

General Studies-3; TOPIC: Conservation, environmental pollution and degradation

World Bank Report on Climate Change

1) Introduction

- Climate change seems to be one of the greatest threats to the growth potential of the Indian economy, according to a report published by the World Bank.
- The report titled - 'South Asia's Hotspots: The Impact of Temperature and Precipitation Changes on Living Standards'.

2) Key Findings

- Rising temperatures and changing monsoon rainfall patterns from climate change could cost India 2.8% of GDP and depress the living standards of nearly half the country's population by 2050.
- A 2.8% drop in GDP, as projected in the business-as-usual scenario, will cost India \$1.1 trillion by 2050.
- Almost half of South Asia's population, including India, now lives in the "vulnerable areas".
- Central, northern and north-western India as regions are most vulnerable to climate change.
- Inland regions are at far higher risk of economic losses due to rising temperatures than coastal or hilly areas.
- States of Madhya Pradesh and Chhattisgarh could see a decline in living standards of up to 9%.
- 7 out of the top 10 most-affected hotspot districts would belong to the Vidarbha region of Maharashtra.
- About 600 million people live in areas which could turn into moderate or severe hotspots of climate change.
- Even if India follows the plan enunciated by the Paris climate change agreement in 2015 the temperature rise would still be by 1-2 degrees Celsius by 2050.
- If no measures are taken, average temperatures in India are predicted to increase by 1.5-3 degrees.
- Cities like Kolkata and Mumbai face a substantial risk of flood-related damage over the next century.

3) Significance of the Report

- These are the findings of a first-of-its-kind World Bank study that quantifies the economic impacts of rising temperatures and changes in rainfall in different parts of the country.
- The report provides options to prioritise investments and strategies to build local resilience to climate change.
- Identifying hotspots will help policymakers in finding specific locations and household types where the resources are needed the most to address the rising risk to living standards.
- The information will be useful for designing a social welfare programme at the national level.

4) What is climate hotspot?

- It's a location where gradual changes in average temperature and rainfall patterns will have negative impacts on living standards in future.

5) Impact

- Global warming could mean loss of livelihood, potentially depressed incomes, forced migration, rising morbidity, etc.

- Fall in agricultural yield, greater food insecurity, lower labour productivity and health impact.
- These weather changes will result in lower per capita consumption levels.
- Further accentuate problems like inequality and poverty in South Asia.
- Weather changes will have a negative impact on living standards and water-stressed areas will be most adversely affected.

6) **Concerns / Challenges**

- India as a country has been ranked one of the most vulnerable countries to climate change.
- Temperature rise is a slow-moving disaster that's not talked about much.
- A lot of focus of climate change studies is on extreme events so people tend to ignore the gradual changes happening for the last 50-60 years.

7) **Way Forward**

- The report suggests enhancing educational attainment, reducing water stress, and improving job opportunities in the non-agricultural sectors.
- A 30 per cent improvement on these measures could halt the decline in living standards by almost 1%.
- Invest in areas that are more impacted by global warming.
- Countries need to adopt climate resilience strategies along with climate change mitigation ones.
- India should rally for more stringent GHG emission reduction and bring policies for efficient and accountable water-usage.
- The government must stop incentivising farmers to grow water-intensive crops in water-stressed areas by weaning MSP away from these crops in such areas.
- It is imperative that water stress be reduced and opportunities in non-agricultural sectors are increased.
- If we don't focus on adaptation we will see an erosion of development gains.