FRP for Sugarcane and Sugar Industry in India

For Prelims: Sugarcane crop, Fair and Remunerative Price, Ethanol Blending

For Mains: Sugarcane Sector in India, Its Significance and Challenges, Ethanol blending as challenges for food security

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 reduction in FRP by Rs 3.05 per quintal for every 0.1% decrease in recovery.
- **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.

How is Sugarcane Cultivated?

- **Temperature:** Between 21-27°C with hot and humid climate.
- **Rainfall:** Around 75-100 cm.
- **Soil Type:** Deep rich loamy soil.
- **Top Sugarcane Producing States:** Maharashtra>Uttar Pradesh > Karnataka
- It can be grown **on all varieties of soils ranging from sandy loam to clay loam** given these soils should be well drained.
- It needs **manual labour** from sowing to harvesting.
  It is the main source of sugar**, gur (jaggery)**, khandsari and molasses.
- Scheme for Extending Financial Assistance to Sugar Undertakings (SEFASU) and **National Policy on Biofuels** are two of the government initiatives to support sugarcane production and the sugar industry.

How are the Prices of Sugarcane Determined?

- The **Prices** of Sugarcane are Determined by the **Central Government (Federal Government)** and the **State Governments.**
- **Central Government:** Fair and Remunerative Price (FRP)
  - The Central Government announces **Fair and Remunerative Prices** 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.**

What is the Status of the Sugarcane Sector in India?

- **Largest Producer:**
    - India is the **largest producer of Sugarcane** in the World.
        - India has surpassed Brazil in the sugar production in the current sugar season 2021-22.
    - Factors like policies that incentivize production, including a minimum price, guaranteed sales of sugarcane and public distribution of sugar, **have helped India become the largest producer.**
    - However, factors like rainfall deficit, depleting groundwater table, delayed payment to cane farmers, lower net income (for the farmer) compared to other crops, labour shortage and increasing cost of labour, followed by Covid-19 pandemic **are challenging the entire sugar sector.**
- **Second Largest Exporter:**
    - India is the Second Largest exporter of Sugar after Brazil.
    - India apart from meeting its requirement for domestic consumption has also **consistently exported sugar** which has **helped in reducing the** fiscal deficit.
    - About 100 LMT of sugar has been exported till August.2022 in the **current sugar season 2021-22** & exports are likely to touch 112 LMT.
- **Becoming Self-Sustainable:**
    - Earlier, sugar mills were dependent primarily on the **sale of sugar to generate revenues.** Surplus production in any season **adversely affects their liquidity leading to accumulation of cane price arrears of farmers.**
    - However, in the **past few years the sugar industry has become self-sustainable.**
        - Since, 2013-14 about Rs. **49,000 crore revenue generated by sugar mills from sale of ethanol to Oil Marketing Companies (OMCs).**
        - In the current sugar season 2021-22, about Rs. **20,000 cr revenue is being generated by sugar mills from the sale of ethanol to OMCs,**
    - The measures taken by the Central Government and FRP enhancement have **encouraged farmers to cultivate sugarcane and facilitated continued operation of sugar factories for domestic manufacturing of sugar.**

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 Atma Nirbhar 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 current 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 are the Challenges Associated with the Sugar Industry?

- **Pricing Controls:** In order to plug the demand-supply mismatch, the union & state governments have been controlling sugar prices through various policy interventions like export duty, imposition of stock limit on sugar mills, change in meteorology rule etc.

    - However, the government control of pricing is populist in nature and this often leads to price distortion.
    - This has triggered that sugar cycle oscillating between massive surplus and severe shortage.
- **High Input and Low Output Cost:** The falling/stagnant price of sugar in recent years in the backdrop of continuous rise in sugarcane prices is **the main source of troubles faced by the sugar industry in the last few years.**
    - Due to this, the government **grappled with large cane arrears while the industry survived on periodic** government funded bail-outs and subsidies.
    - It is because of the unviability of the business, no new private investments are being done in the sugar industry.
- **Unviability Sugar Exports:** Indian exports are unviability as the **cost of producing sugar (thanks to high cane price) is way above the international sugar price.**
    - The government sought to bridge the price gap by providing export subsidies, but this was promptly contested by other countries in the WTO.
    - Further, India under WTO's agreement on agriculture has been allowed to continue with the subsidies till December 2023. The fear is what will happen post-2023.
- **Dismal Performance of India's Ethanol Programme:** [Blending ethanol] with petrol for use as auto fuel, was first announced in 2003, but the problem never took off.
    - The **poor pricing of ethanol supplied for blending,** periodic shortages of sugar and competing demand from the potable alcohol sector.

Way Forward

- There is a **need to deploy remote sensing technologies to map** sugarcane areas.
    - Despite the importance of sugarcane in the water, food and energy sectors in India, there are no reliable sugarcane maps for recent years and in time series.
- Research and development in sugarcane can **help address the issues like low yield and low sugar recovery rates.**
- The **[Rangarajan Committee]** has suggested a **Revenue Sharing Formula to fix cane price** factoring in the price of sugar and other by-products.
    - Further, in case the cane price, arrived at by the formula, drops below what the government considers as a reasonable payment, **it can bridge the gap from a dedicated fund created** for the purpose and a cess can be levied to build up the fund.
- 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 Questions (PYQs)

Q. The Fair and Remunerative Price (FRP) of sugarcane is approved by the (2015)

(a) Cabinet Committee on Economic Affairs
(b) Commission for Agricultural Costs and Prices
(c) Directorate of Marketing and Inspection, Ministry of Agriculture
(d) Agricultural Produce Market Committee

Ans: (a)

Exp:

- Cabinet Committee on Economic Affairs (CCEA) which is chaired by the Prime Minister, approves the Fair and Remunerative Price (FRP) of sugarcane.
- Matters regarding fixation of prices of agricultural products as well as reviewing progress of activities related to rural development, including those concerning small and marginal farmers are in CCEA's competence.
- The FRP is the minimum price that sugar mills have to pay to sugarcane farmers. It is determined on the basis of recommendations of Commission for Agriculture Costs and Prices (CACP) and after consultation with State Governments and other stakeholders. It is then approved by CCEA.

Therefore, option (a) is the correct answer.

Q. With reference to the current trends in the cultivation of sugarcane in India, consider the following statements: (2020)

1. A substantial saving in seed material is made when ‘bud chip settlings’ are raised in a nurse, and transplanted in the main field.
2. When direct planting of setts is done, the germination percentage is better with single budded setts as compared to setts with many buds.
3. If bad weather conditions prevail when setts are directly planted, single-budded setts have better survival as compared to large setts
4. Sugarcane can be cultivated using settlings prepared from tissue culture.

Which of the statements given above is/are correct?

(a) 1 and 2 only
(b) 3 only
(c) 1 and 4 only
(d) 2, 3 and 4 only

Ans: (c)

Exp:

- **Tissue Culture Technology**
    - Tissue culture is a technique in which fragments of plants are cultured and grown in a laboratory.
    - It provides a new way to rapidly produce and supply disease-free seed cane of existing commercial varieties.
    - It uses meristem to clone the mother plant.
    - It also preserves genetic identity.
    - The tissue culture technique, owing to its cumbersome outfit and physical limitation, is turning out to be uneconomical.
- **Bud Chip Technology**
    - As a viable alternative of tissue culture, it reduces the mass and enables quick multiplication of seeds.
    - This method has proved to be more economical and convenient than the traditional method of planting two to three bud setts.
    - The returns are relatively better, with substantial savings on the seed material used for planting. Hence, statement 1 is correct.
- The researchers have found that the setts having two buds are giving germination about 65 to 70% with better yield. Hence, statement 2 is not correct.
- Large setts have better survival under bad weather but single budded setts also give 70% germination if protected with chemical treatment. Hence, statement 3 is not correct.
- Tissue culture can be used to germinate and grow sugarcane settlings which can be transplanted later in the field. Hence, statement 4 is correct. Therefore, option (c) is the correct answer.

Source: TH