



The 'net zero' carbon targets may not be enough to tackle climate change

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(Mains GS 3 : Conservation, environmental pollution and degradation, environmental impact assessment.)

Context:

Independent charitable organisation Oxfam has said that 'net zero' carbon targets that many countries have announced may be a "dangerous distraction" from the priority of cutting carbon emissions.

Dirty business as usual:

- "Land-hungry 'net zero' schemes could force an 80 per cent rise in global food prices and more hunger while allowing rich nations and corporates to continue "dirty business-as-usual,"
- Oxfam has said in a new report titled "Tightening the Net" that has been released ahead of the UN climate talks in Glasgow.

Countries announced net-zero targets:

- In 2019, the New Zealand government passed the Zero Carbon Act, which committed the country to zero carbon emissions by 2050 or sooner, as part of the country's attempts to meet its Paris climate accord commitments.
- In the same year, the UK's parliament passed legislation requiring the government to reduce the UK's net emissions of greenhouse gases by 100 per cent relative to 1990 levels by the year 2050.

- Last year, China also announced that it would become net-zero by the year 2060 and that it would not allow its emissions to peak beyond what they are in 2030.
- More recently, US president Joe Biden announced that the country will cut its greenhouse gas emissions by at least 50 per cent below 2005 levels by 2030.

The mutual achievement:

- John Kerry, USA's climate envoy and considered one of the chief architects of the Paris Climate agreement, launched a bipartisan organisation called World War Zero in 2019 to bring together unlikely allies on climate change and with the goal of reaching net-zero carbon emissions in the country by 2050.
- The European Union too, has a similar plan, called “Fit for 55”, the European Commission has asked all of its 27 member countries to cut emissions by 55 per cent below 1990 levels by 2030.

Understanding the net-zero:

- Net-zero, which is also referred to as carbon-neutrality, does not mean that a country would bring down its emissions to zero.
- That would be gross-zero, which means reaching a state where there are no emissions at all, a scenario hard to comprehend.
- Therefore, net-zero is a state in which a country's emissions are compensated by absorption and removal of greenhouse gases from the atmosphere.

The anomaly of net neutrality:

- One way by which carbon can be absorbed is by creating carbon sinks.
- Until recently, the Amazon rainforests in South America, which are the largest tropical forests in the world, were carbon sinks.
- But eastern parts of these forests have started emitting CO₂ instead of absorbing carbon emissions as a result of significant deforestation.
- This way, it is even possible for a country to have negative emissions, if the absorption and removal exceed the actual emissions.

The report “Tightening the Net”:

- The report “Tightening the Net” says that if the challenge of change is tackled only by way of planting more trees, then about 1.6 billion hectares of new forests would be required to remove the world's excess carbon emissions by the year 2050.
- Further, it says that to limit global warming below 1.5°C and to prevent irreversible damage from climate change, the world needs to collectively be on track and should aim to cut emissions by 45 per cent by 2030 from 2010 levels, “with the sharpest being made by the biggest emitters.”
- Currently, countries' plans to cut emissions will only lead to a one per cent reduction by the year 2030.

- Significantly, if only land-based methods to deal with climate change are used, food rises are expected to rise even more. Oxfam estimates that they could rise by 80 per cent by the year 2050.

Conclusion:

- Oxfam's report shows that if the entire energy sector -whose emissions continue to soar- were to set similar 'net-zero' targets, it would require an area of land nearly the size of the Amazon rainforest or equivalent to a third of all farmland worldwide.
- The report emphasises that reducing emissions cannot be considered a substitute for cutting emissions and these should be counted separately.