

# **Climate Vulnerability Index**

## Why in News

Recently, a report titled "Mapping India's Climate Vulnerability - A District-level Assessment" has been released by the <u>Council on Energy, Environment and Water (CEEW)</u> (not-for-profit policy research institution).

- The report has also launched the first-of-its-kind Climate Vulnerability Index.
- The index has analysed 640 districts in India and found that 463 of these are vulnerable to extreme floods, droughts and cyclones.

## **Key Points**

- **Affected States:** 27 Indian states and Union territories are vulnerable to extreme climate events which often disrupt the local economy and displace weaker communities.
  - The states of Assam, Andhra Pradesh, Maharashtra, Karnataka and Bihar are the most vulnerable to extreme climate events such as floods, droughts and cyclones in India.
- Magnitude of Impact of Climate Change: More than 80% of Indians live in districts vulnerable to climate risks.
  - 17 of 20 people in the country are vulnerable to climate risks, out of which every five Indians live in areas that are extremely vulnerable.
  - More than 45% of these districts have undergone "unsustainable landscape and infrastructure changes".
- Low-level of Adaptability: More than 60% of Indian districts have medium to low adaptive capacity in handling extreme weather events.
- Role of Anthropogenic Activities: The anthropogenic activity has already made vulnerable districts become even more vulnerable to impacts of natural disasters. Some of the activities has led to:
  - Loss of wetlands and loss in mangroves which would act as a natural barrier, making it more vulnerable.
  - Landscape disruptions such as the disappearance of forest cover, over-construction, have led to degradation of natural ecosystems.
- **Triggering Financial Crisis:** Combating the rising frequency and scale of extreme climate events is fiscally draining for developing countries such as India.
  - Investments in infrastructure such as housing, transport, and industries will be threatened by these events, especially along the coasts, adding that mounting weather-related insurance losses could trigger the next financial crisis.

#### Suggestions

 Decentralized Planning: Since most districts in India are highly vulnerable to extreme weather events, a district-wise climate action plan is required.

- The CEEW study also indicated that only 63% of Indian districts have a District Disaster Management Plan (DDMP).
- Policymakers, industry leaders and citizens must use the district-level analysis to make effective risk-informed decisions.
- Mobilizing Green Finance: With loss and damage rising exponentially due to the climate crisis, India must demand climate finance for adaptation-based climate actions at <u>COP-26</u> (Climate Conference).
  - At COP-26, developed countries must regain trust by delivering the USD 100 billion promised since 2009 and commit to stepping up climate finance over the coming decade.
  - Further, India must collaborate with other countries to create a Global Resilience Reserve Fund, which could act as insurance against climate shocks.
- Climate Risk Identification: Finally, developing a Climate Risk Atlas for India would help policymakers to better identify and assess risks arising from extreme climate events.
  - Climate-proofing of physical and ecosystem infrastructures should also now become a national imperative.
- Institutional Setup: India must create a new Climate Risk Commission to coordinate the environmental de-risking mission.
  - Enhanced climate finance can also support India-led global agencies like the **Coalition for Disaster Resilient Infrastructure (CDRI)** to further mainstream climate actions.

### Other Indices Related to Climate Change

- Climate Change Performance Index (Germanwatch, the New Climate Institute and the Climate Action Network)
- Global Climate Risk Index 2021 (Germanwatch)
- **Environmental Performance Index** (Yale University and Columbia University in collaboration with the World Economic Forum).
- Hunger Hotspots Report (FAO and WFP)
- Children's Climate Risk Index (UNICEF)

#### **Source: IE**

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