5. Disaster Risk Index - Environment

Himachal Pradesh CM, in a meeting with the 16th Finance Commission Chairman, urged a revision of the Disaster Risk Index (DRI) for hill states, highlighting that the uniform index of the 15th Finance Commission overlooked Himalayan vulnerabilities and resulted in inadequate disaster relief allocations.

Disaster Risk Index (DRI) – Meaning & Purpose

Definition - The DRI is a composite tool developed to assess, measure, and compare the disaster risks faced by different states/regions in India. It attempts to create a single benchmark for fund allocation and preparedness planning.

Objective - To integrate hazard exposure, vulnerability, and coping capacity into a measurable framework so that disaster risk reduction and financing decisions can be more evidence-based.

Importance - Helps in equitable resource allocation, monitoring preparedness, and prioritising high-risk areas.

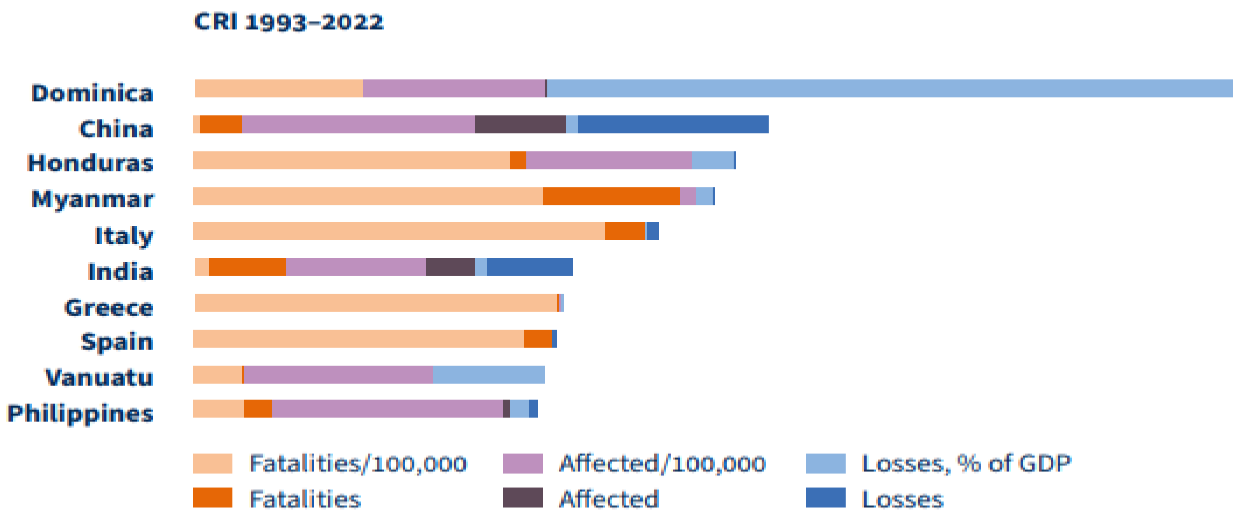
Core Dimensions of DRI

Hazard Exposure - Considers the probability of occurrence of natural disasters such as earthquakes, cyclones, floods, landslides, droughts, etc. Uses historical frequency, geographical patterns, and climate projections.

Vulnerability - Measures how susceptible populations, infrastructure, and ecosystems are to disasters. Factors - poverty levels, housing quality, urban planning, environmental degradation, health, and education status.

Coping/Adaptive Capacity - Indicates the ability of institutions, systems, and communities to respond, recover, and adapt to disasters. Indicators include - governance, disaster management infrastructure, early warning systems, financial capacity, and resilience-building initiatives.

Figure 1: The 10 countries most affected in 1993–2022



Issues with Current DRI

Uniform Matrix Limitation - Current DRI uses a generalised one-size-fits-all approach, not adequately capturing regional variations. For example, low-lying flood-prone states and Himalayan states are assessed under the same framework, ignoring unique risks.

Hill State Specificity - Mountainous and Himalayan states like Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh face distinct hazards - Landslides, snow avalanches, cloudbursts, glacial lake outburst floods (GLOFs), earthquakes, and forest fires. These states also provide critical ecological services (forests, biodiversity, water sources) to the entire nation, which are not reflected in the DRI.

Himachal Pradesh's Key Demands

Separate DRI for Hill States - Development of a customised risk index for Himalayan ecology and vulnerabilities. Incorporation of altitude, slope, seismic activity, fragile ecology, glacial hazards, and other region-specific indicators.

Dedicated Allocation - Funds for hill states to be calculated separately and distributed among them using this revised index. Ensures equitable distribution of disaster management funds, not overshadowed by larger plains states.

Green Fund (₹50,000 crore annually) - To compensate hill states for ecological services like carbon sequestration, water resources, biodiversity, and climate regulation. Proposed as Special Central Assistance for Conservation of Ecology (SASCI).

Recognition of Cold Desert Areas - High-altitude snow-covered and cold desert regions (e.g., Lahaul-Spiti, Ladakh areas) to be recognised on par with dense forests for their ecological significance, despite low vegetation cover.

Significance of Revising DRI

Equitable Fund Allocation - Tailored indices ensure fair resource distribution to states with high ecological fragility and risk.

Stronger Preparedness in Himalayan States - Helps states like Himachal Pradesh, Uttarakhand, and Sikkim build early warning systems, resilient infrastructure, and response capacity.

Supports Climate Change Adaptation - Himalayan states face increasing extreme weather events due to climate change, necessitating special financing.

Recognition of Ecosystem Services - Incentivises states to maintain forests, biodiversity, and water sources by compensating them through green finance mechanisms.

Link with 16th Finance Commission (FC)

Background - The 16th FC (chaired by Arvind Panagariya) is tasked with recommending tax devolution, grants-in-aid, and fiscal transfers between Centre and States for 2026–31. Report due 31 October 2025.

Relevance to DRI - FC has the mandate to review disaster management financing (under DM Act 2005). Hill states like Himachal Pradesh want the FC to redefine DRI to better reflect their risks and recommend special grants.

Constitutional Context -

1. **Article 280** - Finance Commission's role in resource distribution.
2. **Article 275** - Principles of grants-in-aid to states.

FC may introduce a revised DRI-based formula to guide disaster-related grants and allocations.

Source - https - //www.livemint.com/politics/news/need-to-reframe-disaster-risk-index-for-hill-states-himachal-cm-to-16th-finance-commission-11757599059615.html