

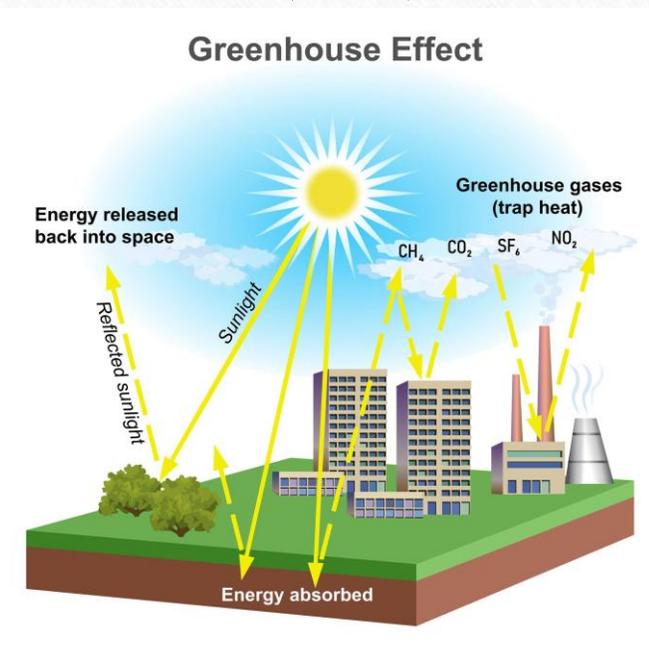
GLOBAL WARMING & CLIMATE CHANGE: CHALLENGES, RESPONSIBILITIES AND RESILIENCE

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Global Warming & Climate change

- Long-term rise in Earth's temperature due to: Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O)
- GhG trapped – global warming
- Weather vs Climate
- Long term & intensified changes in rainfall, temperature, weather patterns, disaster frequency...



Key Impacts of Climate change

- Rising temperatures
- Melting glaciers
- Sea-level rise
- Frequent disasters
- Ecosystem collapse
- Weather instability (heatwaves, droughts, storms)



Climate change is now a planetary crisis.

Causes?

[Age of Anthropocene]

- Coal-based power
- Vehicle emissions
- Cement & steel industries
- Livestock methane
- Deforestation
- Marine pollution



Development without sustainability worsens climate risk.

Threat to Food & Health

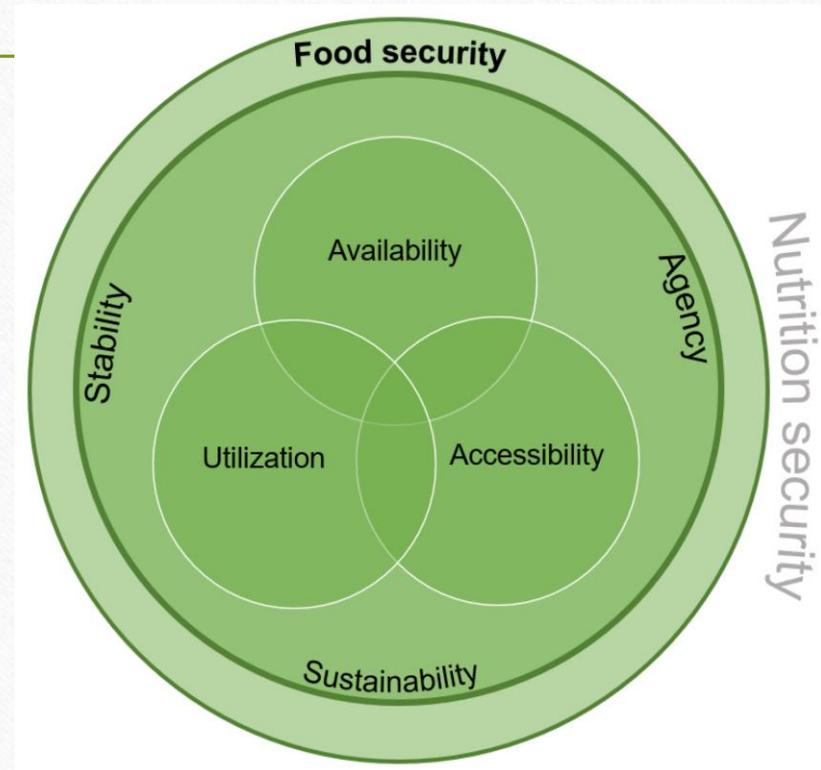
Food Security (FAO)

- Irregular monsoon
- Crop failure
- Nutritional insecurity

Health (WHO)

- Heat strokes
- Respiratory illness
- Vector diseases

Climate change = Public Health Emergency



Livelihoods & Ecosystems

Livelihood Loss

- Agriculture
- Fisheries
- Tourism
- Construction

→ Migration, poverty, social conflict

Ecosystems

- Biodiversity loss
- Carbon sink reduction
- Disaster intensification

Climate change attacks survival systems.



Constitutional & Legal Framework

- Article 21 → Clean Environment
- Public Trust Doctrine
- Intergenerational Equity
- Environmental PIL
- Climate Litigation

Environment = Fundamental Right



Landmark Climate & Environment Cases

- Subhash Kumar v. Bihar
- MC Mehta v. UOI
- Vellore Citizens Case
- Ridhima Pandey Case
- Great Indian Bustard Case

Climate justice = Constitutional justice

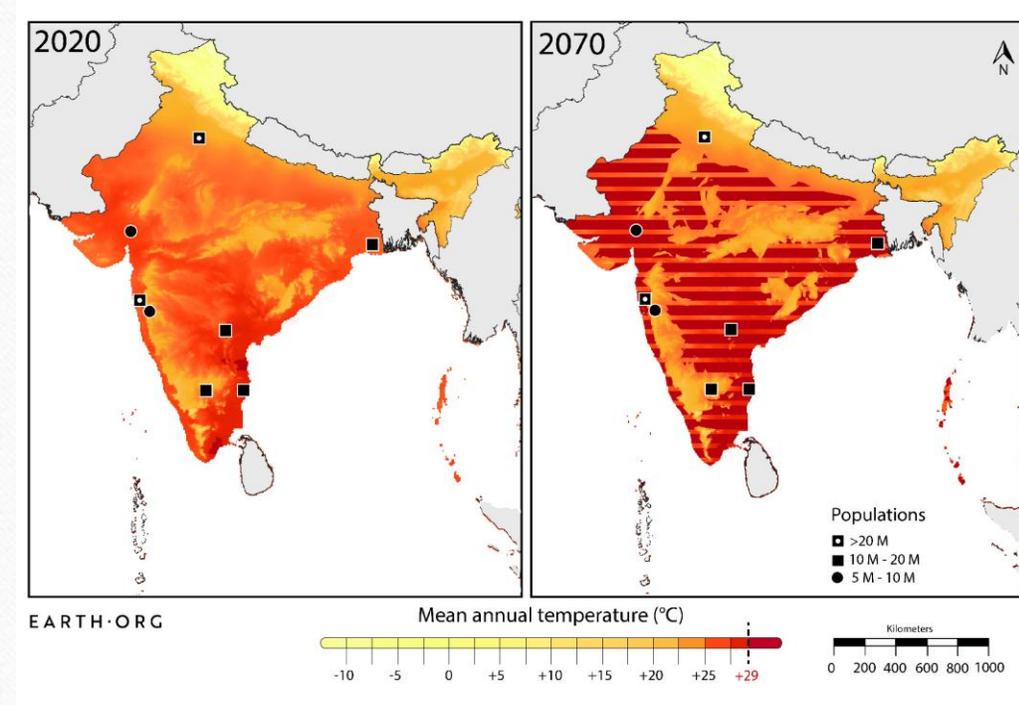


India's Climate Reality

Vulnerabilities

- Heat stress (Telangana, Delhi)
- Water stress (TN, Rajasthan)
- Urban floods (Chennai, Hyderabad)
- Coastal erosion
- Food insecurity

Geography + Population = High Risk



India's National Climate Framework

Led by **Ministry of Environment, Forest and Climate Change**

Key Instruments

- NAPCC (8 Missions)- National Solar Mission, National Mission for Enhanced Energy efficiency, National Mission on Sustainable Habitat, National Water Mission, National Mission for Sustainable Himalayan Ecosystem, National Mission for a Green India, National Mission for Sustainable Agriculture, National Mission on Strategic Knowledge
- SAPCCs
- Climate budgeting
- Inter-ministerial coordination

National + State + Local Governance

International Framework

Under **United Nations Framework Convention on Climate Change (IPCC)**

Core Mechanisms

- Paris Agreement
- NDCs
- COP Process

Goals

- Below 2°C
- Net Zero
- Climate Finance



Climate Change as Global Risk

- UN, WHO, WB

Threat Multiplier

- Economic shocks
- Health crisis
- Migration pressure
- Security stress
- Development trap

Climate = Strategic Risk

Why the (international) community (should) care about climate change ?

[Normative and ethical dimension]

Global Common

Common heritage of Mankind – shared inheritance

Intergenerational Equity (trustee)

Sustainable Development: Growth vs Survival

Shared moral and legal responsibility

We are development actors.



Way forward

Government

- Renewable energy
- Green infrastructure
- Climate finance

Institutions

- Green campuses
- Waste management
- Energy audits

Individuals

- Save energy
- Public transport
- Sustainable lifestyle

Collective responsibility

Climate change threatens survival
Law protects environment

Policy guides transition
Citizens drive change

Sustainability is a **constitutional, institutional, and moral obligation.**

Thank you

Any question?
