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# A CRITICAL ANALYSIS OF INDIAN CONTEMPORARY CLIMATE CHANGE POLICIES

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## ABSTRACT

India, as one of the fastest-growing economies, faces severe challenges due to climate change, necessitating robust policy interventions. Over the past two decades, India has formulated several climate policies, including the National Action Plan on Climate Change (NAPCC), State Action Plans on Climate Change (SAPCCs), and various sectoral policies. However, these policies suffer from fragmented implementation, weak enforcement, and inadequate adaptation mechanisms. This research critically examines India's climate change policies, evaluating their effectiveness, limitations, and alignment with international frameworks such as the Paris Agreement and Sustainable Development Goals (SDGs). The study also compares India's climate response with other major economies, such as the EU and China, to highlight areas of improvement. The paper concludes with recommendations for strengthening India's climate governance, including enhanced monitoring mechanisms, regulatory reforms, and integrated policymaking to ensure a sustainable and resilient future. Climate change poses unprecedented challenges, requiring robust legal frameworks to ensure mitigation and adaptation. While India has a well-established environmental regulatory system, existing laws exhibit significant gaps in addressing climate resilience. This paper critically examines the adequacy of Indian environmental laws in the context of climate change, highlights key legal lacunae, evaluates alignment with international agreements, and explores comparative legal frameworks from other jurisdictions. The study proposes reforms to enhance the adaptability and effectiveness of India's environmental legal regime.

**Keywords:** Climate Policy, India, NAPCC, Adaptation, Paris Agreement

## 1. Introduction

Climate change presents one of the most pressing challenges for India, impacting agriculture, water security, urban development, and biodiversity. The Indian government has adopted various policies and legal frameworks to address climate change, primarily through the National Action Plan on Climate Change (NAPCC) and State Action Plans on Climate Change (SAPCCs). Additionally, India's commitment to the Paris Agreement (2015) underscores its role in global climate mitigation efforts. Climate change has emerged as one of the most pressing global crises, impacting ecosystems, human health, and economic stability. India, with its vast population and ecological diversity, faces severe consequences, including rising temperatures, erratic monsoons, and extreme weather events (Intergovernmental Panel on Climate Change, Sixth Assessment Report (IPCC, 2021)). The legal response to climate change in India has primarily been framed within broad environmental laws, such as the Environment (Protection) Act, 1986 and the Air (Prevention and Control of Pollution) Act, 1981. However, these laws were not originally designed to address the complexities of climate adaptation, necessitating a reassessment of their adequacy in the contemporary context.

However, despite these initiatives, India's climate policies face significant implementation challenges. Weak regulatory enforcement, fragmented governance, and insufficient financing for climate adaptation have limited the impact of these policies. This paper critically examines India's climate policies, their effectiveness, and key challenges while offering recommendations for improvement.

## 2. Climate Change Policies in India

### 2.1 The National Action Plan on Climate Change (NAPCC)

Launched in 2008, the NAPCC is India's flagship climate policy. It comprises eight national missions, focusing on renewable energy, energy efficiency, sustainable agriculture, and water conservation. Key missions include:

- **National Solar Mission (NSM):** Aims to increase solar power capacity to 280 GW by 2030.
- **National Mission for Enhanced Energy Efficiency (NMEEE):** Focuses on reducing industrial energy consumption.

- **National Adaptation Fund for Climate Change (NAFCC):** Provides financial assistance for climate adaptation projects.

#### Challenges:

- **Funding gaps:** The budget allocation for NAPCC missions is insufficient to meet long-term targets.
- **Weak enforcement:** State-level implementation is inconsistent, leading to delayed policy execution.
- **Lack of local governance integration:** Policies are top-down, with limited participation from local communities.

## 2.2 State Action Plans on Climate Change (SAPCCs)

Recognizing that climate impacts vary across states, the government launched SAPCCs to implement regional climate action. Currently, 33 states and Union Territories have formulated SAPCCs.

#### Challenges:

- **Limited financial support:** SAPCCs rely on state budgets, leading to underfunded projects.
- **Poor alignment with national policies:** There is little coordination between SAPCCs and NAPCC, creating policy gaps.
- **Inadequate monitoring and reporting:** Many states lack capacity to track emissions and adaptation progress.

## 2.3 India's International Climate Commitments

India is a signatory to the Paris Agreement (2015) and has set ambitious Nationally Determined Contributions (NDCs), including:

- Reduce emissions intensity by 45% (from 2005 levels) by 2030.

- Increase renewable energy capacity to 500 GW by 2030.
- Enhance carbon sequestration through afforestation and conservation.

However, a critical analysis shows that India's NDC implementation is lagging, mainly due to insufficient funding and policy misalignment.

## **2.4 Existing Indian Environmental Laws and Their Limitations**

India has a wide array of environmental laws, including:

- The Environment (Protection) Act, 1986 (Act 29 of 1986) – A comprehensive legal framework for environmental protection but lacks explicit provisions for climate change adaptation.
- The Air (Prevention and Control of Pollution) Act, 1981 (Act 14 of 1981) – Primarily focused on air pollution but does not address greenhouse gas emissions comprehensively.
- The Water (Prevention and Control of Pollution) Act, 1974 (Act 6 of 1974) – Regulates water pollution but lacks climate resilience measures for rising sea levels and droughts.
- The Forest Conservation Act, 1980 (Act 69 of 1980) – Protects forests but does not sufficiently integrate carbon sequestration strategies.

While these laws play a crucial role in environmental governance, they fail to provide a structured legal framework for climate adaptation. Judicial interventions, such as in *MC Mehta v. Union of India*, AIR 1987 SC 1086, have expanded environmental protection jurisprudence, but legislative reforms remain slow.

## **3. Key Challenges in India's Climate Change Policies**

### **3.1 Weak Enforcement and Regulatory Gaps**

Although India has progressive climate policies, enforcement remains a challenge due to:

- Lack of stringent penalties for industries violating environmental norms.
- Bureaucratic inefficiencies that slow down policy execution.

- Political conflicts between the central and state governments, affecting implementation.

### **3.2 Insufficient Climate Financing**

India requires \$2.5 trillion in climate investments by 2030. However:

- Public funding is inadequate and private investments remain limited.
- Green finance mechanisms, such as carbon pricing and emission trading, are underdeveloped.
- Lack of international climate finance, despite India's eligibility under global climate funds.

### **3.3 Inadequate Adaptation Strategies**

While mitigation policies receive significant attention, adaptation efforts are insufficient, particularly in:

- Agriculture: Rising temperatures and erratic monsoons threaten food security.
- Water management: Glacial retreat and erratic rainfall increase water stress.
- Urban resilience: Indian cities are unprepared for rising temperatures and extreme weather events.

### **3.4 Fragmented Climate Governance**

- Overlapping policies between multiple ministries slow down decision-making.
- Lack of climate accountability: No single institution oversees climate law enforcement.
- Insufficient public participation: Local communities and civil society groups have minimal involvement in policy design.

### **3.5 Factors Impacting Climate Change and Legal Implications**

The impact of climate change in India is influenced by multiple factors:

- 1. Population Growth and Urbanization – India’s growing population exacerbates resource depletion, leading to higher emissions (Government of India, State of Environment Report 2021 (Ministry of Environment, Forest and Climate Change, 2021)).
- 2. Industrialization and Energy Consumption – Heavy reliance on fossil fuels contradicts India's climate commitments under the Paris Agreement.
- 3. Deforestation and Biodiversity Loss – Encroachment and deforestation accelerate environmental degradation.

Although policies such as the National Action Plan on Climate Change (NAPCC) aim to address these issues, there is no legally binding climate change law in India.

4. Comparative Analysis: India vs. Global Climate Policies

Several nations have enacted specific climate laws, which India can use as a model:

- United Kingdom – Climate Change Act, 2008 – Establishes legally binding carbon budgets.
- European Union – European Green Deal, 2019 – Integrates climate action into trade and policy frameworks.
- United States – Inflation Reduction Act, 2022 – Provides legal incentives for climate adaptation.

Unlike these nations, India lacks a climate-specific legislative framework, resulting in fragmented and overlapping regulations.

4.1 India vs. European Union (EU)

Aspect	India	European Union
Emission reduction target	45% by 2030	55% by 2030

Aspect	India	European Union
Carbon pricing mechanism	Weak	Strong (Emissions Trading System)
Renewable energy target	50% by 2030	80% by 2030

4.2 India vs. China

Aspect	India	China
Net-zero target	2070	2060
Green finance policy	Limited	Extensive
Carbon neutrality strategy	Developing	Advanced

India lags behind the EU and China in climate financing, carbon pricing, and regulatory enforcement, requiring stronger policy mechanisms.

5. Policy Recommendations

5.1 Strengthening Climate Law Enforcement

- Introduce legally binding emission targets with strict penalties.
- Enactment of a Comprehensive Climate Change Law – A dedicated Climate Resilience Act should integrate mitigation and adaptation strategies.
- Strengthening of Institutional Frameworks – Establish Climate Courts for specialized environmental dispute resolution.

- Alignment with International Agreements – Ensure India's laws are aligned with Paris Agreement commitments (United Nations Framework Convention on Climate Change (UNFCCC), Paris Agreement, 2015).
- Incentives for Climate Adaptation – Provide legal incentives for industries adopting climate-friendly technologies.
- Enhancement of Public Participation Mechanisms – Strengthen Environmental Impact Assessments (EIA) to incorporate community inputs.
- Enhance the role of the National Green Tribunal (NGT) in climate litigation.
- Streamline policy implementation through a centralized climate authority.

## **5.2 Expanding Climate Finance and Green Economy**

- Develop a robust carbon market with mandatory carbon pricing.
- Encourage private sector investment in renewable energy.
- Leverage international climate finance, such as Green Climate Fund (GCF) loans.

## **5.3 Enhancing Climate Adaptation Strategies**

- Incorporate climate resilience into urban planning.
- Strengthen water conservation policies to address drought risks.
- Improve farmer adaptation programs to mitigate climate impacts on agriculture.

## **6. Conclusion**

While India has made significant progress in climate policymaking, major challenges remain in enforcement, financing, and adaptation. A holistic approach, integrating strong governance, robust financial mechanisms, and public participation, is essential for India to achieve its climate goals and international commitments. India's current environmental legal framework, though extensive, lacks the necessary provisions to address climate change adaptation and resilience. Judicial activism has played a crucial role in expanding environmental rights, yet



legislative reforms remain inadequate. A dedicated Climate Change Act, strengthened enforcement mechanisms, and international alignment are essential for ensuring India's legal preparedness in the face of evolving climate challenges.

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