- However, current commitments are not enough to keep global warming below 2°C.
- The European Commission has decided to increase the EU's climate target from the current 40% reduction in emissions to 50 or 55%.
- However, the German government has not yet agreed on which of the two figures it would support.
- The Commission is currently conducting a public consultation, looking to propose a new target in September.

# The New Green Revolution: A Just Transition to Climate-Smart **Crops**

**Context:** The agriculture sector's massive greenhouse gas emissions pose a threat to India's green transition. There is an urgent need for a transition to climate-smart crops.

### What are Climate Smart Crops?

- These crops include quality seeds and planting materials of well-adapted varieties.
- They are resistance to drought, salinity and flooding.
- They are the most common climate-related traits for which crop varieties are bred.
  - ▶ Tubers, pulses and millets are some of the 'climate smart crops'.
- These crops are important for the livelihoods and nutrition of poor farmers, especially in tropical and sub-tropical countries.
- These crops avoid the imprudent deployment of farming inputs, residue management, soil disturbance and misguided irrigation strategies employed to improve harvests.
- Staple food crops such as rice and wheat are source of GHG and are prone to climate change. However, Climate Smart Crops are resistant to such phenomenon.

### **Contribution of Agriculture Sector to GHG**

- Contribution to GHG: Agriculture contributes 16 percent of the total greenhouse gas emissions in the country, second only to the energy sector.
- In September 2020, the United Nations Environment Programme (UNEP) released a report that says that the food production line of the world accounts for about a quarter (21 to 37 percent) of GHG emitted every year due to human activities.

## How does the agriculture sector contribute to GHG?

- Most farm-related emissions come in the form of methane (CH4) and nitrous oxide (N2O).
- Cattle belching (CH4) and the addition of natural or synthetic fertilizers and wastes to soils (N20) represent the largest sources, making up 65 percent of agricultural emissions globally.
- Smaller sources include manure management, rice cultivation, field burning of crop residues, and fuel use on farms.

## India's forests and coal mining

**Context:** Giving a boost to the mining sector, the government in its announcements intended to revive the economy following the pandemic. But a boost to mining brings with it associated troubles such as land conflicts, run-ins with communities and an impact on the environment.