

National Climate Vulnerability Assessment Report

The Department of Science and Technology released the National Climate Vulnerability Assessment Report 2019-20 on April 17, 2021.

It is a part of the important activity of the capacity building programme under the two National Missions on Climate Change i.e. National Mission on Sustaining the Himalayan Ecosystem (NMSHE) and National Mission on Strategic Knowledge for Climate Change (NMSKCC) being coordinated by the Climate Change Program (CCP), Department of Science and Technology (DST).

About National Climate Vulnerability Assessment Report

- The title of the 2019-20 report is “**Climate Vulnerability Assessment for Adaptation Planning in India Using a Common Framework**”
- A total of **94 representatives from 24 states and 2 Union Territories participated** in the nation-wide exercise jointly supported by the Department of Science & Technology (DST) and the Swiss Agency for Development & Cooperation (SDC)
- The **report identifies the most vulnerable states and districts in India with respect to current climate risk** and key drivers of vulnerability
- This project has been preceded by a vulnerability assessment of states in the Indian Himalayan Region (IHR) in 2018-19, undertaken by the same project team, as a part of the National Mission for Sustaining the Himalayan Ecosystem (NMSHE) in the context of the National Action Plan on Climate Change
- **Objective:** The main objective of this report is to carry out a current-climate state-level and district-level vulnerability assessment for India based on the starting point/contextual approach of vulnerability
- The **state-level assessment was based on 29 states** considering erstwhile Jammu and Kashmir. The **district-level assessment was based on 612 districts**, which covers the same geographical area as the current 718 districts
- The present assessment has used the IPCC 2014 ‘Risk and Vulnerability Framework’ as the base of such a common framework, which is a clear improvement over the IPCC-2007 framework. Read in detail about Intergovernmental Panel on Climate Change (IPCC) at the linked article
- Key indicators for the assessment include:
 - Percentage of population living below the poverty line
 - Income share from natural resources
 - The proportion of marginal and small landholdings
 - Women’s participation in the workforce
 - The density of healthcare workers, etc.

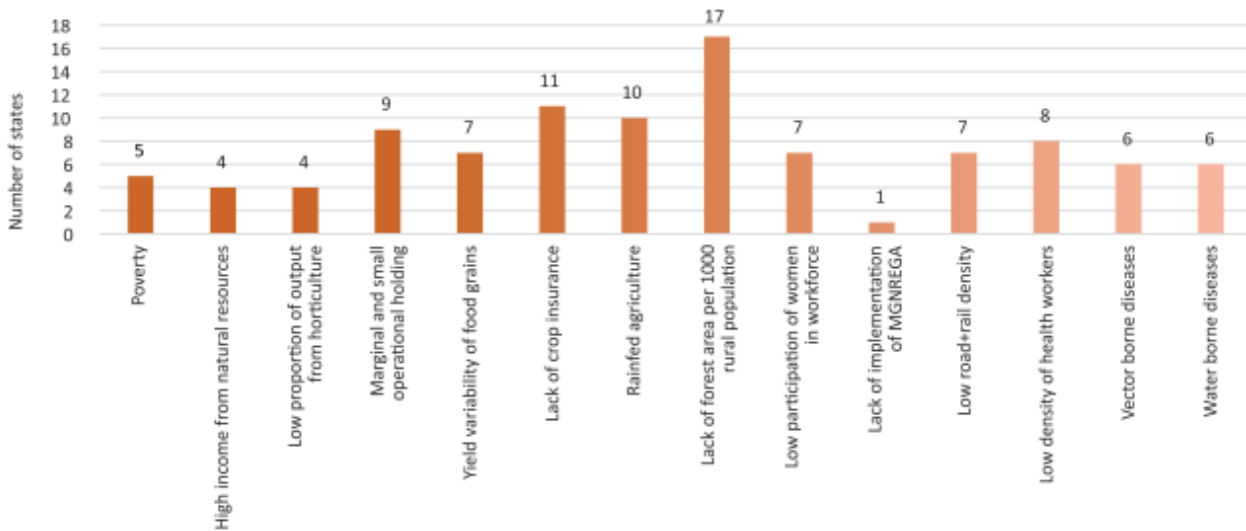
Key Findings of Report

The Vulnerability Index (VI) was based on the following categorisations:

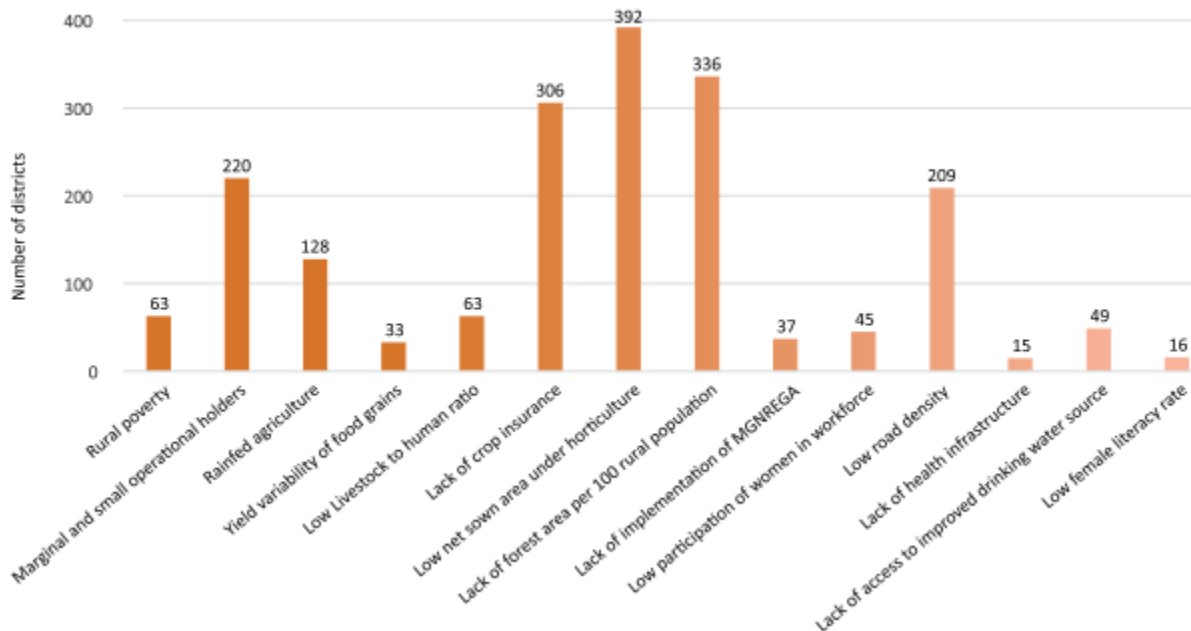
1. State-wise
2. District-wise

Key Findings of the National Climate Vulnerability Assessment Report 2021	
Relative Vulnerability Category	States
Highly Vulnerable States	<ul style="list-style-type: none"> ● Jharkhand ● Mizoram ● Odisha ● Chattisgarh ● Assam ● Bihar ● Arunachal Pradesh ● West Bengal
Moderately Vulnerable States	<ul style="list-style-type: none"> ● Uttar Pradesh ● Tripura ● Gujarat ● Meghalaya ● Erstwhile Jammu and Kashmir ● Rajasthan ● Madhya Pradesh ● Manipur ● Andhra Pradesh ● Karnataka
Low Vulnerable States	<ul style="list-style-type: none"> ● Himachal Pradesh ● Telangana ● Sikkim ● Punjab ● Uttrakhand ● Haryana ● Tamil Nadu ● Kerala ● Nagaland ● Goa ● Maharashtra
Highly Vulnerable Districts	Among all states, Assam, Bihar, and Jharkhand have over 60% of districts in the category of highly vulnerable districts

National Climate Vulnerability Assessment Report - Major drivers of vulnerability for all states



National Climate Vulnerability Assessment Report - Major drivers of vulnerability for all districts



Significance of the Report

- Assessing vulnerability to climate change is important as it helps to understand climate risks and provides information, on the location-specific measures to be taken to adapt to climate change
- The analysis also helps the states in understanding the major drivers of vulnerability and target the adaptation actions accordingly
- It can assist in ranking and identification of the most vulnerable districts and states and help states prioritise adaptation planning and investments

- It is critical for developing adaptation projects for the Green Climate Fund, Adaptation Fund, and funds from multilateral and bilateral agencies
- The findings from the report can help states prepare an Action Plan to curb the climate risk
- Conclusively, the report will also facilitate Nationally Determined Contributions, which aims to adapt better to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, health sector and regions such as the Himalayan region, coastal regions, etc.
- A vulnerability assessment contributes to reporting under the Paris Agreement; the formulation and implementation of a National Adaptation Plan; monitoring and evaluation of adaptation plans; policies and programmes; and the development and implementation of the resilience of socioeconomic and ecological systems

Climate Risk Reduction - The Way Forward

A vulnerability assessment is the first step, considering only current climate risks. A future direction or research and implementation is towards developing a climate risk map based on a hazard, vulnerability, and exposure framework.

The future direction of work involves:

- Development of a common framework, methodology, and guidelines for an overall risk assessment
- Development of a Risk Index for states. All State Climate Change Centres funded by the Department of Science and Technology could undertake this assessment. It requires building capacity for risk assessment and adaptation planning