

BIODIESEL - FULL MIND MAP

Topic-wise | Hinglish | SSC / BPSC / BSSC / Railway

Topics in this chapter:

1. Biofuel & Energy Crops - Jatropha, Maize and Biodiesel Basics
2. Biomass Gasification & Pongamia
3. Biojet Fuel & Compost / Vermicompost

1. Biofuel & Energy Crops - Jatropha, Maize and Biodiesel Basics

- Galat kathan: Bio-fuel is cost-effective.; apne environmental aur energy-protection labhon ke bavajud, biofuel ka production aam taur par traditional fossil indhanon ki comparison mein zyada mahanga hota hai, jisse yeh zyadatar abhi bajar paristhitiyon mein lagat-effective nahi hai. [Q1]
- India mein biofuel development mainly Jatropha plants ke seeds ki farming aur processing par kendrit hai, jo oil (40%) se bahut rich hote hain. Jatropha oil ka extraction karne ke baad diesel generators aur engines mein use kiya ja sakta hai. [Q2]
- Maize - makka ki farming ethenol ke liye ki jati hai, jabki Jatropha, pongamiya aur surajamukhi ki farming bayodijal ke liye ki jati hai. [Q3]

2. Biomass Gasification & Pongamia

- nariyal ke khol, mungaphali ke khol aur dhan ki bhusi biomass gaisikaran mein kachche mal (Feedstock) ke roop mein use kiye ja sakte hain. biomass gaisikaran se banane wali producer gas mein mainly carbon monoxide aur hydrogen hote hain aur thodi amount mein methane, carbon dioxide aur dusre gases bhi ho sakti hain; yeh sirf hydrogen aur carbon dioxide nahi hoti. uचित सफ़ाई aur condition-nirdharan (Conditioning) ke baad producer gas ka use direct heat aur antarik-burning engines (Internal-Combustion Engines) dono mein kiya ja sakta hai. [Q4]
- pongamiya pinata ek kathor (Hardy) tree hai, jo India mein dry aur simant land jaisi paristhitiyon mein bhi ug sakta hai. iske seeds mein paryapt oil hota hai aur pongamiya oil mein olik (Oleic) acid main vasa-acid (Fatty-Acid) component hai. in gunon ke reason pongamiya ko bio diesel ke liye akhady tilahan kachcha mal (Non-Edible Oilseed Feedstock) mana jata hai. [Q5]

3. Biojet Fuel & Compost / Vermicompost

- 27 agast 2018 ko spaisajet (SpiceJet) ne deharadun se Delhi tak India ki pehli bio-jet fuel se operated pradarshan udan (Biojet-Fuel Powered Demonstration Flight) operated ki. Q400 viman ke ek injan mein 25% bio-jet (Biojet) fuel aur 75% traditional ATF ka mishran use kiya gaya tha. [Q6]
- khad-construction (Composting) mein bio-avakramaniy organic substance ka decomposition hokar nutrient-rich soil-sudharak banata hai. varmi-kanposting (Vermicomposting) mein kenchue aur microbe milakar organic substance ko vighatit karte hain. kenchue decomposition ki process ko dhima nahi karte; ve use sugam aur kai paristhitiyon mein tej kar sakte hain. [Q7]