

**STATE-RUN OMCS TO BUY BIODIESEL MADE FROM USED COOKING OIL**

**Prelims:** Governance- Policies, Schemes

**Mains:** GS-II- Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

▶▶ **Context:** Central Government has launched a 'Repurpose Used Cooking Oil (RUCO)' sticker and a phone app to enable the collection of used cooking oil. Restaurants and hotels interested in supplying used cooking oil can affix the sticker to show availability.

**About RUCO:**

- ▶▶ The RUCO (Repurpose Used Cooking Oil) initiative have been launched by Food Safety and Standards Authority of India (FSSAI) which will enable collection and conversion of used cooking oil (UCO) to bio-diesel.
- ▶▶ Under RUCO, 64 companies at 101 locations have been identified to enable collection.
- ▶▶ FSSAI wants businesses using more than 100 litres of oil for frying, to maintain a stock register and ensure that UCO is handed over to only registered collecting agencies.
- ▶▶ FSSAI is also working in partnership with Biodiesel Association of India and the food industry to ensure effective compliance of used cooking oil regulations.
- ▶▶ FSSAI has additionally launched a micro-site to monitor the progress of the collection and conversion of used cooking oil into biodiesel.

**Background:**

- ▶▶ The consumption of Used Cooking Oil (UCO) poses adverse health effects.
- ▶▶ During frying, several properties of oil are altered, **Total Polar Compounds (TPC)** are formed on repeated frying.
- ▶▶ The toxicity of these compounds is associated with several diseases such as hypertension, atherosclerosis, Alzheimer's disease, liver diseases.
- ▶▶ Therefore, it is essential to monitor the quality of vegetable oils during frying.
- ▶▶ In order to safeguard consumer health, FSSAI has fixed a limit for Total Polar Compounds at 25 percent beyond which the vegetable oil shall not be used.
- ▶▶ All Food Business Operators (FBOs) are required to monitor the quality of oil during frying by complying with the said regulations.

- ▶▶ Repurpose Used Cooking Oil (RUCO) is an ecosystem that will enable the collection and conversion of UCO to biodiesel.

### What are Total Polar Compounds (TPC)?

- ▶▶ TPC is formed due to repeated frying and usage of edible oil which changes its physiochemical and nutrition properties making it unfit for human consumption.
- ▶▶ TPCs above the set level cause hypertension, atherosclerosis, Alzheimer's disease, liver disease etc.
- ▶▶ Cooking oil may have saturated fatty acids (palm oil) or unsaturated fatty acids (soyabean).
- ▶▶ The saturated fatty acids such as in palm oil are more stable than the unsaturated fatty acids which decompose easily at high temperature forming polar compounds.
- ▶▶ Thus, it makes oils with saturated fatty acids fit for frying. However, oils with unsaturated fatty acids are healthier provided they are used just once for frying.

