

## **Economics of Climate Change**

## Why in News

The <u>COP26 climate talks</u> are going to take place in Glasgow. Given the <u>magnitude of climate change</u> phenomena occurring all over the world, the upcoming climate deal negotiation is crucial to cap global warming at the 1.5-2 degrees Celsius upper limit set out in the <u>2015 Paris Agreement</u>.

• In this context, it is necessary to analyze the **impact of climate change on economic livelihoods** in the world over and the future stability of the global financial system.

## **Key Points**

- Climate Change Cost: Although there is disagreement on the magnitude, several economists are certain about the possible impact of global warming on global output.
  - According to one <u>International Monetary Fund (IMF)</u> estimate, unchecked global warming would reduce 7% of world output by 2100.
  - The <u>Network for Greening the Financial System (NFGS)</u> group of world central banks puts it even higher at 13%.
- Most Vulnerable Area: It is unanimously accepted that the developing world will be the worst affected area by climate change.
  - Presently, much of the world's poor live in the tropical or low-lying regions already suffering climate change fall-out like droughts or rising sea levels.
  - Moreover their countries rarely have the resources to mitigate such damage.
- Impact on Micro-Level: Climate change will drive up to 132 million more people into extreme poverty by 2030, a World Bank paper last year concluded.
  - Factors included lost farming income; lower outdoor labour productivity; rising food prices; increased disease; and economic losses from extreme weather.
- Analysing Net Zero Emission Scenario: <u>'Net zero emissions'</u> refers to achieving an overall balance between <u>greenhouse gas</u> emissions produced and greenhouse gas emissions taken out of the atmosphere.
  - However, there are several economic repercussions owing to Net Zero emissions.
  - A report by think tank Carbon Tracker estimated that over USD 1 trillion of businessas-usual investment by the oil and gas sector would no longer be viable in a genuinely low-carbon world.
  - Moreover, the IMF has called for the end of all fossil fuel subsidies which it calculates at \$5 trillion annually if defined to include undercharging for supply, environmental and health costs.
  - This may lead to an unemployment crisis of mass level.
- Below Par Carbon Pricing: Tax or permit schemes that try to price in the damage done by emissions create incentives to go green.
  - However, so far only a fifth of global carbon emissions are covered by such programmes, pricing carbon on average at a mere USD 3 a tonne.

- This is well below the USD 75/tonne the IMF says is needed to cap global warming at well below 2°C.
- **Risk of Inflation:** Anything which factors in the polluting cost of fossil fuels is likely to lead to **price rises in some sectors**.
- Failure of Green Decoupling: <u>Sustainable growth</u> implies that economic activity can grow as needed without adding yet more emissions.
  - However, this has failed to manifest uptil now.
  - Presently, higher rates of economic growth are achieved but it is accompanied by gains in emissions or achieved by shifting dirty production from one national territory to another.
- Inadequate Green Finance: At a global scale, the rich countries which since their industrial revolutions have generated the bulk of emissions have <u>promised to help developing countries</u> transition via **USD 100 billion** of annual transfers – a promise so far not fulfilled.

## **Way Forward**

- Covering Up Economic Risk of Net Zero Emissions: The global financial system needs to be insulated against both the physical risks of climate change itself and the upheavals likely to happen during a transition to net zero.
  - Central banks and national treasuries should form a combined strategy to balance economic growth with sustainable development.
  - A vital step should be explicitly including policies for climate mitigation in the government budget, along with energy, roads, health and education.
- **Switching to Hydrogen Economy**: Power generation by **green hydrogen** will be a viable solution to achieve the target of 'net-zero' emission to remain under 1.5° C.
  - It will also be a leap forward in minimising the dependence on conventional fossil fuels.
- Mobilising Climate Finance: There is also a need to launch a major campaign to mobilise climate finance and focus should be given on energy efficiency, use of biofuels, carbon sequestration, carbon pricing.

Source: IE

PDF Reference URL: https://www.drishtiias.com/printpdf/economics-of-climate-change