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Ethanol Blended Petrol Program

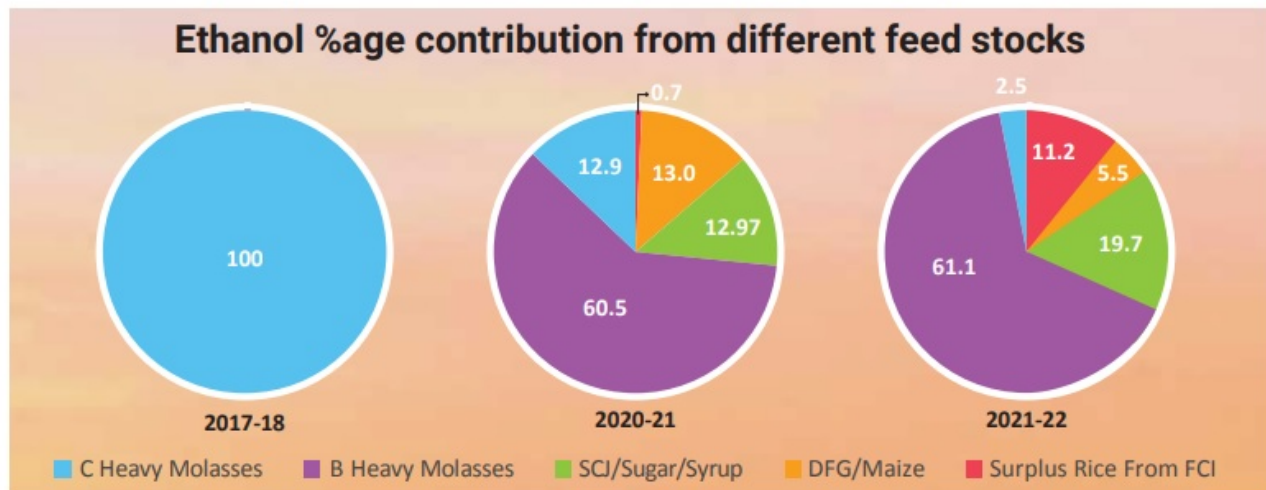
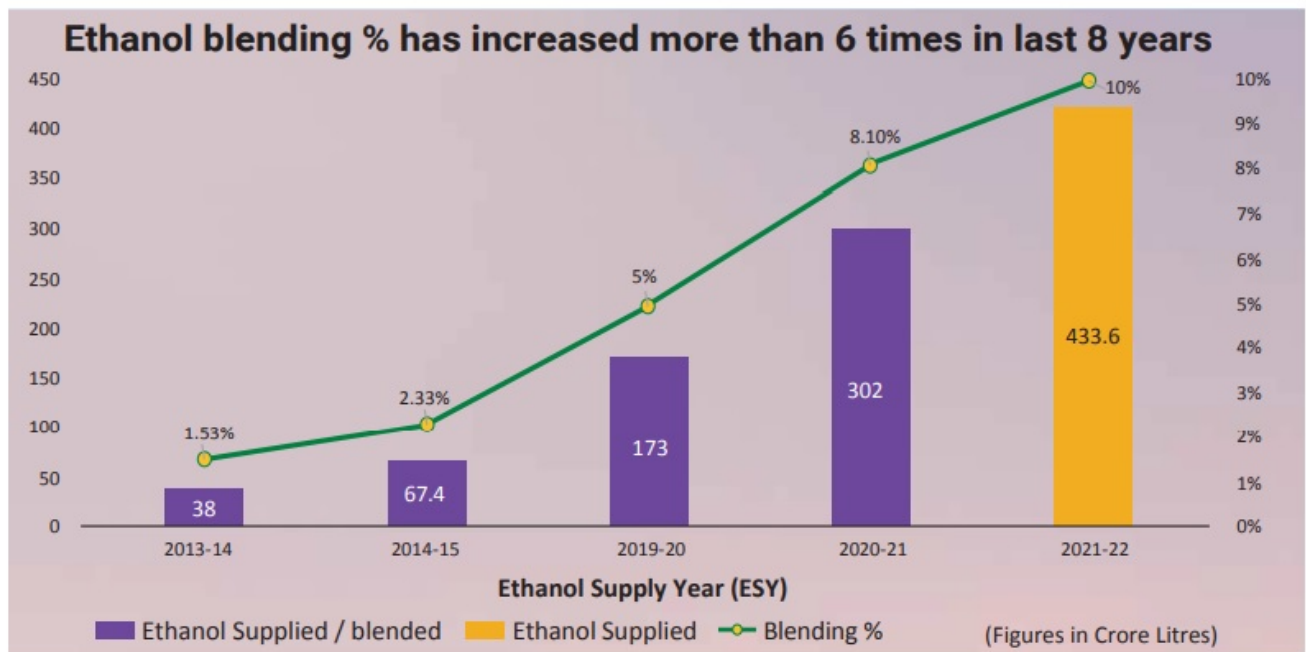
Why in news?

Recently the Ministry of Consumer Affairs, Food and Public Distribution directed all mills and distilleries not to use sugarcane juice/syrup for making any ethanol “with immediate effect”.

Status of Ethanol Production in India

- India is the world's 3rd largest energy consuming nation and a significant part of India's energy requirement is met through oil imports.
- Ethanol production capacity increased more than 2.5 times and no. of distilleries increased by 66% in 8 years.
- Most of the ethanol production in India comes from B Heavy Molasses.
- Ethanol Industry is expected to grow by 500%.

ETHANOL BLENDING IN INDIA



- India has doubled ethanol blending with petrol to **10% in the last two years.**
- Ethanol blending will reach 12% in 2023 and meet the target of **25% by 2025.**

AVERAGE ETHANOL BLENDING WITH PETROL (%)



What is Ethanol Blended Petrol Program (EBP)?

- **Launch year**- 2003
- **Aim**- To promote the use of renewable fuels.
- **Ethanol**- It is an *agro-based product*, mainly produced from a by-product of the sugar industry, namely molasses. It is 99.9% pure alcohol that can be blended with petrol.
- **Guidelines**- National Policy on Biofuels.
- **Nodal department**- *Department of Food and Public Distribution (DFPD)* is the nodal department for promotion of fuel grade ethanol producing distilleries in the country.
- **Target**-
 - **E10**-It has achieved the target of 10% ethanol blending in 2022.
 - **E20**- It has set a target of 20% blending (E20) by 2030 which was now shifted to 2025-26.
- **Price fixation**-The procurement price of ethanol is fixed by the *government*, and oil companies can purchase it from domestic sources.
- **C-heavy molasses**- Ethanol is typically made from “C-heavy” molasses, a by-product of sugarcane processing.
- **Alternative feedstocks**- It include “B-heavy” molasses, concentrated sugarcane juice, and other substrates like rice and maize.
- **Increase in ethanol production**- It happened largely after 2017-18, when mills started making it from B-heavy molasses and concentrated sugarcane juice/syrup.

To know about ethanol blending in India click [here](#)

What is the significance of EBP?

- **Differential pricing**-The success of the Ethanol Blended Petrol (EBP) program is attributed to differential pricing for ethanol produced from various feedstocks.
- **Diversified production**-Government support and alternative feedstocks have diversified ethanol production.
- **Sustainable production**- The government raised the procurement price of ethanol produced from damaged grain and maize, this would lead to food security as it reduces the reliance on the food sources.
- **Fuel India**- Uttar Pradesh and Bihar would “fuel India” in future as Punjab, Haryana, Maharashtra feeds India.

Uttar Pradesh is a major sugarcane producer, Bihar is the major producer of maize.

- **Vehicle efficiency**- Ethanol blending offers increase in Research Octane Number (RON) of the blend, fuel embedded oxygen and higher flame speed.
- **Climate resilient**- It helps in complete combustion and reduce vehicular emissions such as hydrocarbon, carbon monoxide and particulate matter.
- **Energy security**-Domestic biofuels provide a strategic opportunity to the country, as they reduce the nation’s dependence on imported fossil fuels.
- **Waste to wealth**- Ethanol produced from damaged food grain and vegetable waste

would promote circular economy.

Why the government announced restrictions on ethanol production?

The Government directed the sugar mills and distillers “not to use sugarcane juice /sugar syrup” for ethanol production under Sugar (Control) Order 1966.

- **Low stock**- As per National Federation of Cooperative Sugar Factories the sugar production for the year 2022-23 is lowest since 2016-17.
- **Uncertain production**- Maharashtra and Karnataka are expected to record particularly sharp declines, on the back of subpar rains and low reservoir water levels in their major cane-growing areas.
- **Domestic availability**- The sugar production is low coupled with uncertain production, hence the government prefers domestic supply for exports.
- **Consumerism**- The primacy has been given to consumers over ethanol production which is the need of the hour and the government gives high preference for food rather than fuel.
- **Check food inflation**- The restrictions by the government is to regulate the price mechanism for ethanol.

References

1. [Indian Express- Food vs Fuel](#)
2. [The Hindu- Government directs sugar mill](#)



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