

GOVERNMENT OF INDIA  
MINISTRY OF PETROLEUM AND NATURAL GAS  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO - 2513**  
ANSWERED ON - 10/08/2026

**QUANTIFIED BENEFITS ON IMPLEMENTATION OF ETHANOL BLENDING  
POLICY**

2513. DR. SYED NASEER HUSSAIN:

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) whether Government has assessed the economic, environmental, and agricultural impact of achieving 20 per cent ethanol blending in petrol;
- (b) if so, the quantified benefits in terms of foreign exchange savings, crude oil import reduction, and farmer income since the implementation of the Ethanol Blending Programme; and
- (c) whether any challenges have been identified in ensuring sustainable feedstock supply and mitigating adverse impacts on groundwater and food security?

**ANSWER**

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM & NATURAL GAS

(SHRI SURESH GOPI)

(a) to (c): The Government has adopted a balanced approach to the Ethanol Blended Petrol (EBP) Programme, ensuring that water sustainability, food security and farmers' interests remain paramount.

The Government follows a diversified feedstock strategy under the National Policy on Biofuels. Ethanol is produced from multiple approved feedstocks, including sugarcane-based feedstocks, maize, damaged foodgrains, broken rice, foodgrains unfit for human consumption, surplus foodgrains approved by the National Biofuel Coordination Committee (NBCC) and other approved agricultural feedstocks. The Government is also promoting Second Generation (2G) ethanol from agricultural residues under the “Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran Anukool fasal awashesh Nivaran) Yojana 2019” to progressively increase the use of non-food feedstocks.

The diversion of foodgrains for ethanol production is carefully calibrated in consultation with the Department of Food & Public Distribution and other concerned Ministries. Food security, Public Distribution System (PDS) requirements, National Food Security Act (NFSA) obligations, Other Welfare Schemes (OWS) and prescribed buffer stocks are accorded the highest priority. Only surplus foodgrains, after meeting these requirements, are permitted for ethanol production. The Government is also promoting crop diversification towards comparatively less water-intensive feedstocks such as maize and encouraging sustainable agricultural practices so that expansion of ethanol feedstocks remains balanced with the production of pulses, oilseeds and other essential food crops.

In order to support the production of ethanol across the country, the Government have taken several steps to promote ethanol production in India which *inter-alia* includes expansion of feedstock for Ethanol production, administered price mechanism for Ethanol procurement under the Ethanol Blended Petrol (EBP) Programme, lowered GST rate to 5% for Ethanol for EBP

Programme, introduction of various Ethanol Interest Subvention Schemes (EISS) during 2018-22, a dedicated subvention scheme for Cooperative Sugar Mills to convert existing sugarcane-based distilleries into multi-feedstock plants for ethanol production from molasses as well as grains, Long Term Offtake Agreements (LTOAs) between OMCs and Dedicated Ethanol Plants, notified the Pradhan Mantri JI-VAN Yojana, to provide financial assistance for setting up Advanced Biofuels projects in the country using lignocellulosic biomass and other renewable feedstock, multimodal transportation of ethanol to enhance availability of ethanol and increasing ethanol storage capacity along with other allied infrastructure for handling of higher blends of ethanol.

Water-use efficiency is also being enhanced through micro-irrigation, drip irrigation and other water conservation measures under the *Per Drop More Crop* component of the Pradhan Mantri Krishi Sinchayee Yojana. Many sugar mills are also encouraging farmers to adopt water-efficient cultivation practices.

Molasses-based distilleries with incineration boilers and grain-based distilleries are required to operate as Zero Liquid Discharge (ZLD) units, enabling recycling and reuse of process water while eliminating liquid effluent discharge. Modern ethanol plants typically consume about 3–5 litres of processed water for producing one litre of ethanol.

Since Ethanol Supply Year (ESY) 2014–15, the programme has generated foreign exchange savings of over ₹1.97 lakh crore, substituted nearly 316 lakh metric tonnes of crude oil, avoided approximately 952 lakh metric tonnes of CO<sub>2</sub> emissions and generated more than ₹1.66 lakh crore in additional income for Indian farmers.

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