The 1.5 degree Celsius Target

Why in news?

The World Meteorological Organization (WMO) released two decadal prediction reports in which it says, the average global temperature will exceed the critical point of 1.5 degree Celsius by 2027.

What does the World Meteorological Organisation's recent reports say?

- The World Meteorological Organization (WMO) released two reports titled '*Global Annual to Decadal Climate Update 2023-2027*' and '*State of Global Climate 2022*.'
- **Predictions -** In 2022, the annual mean global surface temperature was 1.15 degrees above the baseline temperature of pre-industrial levels (1850-1900).
- The global surface temperature will be 1.1-1.8 degree Celsius higher than the baseline temperature between 2023 and 2027
- This average global temperature will exceed 1.5 degrees by 2027.

What is the 1.5 degree Celsius target?

- Countries agreed to limit the global average warming to below 2 degree Celsius, in 2010 at the Cancun COP16 to UNFCCC.
- The Paris Agreement (2015) also pledged to limit the average temperature rise to below 2 degree ad actively aimed for 1.5 degrees.

The 1.5 degree Celsius target is the global climate target that aims to limit warming to said level by 2100, in order to prevent the planet from slipping into further climate crises.

- The 2 degree target was unaccepted by small island countries as it compromised their survival and the 1.5 degree seemed ambitious.
- After the 2018 IPCC repot, the target moved to 1.5 degree.

Why is the 1.5 degree target critical?

- In 2018, the IPCC released a report on the impact of global warming when temperatures reaches 1.5 degree Celsius above the baseline temperature of pre-industrial levels.
- The report compared the effects of 2 degree temperature rise and 1.5 degree temperature rise.
- The 2 degree temperature rise witnessed mostly irreversible changes.

- Also, the temperature rise is not uniform across the planet and the regional differences and their vulnerability has been taken into account.
- For example, '***polar amplification***' happens at Arctic where warming is greater than the global average.
- For the above factors climate action must limit the average global warming to 1.5 degree.

Why are we missing targets?

- The developed countries are expected to assume more responsibility and implement climate action due to the historic reasons.
- The Climate Performance Index over the years has shown the major polluters have made little progress in climate action.
- The pandemic has pushed the world into a socio-economic crisis.
- The Ukraine conflict has aggravated the situation and pushing in an energy crisis threatening climate goals.

What are the global impacts?

- Climate risks and hazards impact human population and the ecosystem depending on exposure, vulnerability, and adaptive capacity.
- It has exacerbated food insecurity, displacement, and deaths.

According to the WMO, extreme weather anomalies have caused the deaths of two million people and incurred $4.3 trillion of economic damages over the past fifty years.

- Countries like Ethiopia, Nigeria, South Sudan, Somalia, Yemen, and Afghanistan are facing acute food shortages demanding urgent humanitarian assistance.
- The Horn of Africa has been witnessing extreme drought conditions since 2020, while the western African countries are seeing floods and heavy rainfall.
- The floods in Pakistan displaced eight million people within the country.
- The cryosphere is shrinking, and there is a mass loss of glaciers in High-mountain Asia, Western North America, and South America.
- Phenological shifts and mismatches have been recorded due to climate change.
- The population of migratory species has declined in Sub-Saharan Africa.

What are the impacts on India?

- India has been increasingly facing the effect of climate change.
- February 2023 was recorded as the hottest month since record-keeping began in 1901.
- In 2022, India witnessed extreme weather events for 80% of the days.

What are India's climate action?

According to the Climate Change Performance Index 2023, India ranked eighth with a high-performance after Denmark, Sweden, Chile, and Morocco.

- Being an emerging economy, India is attempting to balance its development needs with ongoing climate action at all levels.
- India introduced initiatives like green bonds and Green Hydrogen Mission at domestic level.
- At international level, India is spearheading International Solar Alliance and Coalition for Disaster Resilient Infrastructure against climate change.
- Irrespective of miniscule GHG emissions, India has been a responsible climate player and has a long way to go.

Reference

1. The Hindu - Why is the 5 degree Celsius target critical?

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