IPCC Report on Global Warming 2018

Why in news?

The Special Report on Global Warming of 1.5ºC was recently approved by the Intergovernmental Panel on Climate Change (IPCC).

Click here to read on IPCC's draft report on global warming.

What is the report on?

- The report focusses on keeping warming to under 1.5°C as compared to pre-industrial times.
- Preventing an extra single degree of heat could make a life-or-death difference in the next few decades.
- So it calls for the world's leaders to limit future human-caused warming to just 0.5°Celsius from now.
- This is, notably, well below the earlier globally agreed-upon goal of 1° C from now.
- The report details how Earth's weather, health and ecosystems could be made better.
- It will be a key scientific input into the Katowice Climate Change Conference in Poland in the coming December.
- The governments will review the Paris Agreement to tackle climate change in this upcoming conference.

What is the current warming scenario?

- In 2010, international negotiators adopted a goal of limiting warming to 2°C since pre-industrial times, called the 2° goal.
- In 2015, in Paris climate agreement, they set dual goals - 2°C and a more demanding target of 1.5°C from pre-industrial times.
- The world has already warmed 1°C since pre-industrial times.
- It is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.
- **Impact** - In that case, climate-related risks to health, livelihoods, food security, water supply, human security and economic growth would increase.
- The world's poor would likely be hit the hardest, and extreme weather, especially heat waves, will be deadlier.

- Diseases such as malaria, dengue, and conditions like premature deaths due to air pollution, undernourishment are likely to multiply.

What would limiting to 0.5°C from now mean for the world?

A number of climate change impacts could be avoided by limiting global warming to 1.5ºC compared to 2ºC, or more.

- Half as many people would suffer from lack of water.
- There would be fewer deaths and illnesses from heat, smog and infectious diseases.
- There would be substantially fewer heat waves, downpours and droughts.
- Around 420 million fewer people would be exposed to extreme heat waves.
- About 65 million fewer people will be exposed to exceptional heat waves.
- Seas would rise nearly 4 inches (0.1 meters) less.
- Half as many animals with back bones and plants would lose the majority of their habitats.
- The West Antarctic ice sheet might not kick into irreversible melting.
- Most of the world's coral reefs would be saved from dying.
- Limiting warming to 0.5°C from now means the world can keep the ecosystems much as it is now.
- Adding another 0.5°C on top of that essentially means a different and more challenging Earth for people and species.

What does it call for?

- The nations' pledges in the Paris agreement are insufficient to limit warming to 1.5°C in any way.
- Meeting the more ambitious goal of slightly less warming would require unprecedented changes.
- It needs "rapid and far-reaching" changes in energy systems, land use, city and industrial design, transportation and building use.
- It involves much sharper and quicker emission cuts by big emitters like China, the US, the European Union and India.
- The measures are also likely to be heavily dependent on the success of yet-to-be-developed carbon removal technologies.
- Annual carbon dioxide pollution levels should halve by 2030 and then be near zero by 2050.
- Emissions of other greenhouse gases, such as methane, also will have to drop.
- Switching away rapidly from fossil fuels to do this could be 3 to 4 times more expensive but would clean the air of other pollutants.
- In turn, this would avoid more than 100 million premature deaths through

this century.

Source: The Hindu, Indian Express

Quick Fact

Intergovernmental Panel on Climate Change (IPCC)

- IPCC was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988.
- It is the leading international body for the assessment of climate change.
- It provides a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.