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Climate Security in India: the Role of National Adaptation Planning

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Why Climate Security Matters for India

- Climate change in **India** is a **threat multiplier**, not just an environmental risk
- Intersects with:
 - Human security (health, livelihoods)
 - Economic security (agriculture, infrastructure)
 - Internal stability (migration, urban stress)
- National Adaptation Plan - **key policy lever** to address these risks systematically

IPCC 2022, 2023; MoES 2020; World Bank 2021; ILO 2019; Adger et al., 2014; Rigaud et al., 2018; UNDP 2020; UN Security Council 2021



India's Key Climate Security Risks (2025–2040)

- Heat and health security
 - Extreme heat – mortality; productivity loss; urban unrest
- Water stress and interstate tensions
 - Declining per-capita water availability; stressed river basins
- Food and livelihood security
 - Climate shocks to rainfed agriculture – rural distress
- Climate-linked migration
 - Seasonal, circular, and distress migration – urban pressure

Why These Risks BECOME “SECURITY” ISSUES

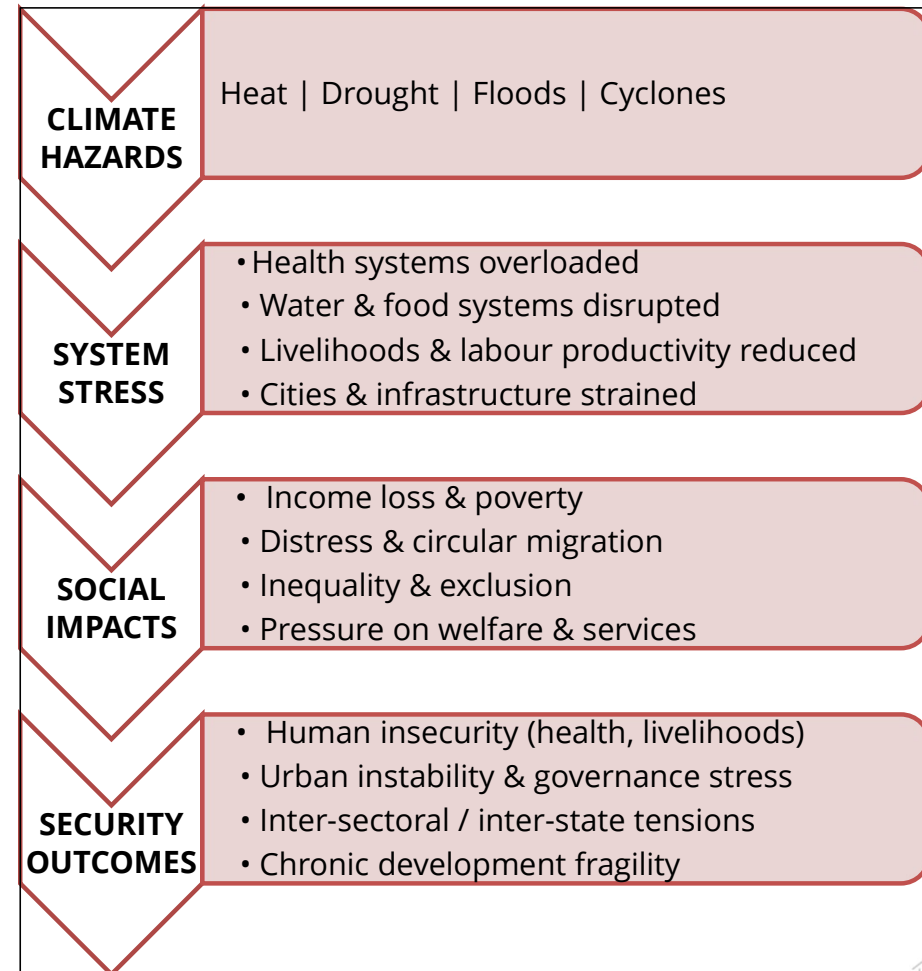
Climate impacts escalate into security risks when they:

- Affect **large populations simultaneously**
- Disrupt **critical systems** (food, water, power, cities)
- Exacerbate **existing inequalities and governance gaps**

Examples:

- Heat + informal work → loss of income → social stress
- Water scarcity + agriculture → farmer distress → migration
- Urban influx → pressure on housing, services, local governance

Security risk emerges from **scale + simultaneity + weak buffers**



What Is India's Current Adaptation Landscape

Key adaptation-relevant strategies:

- **National Action Plan on Climate Change (NAPCC)**
Missions on water, agriculture, Himalayan ecosystems, coastal areas
- **State Action Plans on Climate Change (SAPCCs)**
Sub-national risk assessment and sectoral actions
- **Heat Action Plans (HAPs)**
Early warning, response systems in cities/states
- **Disaster Risk Reduction frameworks**
Cyclone preparedness, flood management



What is still missing?

Strong planning exists — but climate security remains largely implicit.



Where Current Adaptation Falls Short

Key gaps:

- Climate risks treated as **sectoral problems**, not systemic threats
- Limited attention to:
 - Migration as an adaptation outcome
 - Urban stress and informal settlements
 - Cascading risks (heat → health → livelihoods)
- Weak coordination across:
 - Climate, urban, labour, health, and security institutions

Adaptation ≠ security unless these links are made explicit



How National Adaptation Planning Can Address Climate Security

NAPs can integrate climate security by:

- **Explicitly naming security-relevant risks**
Heat stress, migration, water conflicts, urban fragility
- **Planning for compound & cascading risks**
Not just single hazards
- **Linking adaptation with social protection**
Health systems, employment guarantees, housing
- **Strengthening sub-national capacity**
Cities and districts as frontline security actors

Climate security is a *planning design choice*



Planning for Compound & Cascading Risks

Case: Ahmedabad Heat Action Plan (Gujarat)

Climate Hazard

Extreme heatwaves (increasing intensity and duration)

Cascading Risk Pathway

Heat → Health stress → Productivity loss → Urban service pressure

What the Plan Does (Beyond Single-Hazard Response)

- **Early warning systems**
Heat forecasts trigger multi-departmental alerts
- **Health system preparedness**
Hospitals, emergency services, and frontline health workers activated
- **Labour & livelihood protection**
Work-hour advisories for outdoor workers
- **Public communication**
Targeted outreach to vulnerable populations
- **Institutional coordination**
Health, labour, disaster management, and municipal bodies act together



Treats heat as a **systemic risk**, not just a weather event



From Adaptation to Climate Security: Why This Matters for India

Beyond Current NAPs

- **Make climate security explicit**

Name risks such as heat stress, migration, urban fragility, and water competition directly in adaptation planning

- **Shift from sectoral to systemic planning**

Plan for **compound and cascading risks**, not isolated hazards

- **Strengthen people-centred adaptation**

Link NAPs with health systems, social protection, livelihoods, and housing

- **Improve institutional coordination**

Align climate, disaster, urban, labour, and development institutions

- **Empower states and cities**

Sub-national actors as frontline climate security managers

Adaptation planning is central to India's climate security.



Thank you

