IPCC Synthesis Report

Why in news?

Highlighting the need for urgent climate action, the Intergovernmental Panel on Climate Change (IPCC) released its Synthesis Report for the Sixth Assessment Cycle in Interlaken, Switzerland.

What is the IPCC?

- The Intergovernmental Panel on Climate Change (IPCC) is the *United Nations body* for assessing the science related to climate change.
- The IPCC does not undertake scientific assessments but only evaluates the state of scientific evidence on various aspects of climate change.
- **Establishment -** It was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).
- **Objective -** The objective of the IPCC is to provide governments at all levels with scientific information that they can use to develop climate policies.
- **IPCC reports -** They are also a key input into international climate change negotiations.
- **Members -** The IPCC is an organization of governments that are members of the United Nations or WMO.
- The IPCC currently has 195 members.

What is the IPCC synthesis report?

- The Synthesis Report is the final part of the IPCC's Sixth Assessment Report (AR6).
- It is fully based on the reports of the *three Working Groups of the IPCC plus the three Special Reports* (Global Warming of 1.5°C, Climate Change and Land, and on the Ocean and the Cryosphere in a Changing Climate).
- **3 Working Groups (WGs) -**
  - WG I evaluated the physical science basis of climate change,
  - WG II evaluated the impacts, adaptation, and vulnerability, and
  - WG III evaluated the mitigation
- This is the final report of the sixth assessment cycle of the UN panel.

Other IPCC reports.

What are the findings of the 6th report?

- **Reduce greenhouse gases -** The report emphasised the need to reduce greenhouse gas emissions and adapt to effective and equitable action for a liveable sustainable

future for all.

- **Paris Agreement -** The report highlights the urgency to limit rising global temperatures by 1.5 C from pre-industrial levels, set by the Paris Agreement.
- While the rate of emissions growth has slowed in the past decade, humanity is estimated to be on a 2.8° C (2.1°-3.4° C range) trajectory by 2100.

Climate justice entails ensuring representation, inclusion, and protection of the rights of those most vulnerable to the effects of climate change.

- **Carbon -** The amount of carbon that the world can cumulatively emit before reaching key temperature limits, i.e., the world's 'carbon budget', is far lower for the 1.5° C than the 2° C target.

Carbon budgets measure how much CO2 is produced by industry, homes and all other parts of the economy to calculate by how much emissions must be cut in the future.

- The IPCC report points out that humanity had already consumed 4/5th of its total carbon budget for 1.5° C by 2019, with developed economies consuming the lion's share.
- **Climate adaption -** Second, the recognition of greater risks at lower temperatures points to the necessity of early climate adaptation.

Climate adaptation means taking action to prepare for and adjust to both the current and projected impacts of climate change.

- **Increase finance -** Governments & policymakers should increase finance to climate investments.
- They should expand the clean energy infrastructure, reduce nitrogen pollution from agriculture, and curtail food waste.

Climate finance is a multifaceted concept, which generally refers to finance for activities aiming to mitigate or adapt to the impacts of climate change.

How is the world doing in this regard?

- The report finds evidence of progress in the proliferation of laws and policies, and confirms the effectiveness of existing policy tools such as regulations and carbon markets.
- However, the report points out that there are gaps between modelled sustainable pathways and what countries have pledged as well as substantial gaps.

What is the key message from the report?

- **Climate resilient -** Urgently adopt to climate resilient development.

  Climate resilient development model integrates both adaptation and mitigation to advance sustainable development for all.

- **Net zero emissions -** While a climate-resilient development pathway is the journey, the destination is net zero emissions at the global level.
- If sustained, net-zero GHG emissions will result in a gradual decline in global temperatures.

What are the implications for India?

- **Extreme weather events -** The most significant implications of the report for India is the increased frequency and intensity of extreme weather events.
- **Vulnerable population -** With a large vulnerable population, India needs to prioritise grants and policies that focusses on adapting to the effects of climate change.
- **Loss of biodiversity -** India's priority should be to minimise loss and damage in terms of lives, livelihood and biodiversity, and accelerate equitable action mitigation and adaptation.

What is the way ahead?

- The IPCC report offers a blueprint for sustainable development, while presenting an account of present and future damages to ecosystems and the most vulnerable amongst us.
- Access to clean energy, improving air quality to increasing employment opportunities, boosting healthcare through technology, and delivering equity are among the report's recommended goals to help adapt to climate change.
- It is now up to governments and people of the world to act.

References

1. The Hindu | What is the IPCC synthesis report and what does it say?
2. The Hindu | U.N. panel calls for rapid action against climate change
3. The Hindu | A climate change survival guide to act on
4. The Indian Express | IPCC releases its Synthesis Report
5. The Indian Express | IPCC report warns global warming will breach critical threshold by 2030

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