



Bioplastics may not be a viable alternative to plastic

Posted at: 10/12/2018

'Bioplastics may not be a viable alternative to plastic'-It may trigger cropland expansion, which will further increase greenhouse gas emissions

- Bioplastics — often promoted as a climate-friendly alternative to petroleum-based plastics — may lead to an increase in greenhouse gas emissions, according to a study.
- According to the study by researchers at the University of Bonn in Germany, published in the journal Environmental Research Letters, shifting to plant-based plastics could have less positive effects than expected.
- Plastics are usually made from petroleum, with the associated impacts in terms of fossil fuel depletion but also climate change.
- It is estimated that by 2050, plastics could already be responsible for 15% of the global CO₂ emissions.
- Bioplastics, on the other hand, are in principle climate-neutral since they are based on renewable raw materials such as maize, wheat and sugarcane.
- Producing bioplastics therefore consumes CO₂, which compensates for the amount that is later released at end-of-life.
- An increased consumption of bioplastics in the following years is likely to generate increased greenhouse gas emissions from cropland expansion on a global scale.
- Overall, their net greenhouse gas balance is assumed to be zero.
- Bioplastics are thus often consumed as an environmentally friendly alternative.
- However, at least with the current level of technology, this issue is probably not as clear as often assumed, researchers said.

Impact of biofuel

- Experience with biofuels has shown that this effect is not a theoretical speculation.
- The increasing demand for the “green” energy sources has brought massive deforestation to some countries across the tropics, researchers said.

The Hindu

