

## **FAIR AND REMUNERATIVE PRICES OF SUGARCANE IN INDIA: AN ANALYSIS**

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### **ABSTRACT**

*Sugarcane price policy plays an important role in achieving growth and equity in the Indian economy in agriculture sector. In India, effective implementation of the sugarcane price policy has helped in improving the harvesting of sugarcane. This study suggests a formula that reflects price of sugarcane that takes into account both costs of production of sugarcane and sugarcane price trends. The present study is focus on an analysis of fair and remunerative price on sugarcane in India. And in this study shows that analyze the growth rate trends in sugarcane price for a period of 1962-63 to 2018-19. And compared trends of sugarcane price and cost of production of sugarcane the last ten years of 2009-10 to 2018-19. The results of the study indicated that, in small proportion of increasing trends were observed in sugarcane price policy in India their analysis in the study periods. This paper briefly reviews the trends of price policy of sugarcane, costs of production of sugarcane in India with special emphasis on the factors associated with variation in price policy during the study period.*

**KEYWORDS:** *Sugarcane, Price, Cost, Production and Growth Rate*

### **1. INTRODUCTION**

Sugarcane is an important commercial crop in India and grown on an area of about 4.5 million hectare, which is around 3.7 percent of the net area sown in the country. Sugarcane contributes about 4.6 percent of total value of output from agriculture and impacts rural livelihood of about 50 million sugarcane farmers and around 5 lakh workers are directly employed in sugar mills. Employment is also generated in various ancillary activities relating to transport, trade servicing of machinery and supply of agriculture inputs. India is the second largest producer of sugar in the world after Brazil and is also the largest producer of sugarcane and the largest consumer of sugar in the world (GOI). Sugar industry occupies an important place among organized industries and the second largest industry after textiles industry in India. In India, sugarcane is the key raw material, planted once a year during January to March. The production of sugarcane is spread across the country. In the below states are growing of sugarcane, like, Uttar Pradesh, Maharashtra, Karnataka, Tamil

Nadu, Bihar, Gujarat, Andhra Pradesh and etc. When observing the above factor sugarcane cultivation very important although it seems to be significant, here sugarcane cultivators are also suffering from a number of problems; among them importantly they are produce sugarcane crop decent price is one.

Sugarcane sector since the price elasticity of both sugar and sugarcane remains less comparatively as the industrial product prices are hedged to a maximum limit, whereas, agricultural products prices are hedged to minimum limit<sup>1</sup>.

In India, the State's intervention in sugarcane sector is a complex trap of contradictory policies, particularly in the sugarcane production and price policies. Despite many efforts by the State, India's sugarcane sector is reeling under contradictory situations. While on the one hand, the farmers are agitating for better prices and timely payment for their sugarcane produce, on the other, the sugar mills constantly oppose this demand. While the sugarcane growers and their organizations demand better sugarcane prices on the ground

that the cost of inputs and price of sugarcane has not increased proportionately, the sugar mills argue that they are unable to pay the arrears due to falling international sugar prices and changing the economic policies of the Central and State governments<sup>2</sup>. Along with this, the risks of yield and price unpredictability, changes in inputs cost, diseases, and also seasonal variations due to water shortage as well as changes in weather are other also important factors leading to price policy for sugarcane sector. So, the solution of the in this problem is has been necessary to the introduced the Pricing policy of sugarcane.

The pricing of sugarcane is governed by the statutory provisions of the Sugarcane (Control) Order, 1966 issued under the Essential Commodities Act (ECA), 1955. Prior to 2009-10 sugar season, the Central Government was fixing the Statutory Minimum Price (SMP) of sugarcane and farmers were also entitled to share profits of a sugar mill on 50:50 basis. The sharing provision was introduced to empower farmers to equally share the dividends of the mills. However, this sharing provision was not implemented due to the delay in announcement of profits by the sugar mills. Statutory Minimum Price (SMP) was replaced with the Fair and Remunerative Price (FRP), amendment of the sugarcane (Control) order, 1966 on October 22, 2009. As well as a new clause 'reasonable margins for growers of sugarcane on account of risk and profits' was inserted as an additional factor for working out fair and remunerative price from the 2009-10 sugar season<sup>3</sup>. Accordingly, fair and remunerative price is announced at the recommendations of the Commission for Agricultural Costs and Prices (CACP), because these are below factors affect for fixation of sugarcane price. They are; Cost of production of sugarcane, the availability of sugar to the consumers at a fair price; inter-crop price parity; the recovery rate of sugar from sugarcane; the reasonable margins for growers of sugarcane on account of risk and profits etc.

Agricultural price policy has come under serious attack recently for recommending support prices higher than what is the cost of production guarantee and therefore to food deprivation. So agricultural price policy plays an important role in achieving growth and equity in the Indian economy in general and the agriculture sector in particular, the major underlying objective of the Indian government's price policy is to protect both producers and consumers<sup>4</sup>. And in case of sugarcane price policy plays an important role in achieving growth and equity in the Indian economy in agriculture sector. In India, effective implementation of the sugarcane price policy has helped in raising the production of sugarcane.

## 2. OBJECTIVES OF THE STUDY

- To analyze the trends and patterns of Sugarcane Prices in India.
- To understand the trends in area under Sugarcane, Production and Yield in India.

## 3. MATERIALS AND METHODS OF STUDY

The present study is based on Secondary data collected from various sources like Ministry of Agriculture and Farmer's Welfare, Government of India from 1962-63 to 2018-19. The statistical tools used like CAGR and Sugarcane growth rate classified tow Phase like Pre-reforms and Post reforms in India.

## 4. RESULTS AND DISCUSSION

The present study is used for calculated by CAGR for during from 1962-63 to 2018-19. For analysis the whole period was divided into five sub periods from decadal and one seven year sub period. These sub periods are, period I-1962-63 to 1971-72, period II- 1972-73 to 1981-82, period III-1982-83 to 1991-92, period IV- 1992-93 to 2001-02, period V- 2002-03 to 2011-12 and period VI- 2012-13 to 2018-19. Growth rate was also calculated for whole period of 1962-63 to 2018-19.

**Table 1: The FRP Growth rate of Sugarcane in India (1962-63 to 2018-19)**

Years	Compound Annual Growth Rate
1962-63 to 1971-72	0.06
1972-73 to 1981-82	0.06
1982-83 to 1991-92	0.08
1992-93 to 2001-02	0.08
2002-03 to 2011-12	0.09
2012-13 to 2018-19	0.08
1962-63 to 2018-19	0.08

Source: Ministry of Agriculture and Farmers Welfare, GOI.

The table 1 data provides that growth rate of sugarcane prices in India during 1962-63 to 2018-19. The sugarcane price's is highest growth rate of 0.09 per cent was observed in the period of 2002-03 to 2011-12 and as well as while

lowest growth rate of 0.06 per cent was seen in the period of 1972-73 to 1982-83. The Sugarcane price having 0.08 per cent growth rate during from 1962-63 to 2018-19 in India.

**Table 2: Performance of Sugarcane Price in pre and post reforms of India (1962-63 to 2018-19)**

Periods	Compound Annual Growth Rate
Pre-reform period (1962-63 to 1990-91)	0.06
Post-reform period (1991-92 to 2018-19)	0.09

Source: Ministry of Agriculture and Famer's Welfare, GOI.

The table 2 shows that the performance of sugarcane prices in India. The Sugarcane prices in Pre-reform period

growth rate is 0.06 percent and its compared to post reform period its growth up to 0.09 percent in India.

**Table 3: Prices and Cost of Sugarcane Production in India.**

Year	Cost of Production (Rs. Per quintal)	FRP (Rs. Per quintal)	Recovery level of Sugarcane (in %)
2009-10	90.32	129.84	9.5
2010-11	90	139.12	9.5
2011-12	102	145	9.5
2012-13	148	170	9.5
2013-14	185	210	9.5
2014-15	193	220	9.5
2015-16	203	230	9.5
2016-17	210	230	9.5
2017-18	227	255	9.5
2018-19	244	275	10
<b>CAGR</b>	<b>0.12</b>	<b>0.09</b>	--

Source: Ministry of Agriculture and Farmers Welfare, GOI.

Table 3 the trend analysis revealed that compared of sugarcane price and cost of production for sugarcane in the study period. And also this table shows that recovery level of sugarcane trends. In this table trend analysis revealed that the cost of sugarcane production in India cautiously increased in the subsequent period 2009-10 has increased to 90.32 rupees per quintal from 244 rupees per quintal for sugarcane in the period of 2018-19. As well as in this period in case of sugarcane price was slowly increased compared with cost of production. According to in this table, even India, the periods of time rupees per quintal of sugarcane price during 2009-10 there was a subsequent increase up to 2018-19 in respect of 129.84 to 275 rupees per quintal for price sugarcane. And as well as in this table shows that of recovery level of sugarcane has remained almost stable for the period of 2009-10 to 2018-19. And in this table analyses that growth rate of cost of

production of sugarcane and sugarcane price in India during 2009-10 to 2018-19. The cost of production of sugarcane is highest growth rate of 0.12 per cent compared to 0.09 per cent of sugarcane price during the study period, and indicating that the profit margin of sugarcane growers has reduced in the study period. This leads to conclusion that with time the profits of sugarcane growers have reduced if their procured by government of India at sugarcane price.

#### **IMPACT OF PRICE FACTOR ON PRODUCTION OF SUGARCANE**

The sugarcane price factor considered responsible for the growth in production of sugarcane. A large increase in the price of a commodity results in the transfer of resources including area and production under that commodity. Thus, the growth in price policy of sugarcane was taken as one of the independent variables in the hectares response equation.

**Table 4: Production, Yield and Area harvested of sugarcane in India (1962-63 to 2016-17)**

Year	Area (Tri annum Average Million Hectare)	Production (Tri annum Average Million Tonnes)	Yield (Tri annum Average Kg. Per hectare)
1962-64	2.36	106.02	44.75
1965-67	2.40	104.11	43.53
1968-70	2.63	128.69	48.87
1971-73	2.53	126.42	49.90
1974-76	2.84	145.97	51.39
1977-79	2.95	152.49	51.54
1980-82	3.07	176.71	57.53
1983-85	2.97	171.68	57.86
1986-88	3.23	195.29	60.46
1989-91	3.62	240.21	66.34
1992-94	3.62	244.41	67.41
1995-97	4.08	279.40	68.48
1998-00	4.20	294.67	70.24
2001-03	4.29	272.82	63.49
2004-06	4.34	291.26	66.92
2007-09	4.55	308.51	67.80
2010-12	4.97	348.21	70.01
2013-15	5.00	354.31	70.90
2016-17*	4.39	306.72	69.87
<b>CAGR</b>	<b>0.04</b>	<b>0.06</b>	<b>0.03</b>

Source: DES, DAC & FW.

Note: '\*' - Fourth Advance Estimates and Single Year

Table 4 shows that the area under sugarcane, production and yield choices in India has undergone significant changes of the study period. The production of sugarcane in India, in the study period subsequent of tri-annum average years periods of the 1962-64 has increased 106.02 million tonnes from 354.31 million tonnes in 2013-15. This period production of sugarcane continuously increased. But in the period of tri annum average years of 2001-03 production of sugarcane was declined from 272.82 million tonnes because during the drought time, due to lock of water sugarcane loses its weight. The declining sugarcane productivity may be affected on profitability of sugarcane cultivation. Moreover, one of the reasons for variations in cost and profit situation is that the absence of linkage between sugarcane and its byproduct prices, and there is no uniformity of sugarcane prices paid by the sugar mills<sup>5</sup>. The area under sugarcane increased from 2.36 million hectare in 1962- 64 tri annum average year to 5.00 million hectare in 2013-15. The increase in sugarcane productivity was from 44.75 kg/per hectare to 70.90 kg/per hectare during this tri annum average year's period.

## 5. FINDINGS

- The study was indicates that there seems to be a need to increase the sugarcane price at higher rate in order to stabilize the profit margin or net income of sugarcane growers.
- This policy states that sugar factories should be paid to sugarcane growing farmer's b the government's price for sugarcane.
- Price policy of sugarcane route to protect them from unfair market practices and guaranteeing them an effective sugarcane price.
- The awareness about sugarcane price policy among the sugarcane growing farmers to be the needful information.
- The sugarcane Price policy is an important policy of the Union Government to determine floor price of sugarcane every year for protecting the sugarcane growing farmers from the stakeholders.
- It is significant to note here that these higher support prices are meant to compensate the slowdown in yield growth and the consequent increase in Cost of Production.

## 6. SUGGESTIONS

The prime policy implications and suggestions which could be instrumental in improving the performance of sugarcane production in Karnataka are as follows.

- The basic source of livelihood for the sugarcane growing farmer's is farming and the delay in payment has negative effect. Thus, intervention may be specifically directed towards reducing payment time for farmers in case they are accessing the sugarcane price route to protect them from unfair market practices and guaranteeing them an effective price.
- First and foremost the awareness among the sugarcane growing farmer's needs to be increased and the information disseminated at the lowest level so that the knowledge would increase the bargaining power of the sugarcane growing farmers.

- It is suggested that however the growth rate of sugarcane price was similar, but there is need to increase the sugarcane price in proportion to the increase in cost of production.

## 7. CONCLUSION

Sugarcane Prices policy is considered as an important pillar of Indian Agricultural price policy rolled out with an intention of providing price security to sugarcane growers. The sugarcane Price policy is an important policy of the Union Government to determine floor price of sugarcane every year for protecting the farmers from the middlemen and fluctuating market conditions as it provides them an assured market in addition to a minimum assured return on the whole it was indicate that the sugarcane price policy. To sum up, the analysis in this paper shows that sugarcane price policy does face some new challenges in the current period. It is essential to note here that these higher support prices are meant to compensate the slowdown in yield growth and the consequent increase in Cost of Production.

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## END NOTES

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