



SIXTH IPCC REPORT - ENVIRONMENT AND GS III MAINS

Q Discuss the importance of the IPCC reports to India with the backdrop of its latest Synthesis Report.
(10 marks, 150 words)

News: *IPCC work on seventh climate assessment threatened by shorter timelines / Explained*

What's in the news?

- Established in 1988, the U.N. Intergovernmental Panel on Climate Change (IPCC) has been bringing out climate change assessment reports on a periodic basis.

Key takeaways:

- So far, it has produced six assessment reports, three special reports, as well as methodology reports that provide guidelines for estimating greenhouse gas (GHG) emissions and removal.
- The IPCC Bureau, which prepares climate assessment reports, is under pressure to publish them in time for the next global stocktake.

Three reports from the sixth assessment cycle (AR6) of the IPCC:

- These were published during 2021-2022, and the synthesis report came out in early 2023.
- Three reports are as follows:
 - Delve into the physical science;
 - The consequences, adaptation, and vulnerability
 - The climate mitigation aspects of climate change.

IPCC:

- Established in 1988 by WMO and UNEP

Membership - 195 member countries.

Objective:

- Assess scientific info on human-induced climate change, impacts & mitigation/adaptation options.

Main Activity:

- Prepares assessment, special, and methodology reports, crucial for international climate negotiations.



Scientific Research:

- Relies on the global scientific community for literature review and conclusions.

Key Findings of IPCC 6th Assessment Report:

1. Urgent Warning:

- AR6 warns that time is running out to limit global warming to 1.5 degrees Celsius and stresses the need for immediate action to mitigate climate change impacts.

2. Adaptation Challenges:

- The report highlights challenges in adapting to climate change and offers strategies to enhance resilience in natural and human-made systems.

Global Stocktake and IPCC's Role:

1. Assessing Progress:

- The Global Stocktake (GST) evaluates progress towards the Paris Agreement goals, with the IPCC playing a crucial role in providing scientific input.

2. Alignment with Stocktake:

- Member countries request IPCC reports to align with the GST, facilitating comprehensive assessments of climate action effectiveness.

IPCC Synthesis Report and India:

- India faces the highest risk from the impact of climate change, despite contributing less than 5% of historical greenhouse gas emissions.
- The impacts of climate change are already being felt in melting glaciers, heat waves and cyclones, which have affected wheat output and led to milk shortages.
- India is the world's third-largest emitter of greenhouse gases, primarily from coal and its per capita emissions have increased by 36% since 2011.
- While India is taking action to invest in green hydrogen and renewable energy, policy flip-flops and fluctuating gas prices have slowed progress.
- Renewable energy sources account for only about 11 percent of power generation, though they are a little over 40 percent of the installed capacity.
- India's net-zero commitment by 2070 remains uncertain.

IPCC Synthesis Report Suggestions to India:

1. Incentivize Investment:

- India needs to incentivize investment in green hydrogen, renewable energy and natural gas to reduce emissions.

2. Strengthen its Policy Framework:

- Because its policy flip-flops have sharply curtailed renewable energy potential.

3. Relax Import Duties:

- The government needs to relax import duties on solar equipment imports and expand the Approved List of Modules and Manufacturers to accelerate the addition of solar capacity.



4. Minimise the Coal Use:

- India needs to address its reliance on coal and work towards transitioning to cleaner energy sources.

Go back to basics:

Scope and Timeline of Assessment Report 7 Cycle:

1. Report Components:

- The AR7 cycle will include full assessment reports, synthesis reports, methodology reports, and a special report on climate change and cities.

2. Revised Guidelines:

- Methodology reports will cover short-lived climate forces and carbon removal, while technical guidelines on impacts and adaptation will be updated.

3. Publication Timeline:

- The bureau aims to publish special and methodology reports by 2027, with the timeline for assessment reports pending further discussion.

Challenges and Considerations:

1. Time Constraints:

- Balancing the need for timely reports with the rigorous review process and evolving climate research poses challenges.

2. Content Integrity:

- Shortened timelines may affect the depth and breadth of the reports, potentially compromising their scientific rigor and inclusivity.

3. Engagement Complexity:

- Limited timeframes may hinder effective engagement with under-represented communities and stakeholders, impacting report quality.

The initiation of IPCC's AR7 cycle marks a critical juncture in global climate science, emphasizing the urgency of addressing climate change. Despite challenges, the IPCC remains committed to delivering comprehensive and scientifically robust assessments to guide climate action. Collaboration between scientists, policymakers, and stakeholders will be essential in navigating the complexities of climate science and fostering sustainable solutions for a resilient future.