

**30– 11 – 2023**

**News:** International Sugar Organisation (ISO)

- India is set to chair the International Sugar Organization (ISO) in 2024, marking a pivotal milestone in its global stature within the sugar industry.

## **International Sugar Organization (ISO)**

- The International Sugar Organization serves as a vital intergovernmental body dedicated to enhancing the global sugar market.
- It represents around 87% of world sugar production and 64% of world sugar consumption.
- With a membership of around 88 nations, India being among them, the organization encompasses a diverse range of countries.
- International Sugar Organization is headquartered in London, United Kingdom.
- The ISO administers the International Sugar Agreement (ISA), 1992 aiming to foster international cooperation in sugar related matters, facilitate intergovernmental discussions to improve the global sugar economy, collect and disseminate market information, and encourage expanded sugar use, especially in non-traditional applications.
- India is set to chair the organization in 2024.

# Sugarcane

- Sugarcane is a **low-land tropical, plantation, and cash crop** which are grown in the regions having **high temperature and heavy rainfall**.
- This crop is usually grown in **regions that have monsoonal type of climate**. Some major producers include India, Java, Formosa, Cuba, Jamaica, Trinidad, and Barbados.
- **India is the top country with sugar cane production** in the world beating Brazil in 2022. However, **Brazil is the largest exporter** of Sugar in the world. **India is also the largest consumer** of sugar in the world.
- India accounts for about **19 percent of the world's production of sugarcane**. But it occupies only 2.4 percent of the total cropped area in the country.
- This industry provides employment for more than 4 lakh persons directly and many farmers indirectly.
- The **sugar industry is a seasonal industry** because of the seasonality of raw materials.
- The development of the industry on modern lines dates to 1903 when a sugar mill was started in Bihar. Subsequently, sugar mills were started in other parts of Bihar and Uttar Pradesh.
- In 1950-51, 139 factories were in operation. The number of sugar factories rose to 662 in 2010-11.

- Sugarcane is a **weight-losing crop**. The ratio of sugar to sugarcane varies between 9 to 12 percent depending on its variety.
- Its **sucrose content begins to dry during haulage** after it has been harvested from the field.
- **Better recovery of sugar is dependent upon its being crushed within 24 hours of its harvesting.**
- **Sugar factories hence are located within the cane producing regions.**
- **Maharashtra has emerged as a leading sugar producer** in the country and produces more than one-third of the total production of the sugar in the country.
- **Uttar Pradesh is the second-largest producer** of sugar. The sugar factories are concentrated in two belts – the Ganga-Yamuna doab and the Tarai region.
- The major sugar-producing centers in the Ganga -Yamuna doab are Saharanpur, Muzaffarnagar, Meerut, Ghaziabad, Baghpat, and Bulandshahr districts; while Kheri Lakhimpur, Basti, Gonda, Gorakhpur, Bahraich are important sugar-producing districts in the Tarai region.
- The **crop yield is low in Northern India than in Southern India**. Uttar Pradesh's yield is low, but in Maharashtra, Karnataka, and Tamil Nadu the yield is high.
- Area under sugarcane is expected to be almost 54.55 lakh hectare in 2021-2022 sugar season (October to September) or 3% higher than the

current season's area, according to the Indian Sugar Mills' Association (ISMA). (15 – 07 – 2021)

### **Advantages of increasing Sugarcane production**

- Sugar production generates several by-products, such as molasses, bagasse, and press mud, which can be used to produce other products such as ethanol, paper, and Bio-Fertilizers.
- Sugar mills can 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.
- The government of India has fixed a target of 10% blending of fuel grade ethanol with petrol by 2022 & 20% blending by 2025.
- India achieved its target of an average of 10% blending across the country five months ahead of the targeted timelines of November 2022.
- Cultivating sugarcane provides farmers with an opportunity to diversify their agricultural activities and increase their income.
- Sugarcane cultivation can be integrated with other crops such as vegetables, fruits, and spices to promote crop diversification. This can lead to better soil health, reduced pest and disease pressure, and improved crop yields.

## Challenges Associated with Growing Sugarcane

### Longer Duration to Harvest

- Sugarcane takes a long time to grow and be ready for harvest (around 10 to 12 months). Growing sugarcane is not an easy task as it requires the farmer to plant and harvest two more crops before they can finally harvest sugarcane.
- This means that growing sugarcane demands a lot of hard work over a period of about three years.

### Higher Investment

- Growing sugarcane requires farmers to invest more money because they must prepare the fields properly before planting. This involves tilling the soil to a greater depth, followed by harrowing, and levelling it to make it suitable for sugarcane.
- Moreover, buying sugarcane seedlings is expensive, and before planting, farmers need to add manure and fertilizers to the soil, which also comes at a high cost.

### High Labor Cost

- The labour for cutting sugarcane costs huge and if the cutting season is dry without rain, it gravely affects the total weight of the cane and if it rains,

there will be slush on the path resulting in lorries/trucks not being able to come near the field.

- Farmers must spend a lot to transport the sugarcane from their fields to the main road by employing labour.

### **Unviability Sugar Exports**

- India is finding it difficult to export sugar as the cost of producing it is higher compared to the international market price, mainly due to the high cost of sugarcane.
- To help bridge this gap, the government has been providing export subsidies, but other countries have raised objections with the World Trade Organization (WTO).
- Although India is currently allowed to continue with these subsidies until December 2023, there is uncertainty about what will happen after that.

### **Problem with India's Ethanol Programme**

- Blending ethanol with petrol to use as auto fuel was first announced in 2003, but this initiative has not been very successful due to several challenges. One of the key challenges is the poor pricing of ethanol supplied for blending.
- Since the price of ethanol is often higher than the price of petrol, blending ethanol with petrol becomes less economically viable. This can discourage ethanol producers from supplying ethanol for blending.

## **Price Determination of Sugarcane in India**

- The **Prices of Sugarcane** are determined by the Central Government and the State Governments.

### **Central Government: Fair and Remunerative Price (FRP)**

- The **Central Government** announces FRP which are determined on the recommendation of the Commission for Agricultural Costs and Prices (CACP) and announced by the Cabinet Committee on Economic Affairs (CCEA).
- CCEA is **chaired by the Prime Minister of India**.
- The **FRP is based on the Rangarajan Committee report** on reorganising the sugarcane industry.

### **State Government: State Advised Prices (SAP)**

- The **SAP is announced by the Governments of key sugarcane producing states**.
- SAP is **generally higher than FRP**.
- The **price is calculated by the experts, who calculate the entire economics of the crop by taking input cost and then suggest to the government, which may agree or not**.

# Sugar Beet

- Sugar beet is a large white or yellow root crop that grows in temperate regions.
- Sugar beet juice contains high levels of sucrose and is second only to sugarcane as the major source of the world's sugar.
- Beet sugar now accounts for almost all sugar production in the European Union and for about one – fifth of total world production.

## Growing Conditions

- It requires moist and mild winter and moderate summer temperature (16 – 23 degrees) and thus in wide contrast to sugarcane, it is grown in mid-latitude regions.
- Sugar beets require well-distributed precipitation of about 65 cm (24 inches), and the crop must be irrigated if precipitation is deficient.
- It requires deep, friable, well-drained and lime-rich soil.
- It is usually cultivated as a rotation crop with turnips.
- It is a highly capital-intensive crop; thus, its cultivation is limited only to affluent countries of the world.
- It also requires a cheap and easy supply of labour to perform the works from planting to harvesting.
- Russia, France, and USA are among the leading producers in the world.