

# New technology to make fuel from feedstock

TIMES NEWS NETWORK

**Ludhiana:** Under the aegis of the CSIR-CMERI, scientists at Centre of Excellence Farm Machinery (CoEFM) here have developed the technology of 'semi-continuous bio-diesel plant'. This technology represents a simplified process to produce biodiesel from any feedstock having free fatty acid content up to 10%. It is a low maintenance production technology, easily implementable anywhere at low capital cost and operated with lowest possible manual intervention.

The plant is capable of utilizing different types of waste edible oils and non-edible oils of jatropha, karanj, tung, mahua and jojoba as well as animal fat to produce quality biodiesel. The CSIR-CMERI is commercializing its technology to help MSME units in the production of bio-diesel processing machinery. New entrepreneurs and startups are taking part in developing successful business models and presently it has been transferred to more than five industries.

On Sunday, this developed technology has been transferred to Basudev Biodiesel LLP,

Bhuvneshwar, Odisha, in the presence of CSIR-CMERI director Harish Hirani.

On this occasion, CMERI director Harish Hirani said CMERI was conducting research and developing technologies to utilize waste oils, biomass and municipal solid waste for energy production. He urged the industries to work together to take this technology further forward to achieve government's target of higher energy dependence on renewable energy sources. Currently, the institute is developing a fully automatic upscaled version of bio-diesel plant, with many more features like utilizing high FFA oils and recovery of reactants and purification of byproducts.

Elaborating the technology, the inventor, Krishnendu Kundu, principal scientist, said the bio-diesel produced through this plant was a better energy alternative, considering overall sustainability as it lowers the toxic emissions like carbon monoxide, nitrogen oxides and particulate matter, etc. He added that the technology was beneficial for the bio-diesel producers too as it will give them a profit of Rs 5-8 per litre with a payback period of less than one year.