



drishti

## India's Ethanol Plan and Food Security

---

 [drishtias.com/printpdf/india-s-ethanol-plan-and-food-security](https://drishtias.com/printpdf/india-s-ethanol-plan-and-food-security)

### Why in News

---

India's ambitious plan to cut the use of fossil fuels by promoting **ethanol** derived from rice, corn and sugar could **undermine** its **food security**.

### Key Points

---

- **About:**

- **Ethanol:** It is an agro-based product, mainly produced from a by-product of the sugar industry, namely molasses.  
It is one of the principal **biofuels**, which is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes such as **ethylene hydration**.
- **Ethanol Blending Programme (EBP):** It **aims** at **blending ethanol with petrol**, thereby bringing it under the category of biofuels and saving millions of dollars by cutting fuel imports and decreasing carbon emissions.
- **Blending Target:** The Government of India has advanced the target for **20% ethanol blending in petrol** (also called E20) to 2025 from 2030.  
Currently, 8.5% of ethanol is blended with petrol in India.

- **Associated Issues:**

- **National Policy on Biofuel:** The new ethanol blending target primarily focuses on food-based feedstocks, in light of grain surpluses and wide availability of technologies.
  - The blueprint is a departure from the **2018 National Policy on Biofuels**, which prioritized grasses and algae; cellulosic material such as bagasse, farm and forestry residue; and, items like straw from rice, wheat and corn.
- **Risk of Hunger:** The food grains meant for the impoverished are being **sold to distilleries at prices cheaper** than what states pay for their public distribution networks.
  - **Competition** between the **distilleries and the public distribution system** for subsidized food grains could have adverse consequences for the rural poor and expose them to enhanced risk of hunger.
  - India still ranks **94<sup>th</sup> on the Global Hunger Index 2020** comprising 107 nations.
  - The **Food and Agriculture Organization (FAO)** estimates that about 209 million Indians, or about 15% of its population, were undernourished between 2018 and 2020.
  - The **Covid-19 pandemic** is also pushing more people into poverty, dealing a blow to decades of progress.
- **Cost:** Production of biofuels requires land, this impacts the cost of biofuels as well as that of food crops.
- **Water use:** Massive quantities of water are required for proper irrigation of biofuel crops as well as to manufacture the fuel, which could strain local and regional water resources.
- **Efficiency:** Fossil Fuels produce more energy than some of the biofuels. E.g. 1 gallon of ethanol produces less energy as compared to 1 gallon of gasoline (a fossil fuel).

- **Government's Arguments:**

- **Enough Stockpiles of Grains:** The push for ethanol poses no threat to India's food security because the government has enough stockpiles of grains at warehouses of the state-run **Food Corporation of India (FCI)**.
  - State reserves stood at 21.8 million tons of rice, against a requirement of 13.54 million tons.
- **Capacity Creation:** The **long-term planning** of the government involves the **creation of sufficient capacities** so that half of the requirement of 20% blending is catered by grains, predominantly maize and the rest by sugar cane.
- **Benefit of Farmers:** The blending plan would benefit corn and rice farmers, while addressing the issue of surplus.

## Way Forward

---

- **Ethanol From Wastes:** India has a real opportunity here to become a global leader in sustainable biofuels policy if it chooses to refocus on ethanol made from wastes.  
This would bring both strong climate and air quality benefits, since these wastes are currently often burned, contributing to smog.
- **Water Crisis:** The new ethanol policy should ensure that it doesn't drive farmers toward water-intensive crops and create a water crisis in a country where its shortage is already acute.  
Rice and sugarcane, along with wheat, consume about 80% of India's irrigation water.
- **Prioritize Crop Production:** With our depleting groundwater resources, arable land constraints, erratic monsoons, and dropping crop yields due to climate change, food production must be prioritized over crops for fuel.

**Source: IE**