



Production and marketing of Sugarcane in Karnataka- issues and challenges

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Abstract

Agriculture is the predominant sector of the Indian Economy. Indian agriculture sector occupies 18 per cent of India's Gross Domestic Product (GDP) and employs 50 per cent of the country's workforce. Sugar cane is a major commercial crop in India. It has contributed 1 per cent of the Gross Domestic Product in the Indian Economy. It is evident that there is a significant increase in production and productivity of sugar cane in India, and has occupied major exported crops at the global level. Despite the improvement in production and productivity of sugar cane in the country, it has faced several issues and challenges regarding production and marketing. Hence the intended study attempts to examine the trends in area, production, productivity, and issues related to the marketing of sugar cane in Karnataka. This study is based on secondary sources of data like volumes, journal articles, census reports, annual reports, and e-sources. It has been observed that area expansion has significantly contributed to increased production of sugarcane but productivity has remained stagnant. The cost of cultivation of sugarcane also witnessed an increasing trend and due to the much higher use of inputs, it was found to be higher in the state. The study revealed that the area, production, and productivity of Sugarcane increased significantly over the years. However the problems faced by the farmers high cost of cultivation, insufficient supply of inputs, financial problems, and lack of irrigation are the problems faced by the Sugarcane growers. Hence government should provide the necessary input services, financial support, and proper infrastructure facilities are the urgent need for the improvement of production and productivity of Sugarcane in Karnataka in the future.

Keywords: Production, marketing, sugarcane, issues, challenges

Introduction

Agriculture sector plays an immense role in the development of Indian Economy. It occupies 18 per cent of India's Gross Domestic Product (GDP) and employs 50 per cent of the country's workforce. In India, sugarcane is the most important commercial crop which is grown in over 2.57 per cent of its gross cropped area. Globally India is the second largest sugarcane producer after Brazil, accounting for about 25 per cent of the world's production. It has engaged around 7.5 per cent of the country's rural population in sugarcane farming and contributed to 10 per cent of the agricultural GDP in 2010-11 (Priyanka Upreti and Alka Singh 2017) [8].

Sugarcane is a popularly grown commercial crop all over the world including India. However, growing sugarcane is a challenging job. It requires greater care and management (Bala Murugan S., and Ponmalar K 2019) [4]. India accounts for about 25 per cent of the global sugar production and around 7.5 per cent of India's rural population has engaged in sugarcane farming. About 51 per cent of India's sugarcane production is produced in the states like Maharashtra, Karnataka, Tamil Nadu, and Andhra Pradesh and the remaining i.e., 49 per cent is from states such as Uttar Pradesh, Bihar, Uttarakhand, Punjab, and Haryana, despite the latter having 55 per cent of the total area under sugarcane. The sugarcane crop and its products contribute about 1.1 per cent to India's GDP. There is gradual improvements in the contribution of sugarcane to the national GDP has in the past two decades (Arun J.V and Prema Kumar 2022) [2]. Considering the above pertinent issues the intended study Production and Marketing of Sugarcane in Karnataka- Issues and Challenges is needed for the study.

Review of Literature

Few earlier studies have been reviewed to identify the research gap and get insight into the topic as under:

Ashokkumar G. Policepatil (2014) [3] studied the Problems of Sugarcane Cultivators in Gulbarga District of Karnataka and examined the non-availability of sufficient finance, insufficient water supply, seeds, additional labour, fertilizer, non-availability of technical guidance from concerned authorities and no stable demand for sugarcane. The study also revealed that the marketing problems faced by the sugarcane farmers such as the low rates for sugar cane, waiting in long queues Dishonest weighing at the weighbridge, unnecessary deductions in the name of toll, charges, and Shortages of sugarcane buyers (Ashokkumar G. Policepatil 2014) [3].

Kishore Kumar Das et.al. (2016) [7] in their study Problems And Prospects For Sugarcane Growers In India: An Empirical Study found that the problems of Sugar Cane Growers are Fertility of soil, lack of quality seed, lack of experienced labour, lack of adequate manure and fertilizer, the marketing problems are delay in harvesting, lack of transport facilities, absence of marketing facilities, the financial problems are Inadequate finance, absence of quick payment by the purchaser.

Dineshappa Singapur (2019) [6] in his study Problems and Prospects for Sugarcane Growers in India: A Sociological Study examined that, sugarcane farming plays a significant role in the development of Indian economy. The problem of the sugarcane grower is that there is no relation between the price of raw material i.e., sugar cane, and its finished good i.e., sugar and high cost of cultivation, the low price fixed

for the cane supply is not, however, and marketing and financial problems are also becoming very acute.

Arul Mithre Devi, A (2021) ^[1] in her study on a study on problems in the production and marketing of sugarcane by farmers in Gobichettipalayam Taluk observed that India is the second largest country in the world to cultivate sugarcane. But in India, the sugarcane cultivators faced problems from both marketing and cultivation point of view. From the cultivation point of view problems like financial problems, shortage of labour, high wage rate, scarcity of water, the severity of diseases, etc., and from the marketing point of view problems such as delay in harvesting, delay in payment, lack of transparency in weighted.

Arun J.V. and A. Premkumar A., (2022) ^[2] in their research paper on Sugarcane Growth in India: Problems and Prospects examined that Sugarcane is one of the most important cash crops in India. The results showed that there is a significant positive growth rate which is about 65 per cent of the production comes from two states, Uttar Pradesh and Maharashtra. Comparatively, states falling under tropical regions have higher yields per hectare than states of sub-tropical regions.

Statement of the Problem

In India, sugarcane growers face several sorts of problems both in the cultivation point of problems and marketing point of problems. Despite being the largest sugarcane producer country of India in the world, the sugarcane

growers faced problems like non-availability of labour, high wage rate, lack of proper transportation and high transportation costs, lack of storage and high storage cost, poor quality of fertilizers, lack of quality seeds, non-availability of fertile seeds and inadequate technical knowledge, price fluctuation, and high commission, etc.,

Objectives

1. To examine trends in area production, and productivity of sugarcane in Karnataka.
2. To analyze the problems faced by sugarcane growers in production and Marketing in the state.

Methodology

The intended study is based on secondary sources and it is descriptive and analytical. The gathered information regarding, area, production, and productivity from the several published sources, such as volumes, journal articles, reports, census reports, and the agricultural and farmers welfare department reports government of India have been used in this study.

Results and Discussion

Trends in Area Production and Productivity of Sugarcane

It is noted that there is significant increase in area production and productivity of sugarcane in Karnataka. It can be shown in Table 1

Table 1: Trend in Area Production and Productivity of Sugarcane in Karnataka

Year	Area (*000 h)	Production (*000 Million tonnes)	Productivity Million (tonnes /h)
2010-11	423	39657	93.3
2011-12	430	38808	90.3
2012-13	425	35732	84.1
2013-14	420	37905	90.3
2014-15	480	43776	91.2
2015-16	450	37834	84.1
2016-17	397	27378	69.0
2017-18	350	28263	80.8
2018-19	506	42006	83
2019-20	429	38181	89
2020-21	428	41088	96
Total	4,738	410,628	951.1
CAGR%	0.11	0.32	0.26

Note: *Provisional (e)-estimates **Source:** Co-operative Sugar (2022) Vol.53, No.12. (Published in Cooperative Sugar) and Asha D. M. and M. Ramanjaneyulu (2021) Economic analysis of production of alcohol, power and Biocompost in sugar industry of Karnataka” International Journal of Advanced Research, p.147.

It is evident from Table 1 that, details of production and productivity of Sugarcane in Karnataka during the period from 2010-11 to 2020-21. It is found that the area under sugarcane production increased from 423 hectares to 428 hectares in the same period, the production increased from 39657 tonnes to 41088 during the above said period and the productivity also increased from 93.3 tonnes /h to 96 tonnes /h during the period from 2010-11 to 2020-21. The CAGR values for production were 0.32 and for productivity was 0.26. The results show that there is significantly increased production and productivity during the same period in the state.

Problems Faced By the Farmers

▪ **Inadequate supply of Input Services**

It is one of the most important problems faced by sugarcane farmers in Karnataka. The basic inputs such as quality seeds, fertilizers, and pesticides are not adequately supplied in time in the process of production and it is the insufficient quantity is one of the influencing factors for the production of sugarcane cultivation in the state. In addition to these factors like fertility of land, water, labour, finance fertilizers, and technical guidance are the most important for the production of sugarcane but these are insufficient quantities in the state

▪ **Low Rate for Sugarcane**

The Sugarcane growers faced the problem of low rates for the sugarcane. It is the main problem faced by the sugarcane growers in Karnataka as well as in the country. The price of Sugar cane is very low hence the farmers are not able to get the actual price of their commodity.

▪ **Low Yield of Sugarcane**

Despite being the third largest state of Karnataka in the country, the yield per acre is a concern that is very low as compared to other states like Maharashtra. Consequently, the production has gradually lowered, and the shortage for mills.

▪ **Fluctuating Production Trends**

It is evident that the production and productivity of sugarcane in Karnataka has fluctuated, the Sugarcane has to compete with various other foods and pastures like cotton, vegetable oil, rice, and others. Hence land for sugarcane planted is not the same and the total sugarcane production varies.

▪ **High cost of production**

The cost of production for sugarcane is high, due to inefficient technology, inefficient production process, and higher consumption taxes which result in enhanced high production costs. (Ashokkumar G. Policepatil 2014) ^[3].

▪ **Low level of Soil Fertility**

It is another problem for sugarcane growers in the state of Karnataka, the fertility of the soil is very low and is of poor quality due to the continuous growth of the sugarcane, and more plants grow over time. There is no crop rotation system. Hence the fertility of soil for Sugarcane growers is declining.

▪ **Lack of quality seeds**

It is another problem faced by the farmers in growing sugarcane, the supply of quality seed for Sugarcane cultivation is low quality. Even though the various states and concerned local agencies supply of seeds, the farmers do not receive quality seeds. Hence the production of quality sugarcane is not possible is another problem for the farmers.

▪ **Lack of Experienced Labour**

The labour inefficiency, and experienced, skilled labour are also the major problem faced by the farmers in the state of Karnataka. Sugar cane cultivation requires experienced, skilled labour, but most of the labour in the state is not properly trained and skilled. Hence production and productivity have not improved at a faster rate (Timmanna V. Halli, and C. R. Gudasi C.R 2021) ^[9].

Marketing Problems

▪ **Delay in harvesting**

The main marketing problem of sugarcane growers in Karnataka is that harvesting and marketing, the farmers crush the cane for manufacture, he will harvest the cane, and market it. The majority of the farmers have contractual obligations with the factories, for the supply of sugarcane before the cultivation of their cane, therefore there is a delay in harvesting the cane even though the sugar cane is ready

for harvesting. Hence this is the main problem of sugarcane growers in the state of Karnataka.

▪ **Absence of marketing facilities**

It is another problem of marketing of Sugarcane in the state of Karnataka. Sugarcane is an agricultural commodity it has a limited market and only a few of them are purchasers. There is no adequate scope for demand for the cane and is not universal. Hence the absence of marketing facilities is the major problem of sugarcane growers in Karnataka.

▪ **Lack of Transport Facility**

The problem of proper transport facilities is another obstacle to the movement of goods from production to marketing in Karnataka. The majority of the farmers in the state resided in rural areas. There is no proper transportation facility to supply the sugarcane from production to marketing. Hence faster vehicles are necessary for the quick supply of these commodities for faster market access.

▪ **Financial Problems**

Finance is the most important factor for the production and marketing of Sugarcane. If the farmers financially improved there are improvements in the production and marketing of Sugarcane. But in Karnataka majority of the farmer's marginal and small farmers, financially they are poor. Due to the poor finance, the farmers are not able to purchase the necessary inputs for the production of Sugarcane. Hence unable to grow and supply Sugarcane in time.

▪ **Absence of quick payment by the purchaser**

The majority of the farmers in India as well as in Karnataka who sold their produce to private factories and crushers did not have payments made immediately, resulting in financial viability suffering very much. It can also add to their marketing costs in the sense that they may be forced to make more than one trip to the factory to get paid, which adds to the costs. Often farmers only harvest and sell crops to fulfill part of the family's financial obligations, waiting for a quick return. (Timmanna V. Halli, and C. R. Gudasi C.R 2021) ^[9].

Challenges

The high cost of production, the low-level minimum support price of sugarcane, poor infrastructure, low-quality seeds, and the decreased global process are the main challenges in front of the government, without increasing prices of sugarcane, and increased minimum support prices, infrastructure improvements, increase in financial support, and reduce the contact between the sugar industry and the farmers are the challenges for the improvement of sugarcane these challenges need to be addressed for the government for the improvements in production and productivity of sugarcane and the more contribute on national GDP in the future.

Findings

Based on the study some useful findings have been made as under:

- It is found from the study that, the area for sugarcane increased from 423 hectares to 428 hectares during the period from 2010-11 to 2020-21 in Karnataka.

- The study revealed that the production of Sugarcane increased from 39657 tonnes to 41088 during the period from 2010-11 to 2020-21.
- The highest production was recorded at 43776 tonnes in the year 2014-15 and the lowest was 27378 in the year 2016-17 state.
- It is found that the highest area for sugarcane cultivation registered in the year 2019 was about 506 hectares and the lowest area used for sugarcane farming in the state of Karnataka in the year 2017-18 was about 350 hectares in Karnataka.
- The study revealed that there is positive growth in the production of sugarcane from 35732 tonnes to 43776 tonnes during the period from 2012-13 to 2014-15 in the state of Karnataka.
- The productivity of sugarcane increased from 93.3 (tonnes /h) in 2010-11 to 96 tonnes/hectare in 2020-21 in Karnataka.
- The highest productivity observed in 2020-21 it was 96 tonnes/hectare and the lowest was 69 tonnes/hectare in 2016-17.

Suggestions

Based on the findings some useful suggestions have been made.

- The government should provide input services like fertilizer, irrigation, quality seeds, credit facilities, and incentives for the improvements in the production of sugarcane in Karnataka.
- There is a need to strictly instruct the concerned sugarcane industries to purchase cane immediately after the harvesting.
- The government should provide financial support to the sugarcane growers for the production of sugarcane it helps the farmers to avoid contact with the industry.
- The government should supply updated technology in the process of production, and harvesting of sugarcane for the betterment of sugarcane growers and enhance the production of sugarcane.

Conclusion

Agriculture is most important for the development of the Indian economy. A huge proportion of the population in India mainly depend on agriculture as the source of their socio-economic well – being. The Sugarcane growers in India face several problems such as low efficiency, lack of irrigation, poor infrastructure, and financial problems. It is observed from the study that the area, production, and productivity of Sugarcane increased significantly over the years. But the problems like high cost of cultivation, insufficient supply of inputs, financial problems, and lack of irrigation are the problems faced by the Sugarcane growers. Hence government should provide necessary input services, financial support, and proper infrastructure facilities are the urgent need for the improvement of production and productivity of Sugarcane in Karnataka in the future.

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