



# Sugar Industry

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**For Prelims:** Minimum Support Price (MSP), State Advised Price (SAP), Fair and Remunerative Price (FRP)

**For Mains:** Sugar Industry: Significance, Challenges, Initiatives

## Why in News

The [Cabinet Committee on Economic Affairs](#) has hiked [Fair and Remunerative Price \(FRP\) of sugarcane for sugar season 2022-23](#) (October - September) by Rs 15 per quintal.

- The Centre has also **announced a premium of Rs 3.05 per quintal for each 0.1% increase in recovery of sugar** over and above 10.25% and a reduction in FRP by Rs 3.05 per quintal for every 0.1% decrease in recovery.
- **The recovery rate is the amount of sugar that sugarcane fetches** and higher the quantum of sugar derived from sugarcane, greater the price it fetches in the market.

## What are the Indian Sugar Industry Highlights?

- **Background**
  - A **major player in the worldwide sugar trade**, India produced 33 million metric tons in 2017/2018. The nation is seeing record levels of sugar production and is **set to overtake Brazil as the highest sugar producer**.
  - India's sugar production **rose 11.5% during the 2014 to 2015 season** on bumper cane production. This increase in production led to an extensive surplus in Indian sugar with mills struggling to pay fair wages to workers.
  - According to a press release from the **Indian Sugar Mills Association (ISMA)** the production till March 2022, since October 2020 was 310 lakh tones and sugar mills.
- **Location:**
  - The sugar industry is **broadly distributed over two major areas of production:**
    - Uttar Pradesh, Bihar, Haryana and Punjab in the north and Maharashtra, Karnataka, Tamil Nadu and Andhra Pradesh in the south.
  - South India has tropical climate which **is suitable for higher sucrose content giving higher yield per unit area** as compared to north India.

## What is the Significance of the Sugar Industry?

- **Multiple Linkages:** Sugar is a labour-intensive industry, up the entire value-chain from cane-growing to sugar and alcohol production. Across multiple districts of Uttar Pradesh, Maharashtra, Tamil Nadu, Karnataka, and several other states, it is the main source of employment.
- **Source of Employment:** A sugar industry is source of livelihood for 50 million farmers and their families. It provides direct employment to over 5 lakh skilled laborers but also to semi-skilled laborers in sugar mills and allied industries across the nation.

- **Byproducts:** The various byproducts of the sugar industry also contributes to the economic growth and promote a number of allied industries.
  - **Sugarcane** has **emerged as a multi-product crop** used as a basic raw material for the production of sugar, ethanol, paper, electricity and a cogeneration of ancillary product.
- **For Livestock Feeding:** Molasses from sugar cane is used for alcohol production and livestock feeding since it is highly nutritious.
- **Biofuel:** In India, the vast majority of ethanol is produced from sugarcane molasses, a by-product of sugar. Ethanol blended fuel can help in reducing **crude oil** imports.
- **Bagasse:** Basic utilisation of baggase continues to be as a fuel. But it is also suitable raw material for paper industry. 30% of cellulose requirement comes from agricultural residues.
  - However, since the mills are scattered all over the country, collection of surplus baggase poses a problem and makes paper units uneconomical.

## What are the Challenges Regarding the Sugar Industry?

- **Uncertain Production Output:**
  - Sugarcane has to compete with several other food and cash crops like cotton, oil seeds, rice, etc. This affects the supply of sugarcane to the mills and the production of sugar **also varies from year to year causing fluctuations in prices** leading to losses in times of excess production due to low prices.
- **Low Yield of Sugarcane:**
  - India yields per hectare is extremely **low as compared to some of the major sugarcane producing countries** of the world. For example, India's yield is only 64.5 tonnes/hectare as compared to 90 tonnes in Java and 121 tonnes in Hawaii.
- **Short Crushing Season:**
  - Sugar production is a seasonal industry with a short crushing season varying normally from 4 to 7 months in a year.
  - It **causes financial loss and seasonal employment for workers** and lack of full utilization of sugar mills.
- **Low Sugar Recovery Rate:**
  - The average rate of recovery of sugar from sugarcane in India is less than 10% which is quite low as compared to other major sugar-producing countries.
- **High Production Cost:**
  - High cost of sugarcane, inefficient technology, uneconomic process of production and heavy excise duty result in high cost of manufacturing.
  - Most of the sugar mills in India are of small size with a capacity of 1,000 to 1,500 tonnes per day thus **fail to take advantage of economies of scale.**
- **Government Policy and Control:**
  - Government has been controlling sugar prices through various policy interventions like export duty, imposition of stock limit on sugar mills, change in meteorology rule etc., to balance supply demand mismatch.
  - But these controls have resulted in **unremunerative sugar prices, increasing arrears for sugar mills and dues to be paid to sugarcane farmers.**

## What are the Initiatives taken by the Government?

- **Rangarajan Committee (2012):** It was set up to give recommendations on regulation of sugar industry. Its major recommendations:
  - Abolition of the quantitative controls on export and import of sugar, these should be replaced by appropriate tariffs.
  - The committee recommended **no more outright bans on sugar exports.**
  - The central government has prescribed a minimum radial distance of 15 km between any

two sugar mills, this criterion often causes virtual monopoly over a large area can give the mills power over farmers. **The Committee recommended that the distance norm be reviewed.**

- There should be no restrictions on the sale of by-products and prices should be market determined. States should also undertake policy reform to allow mills to harness power generated from bagasse.
- **Remove the regulations on release of non-levy sugar.** Removal of these controls will improve the financial health of the sugar mills. This, in turn, will lead to timely payments to farmers and a reduction in cane arrears.
- Based on the report, **Commission for Agricultural Costs and Prices (CACP)** recommended a **hybrid approach of fixing sugarcane prices, which involved fair and remunerative prices (FRP).**
- 2013-14 was a water-shed for the sugar industry. The Central Government considered the recommendations of the committee headed by Dr. C. Rangarajan on the de-regulation of sugar sector and decided to discontinue the system of levy obligations on mills for sugar produced after September, 2012 and **abolished the regulated release mechanism on open market sale of sugar.**
- The de-regulation of the sugar sector was undertaken to improve the financial health of sugar mills, enhance cash flows, reduce inventory costs and also **result in timely payments of cane price to sugarcane farmers.**
- The recommendations of the Committee relating to Minimum Distance Criteria and adoption of the Cane Price Formula have been left to State Governments for adoption and implementation, as considered appropriate by them.
- With the aim of **benefitting** Sugar farmers and in order to clear their arrears/cane dues, the Union Government has decided to increase the [Minimum Selling Price \(MSP\) of Sugar from Rs. 29 to Rs. 31 for the year 2019-20.](#)

### What is Fair and Remunerative Price (FRP)?

- FRP is the minimum price that the sugar mills have to pay to farmers.
- It is determined on basis of recommendations of **Commission for Agricultural Costs and Prices (CACP)** and after consultation with State Governments and other stake-holders.

### What is State Advised Price (SAP)?

- In other key growing states of Uttar Pradesh, Punjab, Haryana, Tamil Nadu and Uttarakhand, farmers get the **State Advised Price (SAP)** fixed by state governments which is usually higher than FRP.
- Apart from this, the government has also provided incentives on producing ethanol from B-heavy molasses and cane juice to divert the sugar surpluses towards biofuel, thus indirectly supporting sugar prices. The new **Biofuel Policy 2018** has fixed a target of achieving **20% ethanol blending** with petrol by 2030.
  - Recently, instead of 2030, the Centre plans to move ahead with its ethanol blending target of 20% of petrol containing ethanol by 2025-26.

### Why is the Government Encouraging Sugar Production?

- The government wants to reduce its Import Bill on Crude Oil by cutting oil imports and blending ethanol with Petrol under the **Ethanol Blended with Petrol programme.**
  - Currently, India's 85% requirement of crude oil is met through imports.
- Also, to reduce pollution & to make India Atmanirbhar in petroleum sector, Government is encouraging **sugar mills to divert excess sugarcane to ethanol** which is blended with petrol, which **not only serves as a green fuel but also saves foreign exchange** on account of crude oil import.
  - In the sugar season 2021-22, **about 35 LMT of sugar is estimated to be diverted & by 2025-26 more than 60 LMT of sugar is targeted to be diverted to ethanol,**

which would address the problem of excess sugarcane as well as delayed payment issue because farmers would get timely payment.

- The government has fixed a target of **10% blending of fuel grade ethanol with petrol by 2022 & 20% blending by 2025.**

### What can be the Way Forward?

- The sector needs an infusion of capital, but also policy measures and structural changes. **Technological upgradation** in age old mills especially in Uttar Pradesh and Bihar to improve efficiency in production.
- Major sugar producing States like Maharashtra and Karnataka have migrated to the progressive revenue-sharing formula other states should also introduce **revenue-sharing formula** to ensure farmers receive a share in the profits.
- When domestic production is likely to be in excess of domestic consumption the government should encourage exports through policy changes.
- Mills should be **allowed to produce more alcohol** (a higher value product with massive industrial demand). Exports of sugar and alcohol should also be reduced. It will improve the financial situation of mills and could afford to pay farmers a price based on the market prices of sugar.
- The production cost of sugar in India is one of the highest in the world. **Intense research is required to increase the sugarcane production** in the agricultural field and to introduce new technology of production efficiency in the sugar mills.
- Production costs can also be reduced through the proper utilisation of by- products of the industry.
- The Government should **encourage ethanol production.** It will bring down the country's oil import bill and help in diversion of sucrose to ethanol and to balance out the excess production of sugar.

### UPSC Civil Services Examination, Previous Year's Question (PYQs)

**Q. With reference to the usefulness of the by-products of sugar industry, which of the following statements is/are correct? (2013)**

1. Bagasse can be used as biomass fuel for the generation of energy.
2. Molasses can be used as one of the feedstocks for the production of synthetic chemical fertilizers.
3. Molasses can be used for the production of ethanol.

**Select the correct answer using the codes given below:**

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**Ans: (c)**