



Modified Scheme to Produce 1G Ethanol

Why in News

Recently, the **Department of Food & Public Distribution** has **notified a modified scheme** for **extending financial assistance for producing 1st Generation (1G) ethanol**.

- The aim is to achieve blending targets of ethanol with petrol ([Ethanol Blending Programme](#)).

Key Points

▪ Ethanol Blending Programme (EBP):

- **Aim:** 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**.
- **Target:** The target is to **achieve 20% blending** of ethanol **by 2025**.
- **Ethanol Extraction from Foodgrains:**

- In **2018**, the Central Government **extended the ambit of the EBP programme** to extract the **fuel from surplus quantities of food grains** such as maize, jawar, bajra fruit and vegetable waste.
- Earlier, **only excess sugarcane production** was allowed to be converted into ethanol for procurement under the programme.

▪ Financial Assistance for Expansion of Ethanol Distillation Capacity: The government will provide **interest subvention (on loans)** to encourage the funding in this sector.

◦ Aim:

- To set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such as **cereals** (rice, wheat, barley, corn & sorghum), sugarcane, sugar beet etc.
- To convert molasses (a sugar byproduct) based distilleries to dual feedstock.

▪ Expected Benefits:

◦ Enhancing Farmers' Income:

- Facilitate **farmers to diversify their crops** to cultivate particularly maize/corn which needs less water compared to sugarcane and rice.

◦ Provide Employment:

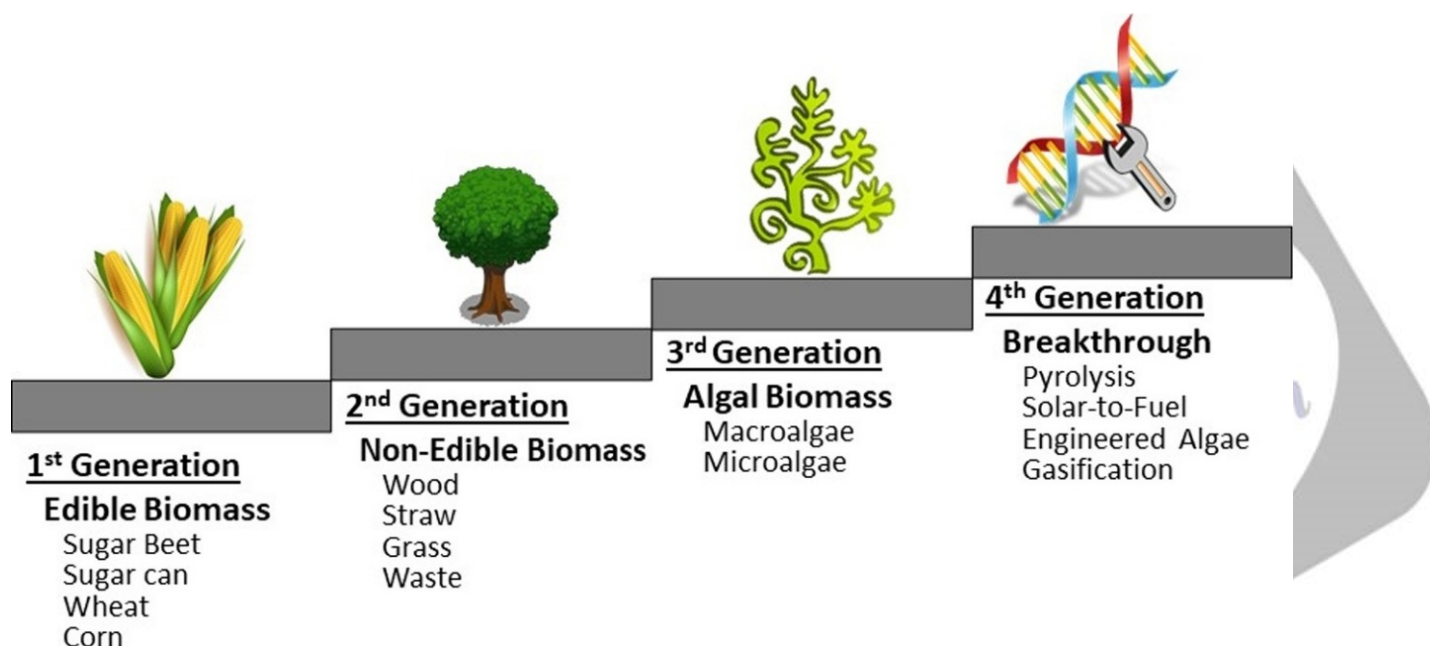
- Investment **in capacity addition or establishment of new distilleries** shall provide new employment opportunities in rural areas.

◦ Promote Distributed Ethanol Production:

- Bringing **new grain based distilleries** in the entire country would result in **distributed production of ethanol** and would **save a lot of transportation cost** and thus prevent delays in meeting the blending target.

▪ Related Initiatives:

- **E20 Fuel:** Earlier, the Indian government had invited public comments for introducing adoption of **E20 fuel** (a blend of 20% ethanol with gasoline).
- **Pradhan Mantri JI-VAN Yojana, 2019:** The objective of the **scheme** is to create an ecosystem for setting up commercial projects and to boost research and development in the 2G Ethanol sector.
- **Reduction in GST:** The Government has also reduced **GST** on ethanol for blending in fuel from 18% to 5%.
- **National Biofuel Policy 2018:** The Policy **categorises biofuels** as "Basic Biofuels" viz. First Generation (1G) bioethanol & biodiesel and "Advanced Biofuels" - Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels, Third Generation (3G) biofuels, bio-CNG etc. to enable extension of appropriate financial and fiscal incentives under each category.



Way Forward

- Proper implementation of the biofuel policy and ethanol blending programme should ensure **fuel requirements should not compete with food requirements** and that only surplus food crops should be used for fuel production.
- Alternatives like 3rd generation (derived from algae) and 4th generation biofuels (derived from **genetically engineered plants** or biomass) should be encouraged.

Source: PIB