

Infomerics Valuation And Rating Pvt. Ltd.

SEBI REGISTERED / RBI ACCREDITED / NSIC EMPANELLED
CREDIT RATING AGENCY

Mr. Vipin Malik (Chairman, Infomerics Ratings)

INDUSTRY OUTLOOK

Dr. Manoranjan Sharma (Chief Economist)

THE SUGAR INDUSTRY IN INDIA: HOW SWEET?

Mr. Rajat Raghav (Officer - Economic Analysis)

17 December 2024

1. Introduction

Sugar is an important commercial commodity in the world. Around 183.5 MMT of sugar was produced in CY 2023-24 representing a 2 per cent growth over last year. Sugar production is expected to increase to 186 MMT in CY 2024-25. Brazil (25 per cent), India (19 per cent), European Union (8 per cent) and China (5 per cent) are the major producers, collectively producing more than 104.4 MMT¹.

Sugarcane is an important input in the food and energy industry. In food industry, sugar is used as an additive. While in the energy industry, sugarcane is used to produce ethanol, biofuels, and energy though cogeneration units. Sugar byproducts also find use in the chemical, fertilizer industry and paper & pulp industry.



Sugar is recovered from either sugarcane or sugar-beet plant. Sugarcane is the primary route for sugar production. Sugarcane takes about 12 months to mature. It involves less risk and assures high returns to farmers compared to other crops².

In India, sugarcane production stood at 453.1 MMT in 2023-24 while sugar production stood at 34 MMT in SY 2023-24³ with total domestic consumption at 29 MMT and domestic availability of sugar at 19.9 kg/pc⁴.

2. Demand-Supply Outlook

2.1 Global Outlook

There has been an upward forecast in the global production of sugar by Australian Bureau of Agricultural and Resource Economics (ABARES), and United States Department of Agriculture (USDA). Food and Agriculture Organisation (FAO) expects the sugar production to slightly decrease in future.

Due to increased sugar production, lower exports and higher domestic utilization, a rise in the overall stocks could occur. FAO considers that lower utilization and slow exports may cause stocks to increase over time.

	Table 1: Global Sugar Outlook									
		FAO			ABARES	8	USDA			
Year	22-23	23-24 (E)	24-25 (F)	22-23	23-24	24-25 (F)	22-23	23-24	24-25 (F)	
Production	178.6	182.2	180.3	189	191	194	179.5	183.5	186.6	
Consumption	174.0	176.0	178.1	187	191	193	176.75	177.3	179.6	
Exports	62.7	66.4	63.9	69.5	71.1	71.8	62.16	68.2	66.69	
Ending Stock	114.6	120.5	122.3	105	105	106	46.0	40.2	45.52	
SUR (%)	65.9	68.5	68.7	56.1	54.6	54.7				

^{*} Values in Million tonnes; E- Estimate, F-Forecast,

Data Source: FAO, ABARES -Sept 2024, USDA – Sugar Report Nov 24

2.2 Domestic Outlook

India is the second largest producer of sugarcane and largest consumer of sugar in the world. India produces 19 per cent of the world's sugar while contributing 16 per cent to world sugar consumption.

Table 2: Sugarcane Production in India								
Production 2021-22 2022-23 2023-24 2024-25								
Sugarcane	439.4	490.05	453.16	439.9				
*Values in Million	*Values in Million Tonnes							

Data Source: As of Nov 2024, First Estimate of Production of Food Grains: (DA&FW)



Domestic sugarcane production is expected to decline from 453.16 MMT in 2023-24 to 439.9 MMT in 2024-25. While domestic sugar production is expected to decline to 33.3 MMT in SY 2024-25 from 34 MMT in SY 2023-24. Post consideration of sugar diversion towards ethanol production, net sugar production is expected to stand at 29.3 MMT. The area sown under sugarcane has seen a marginal increase. Which stands in contrast to the trend of decrease in sugarcane production.

Table 3: Sugarcane Area Sown								
Kharif Normal Area (DES) 18-19 to 22-23 Area Sown Change (%)								
	2023 2024							
Sugar 51.15 57.11 57.68 0.57%								

^{*}Value in Lakh Hectare

Data Source: Progress of area coverage under Kharif crops as on 27.09.2024 (& corresponding value in last year), Directorate of Sugarcane Development, Lucknow

2.3 Domestic Balance Sheet

Table 4: Domestic Balance Sheet					
	2024-25 (E)				
Opening Stock	8.48				
Gross Production	33.3				
Total Availability	41.78				
Internal Consumption	29				
Sugar Diversion to ethanol	4				
Closing Stock	8.79				

Values in Million metric tonnes;

SS: Sugar year is from October-September,

Data Source: Agrispectrum article dated: 6 Nov 2024, (primary data source: ISMA)

Sugar production is expected to decrease from 34 MMT in SY 2023-24 to 33.3 MMT in SY 2024-25. Diversion under Ethanol Blending Programme (EBP) is expected to increase form 2 MMT to 4 MMT in SY 2024-25. Sufficient availability of sugar will ensure a comfortable stock for domestic consumption and increase stocks.

3. Sugar Prices

3.1 Global Sugar Index

Table 5: FAO Sugar Index Values								
Index 2019 2020 2021 2022 2023 2024 Sept-2024 Oct 2024								
FAO Sugar	FAO Sugar 79.1 80.40 108.8 112 139.4 118.9 119.3 122.4							
Index								
D 2014	(D 1	r 1 \						

Base: 2014-16 (Real Index)

Data Source: FAO Food Price Update | FAO | Food and Agriculture Organization



The FAO Sugar Index has averaged 122.4 in October 2024. It is 13.8 per cent lower than the previous year's value. The drop from previous prices may be attributed to record production and higher diversion of sugarcane towards sugar production in Brazil.

3.2 Domestic Price Index

Domestic prices are measured at the wholesale and consumer level through the Wholesale Price Index (WPI) and Consumer Price Index (CPI). These indexes take into consideration the change in prices of sugarcane and sugar.

	Table 6:	WPI Ind	lex Value	es (Fiscal Y	Year)		
Commodity name	Weight	19-20	20-21	21-22	22-23	23-24	%change 5 Yrs
WPI Overall	100.00	121.8	123.4	139.4	152.5	151.4	24.3
FOOD INDEX	24.38	147.6	153.4	163.8	174.2	179.8	21.8
Sugarcane	0.58	169.5	185.6	197.8	205.0	213.6	26
Sugar	1.055	117.6	117.3	121.6	124.8	132.9	13
Molasses	0.044	102.6	116.4	130.0	140.8	149.5	45.7
Bagasse	0.027	146.5	136.4	130.2	145.3	149.5	2.0
Gur	0.023	131.0	132.9	134.5	140.5	152.2	16.2
Sugar confectionary	0.078	127.1	130.2	128.4	132.0	132.8	4.5

Base: 2011-12

Data Source: Office of Economic Advisor, Ministry of Commerce and Industry

WPI rose by 24.3 per cent over the past 5 years while WPI Food Index increased by 21.8 per cent. In the corresponding period, prices of sugarcane grew 26 per cent, while sugar prices have only grown by 13 per cent. This represents a dichotomy where wholesale prices of raw material rose at a faster rate compared to the prices of final good.

In case of byproducts, prices of molasses have increased by 45.7 per cent over the past 5 years. The significant growth can be attributed to molasses use in the production of ethanol under the EBP programme.



	Table 7: CPI Index Values								
Commodity name	Weight	Sep-20	Sep-21	Sep-22	Sep-23	Sep-24	%change 5 Year		
CPI (Overall)	100	156.4	163.2	175.3	184.1	194.2	24.17		
CPFI	47.25	161.6	162.7	176.7	188.4	205.8	27.35		
Sugar-PDS	0.08	157.7	161	164.4	164.4	165.6	5.01		
Sugar-Other Sources	1.13	111.1	115.1	116.3	121.8	126	13.41		
Gur	0.103	143.2	144	150.7	159.9	168.3	17.53		
Candy-Misri	0.001	148.4	160.9	164.9	166.5	168.1	13.27		

Base: 2011-2012, Data Source: MOSPI

CPI grew by 24.17 per cent, while CPFI grew by 27.35 per cent during the past 5 years. The price of sugar has increased by 13.51 per cent during the same period. Sugar prices in CPI have mirrored the WPI prices. The reason for muted growth in sugar prices is that they are controlled through Minimum Sale Price which have not been revised since 2019.

4. Prices

The overall sugar price structure is highly regulated and controlled in India. The government directly determines the price of the input-sugarcane through Fair & Remunerative Price (FRP)/State advised price (SAP), price of output – sugar through Minimum Sale Price (MSP) and the prices of byproducts through ex-mill ethanol prices. In the overall price structure, sugarcane FRP is determined by sugarcane recovery rate.

4.1 FRP and SAP

FRP is announced considering the cost of production and average recovery rate. FRP of ₹ 340 per quintal linked to a basic recovery rate of 10.25 per cent has been recommended for 2024-25. Further, for every 0.1 per cent increase (decrease) in recovery rate, FRP shall be increased (decreased (till 9.5 per cent)) by ₹ 3.32.



Table 8: Fair and Remunerative Prices of Sugar								
Crop Year	Crop Year 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24 2024-25							
FRP								

*Values in Rupees/quintal Data source: MoAFW

FRP calculated at 10% recovery rate for 2018-19 to 21-22 & 10.25%, 2022-23 onwards

Four states namely Haryana, Punjab, Uttar Pradesh, and Uttarakhand fix SAP for sugarcane. SAP are usually above the FRP and are not linked to sugar recovery rate. The are provided to cover the cost of production which varies across states. State Government(s) are responsible for paying the difference between SAP and FRP, the difference causes a fiscal drain upon the state exchequer. They also tend to distort sugarcane prices across states.

Table 9: State Advised Price								
Crop Year 2020-21 2021-22 2022-23 2023-24								
FRP (All India)	285	290	305	315				
Haryana	345	355	365	386				
Punjab	300	350	370	392				
Uttar Pradesh	315	340	340	(360) 370				
Uttarakhand	317	345	345	(365) 375				

^{*}Values in Rupees/Quintal

Data source: CACP MoAFW and News Reports

Note: () bracket denotes early variety sugarcane while without bracket denote common

variety sugarcane

4.2 MSP

Central government also determines the floor price of sugar in the market. This is known as the minimum selling price (MSP), MSP helps provide price stability to sugar mills by fixing the factory gate price for domestic consumption. While MSP is beneficial to farmers by providing a measure of income security, it hampers market dynamics to determine the price of sugar in the market.

Table 10: MSP recommended and requested								
Year 2018 2019 Industry demains (next season)								
MSP	29	31	39.14					
	*Values in Rupees per kg Data Source: CACP- MoAFW and ISMA.							



Low MSP compared to high FRP affects the financial health of sugar mills. To overcome the issue, sugar mills are moving towards ethanol production. To improve the financial health of mills, Indian Sugar and Bio energy Association (ISMA) is requesting the MSP to be hiked to ₹ 39.14 per kg⁵.

4.3 Prices of Sugar Byproducts

Sugar mills also produce many byproducts. Major byproducts include Molasses, Bagasse, and press mud. Prices fetched by these byproducts also determine the profitability and viability of sugar mills.

Table 11: Price of Byproducts								
Byproducts 2018-19 2019-20 2020-21 2021-22 2022-23								
Molasses B-Heavy	6550	6506	9390	10341	10567			
Molasses C-Heavy	2911	5419	7055	6909	7970			
Bagasse	2167	1961	1966	2125	2471			
Press mud	150	260	286	329	421			
Values are Rupees per tonnes.								
Data source: CACP, Mo	AFW							

These byproducts are utilized across various industries. Recently schemes such as EBP and Compressed Biogas (CBG) under Sustainable Alternative towards Affordable Transportation (SATAT) have helped increase the prices fetched by these byproducts. The prices of molasses B & C have seen a large jump over the past 5 years driven by the targets set under EBP and molasses derived ethanol.

5. Production, Recovery and EBP

5.1 Production Trends

Overall sugarcane production in 2024-25 is estimated to be at 439.9 MMT. A general decreasing trend in sugarcane production has been witnessed across the past three years. Sugarcane production in current year has reached the 2021-22 level of production (Table 2).

Large variation in production has been seen across major states, production has declined by -8.1 per cent in Uttar Pradesh, -3.1 per cent in Karnataka and -32.01 per cent in Tamil Nadu over last year. While Maharashtra, Gujarat and Bihar have witnessed an increase in sugarcane production. The variation in production may be attributed to the difference in maturity of sugarcane crops (adsali vs eksali crop) as no change in area under cultivation has taken place (Table 3) and no large-scale disease incidence has been reported.



Table 12: Sugarcane Production in India								
Production	luction 2022-23 2023-24 2024-25* Variation (
Sugarcane	490.05	453.16	439.9	-2.93				
		Major States						
Uttar Pradesh	224.2	215.8	198.3	-8.11				
Maharashtra	123.9	112.08	118.3	5.55				
Karnataka	59.3	41.8	40.5	-3.11				
Tamil Nadu	17.66	15.9	10.8	-32.08				
Gujarat	13.4	14.4	18.3	27.08				
Bihar	12.7	12.08	12.4	2.65				

Values in Million Tonnes

Data Source: As of Nov 2024, First AE of Production of Food Grains: (DA&FW)

The significant increase in sugarcane production in Gujarat may be attributed to the increase in the area under sugarcane cultivation along with adoption of higher yield sugarcane variety.

5.2 Sugar Recovery and Effective FRP.

Recovery rate is the ratio of sugar produced to sugarcane crushed. Recovery rate is determined by the sugarcane variety used. It determines the total FRP paid to farmers. All India sugarcane recovery rate has remained above base rate of 10.25 per cent. All major sugarcane producing states have higher recovery rate, and hence the FRP paid has also been higher.

Table 13: Sugarcane Recovery in India						
	Recovery Rate (%)	Effective FRP				
All India	11.20	371.5				
FRP Recommended	10.25	340.0				
Uttar Pradesh	11.40	378.2				
Maharashtra	11.30	374.9				
Karnataka	11.80	391.5				
Tamil Nadu	9.46	313.8				
Gujarat	10.70	354.9				
Bihar	11.60	384.8				

Effective FRP: Rupees per Quintal

Data Source: CACP

Note: Recovery rate is for TE22-23, Effective FRP (24-25) is FRP adjusted for state specific

recovery rate, Data Source: CACP

5.3 EBP

Molasses is derived from manufacturing sugar. It is a byproduct of sugarcane. Molasses is used to manufacture ethanol; ethanol is used in the automotive industry as a fuel additive and used to produce alcoholic beverages in spirit industry.



To deal with issue of excess sugar production while reducing the import demand for crude oil, the EBP programme was relaunched in 2018.

The impetus for recent growth in ethanol has been provided by the blending targets set under EBP. Long-term offtake agreements with Oil marketing companies (OMC), administered prices and support for setting up ethanol refinery have also helped in increasing ethanol production. This has also increased the returns of Molasses which fetched low prices before 2019 (Table 11).

Table 14: Ethanol Supply and Blending Targets								
Ethanol	2018-19	2019-	2020-	2021-22	2022-23	2023-24	2024-25	2025
Supply Year		20	21					
Quantity	188.6	173	302.3	433.6	502.7	545.05	837*	1016 [@]
Supplied								
Blending %	5	5	8.1	10.2	12.06	13.8 ^{#s}	20	20 [@]

Value of Quantity supplied is Crore Litres

Data Source: MoPNG

Note: Ethanol supply Year (ESY) is Nov-Oct, * OMC ESY bid allocated, * Values till Sept 2024,

Values for 2025 are forecasted.

A significant increase in ethanol supply for ESY 2024-25 can be seen compared to ESY 2023-24. Increased blending targets from 13.8 per cent to 20 per cent are the prime reason. Blending will be further supported by the recent government decision to lift cap on diversion of sugarcane (and related byproducts) towards ethanol production⁶.

In line with the increasing importance of sugar in the energy sector, the premier sugar industrial association - Indian Sugar Mill Association has renamed itself to Indian Sugar and Bio energy Manufacturing Association in Dec-2023⁷.

6. Yield

6.1 Average Yield

Table 15: World Average Yield						
	Yield (World World World Largest All India State with Average) highest Producer Average Highest					
Sugarcane	74.0	120.74 Peru	73.39 Brazil	84.9	109.2 Tamil Nadu	

Values in tonne/hectare,

Data Source: FAOSTAT-22 (Column 1-3) and MoAFW (Column 4-5) TE 23-24

All India sugarcane yield stands at 84.9 tonnes/hectare, higher than the world average of 74.0 tonnes/ha and Brazil's yield of 73.39 tonnes/ha. The significant increase in



India's yield occurred due to convergence of tropical and subtropical sugarcane yield. Increase in Uttar Pradesh yield is the prime driver for the convergence. Uttar Pradesh yield is now closer to tropical sugarcane yield in India.

Table 16: State wise Average Yield					
State	Yield	Area			
All India	82	545.53			
Bihar	57.2	21.4			
Haryana	83.4	10.6			
Punjab	83	9.62			
Uttar Pradesh	81.5	255.2			
Sub-tropical	<i>79.7</i>				
Gujarat	76.7	19.2			
Karnataka	94	53.9			
Madhya Pradesh	63.8	Not Available			
Maharashtra	87.4	137.9			
Tamil Nadu	107.8	11.53			
Tropical	82.9				
Values in Yield in Tonnes/Ha, Area in lakh hectares					
Data Source: MoAFW					

In major states, yield has already reached the national average, but in states with smaller areas such as Bihar, Madhya Pradesh, and Gujarat large potential for higher yield exploitation exists. Further sugarcane production can be increased through adoption of high yield varieties which may increase the average yield in states such as Uttar Pradesh.

7. Cost of Production and Returns

-	Table 17: Projected Cost of Production (CoP) for 2024-25							
	Recovery rate TE22-23	CoP at State Specific Recovery rate			CoP at Base Recovery rate of 10.25%			FRP (Effective FRP)
		A2	A2+FL	C2	A2	A2+FL	C2	
India	11.22	152	179	255	139	164	233	340
Uttar Pradesh	11.52	279	188	279	139	167	248	378.2
Maharashtra	11.25	172	201	262	156	183	239	374.9
Karnataka	11.22	89	110	166	82	101	152	391.5
Tamil Nadu	9.16	201	222	288	225	248	322	313.8

Values in Rupees/quintal Data Source: MOAFW

Note: Margin:100* (((FRP/C2)-1), Effective FRP is for 24-25

All India FRP of ₹ 340 is higher than CoP. At Base recovery rate, FRP covers C2 costs with 45 per cent margin and A2+FL with 107 per cent margin. At state specific



recovery rate, FRP covers C2 with 33 per cent margin and covers A2+FL costs with 89.9 per cent margin. Farmers also bear overhead expenses which are not included in CoP. These overhead expenses include transportation, marketing, and insurance premium which impact the margin of farmers. Post consideration of these cost(s), a modified cost of production is formulated.

164	C2 233
164	233
27	27
191	260
340	340
107 %	45 %
70.0/	30 %
	107 % 78 %

Values in Rupees Quintal,

Data source: CACP

Note: Margin: ((FRP/M. CoP)-1)

Data Source: DGCIS and Economic Survey 2023-24

FRP provide a 78% margin over modified CoP A2+FL, and 30% margin over modified CoP C2. FRP sufficiently covered the cost of cultivation. A point to be noted is that FRP and modified CoP mask large interstate variation that exists in cost of production and do not take in consideration other factors such as yield.

8. Trade Analysis

Sugar exports constitute 5.9 per cent of the agricultural exports of India. 4.36 million tonnes sugar was exported earning 2.8 billion USD in 2023-24.

Table 19: Sugar Exports						
Year	2021-22	2022-23	2023-24 (P) ⁸	2023-24 (A)	Apr -Sept 24	
Exports						
Value	4.82	6.02	2.96	2.824	1.10	
Volume 11.86 13.38 5.13 4.36 1.8						
Volume in Million tonnes, Value in USD billion, P-Provisional, A -Actual						

Exports, which showed an increasing trend till 2022-23, have decreased substantially. In the current FY, 1.8 million tonnes of sugar have been exported, earning 1.1 billion USD. The reason for the drop in exports post FY 2023-24 was the exports restrictions put in place in May-2022. These restrictions have been periodically extended and are the primary reason for low sugar exports.



	Table 20: Trade Policy (Export and Import) of Sugar					
Month	Trade Policy	Description				
Feb 2018	Import duty	Import duty increased from 50 to 100 per cent				
May 2022	Free to Restricted	DGFT modified the export policy of sugar (raw,				
		refined, and white sugar) from Free to Restricted				
		w.e.f. 1st June 2022				
Oct 2022	Export restriction	Export restriction on sugar was initially from 1st				
	extended	June 2022 to 31st October 2022 but has been				
		extended till 31st October 2023				
Oct 2023	Export restriction	The export restrictions on sugar have been further				
	extended	extended beyond 31st October 2023 till further order				
Jan 2024	Export Duty	Government Imposed 50 per cent export duty on				
		molasses				
	Data Source: CBIC and DGFT					

Trade policy for sugar in the past year has not seen any major changes. In January-2024, the government imposed 50 per cent export duty on molasses. This is done to ensure sufficient supply of molasses for ethanol blending. Further, Government is expected to extend export restriction on sugar for a further year to meet domestic sugar demand and ensure sufficient supply for ethanol blending.

9. Government Initiatives impacting the Sugar Industry

The sugar industry is impacted by several government initiatives both directly and indirectly. Some initiatives are:

- a. Sugarcane variety: The Government released four high yielding climate resilient sugarcane varieties on 11th August 2024. Among the four-sugarcane variety: Karan 17 (Co 17018) with yield of 91.5 tonnes/ha, IKSHU-16 (CoLK 16202) with yield of 93.2 tonnes/ha has been recommended for cultivation in states of Uttar Pradesh, Haryana, Punjab, Rajasthan, and Uttarakhand. If adopted, these sugarcane variety will help increase overall yield and production⁹.
- b. Efficiency through Farm mechanization: Farm mechanization is crucial for agriculture as it helps in reducing cost of cultivation. In sugarcane cultivation, human labour constitutes 52.5 per cent of the total cost of production. Scheme such as Sub-Mission on Agricultural Mechanization (SNAM), will have a direct impact on the reducing the overall human cost while further increase the profitability of the sector.



- c. Global Biofuel Alliance: In September-2023, Government of India launched the Global Biofuel Alliance to promote the development and adoption of sustainable fuels¹⁰. Recently, on the sideline of G20-Brazil, India and Brazil agreed to cooperate on technology exchange, share regulatory & policy experience and leverage ethanol production from all sources¹¹. This will benefit the sugar industry both in India and world by developing a framework for adoption of ethanol. It will also help in dealing with the issue of climate change while providing income security and promoting just transition¹².
- d. International Sugar Organisation: In 2023, India became the Chair of International Sugar Organisation for 2024. The Chair will provide India a platform to bring together member countries to adopt sustainable practices in sugarcane cultivation, promote ethanol production and utilisation of by-products. Technical collaboration by sharing latest technologies and best practice is being carried out by National Sugar Institute-Kanpur with member countries Indonesia, Nigeria, Egypt¹³.
- e. Improving Financial Health of Sugar Mills: Government has proposed the formulation of a comprehensive five-year plan to boost the financial capacity of sugar mills, with a target funding to 25,000 crores spread across five years. This will help improve financial health and support long-term development of sugar mills¹⁴.
- f. Review of Sugar (Control) Order 1966- In August 2024, Government circulated the Draft Sugar (Control) Order-2024¹⁵ with the view of modernizing the sugar sector. The order will regulate sugar byproducts, which are currently outside the purview. The order will also help in regulatory convergence by consolidating the various aspects of sugar product which are currently controlled by different acts¹⁶.

10. Challenges

a. Pricing: MSP has not been revised since 2019. ISMA is urging the government to revise the MSP to ₹ 39.14 per kg. Further ISMA, is also requesting the price of ethanol derived from sugar byproducts to be revised upward.



- b. Farm Labour: Human Labour constitutes 52 per cent of the total sugarcane cultivation cost. Any reduction will directly impact the total cost of cultivation. Increased farm mechanisation may help reduce the cost of cultivation.
- c. Water Requirement: Sugarcane is a highly water intensive crop and has been the prime reason for groundwater depletion in North and Northwestern states. Increase in sugar production and adoption of high yield varieties may further exacerbate the issue ¹⁷.
- d. Politics: Sugar Industry employs 0.5 million skilled workers and is source of livelihood for more than 50 million workers. This makes the sector highly susceptible to political interests across.
- e. Industrial Alcohol: In October 2024, Supreme Court upheld States power to regulate industrial alcohol. This may provide state government the ability to tax industrial alcohol¹⁸.

11. Conclusion

The sugar industry is an important agroindustry contributing to income security to more than 5 million people. In SY 2024-25, production is expected to decline but the overall position is expected to remain comfortable due to past year's stock drawdown. FRP has been fixed at ₹ 340 per quintal with a base recovery of 10.25 per cent which would provide sufficient margin for the farmers. In August-24, to meet ethanol production targets under EBP, government lifted the cap on sugar diversion towards ethanol production.

In January-2024, an export duty of 50 per cent on molasses was implemented, to ensure sufficient supply of molasses to meet the EBP targets. In August -2024, Government of India circulated the draft Sugar (Control) Order-2024, to replace the 1966 order. The order will have large implication by consolidating the regulatory structure governing the sugar industry. In October-24, the Supreme Court upheld the state's ability to regulate industrial alcohol. Further, in current year, Government is expected to continue the sugar export restriction.

In 2024, India became the Chair of International Sugar Organisation and aims at technical collaboration by sharing latest technologies among countries. At the sideline of G20-Brazil, India and Brazil agreed to technological cooperation and share regulatory and policy experience.



References

- ⁶ F.No. 3(2)/2-23-SP, DFPD- Ministry of Consumer Affairs dated 29 August 2024 Link: https://dfpd.gov.in/WriteReadData/Notices/e30bd0ec-fd5d-4b0b-87b8-59f4f92e4733_Relaxing%20of%20Capping%20of%20sugarcane%20juice%20order%2029.8.24.pdf
- ⁷ Sugar body ISMA adds bioenergy to title, names new President, The Hindubusinessline dated December 23, 2024. Link: https://www.thehindubusinessline.com/economy/agri-business/sugar-body-isma-adds-bio-energy-to-title-names-new-president/article67661178.ece

- Historic moment in Global Energy Sector: Global Biofuels Alliance (GBA) announced at G20 event.
 PIB Press release dated 09 September 2023- Ministry of Petroleum & Natural Gas (Press Release ID: 1955836)
- ¹¹ Joint Statement on meeting between Minister of Petroleum and Natural Gas of India and Minister of Mines and Energy of Brazil on Cooperation between India and Brazil in the Energy Sector; *PIB Press Release dated 21 September 2024 Ministry of Petroleum & Natural Gas (Press Release ID: 2057239)*
- ¹² India's Ethanol Push: A Path to Energy Security; PIB Press Release (Explainer) dated 24 October 2024 -Ministry of Petroleum & Natural Gas (Backgrounder ID: 153363)
- ¹³ India becomes Chair of International Sugar Organisation (ISO) for 2024 to lead global sugar sector; *PIB Press Release dated 24 November 2023, Ministry of Consumer Affairs, Food & Public Distribution (Press Release ID: 1979507)*
- ¹⁴ Union Home Minister and Minister of Cooperation Shri Amit Shah addressed the 91st General Council Meeting of the National Cooperative Development Corporation (NCDC) in New Delhi; *PIB Press Release dated 23 November 2024, Ministry of Cooperation (Press Release ID: 2076312)*
- ¹⁵ File No. 2(1)/2013-SP-I, DFPD, Ministry of Consumer Affairs, Food and Public Distribution dated 22 August 2024 Link: https://dfpd.gov.in/WriteReadData/Notices/40ee14cb-7f81-425c-82ce 48d76654c595 Draft%20Sugar%20(Control)%20Order%202024%20).pdf
- ¹⁶ An in-depth comparison of the existing Sugar (Control) Order with the revised Draft Sugar (Control) Order, 2024 dated 26 August 2024,
- Link: https://www.chinimandi.com/an-in-depth-comparison-of-the-existing-sugar-control-order-with-the-revised-draft-sugar-control-order-2024/

¹⁷Shukla, SK., Nagargade, M., Pathak, AD and Blessey, M. (2020). Water Footprint in Sugarcane, ICAR-IISR Technical bulletin



¹ Foreign Agricultural Service, United States Department of Agriculture. Link: https://apps.fas.usda.gov/psdonline/app/index.html#/app/home

² Annex Table 5.10; CACP Price policy for Sugarcane 2024-25; Released by MoAFW on November 2023

³ Foreign Agricultural Service, United States Department of Agriculture; https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Sugar+Semi-annual New+Delhi India IN2024-0045.pdf

⁴ Table 1.21: Per Capita Availability of Certain Important Articles of Consumption, Economic Survey 2023-24

⁵ Sugar sector demands hike in sale price and ethanol prices: The Hindu dated October 30, 2024, *Link: https://www.thehindu.com/business/Industry/sugar-sector-demands-hike-in-sale-price-and-ethanol prices/article68814131.ece*

⁸ Table 6.3 A. Principal Exports, Economic Survey 2023-24

⁹ Details of 109 varieties of Field and Horticultural crops which was released by Prime Minister Shri Narendra Modi on 11th August 2024; *PIB Press Release dated 13 August 2024 - Ministry of Agriculture and Farmers Welfare (Press Release ID: 2044754)*

Link: https://www.scobserver.in/cases/state-of-uttar-pradesh-v-lalta-prasad-vaish-states-power-to-regulate-industrial-alcohol/

State's power to make laws on industrial alcohol can't be taken away: Supreme Court in 8:1 ruling; Indian Express dated 24th October 2024

Link: https://indianexpress.com/article/india/supreme-court-verdict-states-industrial-alcohol-9634295/

Note: Calendar Year: January to December

Fiscal Year: April to March

Sugar year/marketing Year: October to September Ethanol Supply Year: November to October

Note: Definitions of costs calculated by CACP

- A2: Costs incurred by the farmer in production of a particular crop. It includes several inputs such as expenditure on seeds, fertilisers, pesticides, leased-in land, hired labour, machinery and fuel
- A2+FL: Costs incurred by the farmer and the value of family labour
- C2: A comprehensive cost, which is A2+FL cost plus imputed rental value of owned land plus interest on fixed capital, rent paid for leased-in land



¹⁸ State's power to regulate industrial alcohol, (State of Uttar Pradesh v Lalta Prasad Vaish); Supreme Court Observer dated 28th October 2023