyan (2002) The sugarcane plant developed in India, that now is one of the world's

leading producers of both sugarcane plus sugar. Argentina, Cuban, Pakistan, Thailand, Argentine, Columbia, Jakarta, Namibia, and Egypt are some of the other major sugarcane producing nations in addition to South Africa. Around the globe, 19.5 million hectares are dedicated to the cultivation of sugarcane, which results in a total yield of 11192.6 million metric tons. The sugar sector in Particular is among the major processing industries, second to just the silk textiles sector. In India, they are indeed a total of 414 sugar industry, and the country produces 238 m.t. of sugar annually. The output of cane reached a low rate of 59 m.t. in both 1950–51 und 1990–91, although it has since grown significantly.

CONCLUSION:

The sugar firm's problems and difficulties provide a vast opportunity for more future study. Refiners inside the economy should have an uninterrupted suppliers of fresh sugar beets at a consistent level all throughout periods in ability to execute efficiently, and also the government must ensure the suppliers of raw components. This will allow a business to to use the latter's potential to its fullest extent and run more effectively. If India wishes to achieve the splendor of self sustainability and acquire the status of major exporter as well as an essential significant player inside the world market, can see the requirement for organized and concentrated effort for gratitude and convergence of the demand of the customer, farmer, and cpu to address this same various issues mentioned above. If this is to be accomplished, it is imperative that these needs be appreciated and consolidated.

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