

CLIMATE JUSTICE AND CONSTITUTIONAL RIGHTS: THE EMERGENCE OF ENVIRONMENTAL CONSTITUTIONALISM

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Abstract

Climate change presents an unprecedented challenge, disproportionately affecting vulnerable communities across the globe, including those in India. As extreme weather events, rising temperatures, and resource scarcity intensify, the principles of climate justice—fairness, equity, and accountability—become critical in ensuring the protection of marginalized groups. Climate justice advocates for policies that recognize historical contributions to environmental degradation while safeguarding those most at risk.

In India, constitutional provisions have increasingly been interpreted to support environmental protection. Article 21 of the Constitution, which guarantees the right to life, has been judicially expanded to include the right to a healthy environment. Landmark Supreme Court judgments, such as the MC Mehta Cases, have reinforced this perspective, establishing legal precedents that integrate environmental concerns into fundamental rights. This evolution highlights the judiciary's proactive role in shaping environmental constitutionalism.

Furthermore, India's international commitments, including the Paris Agreement, continue to influence domestic policies, compelling the government to balance economic growth with sustainability. While progress has been made, challenges persist. Weak enforcement mechanisms, regulatory gaps, and conflicts between industrial development and environmental protection pose significant hurdles. Additionally, inadequate public awareness and limited grassroots advocacy hinder widespread implementation.

This research underscores the urgent need for explicitly recognizing climate justice as a constitutional right. Drawing inspiration from global precedents, such as the Urgenda Climate Case in the Netherlands, India has the potential to set a transformative example. As the world grapples with escalating climate crises, integrating climate justice into constitutional

frameworks could offer a robust model for equitable and sustainable development, ensuring that environmental protection is not a privilege but a fundamental right for all.

Keywords: Climate Justice, Constitutional Right, Environmental law, Judicial Activism, Climate Constitutionalism.

CHAPTER 1: INTRODUCTION:

Climate justice recognizes that climate change is not just an environmental issue but also a matter of human rights and equity. It demands that those most responsible for emissions take accountability while ensuring protections for marginalized and vulnerable communities disproportionately affected. Climate policies must be fair, inclusive, and address social inequalities, ensuring sustainable development for all. The global push for climate justice seeks stronger legal mandates, corporate responsibility, and community-driven advocacy. True climate justice is achieved when economic growth and environmental sustainability work together, prioritizing fairness for present and future generations.

1.1. Climate Change and the Urgency of Climate Justice.

Climate change is one of the greatest threats facing humanity today, exacerbating social inequalities and disproportionately affecting marginalized communities. Rising global temperatures, extreme weather events, and environmental degradation necessitate urgent legal interventions to ensure climate justice, a principle advocating fairness, equity, and accountability in addressing climate-related impacts.¹ Climate justice shifts the narrative from mere environmental protection to human rights, emphasizing the need for enforceable legal frameworks that safeguard vulnerable populations.²

1.2. Constitutional Foundation of Environmental Protection in India

Environmental rights in India have evolved significantly through judicial interpretation. While the **Indian Constitution** does not explicitly recognize a right to the environment, the Supreme Court has expanded **Article 21** (Right to Life) to include the **right to a clean and healthy environment**.³ Landmark rulings such as **MC Mehta v. Union of India** reinforced this view, holding that environmental protection is fundamental to the

¹ See Mary Robinson, *Climate Justice: Hope, Resilience, and the Fight for a Sustainable Future* (Bloomsbury Publ'g 2018).

² Lavanya Rajamani, *International Climate Change Law* 31 (Oxford Univ. Press 2017).

³ Subhash Kumar v. State of Bihar, (1991) 1 SCC 598 (India) (recognizing environmental protection as an extension of Article 21).

enjoyment of life.⁴ This precedent has shaped India's environmental governance, creating a constitutional foundation for climate-related jurisprudence.

1.3. Objectives and scope of the study

This research examines the constitutionalization of climate justice in India, exploring

- The judiciary's role in establishing environmental rights
- The intersection between constitutional law and climate governance
- India's compliance with international climate agreements
- Challenges in enforcing climate justice through constitutional mechanisms
- Lessons from global precedents, including the Urgenda Climate Case in the Netherlands

Through these inquiries, the study aims to highlight the need for explicit constitutional recognition of climate justice.

1.4. Research Questions:

This study seeks to answer the following:

1. How has Article 21 been interpreted to incorporate environmental protection?
2. To what extent does the judiciary shape climate justice jurisprudence?
3. How do international commitments influence India's domestic climate laws?
4. What legal and institutional challenges hinder climate justice enforcement?
5. How can India learn from global constitutional models in strengthening climate governance?

1.5. Research Gap

Despite the Supreme Court's expansion of **Article 21**, climate justice remains a **policy-driven discourse rather than an enforceable constitutional right**⁵. Existing legal frameworks address environmental concerns **reactively** rather than **proactively**, lacking comprehensive mechanisms to integrate climate justice within constitutional mandates.⁶

⁴ M.C. Mehta v. Union of India, (1985) 1 SCC 641 (India) (establishing environmental jurisprudence under constitutional rights).

⁵ See Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 12 (2020).

⁶ Rajamani, *International Climate Change Law*, supra note 2, at 35 (discussing enforcement gaps in India's climate policies).

Furthermore, while the judiciary has played a pivotal role in environmental protection, there is **no explicit recognition** of climate justice as a fundamental right, creating a gap between legal precedent and legislative action. This study aims to bridge this gap by advocating for climate justice as a **constitutional principle** rather than a judicial interpretation.

1.6. Methodology:

This research employs a **qualitative legal analysis**, examining Supreme Court judgments, **constitutional provisions**, legislative frameworks, and international treaties. A **comparative approach** is used to analyze global precedents such as the **Urgenda Climate Case**, assessing how similar legal models could be applied in India. The study also incorporates policy reviews and stakeholder perspectives to identify gaps in enforcement mechanisms.

1.7. Structure of the Study

This dissertation is structured as follows:

- **Chapter 2** analyzes the global evolution of climate justice and comparative legal frameworks.
- **Chapter 3** examines the **constitutional basis** of environmental protection in India.
- **Chapter 4** provides an in-depth review of landmark Supreme Court judgments.
- **Chapter 5** evaluates India's **international commitments** and policy frameworks.
- **Chapter 6** identifies key challenges in climate justice enforcement.
- **Chapter 7** discusses global legal precedents and lessons for India.
- **Chapter 8** concludes the study, offering recommendations for constitutional integration of climate justice.

CHAPTER 2: CLIMATE JUSTICE AND ITS GLOBAL EVOLUTION:

Climate change is not merely an environmental issue; it is deeply intertwined with social justice, human rights, and legal frameworks. The disparities in climate impacts highlight the urgent need for **climate justice**, which seeks to ensure that vulnerable communities receive fair and equitable protection under national and international legal systems.⁷ While developed nations have historically contributed to greenhouse gas emissions, developing nations—including India—experience the disproportionate effects of environmental degradation.⁸ This chapter explores the origins, principles, and global development of **climate justice**, analyzing international treaties and landmark legal cases that have shaped climate litigation worldwide.

2.2. Defining Climate Justice:

The concept of climate justice is rooted in the idea that climate change exacerbates **social inequalities**, disproportionately affecting marginalized groups who have contributed the least to environmental degradation.⁹ Scholars argue that climate justice extends beyond environmental protection—it encompasses human rights, legal accountability, and ethical governance.¹⁰ According to the United Nations, climate justice involves not only climate mitigation but also principles of fairness in adaptation policies, ensuring that low-income communities have access to resources for survival¹¹.

Climate justice is a **multidimensional framework** that addresses the ethical, legal, and social dimensions of climate change. Unlike traditional environmentalism, which primarily focuses on conservation, climate justice emphasizes **human rights, social equity, and legal accountability** in climate governance¹². It acknowledges that the burden of climate change disproportionately falls on marginalized communities, including **low-income populations**,

⁷ See Mary Robinson, *Climate Justice: Hope, Resilience, and the Fight for a Sustainable Future* 27 (Bloomsbury Publishing 2018)

⁸ Lavanya Rajamani, *International Climate Change Law* 41 (Oxford Univ. Press 2017).

⁹ See David Boyd, *The Right to a Healthy Environment* 65 (U.N. Human Rights Council 2018).

¹⁰ ID at 68.

¹¹ U.N. Framework Convention on Climate Change, Climate Justice Report 2020, U.N. Doc. FCCC/CP/2020/1 (2020).

¹² Mary Robinson, *Climate Justice: Hope, Resilience, and the Fight for a Sustainable Future* 31 (Bloomsbury Publ'g 2018)

Indigenous groups, and developing nations, despite their minimal contributions to greenhouse gas emissions¹³.

2.2.1. Core Principles of Climate Justice:

Climate justice operates on several fundamental principles that shape legal, policy, and advocacy efforts:

1. **Fairness and Equity** – Climate change affects different regions and populations unequally. Climate justice demands **equitable distribution of responsibilities**, ensuring that those historically responsible for emissions bear the highest obligations for mitigation and adaptation.
2. **Intergenerational Justice** – Environmental policies must protect present populations and future generations. The principle of **intergenerational equity** ensures that long-term sustainability remains a key objective in climate governance¹⁴.
3. **Human Rights and Environmental Justice** – Climate change threatens fundamental human rights, including the right to life, health, and shelter. Legal frameworks increasingly recognize the **right to a safe environment** as an essential component of human rights law¹⁵.
4. **Legal Accountability and Just Transition** – Governments, corporations, and policymakers are expected to implement climate-responsible actions. The concept of **just transition** promotes an equitable shift towards renewable energy, ensuring that vulnerable workers and communities are not negatively impacted by sustainability policies.

2.2.2 Climate Justice in the Context of Developing Nations

While global climate agreements emphasize collective action, developing nations face significant **economic, social, and infrastructural constraints** in adopting climate justice measures¹⁶. Countries like India, which are both highly vulnerable to climate change and rapidly industrializing, struggle to balance **economic development with**

¹³ Lavanya Rajamani, *International Climate Change Law* 48 (Oxford Univ. Press 2017).

¹⁴ See Edith Brown Weiss, *Intergenerational Equity and Climate Policy*, 75 Am. J. Int'l L. 199, 215 (1990)

¹⁵ David Boyd, *The Right to a Healthy Environment*, 32 U.N. Human Rts. Council Report (2018)

¹⁶ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 14 (2020).

environmental sustainability¹⁷. Many developing nations argue that they should receive financial and technological assistance from developed nations, under the principle of **common but differentiated responsibilities** established in the **Kyoto Protocol**¹⁸.

2.2.3 Climate Justice and Legal Frameworks

In recent years, climate justice has been increasingly incorporated into **national constitutions, judicial interpretations, and international treaties**.¹⁹:

- **International Legal Instruments** – The **Paris Agreement** reinforces the notion that climate action should be equitable and inclusive, advocating for **developed nations to support vulnerable communities** through climate finance and adaptation programs²⁰.
- **Judicial Recognition** – Courts worldwide have recognized climate justice as a **constitutional and human rights issue**. The Dutch **Urgenda Climate Case** ruled that governments have a legal duty to reduce greenhouse gas emissions to safeguard fundamental rights.
- **Legislative Policies** – Some nations, including Germany and France, have integrated **climate protection** into constitutional law, requiring the state to actively uphold environmental justice.

2.2.4 Challenges in Implementing Climate Justice

Despite its growing recognition, **climate justice faces obstacles** in legal enforcement and policy implementation.²¹:

1. **Weak Legal Frameworks** – Many nations lack constitutional provisions explicitly recognizing climate justice as a legal right²².

¹⁷ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 14 (2020).

¹⁸ Kyoto Protocol to the U.N. Framework Convention on Climate Change, Dec. 11, 1997, U.N. Doc. FCCC/CP/1997/L.7/Add.1.

¹⁹ U.N. Framework Convention on Climate Change, *Climate Governance and Justice*, U.N. Doc. FCCC/CGJ/2019/2 (2019).

²⁰ Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/10/Add.1, 55 I.L.M. 740 (2016).

²¹ See Gerrard & Dernbach, *Legal Pathways to Deep Decarbonization*, 89 Env'tl L. Inst. Rep. (2019)

²² Rajamani, *International Climate Change Law*, supra note 2, at 65.

2. **Economic Conflicts** – Governments often prioritize industrial growth over sustainability, leading to conflicts between economic development and environmental protection.
3. **Limited Access to Justice** – Vulnerable communities frequently encounter barriers in accessing legal remedies for climate-related damages²³.
4. **Political Resistance** – Climate justice policies face opposition from powerful corporate and economic entities, slowing legislative progress.

2.3. Historical Development of Climate Justice:

2.3.1 Early Environmental Movements and Social Justice

The foundation of climate justice lies in the broader framework of **environmental justice**, which emerged as a global movement addressing the unequal distribution of environmental harm. While environmental concerns date back centuries, the formal advocacy for **equitable environmental protection** gained momentum during the **1960s and 1970s** with the rise of grassroots environmental activism.²⁴

In the United States, environmental justice became a legal issue in the **1980s**, as communities protested against hazardous waste sites disproportionately placed in low-income neighborhoods and communities of color²⁵. The movement highlighted systemic **environmental racism**, emphasizing how marginalized groups faced disproportionate pollution burdens, health hazards, and displacement²⁶.

While the early environmental movements focused on pollution control and conservation, climate change emerged as a **new frontier** for justice-oriented discussions. By the **1990s**, scientific evidence had solidified the understanding that industrial emissions significantly contributed to **global warming**, necessitating stronger international cooperation²⁷.

²³ U.N. Human Rts. Council, *Climate Rights and Access to Justice*, U.N. Doc. A/HRC/45/CRJ (2020).

²⁴ Robert Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* 72 (Westview Press 1990)

²⁵ U.S. Environmental Protection Agency, *Environmental Justice Legal Framework* (EPA Report No. EJ-2022, 2022).

²⁶ See David Boyd, *The Right to a Healthy Environment*, 32 U.N. Human Rts. Council Report (2018)

²⁷ See Intergovernmental Panel on Climate Change, *Climate Science & Global Warming*, IPCC Rep. No. 2021 (2021)

2.3.2 The Role of International Treaties in Climate Justice

Global environmental agreements laid the foundation for **climate governance**, shifting the focus from national environmental protection laws to collective global responsibility. The following treaties played key roles in shaping climate justice principles:

- **United Nations Framework Convention on Climate Change (UNFCCC) – 1992.** The UNFCCC was the first global treaty to establish legal frameworks for **climate negotiations**²⁸. It recognized the disproportionate effects of climate change on developing nations and introduced the concept of **intergenerational equity**, ensuring that future generations inherit a stable environment..
- **Kyoto Protocol – 1997** The **Kyoto Protocol** reinforced the **principle of common but differentiated responsibilities (CBDR)**, acknowledging that industrialized nations contributed the most to global emissions and should therefore lead mitigation efforts²⁹. However, the protocol's failure to enforce binding emission reductions led to its decline, as major polluting countries like the United States withdrew from their obligations.³⁰.
- **Paris Agreement – 2015** The **Paris Agreement** established legally binding commitments, urging nations to limit global temperature rise below **2°C** while ensuring equitable adaptation policies for vulnerable populations³¹. Unlike the Kyoto Protocol, the Paris Agreement embraced a more flexible framework, recognizing the **rights of Indigenous communities** and the **importance of climate finance** for developing nations.

2.3.3 The Rise of Climate Litigation and Legal Precedents

As climate science advanced, courts worldwide began acknowledging climate justice as a **constitutional and human rights issue**. Landmark cases reinforced the legal duty of governments to **implement climate mitigation and adaptation strategies**:

²⁸ U.N. Framework Convention on Climate Change, June 4, 1992, U.N. Doc. A/AC.237/18

²⁹ Kyoto Protocol to the U.N. Framework Convention on Climate Change, Dec. 11, 1997, U.N. Doc. FCCC/CP/1997/L.7/Add.1

³⁰ See Rajamani, *International Climate Change Law*, 41 (Oxford Univ. Press 2017).

³¹ Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/10/Add.1, 55 I.L.M. 740 (2016).

- **Urgenda Climate Case (Netherlands, 2015 & 2019)** The **Urgenda Foundation v. The Netherlands** was a historic case in climate litigation, where the Dutch Supreme Court ruled that the government had a constitutional obligation to reduce greenhouse gas emissions³². The decision established a **rights-based approach** to climate protection, marking a precedent for judicial intervention in climate governance.
- **Juliana v. United States (U.S., 2015–2020)** In **Juliana v. United States**, young activists argued that the U.S. government's failure to mitigate climate change violated their **constitutional right to a stable climate**³³. While procedural barriers prevented the case from advancing, it underscored the emerging role of climate justice in constitutional litigation³⁴.
- **Pakistan's Climate Litigation (Leghari Case, 2015)** In **Ashgar Leghari v. Federation of Pakistan**, the Lahore High Court ruled that the government's inaction on climate change violated constitutional rights, leading to the establishment of a **Climate Change Commission** to oversee sustainable governance³⁵. This case set an example for developing nations in asserting constitutional climate responsibilities.

2.3.4 Climate Justice in the Global South

Developing nations—particularly those in South Asia, Africa, and Latin America—have advocated for climate justice through international negotiations and domestic policies. These nations argue that their low historical emissions should grant them access to **climate finance, technology transfer, and international support** in addressing climate-related challenges.³⁶ India, for instance, faces significant climate vulnerabilities but also struggles with **economic dependence on fossil fuels**.³⁷ The country balances industrial growth with environmental commitments while seeking support for **sustainable energy transitions**.³⁸

³² Urgenda Found. v. Netherlands, HR 20 December 2019, ECLI:NL:HR:2019:2006 (Neth.).

³³ Juliana v. United States, 217 F. Supp. 3d 1224 (D. Or. 2016).

³⁴ Gerrard & Dernbach, *Legal Pathways to Deep Decarbonization*, 89 Env't'l L. Inst. Rep. (2019).

³⁵ Ashgar Leghari v. Federation of Pakistan, W.P. No. 25501/2015 (Lahore High Ct.)

³⁶ U.N. Env't'l Programme, *Developing Nations and Climate Change Policy* (2022).

³⁷ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 14 (2020).

³⁸ See Rajamani, *supra* note 8, at 55

2.3.5 The Future of Climate Justice as a Legal Principle

The evolution of climate justice suggests an increasing shift toward **constitutional recognition and legal enforcement**³⁹. Nations are gradually adopting **stronger legal protections**, while courts are playing a decisive role in shaping climate governance. The next frontier in climate litigation will likely involve **strengthening enforcement mechanisms** and embedding climate justice into **national constitutions** worldwide.

2.4 International Legal Frameworks for Climate Justice

Several international conventions and legal precedents have contributed to the development of climate justice as a **legal right**:

2.4.1 United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC (1992) provided the foundation for subsequent climate agreements, emphasizing the principle of **intergenerational equity**, ensuring future generations inherit a stable environment⁴⁰. Although it lacked enforceability mechanisms, it laid the groundwork for climate litigation worldwide.

2.4.2 The Urgenda Climate Case (Netherlands)

A groundbreaking case in climate justice was the **Urgenda Foundation v. The Netherlands** (2015), where the Dutch Supreme Court ruled that the government had a constitutional duty to reduce greenhouse gas emissions⁴¹. The ruling set a global precedent for climate litigation by recognizing climate protection as a human right under European legal frameworks.⁴²

2.4.3 Climate Litigation in the United States

In the United States, cases such as **Juliana v. United States** challenged governmental inaction on climate change, arguing that failure to mitigate emissions violated citizens' constitutional

³⁹ Robinson, *Climate Justice*, supra note 1, at 78.

⁴⁰ U.N. Framework Convention on Climate Change, June 4, 1992, U.N. Doc. A/AC.237/18.

⁴¹ Urgenda Found. v. Netherlands, HR 20 December 2019, ECLI:NL:HR:2019:2006 (Neth.).

⁴² Id. at para. 5.8

rights.⁴³. Although procedural hurdles remain, such cases highlight the growing use of constitutional principles in climate advocacy.

2.5 Comparative Analysis of Climate Justice Models

Climate justice manifests in varied legal frameworks worldwide, shaped by constitutional mandates, judicial interpretations, and policy mechanisms. Different nations adopt distinct approaches in recognizing, enforcing, and protecting climate rights, reflecting their unique political, economic, and social contexts. This section provides a comparative analysis of climate justice models, evaluating European, North American, Global South, and Indigenous legal perspectives to determine lessons for India's constitutional framework.

2.5.1 The European Model: Constitutional Mandates and Judicial Enforcement

European nations have been at the forefront of **constitutionalizing climate justice**, embedding climate protection directly into national law. Countries such as the **Netherlands, Germany, and France** exhibit strong legal frameworks where **courts play an active role in compelling governments to meet climate obligations**⁴⁴.

- **The Netherlands: Urgenda Case and Government Accountability.** The Urgenda Foundation v. The Netherlands established a historic precedent for judicial intervention in climate governance. The Dutch Supreme Court ruled that failure to reduce emissions violated human rights, ordering the government to implement concrete climate mitigation policies⁴⁵. Unlike nations where climate policies are politically driven, the Dutch model exemplifies court-mandated climate enforcement, ensuring governments are held accountable for environmental commitments.⁴⁶
- **Germany: Climate Protection Act and Constitutional Safeguards** The German Climate Protection Act (2021) mandates net-zero emissions by 2045, backed by strong constitutional principles that require the government to uphold climate justice⁴⁷. In 2021, the German Federal Constitutional Court ruled that climate inaction threatened

⁴³ Juliana v. United States, 217 F. Supp. 3d 1224 (D. Or. 2016)

⁴⁴ See Lavanya Rajamani, *International Climate Change Law* 42 (Oxford Univ. Press 2017).

⁴⁵ Urgenda Found. v. Netherlands, HR 20 December 2019, ECLI:NL:HR:2019:2006 (Neth.).

⁴⁶ Id. at para. 5.8.

⁴⁷ German Federal Constitutional Court, Climate Ruling BvR 2656/18 (Mar. 24, 2021).

fundamental rights, reinforcing that future generations have a constitutional claim to a stable climate. This ruling signals a move towards intergenerational equity in constitutional law, a principle largely absent in India's framework.

- France: Constitutional Environmental Rights. France has embedded environmental rights into its Constitutional Charter for the Environment, recognizing climate stability as a fundamental right⁴⁸. This model integrates legislative and constitutional mechanisms, ensuring that policy decisions are consistent with climate objectives rather than dependent on political shifts.

Lessons for India from the European Model

1. Judicial enforcement must go beyond policy directives, integrating constitutional mechanisms for binding governmental obligations on climate justice.
2. Intergenerational equity must be recognized as a constitutional principle, ensuring that future generations have a legally enforceable right to environmental protection.
3. Climate litigation should compel government accountability, preventing politically motivated delays in environmental action.

2.5.2 The North American Model: Statutory Frameworks and Climate Litigation

North American nations—particularly the United States and Canada—follow a statutory and litigation-driven approach to climate justice, relying on existing environmental statutes rather than direct constitutional mandates⁴⁹.

- United States: Climate Litigation Without Constitutional Mandates Climate justice in the U.S. is governed by statutory law, such as the Clean Air Act (1970) and environmental regulations enforced by the Environmental Protection Agency (EPA)⁵⁰. However, the absence of constitutional recognition for climate rights creates hurdles for litigants seeking judicial enforcement of climate policies.

⁴⁸ France Constitution, Charter for the Environment, art. 1 (2004).

⁴⁹ See Michael Gerrard & John Dernbach, *Legal Pathways to Deep Decarbonization in the United States* 88 (Environmental Law Inst. 2019).

⁵⁰ Clean Air Act of 1970, 42 U.S.C. §§ 7401–7671q (1970).

- In *Juliana v. United States*, young activists argued that government inaction on climate change violated their constitutional rights⁵¹. While courts acknowledged the merit of climate-based constitutional claims, procedural issues prevented the establishment of legally binding climate mandates.
- **Canada: Expanding Environmental Rights Through Legislative Mechanisms.** Canada integrates climate action into policy-based environmental laws, such as the Canadian Environmental Protection Act (1999)⁵². While constitutional recognition remains limited, courts have expanded environmental jurisprudence under human rights frameworks, ensuring climate justice aligns with national sustainability commitments⁵³.

Lessons for India from the North American Model

1. Statutory environmental protections must be enforced through strong regulatory bodies, preventing industrial violations of sustainability laws.
2. Climate litigation must evolve to integrate constitutional claims, allowing courts to rule on governmental responsibility for climate inaction.
3. Public interest litigation (PIL) in India should expand climate advocacy, ensuring citizens can challenge governmental failures in climate protection.

2.5.3 Climate Justice in the Global South: Balancing Economic Growth and Environmental Protection

Developing nations, particularly those in South Asia, Africa, and Latin America, face the dilemma of economic dependence on fossil fuels while addressing severe climate vulnerabilities. Unlike Europe and North America, where climate litigation and constitutional enforcement prevail, nations in the Global South struggle with weak enforcement, political instability, and economic constraints.⁵⁴

- **Pakistan: Judicial Climate Action Without Constitutional Recognition** In *Ashgar Leghari v. Federation of Pakistan*, the Lahore High Court ruled that climate inaction

⁵¹ *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016).

⁵² Canadian Environmental Protection Act, S.C. 1999, c. 33.

⁵³ See David Boyd, *The Right to a Healthy Environment: Revitalizing Canadian Environmental Law*, 65 U.N. Human Rts. Council (2018)

⁵⁴ U.N. Env'tl Programme, *Climate Governance in the Global South*, U.N. Doc. UNEP/CGS/2021/1 (2021).

violated fundamental rights, leading to the formation of Pakistan's Climate Change Commission⁵⁵. This case shows that judicial climate advocacy can compel policy change, even without direct constitutional climate mandates.

- Colombia: Indigenous-Led Constitutional Climate Protection In Colombia, constitutional climate litigation has been Indigenous-led, with courts recognizing Indigenous land rights as an essential component of environmental justice⁵⁶. The Colombian Supreme Court ruled that the Amazon rainforest required constitutional protections, reinforcing the link between Indigenous sovereignty and environmental sustainability.

Lessons for India from the Global South Model

1. Climate commissions must be strengthened with enforcement powers, ensuring policy implementation is not limited to advisory roles.
2. Indigenous and rural communities must be empowered legally, integrating land rights and environmental protection into India's constitutional framework.
3. Economic policies must align with climate commitments, preventing development-based exemptions for environmental laws.

2.5.4 Climate Justice in Indigenous Legal Traditions

Indigenous perspectives on climate justice emphasize ecological stewardship, land sovereignty, and intergenerational sustainability⁵⁷. Unlike Western legal systems, where environmental laws often focus on industrial regulation, Indigenous frameworks treat nature as a legal entity with inherent rights⁵⁸.

- Ecuador and the Rights of Nature Ecuador recognizes the constitutional rights of nature, granting legal protections to ecosystems and biodiversity⁵⁹. This approach ensures that

⁵⁵ . Ashgar Leghari v. Federation of Pakistan, W.P. No. 25501/2015 (Lahore High Ct.).

⁵⁶ Indigenous Legal Activism in Colombia, *Constitutional Protections for Climate Rights*, Case No. T-622/16 (Colombian Const. Ct.)

⁵⁷ See Edith Brown Weiss, *Intergenerational Equity and Climate Policy*, 75 Am. J. Int'l L. 199, 215 (1990)

⁵⁸ U.N. Framework Convention on Climate Change, *Climate Justice Report*, U.N. Doc. FCCC/CJR/2019/2 (2019).

⁵⁹ Ecuador Constitution, ch. 7, arts. 71-74 (2008) (granting nature constitutional rights).

climate litigation can be pursued not only for human interests but also for environmental preservation itself.

- New Zealand's Indigenous Climate Advocacy, the Māori people of New Zealand have successfully incorporated Indigenous climate rights into legal frameworks, ensuring co-governance of environmental policies between the government and Indigenous communities⁶⁰.

Lessons for India from Indigenous Climate Models

1. Environmental law must integrate Indigenous ecological knowledge, ensuring climate governance respects traditional sustainability practices.
2. Legal frameworks should recognize ecosystem rights, allowing constitutional protections for biodiversity and natural habitats.

⁶⁰ Māori Climate Governance Framework, *Te Mana o Te Taiao*, New Zealand Env'tl. Prot. Auth. Rep. No. 2020

CHAPTER 3: ENVIRONMENTAL CONSTITUTIONALISM IN INDIA:

3.1. Constitution with Environment Introduction:

Environmental protection is integral to constitutional governance, ensuring that natural resources are preserved, pollution is controlled, and ecological balance is maintained.⁶¹ While India's Constitution does not explicitly mention "climate justice," judicial interpretations have expanded environmental rights under Article 21 (Right to Life), reinforcing the role of constitutionalism in sustainable development⁶².

This chapter explores India's constitutional provisions, Supreme Court rulings, Directive Principles of State Policy (DPSPs), and challenges in climate governance, highlighting areas where legal frameworks need further strengthening.

3.2 Constitutional Provisions for Environmental Protection in India

India's constitutional framework provides a robust foundation for environmental governance, emphasizing the State's responsibility, citizen duties, and judicial interpretations that uphold ecological sustainability. While the Constitution of India does not explicitly reference "climate justice," various provisions under Fundamental Rights, Directive Principles of State Policy (DPSPs), and Fundamental Duties collectively shape environmental constitutionalism.⁶³ The Supreme Court of India has played a significant role in expanding environmental protections through judicial activism, ensuring that ecological sustainability aligns with constitutional mandates⁶⁴.

3.2.1 Article 21: The Right to Life and a Healthy Environment

One of the most significant constitutional provisions supporting environmental protection is Article 21, which guarantees the Right to Life and Personal Liberty. The Supreme Court has

⁶¹ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 12 (2020).

⁶² Subhash Kumar v. State of Bihar, (1991) 1 SCC 598 (India)

⁶³ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 12 (2020).

⁶⁴ M.C. Mehta v. Union of India, (1985) 1 SCC 641 (India)

interpreted this right to include a clean and healthy environment, ensuring that environmental degradation violates fundamental rights⁶⁵.

In *Subhash Kumar v. State of Bihar*, the Court ruled that the right to pollution-free water and air is an integral part of Article 21, reinforcing environmental protection as a constitutional mandate⁶⁶. Similarly, in *M.C. Mehta v. Union of India*, the Court expanded environmental rights under Article 21 by introducing the Polluter Pays Principle, ensuring legal accountability for environmental harm⁶⁷.

Landmark Judgments Expanding Article 21 for Environmental Protection

1. *Indian Council for Enviro-Legal Action v. Union of India* – Established that industrial pollution violates the right to life, mandating strict environmental regulations⁶⁸.
2. *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* – Confirmed that illegal mining threatens environmental rights, reinforcing ecological justice under Article 21⁶⁹.
3. *Vellore Citizens' Welfare Forum v. Union of India* – Integrated the precautionary principle into environmental litigation, ensuring preventive measures against ecological harm⁷⁰.

The interpretation of Article 21 as encompassing environmental rights demonstrates India's commitment to constitutional environmental governance, expanding climate-related protections through judicial activism.

3.2.2 Directive Principles of State Policy (DPSPs) and Environmental Sustainability

While DPSPs are not enforceable by courts, they serve as guiding principles for policymaking, outlining government responsibilities in environmental conservation.

⁶⁵ INDIA CONST. art. 21.

⁶⁶ *Subhash Kumar v. State of Bihar*, (1991) 1 SCC 598 (India).

⁶⁷ *M.C. Mehta v. Union of India*, supra note 2

⁶⁸ *Indian Council for Enviro-Legal Action v. Union of India*, (1996) 3 SCC 212 (India)

⁶⁹ *Rural Litigation & Entitlement Kendra v. State of Uttar Pradesh*, (1985) 2 SCC 431 (India).

⁷⁰ *Vellore Citizens' Welfare Forum v. Union of India*, (1996) 5 SCC 647 (India)

- **Article 48-A:** Mandates the **State to protect and improve the environment**, including forests and wildlife⁷¹.
- **Article 47:** Requires the State to **raise the level of nutrition and standard of living**, implicitly linking **public health** to environmental quality⁷².

Although DPSPs are not directly justiciable, courts have relied on these principles to reinforce environmental rights under Article 21⁷³.

3.2.3 Fundamental Duties and Environmental Protection

Article 51-A(g) establishes a constitutional duty on citizens to protect and improve the environment, compelling individuals to safeguard forests, wildlife, and natural resources.⁷⁴ While Fundamental Duties are not legally enforceable, they strengthen the constitutional commitment to environmental conservation.

3.2.4 Judicial Expansion of Environmental Constitutionalism

Through judicial activism, India's courts have constitutionalized environmental law, integrating international environmental principles into domestic jurisprudence.⁷⁵

Judicially Incorporated Environmental Principles

- **Polluter Pays Principle** – Industries must bear the cost of environmental damages⁷⁶.
- **Precautionary Principle** – Governments must prevent environmental harm before it occurs⁷⁷.

⁷¹ INDIA CONST. art. 48A.

⁷² INDIA CONST. art. 47.

⁷³ Rajamani, *International Climate Change Law* 63 (Oxford Univ. Press 2017).

⁷⁴ INDIA CONST. art. 51A(g).

⁷⁵ S. Muralidhar, *Public Interest Litigation and Climate Justice in India*, 12 *Env'tl L. Rev.* 45, 67 (2018).

⁷⁶ Indian Council for Enviro-Legal Action, *supra* note 6, at para. 9.

⁷⁷ Vellore Citizens' Welfare Forum, *supra* note 8, at para. 14.

- **Intergenerational Equity** – Environmental protection must safeguard future generations⁷⁸.

These principles have been **consistently applied in climate litigation**, reinforcing environmental constitutionalism.⁷⁹.

3.3 Judicial Activism and Landmark Supreme Court Cases

3.3.1. The role of Judicial Activism in the Supreme Court - Introduction

The Supreme Court of India has played a pivotal role in expanding environmental constitutionalism, particularly in the absence of explicit climate justice provisions in the Constitution⁸⁰. Through judicial activism, the Court has developed binding environmental principles, compelling government agencies, industries, and polluters to adhere to sustainability mandates⁸¹.

This section analyzes landmark Supreme Court cases that have strengthened environmental jurisprudence, integrating constitutional doctrines, international legal principles, and human rights protections into India's environmental law framework.⁸².

3.3.2 Judicial Activism and Environmental Constitutionalism

Judicial activism has played a crucial role in the development of environmental constitutionalism in India, particularly in the absence of explicit constitutional provisions dedicated to climate justice. The Supreme Court of India has expanded the interpretation of fundamental rights, specifically Article 21 (Right to Life), to encompass environmental protection. Through Public Interest Litigation (PIL), courts have intervened in cases where environmental harm threatens public health and ecological sustainability, reinforcing judicial oversight in environmental governance⁸³.

⁷⁸ Edith Brown Weiss, *Intergenerational Equity in Climate Policy*, 75 Am. J. Int'l L. 199, 215 (1990).

⁷⁹ Rajamani, *International Climate Change Law*, supra note 12, at 78.

⁸⁰ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 12 (2020).

⁸¹ M.C. Mehta v. Union of India, (1985) 1 SCC 641 (India).

⁸² INDIA CONST. art. 21.

⁸³ M.C. Mehta v. Union of India, (1985) 1 SCC 641 (India).

Environmental constitutionalism refers to the integration of ecological principles into constitutional mandates, ensuring that environmental protection is treated as a fundamental right rather than a discretionary policy. The Supreme Court has invoked doctrines such as the Polluter Pays Principle, Precautionary Principle, and Intergenerational Equity, applying them to various cases to uphold environmental justice.⁸⁴ Judicial activism has led to binding legal precedents that influence policy formation, compel regulatory agencies to act, and provide a legal avenue for communities affected by climate degradation.

Key Aspects of Judicial Activism in Environmental Constitutionalism

1. **Expansion of Article 21:** The Court has recognized the right to a clean environment as intrinsic to the **right to life**, making environmental rights enforceable under constitutional protections⁸⁵.
2. **Legitimization of PILs in Environmental Cases:** Citizens and environmental groups can approach the Supreme Court and High Courts directly to seek redressal for **ecological harm**⁸⁶.
3. **Judicial Incorporation of International Environmental Law:** The Court has applied principles from international treaties, such as the **Rio Declaration on Environment and Development**, reinforcing global climate justice standards within Indian jurisprudence⁸⁷.
4. **Accountability for Government and Industries:** Courts have held industries responsible for pollution under the **Polluter Pays Principle**, ensuring compensation and preventive environmental measures⁸⁸.

Judicial activism has thus bridged the legislative gap in environmental protection, making courts a vital force in constitutionalizing climate governance. However, challenges such as weak enforcement mechanisms, conflicts with economic policies, and political resistance continue to limit the effectiveness of judicial interventions⁸⁹. Strengthening constitutional

⁸⁴ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 15 (2020).

⁸⁵ Subhash Kumar v. State of Bihar, (1991) 1 SCC 598 (India).

⁸⁶ Rural Litigation & Entitlement Kendra v. State of Uttar Pradesh, (1985) 2 SCC 431 (India).

⁸⁷ Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/26 (1992)

⁸⁸ Indian Council for Enviro-Legal Action v. Union of India, (1996) 3 SCC 212 (India).

⁸⁹ Rajamani, *International Climate Change Law*, 63 (Oxford Univ. Press 2017).

mandates and ensuring statutory backing for judicial environmental directives remain crucial for advancing climate justice in India.

3.3.3 Landmark Supreme Court Cases in Environmental Constitutionalism

M.C. Mehta Cases: Pioneering Environmental Jurisprudence

The **M.C. Mehta Cases** remain foundational to Indian environmental law. These rulings introduced principles of absolute liability, polluter accountability, and state responsibility for environmental damage.

M.C. Mehta v. Union of India (1987): Oleum Gas Leak Case

- Established **absolute liability**, holding industries **strictly accountable** for environmental disasters.
- Ensured industrial regulation aligned with **public health concerns**.

M.C. Mehta v. Union of India (1991): Ganga Pollution Case

- Mandated **industrial compliance with pollution control norms**⁹⁰.
- Expanded the scope of **environmental PILs**, reinforcing **citizens' right to seek ecological justice**⁹¹.

These cases transformed Indian environmental litigation, compelling **government oversight and corporate accountability** in pollution management.

Vellore Citizens' Welfare Forum v. Union of India (1996): Strengthening Sustainable Development, the **Vellore Citizens' Welfare Forum Case** incorporated **international environmental principles** into Indian constitutional jurisprudence:

1. **Polluter Pays Principle** – Industries must compensate for environmental degradation.
2. **Precautionary Principle** – Governments must implement preventive policies to avert ecological harm⁹².

⁹⁰ See Gerrard & Dernbach, *Legal Pathways to Deep Decarbonization*, 89 Env'tl L. Inst. Rep. (2019).

⁹¹ Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647 (India).

⁹² T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267 (India).

This ruling reinforced India's commitment to environmental justice, linking constitutional obligations with sustainable governance.

T.N. Godavarman Thirumulpad v. Union of India (1997): Expanding Forest Conservation

This case addressed deforestation and wildlife conservation, ruling that:

- Forest conservation is a constitutional obligation, requiring government intervention against illegal land exploitation.
- The State has to protect forest ecosystems, ensuring intergenerational equity.

The ruling strengthened India's legal framework for forest governance, establishing stringent protections against commercial deforestation.

3.4 Challenges in Constitutional Enforcement of Climate Justice

Despite significant judicial advancements in expanding environmental protections under **Article 21** of the Indian Constitution, **climate justice remains a policy-driven discourse rather than a legally enforceable constitutional mandate**. While landmark Supreme Court cases have shaped environmental jurisprudence, enforcement remains a major challenge due to regulatory inefficiencies, conflicting economic priorities, and weak legislative backing.⁹³.

This section outlines key challenges in **constitutionalizing climate justice**, highlighting gaps in enforcement mechanisms, economic trade-offs, and the need for stronger statutory recognition.

3.4.2 Weak Enforcement of Judicial Directives

The Supreme Court has delivered several **progressive rulings** mandating environmental protection, yet **implementation mechanisms remain ineffective**.

⁹³ Upendra Baxi, *Environmental Justice in Indian Constitutional Law*, 42 J. Indian L. Inst. 1, 12 (2020).

- **Failure to Implement Court Orders:** Despite directives in cases like **M.C. Mehta v. Union of India**, pollution control measures often lack strict enforcement, leading to continued ecological degradation⁹⁴.
- **Regulatory Bodies Lacking Authority:** Agencies such as the **Central Pollution Control Board (CPCB)** and **State Pollution Control Boards** frequently struggle with inadequate resources and weak legal mandates, limiting their ability to enforce environmental laws⁹⁵.
- **Inconsistencies in Government Policies:** Various environmental laws exist, but **overlapping jurisdictions between state and central authorities** cause delays in policy execution⁹⁶.

3.4.3 Economic Growth vs. Environmental Sustainability

India, as a **developing nation**, prioritizes **industrial expansion** and **economic competitiveness**, often at the expense of environmental protection.

- **Industrial Exemptions from Climate Regulations:** Many industries continue to pollute due to loopholes in environmental regulations, with businesses prioritizing short-term gains over sustainable practices⁹⁷.
- **Infrastructure and Deforestation Conflicts:** Large-scale infrastructure projects, mining activities, and urbanization contribute to ecological destruction, yet constitutional enforcement remains weak.
- **Carbon Emission Regulations:** India's commitments under the Paris Agreement lack legally binding climate justice mandates, making enforcement voluntary rather than mandatory⁹⁸.

⁹⁴ M.C. Mehta v. Union of India, supra note 1.

⁹⁵ Central Pollution Control Board, *Annual Report on Industrial Pollution Control* (2022).

⁹⁶ Environment Protection Act, No. 29 of 1986, §3 (India).

⁹⁷ Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647 (India).

⁹⁸ Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/10/Add.1, 55 I.L.M. 740 (2016).

3.4.4 Political and Institutional Barriers

The absence of formal constitutional recognition for climate justice creates policy inconsistencies, leaving climate governance vulnerable to shifting political agendas.

- **Political Resistance to Stringent Climate Laws:** Governments prioritize economic development, resisting strict climate mandates that may impact industrial growth⁹⁹.
- **Legislative Gaps in Climate Accountability:** Unlike Germany and the Netherlands, where courts enforce state responsibility for climate inaction, India lacks an equivalent mechanism for imposing binding legal climate obligations¹⁰⁰.

3.4.5 Limited Public Awareness and Participation

A critical challenge in enforcing constitutional climate justice is the lack of grassroots mobilization and public awareness regarding climate rights.

- **Limited Access to Climate Litigation:** Citizens facing climate-induced displacement or ecological harm often struggle to access legal remedies due to procedural barriers.
 - **Insufficient Public Engagement:** Climate advocacy is largely restricted to academic and legal discourse, limiting grassroots involvement in constitutional enforcement.
1. Amending the Constitution to explicitly recognize climate justice as a fundamental right.
 2. Strengthening Enforcement Mechanisms to ensure binding legal accountability for climate violations.
 3. Integrating Climate Governance into DPSPs to enhance policy consistency in environmental legislation.

⁹⁹ Rural Litigation & Entitlement Kendra v. State of Uttar Pradesh, (1985) 2 SCC 431 (India).

¹⁰⁰ Urgenda Found. v. Netherlands, HR 20 December 2019, ECLI:NL:HR:2019:2006 (Neth.).

CHAPTER 4: LANDMARK SUPREME COURT JUDGMENTS:

The **Supreme Court of India** has shaped environmental constitutionalism through **landmark judgments** that reinforce climate governance. These decisions have established legal doctrines such as the **Polluter Pays Principle, Precautionary Principle, and Intergenerational Equity**, ensuring that environmental protection is a fundamental right under **Article 21 (Right to Life)**¹⁰¹.

While the judiciary has actively interpreted constitutional provisions to integrate climate justice, enforcement challenges persist. India still lacks a formal constitutional amendment recognizing climate justice, necessitating judicial activism in bridging the gap between law and policy.

4.2 Supreme Court's Role in Expanding Environmental Rights

4.2.1 Constitutional Interpretation of Article 21 and Environmental Rights

India's Constitution does not explicitly mention climate justice, but courts have expanded Article 21 to include environmental protection¹⁰². Through various rulings, the Supreme Court has embedded climate governance within the framework of constitutional rights, ensuring that citizens have legal remedies against environmental degradation.

- **M.C. Mehta v. Union of India** – Affirmed environmental rights as an extension of Article 21, reinforcing constitutional safeguards against industrial pollution¹⁰³.
- **Indian Council for Enviro-Legal Action v. Union of India** – Declared environmental degradation a violation of fundamental rights, setting a precedent for corporate accountability¹⁰⁴.
- **T.N. Godavarman Thirumulpad v. Union of India** – Expanded Forest conservation mandates within the constitutional framework, ensuring government compliance with sustainability obligations¹⁰⁵.

¹⁰¹ M.C. Mehta v. Union of India, (1985) 1 SCC 641 (India).

¹⁰² INDIA CONST. art. 21.

¹⁰³ M.C. Mehta v. Union of India, supra note 1.

¹⁰⁴ Indian Council for Enviro-Legal Action v. Union of India, (1996) 3 SCC 212 (India).

¹⁰⁵ T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267 (India).

These cases have laid the foundation for climate litigation, compelling the State and private entities to integrate sustainability into their legal obligations.¹⁰⁶.

4.3 Landmark Supreme Court Cases on Climate Governance

4.3.1 M.C. Mehta Cases: Pioneering Environmental Jurisprudence

The M.C. Mehta cases have profoundly influenced climate governance, integrating absolute liability and environmental accountability into Indian constitutional law.

M.C. Mehta v. Union of India (1987): Oleum Gas Leak Case

- Established absolute liability, making industries strictly responsible for environmental harm¹⁰⁷.
- Ensured industrial regulation aligns with public health concerns.

M.C. Mehta v. Union of India (1991): Ganga Pollution Case

- Ordered closure of polluting industries along the Ganges River.
- Expanded environmental PILs, reinforcing citizens' rights to seek environmental justice¹⁰⁸.

These cases mandated corporate responsibility for environmental damage, ensuring industrial policies prioritize climate concerns.

4.3.2 Vellore Citizens' Welfare Forum v. Union of India (1996): Strengthening Sustainability

This ruling established the Polluter Pays Principle and Precautionary Principle, integrating international environmental doctrines into Indian jurisprudence.

1. **Polluter Pays Principle** – Industries must compensate for environmental degradation.

¹⁰⁶ Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647 (India).

¹⁰⁷ M.C. Mehta v. Union of India, (1987) 1 SCC 395 (India).

¹⁰⁸ M.C. Mehta v. Union of India, (1991) 2 SCC 353 (India)

2. **Precautionary Principle** – Governments must implement preventive measures to avert ecological harm.

This case reinforced India's constitutional commitment to climate governance, ensuring corporate compliance with sustainability policies.

4.3.3 AI-Driven Climate Litigation: The Future of Judicial Oversight

Emerging AI-powered environmental assessments present new opportunities in judicial oversight.

- Satellite-based ecological tracking can help courts monitor industrial pollution more effectively.
- Data-driven policy enforcement ensures stricter compliance with constitutional climate mandates.

Indian courts can leverage AI and technology to improve **real-time environmental governance**, strengthening judicial activism in climate litigation.

4.4 Challenges in Judicial Enforcement of Climate Governance

Despite **progressive interpretations**, climate litigation faces **systemic barriers**:

- Weak enforcement of judicial mandates – Government agencies fail to implement climate rulings due to policy gaps¹⁰⁹.
- Lack of binding climate legislation – Unlike Germany and the Netherlands, India does not impose constitutional climate obligations¹¹⁰.
- Industrial resistance – Economic priorities often override sustainability mandates, limiting judicial effectiveness.

¹⁰⁹ INDIA CONST. art. 48A.

¹¹⁰ Urgenda Found. v. Netherlands, HR 20 December 2019, ECLI:NL:HR:2019:2006 (Neth.).

CHAPTER 5: INDIA'S INTERNATIONAL COMMITMENTS AND POLICY FRAMEWORK:

India, as one of the largest emerging economies, plays a crucial role in global climate governance. Given its high vulnerability to climate change impacts, including rising temperatures, erratic monsoons, and coastal erosion, India has made significant international commitments to tackle environmental challenges.

Over the years, India has ratified several international treaties while simultaneously shaping domestic climate policies aligned with global standards. However, challenges persist in policy implementation, enforcement mechanisms, and balancing development with sustainability¹¹¹.

This chapter examines India's international climate commitments, particularly under the Paris Agreement, United Nations Framework Convention on Climate Change (UNFCCC), and Kyoto Protocol, and evaluates its national policies, institutional frameworks, and challenges in enforcement.

5.2 India's International Environmental Obligations:

India, as a major developing economy, plays a crucial role in global climate governance. While historically, India has maintained a stance of climate equity, arguing that developed nations bear primary responsibility for greenhouse gas (GHG) emissions, it has progressively enhanced its international commitments towards sustainability and environmental conservation¹¹². Over the decades, India has ratified multiple global treaties, demonstrating a growing commitment to climate resilience and sustainability.

This section expands upon India's international obligations, exploring key treaties, conventions, and agreements, and how they have shaped India's domestic environmental policies while addressing challenges in implementation and enforcement.

¹¹¹ Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/10/Add.1, 55 I.L.M. 740 (2016)

¹¹² Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/10/Add.1, 55 I.L.M. 740 (2016)

5.2.1 United Nations Framework Convention on Climate Change (UNFCCC)

Background and India's Position

The UNFCCC, adopted in 1992, provides a comprehensive global framework for addressing climate change. The principle of Common but Differentiated Responsibilities (CBDR)—where developed nations are held more accountable for emissions than developing ones—is a core concept that India has strongly supported.

India became a **signatory to the UNFCCC in 1992**, committing to:

1. Develop national climate strategies aligned with global frameworks.
2. Submit periodic reports on greenhouse gas (GHG) emissions and mitigation efforts.
3. Engage in international negotiations to advocate for climate equity.

India has consistently argued that developed countries must take the lead in emissions reduction, while developing nations like India should receive financial aid, technology transfers, and policy support to transition towards cleaner energy.

Key UNFCCC Commitments by India

India has actively participated in several **UNFCCC-led initiatives**, including:

- **Nationally Determined Contributions (NDCs)** – India set emission targets under the Paris Agreement, reinforcing long-term climate resilience policies.
- **Climate Finance Mechanisms** – India has advocated for stronger funding and investment in climate mitigation projects.
- **Adaptation Strategies** – India has emphasized early warning systems, disaster preparedness, and sustainable development goals under the UNFCCC umbrella¹¹³.

¹¹³ U.N. Framework Convention on Climate Change, *Climate Finance Mechanisms for Developing Economies*, U.N. Doc. FCCC/CFM/2020/3 (2020).

5.2.2 Kyoto Protocol (1997) and India's Role

The **Kyoto Protocol**, adopted in **1997**, established legally binding targets for emissions reductions among Annex I countries (developed nations). However, as a non-Annex I country, India was not required to meet specific reduction targets¹¹⁴. Instead, India benefited from the Clean Development Mechanism (CDM), allowing it to earn carbon credits through sustainable development projects.

Key Contributions Under Kyoto Protocol

India leveraged the Kyoto Protocol to enhance **low-carbon projects**, such as:

- Development of renewable energy sources, including solar and wind power¹¹⁵.
- Afforestation programs to offset carbon emissions.
- Energy efficiency improvement initiatives across industries.

Despite the eventual replacement of Kyoto Protocol mechanisms by the **Paris Agreement**, India's experience under Kyoto **helped shape its domestic carbon-market regulations**, demonstrating early leadership in **global climate negotiations**.

5.2.3 Paris Agreement (2015) and India's Commitments

The **Paris Agreement**, ratified by India in **2016**, marked a **turning point in global climate governance**, shifting from **binding emission targets to voluntary commitments**¹¹⁶. India made **bold climate pledges**, including:

Key Climate Pledges Under the Paris Agreement

1. **Reduce Emission Intensity of GDP** – India committed to a **33-35% reduction by 2030** (compared to 2005 levels).
2. **Expand Renewable Energy Capacity** – India pledged to achieve **40% cumulative electric power capacity from non-fossil sources**.

¹¹⁴ Kyoto Protocol, *supra* note 4, at Art. 12.

¹¹⁵ Bureau of Energy Efficiency, *Renewable Energy Expansion under Kyoto Protocol*, Energy Policy Report (2018).

¹¹⁶ Paris Agreement, *supra* note 1, at Art. 4.

3. **Forest Carbon Sink Expansion** – India aims to **increase forest cover to absorb 2.5-3 billion tons of CO₂**¹¹⁷.
4. **Climate Finance and Adaptation Support** – India has continuously advocated for **financial and technical assistance** to support its sustainability goals.

Implementation Challenges Under the Paris Agreement

Despite ambitious targets, India faces several **policy hurdles**, including:

- Dependence on coal and fossil fuels, which makes the energy transition complex.
- Insufficient infrastructure for clean energy adoption, limiting rapid progress.
- Need for foreign investments and technology transfers to facilitate climate adaptation.

The Paris Agreement remains India's most significant international commitment, reinforcing its role as a key player in shaping global climate policies¹¹⁸.

5.2.4 Other International Environmental Treaties Signed by India

Apart from the UNFCCC, Kyoto Protocol, and Paris Agreement, India has signed various other environmental treaties, including:

5.2.4.1 Convention on Biological Diversity (CBD) (1992)

India ratified the CBD to protect biodiversity and natural ecosystems, ensuring sustainable use of biological resources. The treaty supports:

- Conservation of endangered species through habitat protection policies.
- Regulation of genetic resources to prevent biopiracy.
- Integration of biodiversity goals into national agricultural policies.

¹¹⁷ U.N. Framework Convention on Climate Change, *National Adaptation Strategies for Resilience*, U.N. Doc. FCCC/NASR/2019/2 (2019)

¹¹⁸ Robinson, *Climate Justice: Hope, Resilience, and the Fight for a Sustainable Future* 78 (Bloomsbury Publ'g 2018).

5.2.4.2 Ramsar Convention on Wetlands (1971)

India joined the **Ramsar Convention** to protect **wetland ecosystems**, crucial for biodiversity and water conservation¹¹⁹. India now has **75 Ramsar sites** designated as **protected wetlands**¹²⁰.

5.2.4.3 Montreal Protocol on Ozone-Depleting Substances (1987)

India ratified the Montreal Protocol to eliminate ozone-depleting chemicals, successfully phasing out chlorofluorocarbons (CFCs) by 2010.

These treaties complement India's broader climate strategy, reinforcing its global commitment to environmental sustainability.

5.3 Domestic Policy Framework Aligned with Global Commitments

India has progressively strengthened its domestic environmental policy framework to align with its global climate commitments, particularly under the Paris Agreement, Kyoto Protocol, and UNFCCC. Given India's role as a developing economy with significant carbon emissions, its policy approach must balance economic growth, energy security, and sustainability objectives.

This section examines India's domestic climate policies, detailing their alignment with international treaties, challenges in enforcement, and emerging trends for policy innovation and governance reforms.

¹¹⁹ Ramsar Convention on Wetlands, U.N. Doc. Ramsar/IN/1971/1 (1971).

¹²⁰ Government of India, *Wetland Conservation Policies and Ramsar Site Designations*, Ministry of Environment, Forest & Climate Change (2021).

5.3.2 National Action Plan on Climate Change (NAPCC)

5.3.2.1 Overview of NAPCC

Launched in 2008, India's National Action Plan on Climate Change (NAPCC) serves as the primary framework for domestic climate policy, integrating adaptation, mitigation, and sustainable development objectives.

5.3.2.2 Missions Under NAPCC

The NAPCC consists of eight core missions, each designed to promote low-carbon and climate-resilient strategies:

1. **National Solar Mission** – Targets 100 GW of solar power capacity by 2022.
2. **National Water Mission** – Focuses on water conservation strategies and efficient resource management¹²¹.
3. **National Mission for Enhanced Energy Efficiency (NMEEE)** – Encourages industries to adopt energy-efficient technologies¹²².
4. **National Mission for Sustainable Agriculture** – Strengthens agricultural resilience through climate-adaptive technologies.
5. **National Green India Mission** – Supports reforestation and carbon sequestration efforts.

The NAPCC aligns directly with India's Paris Agreement commitments, reinforcing sustainability objectives at both national and state levels¹²³.

¹²¹ Government of India, *National Solar Mission: Renewable Energy Expansion Goals*, Ministry of New & Renewable Energy (2011).

¹²² Government of India, *National Water Mission and Sustainable Hydrological Strategies*, Ministry of Jal Shakti (2012).

¹²³ Paris Agreement, *supra* note 1, at Art. 4.

5.3.3 State Action Plans on Climate Change (SAPCCs)

5.3.3.1 Decentralized Climate Governance

To ensure localized climate governance, India developed State Action Plans on Climate Change (SAPCCs), enabling individual states to adopt climate policies tailored to regional vulnerabilities.

SAPCCs focus on:

- Coastal resilience strategies for states like Tamil Nadu and Odisha.
- Air pollution control measures in urban centers like Delhi and Mumbai.
- Renewable energy projects in states with strong solar potential, such as Rajasthan and Gujarat.

5.3.3.2 SAPCCs and Compliance with Global Climate Frameworks

SAPCCs are designed to align state-level implementation strategies with national and international commitments, ensuring:

- Consistent policy integration with Paris Agreement goals.
- Strengthened monitoring mechanisms for emission reductions.
- Collaboration with global institutions for climate adaptation funding.

Despite their effectiveness, SAPCC execution remains uneven due to financial and administrative constraints.

5.3.4 Legislative and Regulatory Frameworks Supporting Climate Governance

5.3.4.1 Key Environmental Laws and Regulatory Mechanisms

India has **implemented key environmental laws** to regulate emissions, promote sustainability, and enforce compliance:

Legislation	Focus Area	Alignment with Global Commitments
Environment Protection Act (1986)	Pollution control and environmental Safety	Aligns with UNFCCC guidelines
Air (Prevention and Control of Pollution) Act (1981)	Industrial Emissions Reduction	Supports Paris Agreement Goals
Energy Conservation Act (2001)	Promotion of Energy efficiency	Linked with Kyoto Protocol mandates

These laws serve as regulatory pillars for India's climate governance, ensuring compliance with international agreements.

5.3.5 India's Renewable Energy Policies and Carbon Market Strategies

5.3.5.1 Expansion of Renewable Energy

India has significantly expanded its renewable energy portfolio to meet Paris Agreement commitments:

- Target: 500 GW renewable capacity by 2030¹²⁴.
- Largest solar power expansion under the National Solar Mission.
- Wind energy projects with international collaborations.

5.3.5.2 Carbon Market Strategies and Trading Mechanisms

To control carbon emissions, India has introduced market-driven mechanisms, including:

- **Perform, Achieve, and Trade (PAT) Scheme** – Encouraging industries to trade energy efficiency credits.
- **Renewable Energy Certificates (RECs)** – Allowing corporations to invest in clean energy projects.

These strategies strengthen India's compliance with international emissions targets.

¹²⁴ Air (Prevention and Control of Pollution) Act, No. 14 of 1981, §5 (India).

5.3.6 Challenges in Implementing Domestic Climate Policies

5.3.6.1 Weak Enforcement and Compliance Gaps

- Regulatory agencies often lack funding for effective policy execution.
- Industrial sectors lobby against strict emissions regulations.

5.3.6.2 Conflicts Between Economic Growth and Sustainability Goals

- Coal dependence remains a challenge, slowing renewable transitions.
- Infrastructure limitations impact clean energy adoption at scale.

Stronger enforcement mechanisms and technology-based policy innovations are essential to improving compliance.

5.3.7 Future Directions in Strengthening Climate Policy Frameworks

India must focus on:

1. Codifying climate justice as a constitutional mandate¹²⁵.
2. Strengthening SAPCC execution and funding mechanisms.
3. Accelerating renewable energy transitions through policy incentives.
4. Expanding carbon market regulations to enhance corporate climate accountability.

These reforms will ensure India's domestic policies effectively support its global climate commitments.

5.4 Challenges in Implementing Climate Commitments

5.4.1 Weak Enforcement Mechanisms

Despite progressive climate policies, enforcement remains a challenge:

- Environmental compliance is inconsistent, with industries often violating pollution control norms¹²⁶.

¹²⁵ INDIA CONST. art. 48A.

¹²⁶ Central Pollution Control Board, *Annual Report on Industrial Pollution Control* (2022)

- Regulatory agencies lack funding and legal authority to enforce sustainability measures.

5.4.2 Conflict Between Economic Growth and Climate Goals

- India prioritizes industrial expansion, often at the expense of climate policies.
- Carbon-intensive sectors like coal, steel, and manufacturing pose challenges in meeting emission reduction goals.

5.4.3 Political and Institutional Barriers

- Climate governance depends heavily on political will, leading to delays in policy execution.
- Overlapping jurisdiction between central and state agencies creates administrative inefficiencies.

While India remains committed to global climate agreements, stronger enforcement and legislative reforms are required to meet international obligations.

5.5 Comparative Analysis: India vs. Other Nations

Climate governance varies significantly across countries, shaped by national priorities, industrial dependencies, enforcement mechanisms, and legal frameworks. While developed nations have established binding legal mandates for climate action, developing countries like India focus on balancing economic growth with sustainability goals¹²⁷.

This section compares India's climate commitments with those of Germany, the United States, and China, analyzing differences in policy enforcement, renewable energy adoption, carbon trading mechanisms, and constitutional climate mandates.

¹²⁷ Rajamani, *International Climate Change Law* 63 (Oxford Univ. Press 2017).

5.5.2 Climate Governance Framework: India vs. Other Nations

5.5.2.1 Constitutional Recognition of Climate Rights

A significant difference between India and European nations is the constitutional recognition of climate rights:

Country	Climate Justice in the Constitution	Enforceability of Climate Policies
India	No explicit constitutional mandate	Judicial interpretation U/A-21
Germany	Climate Protection Act (2021)	Government Legally Obligated to Meet Emission Targets
United States	No direct Constitutional provisions	Climate laws enacted at the federal and state levels
China	National Climate Law (2021)	Centralized government mandates carbon neutrality by 2060

Germany's Climate Protection Act (2021) legally binds the government to meet emissions reduction targets, while India relies on judicial activism through Supreme Court interpretations of Article 21 (Right to Life)¹²⁸.

China's National Climate Law provides a centralized framework for achieving carbon neutrality by 2060, whereas the United States relies on federal and state-level regulations.

India's lack of direct constitutional recognition for climate justice limits its ability to enforce binding climate mandates, making judicial oversight crucial for climate governance.

¹²⁸ German Federal Constitutional Court, *Climate Protection Act Ruling*, BvR 2656/18 (Mar. 24, 2021).

5.5.3 Renewable Energy Commitments: India vs. Leading Climate Actors

5.5.3.1 Transition to Renewable Energy

India is rapidly expanding its renewable energy sector, yet it still lags behind developed nations in transitioning away from fossil fuels:

Country	Renewable Energy Target	Coal Dependency	Investment in Clean Technology
India	500GW of renewable energy by 2030	High	Growing but limited by funding
Germany	100% clean energy by 2045	Low	Strong Government-Funded Initiatives
United States	50% clean energy by 2030	Moderate	Private-sector investments
China	80% clean energy by 2050	High	Large-scale state funding for renewables

While Germany aims for 100% renewable energy by 2045, India's dependence on coal as a primary energy source remains a challenge.¹²⁹.

China has state-funded renewable energy projects, making its clean energy transition less reliant on foreign investment, whereas India requires international funding and technology transfers to meet its ambitious climate targets.

¹²⁹ Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/10/Add.1, 55 I.L.M. 740 (2016).

5.5.4 Carbon Trading and Emission Reduction Mechanisms

5.5.4.1 Carbon Trading Systems

The carbon market system is widely used in developed nations to regulate emissions. While India has introduced market-driven mechanisms, they remain less structured compared to Europe and the United States:

Country	Carbon Market Mechanisms	Mandator vs. Voluntary	Effectiveness
India	Perform, Achieve, and trade (PAT) Scheme	Voluntary	Limited impact
Germany	European Union Emissions Trading System (EU ETS)	Mandatory	Strong regulatory framework
United States	State-level carbon pricing (California's Cap-and-Trade)	Varies by state	Effective in regulated sectors
China	National Carbon Market (2021)	Mandatory	Expanding rapidly

India's PAT scheme allows industries to trade energy efficiency credits, but it lacks strict emission reduction mandates. Germany's EU ETS ensures mandatory emissions trading, making climate accountability legally enforceable.

China's carbon market, launched in 2021, is expanding rapidly, reinforcing government oversight on corporate emissions.

India must strengthen its carbon trading frameworks to make carbon accountability legally binding.¹⁰

5.5.5 Climate Litigation and Judicial Interventions

5.5.5.1 Legal Action Against Government Inaction

In India, climate litigation depends on judicial activism, while European nations rely on constitutional climate mandates:

Country	Major Climate Litigation	Impact on Policy
India	M.C. Metha V. Union of India (1987)	Strengthened Environmental Accountability
Germany	Neubauer et al. v. Germany (2021)	Expanded Climate Protection Act
United States	Juliana v. United States (2015)	Raised awareness of youth climate activism
Netherlands	Urgenda Climate Case (2019)	Government is legally required to reduce emissions

Germany's Neubauer Case forced legal reforms, embedding climate accountability in government policy.¹³⁰

India's M.C. Mehta cases strengthened industrial environmental accountability, but its climate litigation remains judicially interpreted rather than constitutionally mandated.

5.5.6 Key Takeaways from Global Climate Governance

5.5.6.1 Lessons for India from Other Nations

India can learn valuable lessons from global climate frameworks:

1. Codify Climate Justice as a Constitutional Right – Germany's Climate Protection Act enforces government responsibility for climate action.
2. Strengthen Carbon Market Mechanisms – China's mandatory carbon trading model ensures emissions regulation.
3. Expand Renewable Energy Investments – The U.S. leverages private-sector funding, while Germany prioritizes government-supported initiatives.

¹³⁰ Neubauer et al. v. Germany, BvR 78/21, German Federal Constitutional Court (2021)

4. Enhance Judicial Enforcement Mechanisms – The Netherlands' Urgenda Case legally mandated climate policy reforms.

India must transition from voluntary climate policies to enforceable legal mandates, ensuring stronger constitutional recognition and enforcement mechanisms.

5.6 Future Directions for Strengthening India's Climate Commitments

To enhance climate governance, India must focus on:

1. **Codifying Climate Justice as a Constitutional Right** – Establishing legally binding environmental mandates¹³¹.
2. **Strengthening Regulatory Institutions** – Providing more autonomy and funding for environmental bodies.
3. **Aligning Economic Policies with Sustainability** – Introducing stricter regulations for carbon-intensive industries.
4. **Expanding Renewable Energy Investments** – Accelerating solar and wind energy projects.

India must transition from policy-driven climate commitments to enforceable legal mandates to effectively meet its global climate obligations.

¹³¹ INDIA CONST. art. 48A.

CHAPTER 6: CHALLENGES TO CLIMATE JUSTICE IN INDIA:

India's pursuit of climate justice is shaped by its economic ambitions, environmental vulnerabilities, and policy frameworks. While the country has made considerable progress in environmental governance, significant institutional, legislative, and socio-economic barriers continue to hinder effective climate justice implementation.

This chapter examines the major challenges India faces in achieving climate justice, including policy enforcement issues, economic constraints, industrial conflicts, and community vulnerabilities. The discussion highlights the systemic barriers preventing equitable climate governance, emphasizing areas where reforms are crucial to ensure sustainability, climate resilience, and environmental equity.

6.2 Legislative Gaps in Climate Governance

6.2.1 Absence of a Constitutional Climate Mandate

Unlike countries such as Germany and the Netherlands, which have constitutional environmental mandates, India lacks an explicit constitutional recognition of climate justice.¹³² While the Supreme Court has interpreted Article 21 (Right to Life) to include environmental protections, there is no binding constitutional provision compelling the government to enforce climate-related laws.¹³³

6.2.2 Fragmented Environmental Laws

India's climate-related legislation is scattered across multiple laws, including:

- **The Environment Protection Act (1986)** – Regulates industrial pollution.
- **The Air (Prevention and Control of Pollution) Act (1981)** – Focuses on air quality management.
- **The Energy Conservation Act (2001)** – Encourages energy efficiency initiatives.

¹³² German Federal Constitutional Court, *Climate Protection Act Ruling*, BvR 2656/18 (Mar. 24, 2021).

¹³³ M.C. Mehta v. Union of India, (1985) 1 SCC 641 (India).

Despite these laws, overlapping jurisdictions between state and central authorities create policy inconsistencies, weakening enforcement mechanisms¹³⁴.

6.2.3 Lack of Binding Climate Litigation Mechanisms

Countries such as Germany and the Netherlands have strong climate litigation precedents, where courts can hold governments accountable for failing to meet climate targets. In India, climate cases largely depend on **public interest litigation (PIL)**, which lacks the legal force necessary to enforce binding climate regulations.

6.3 Economic Barriers to Climate Justice

6.3.1 Dependence on Coal and Fossil Fuels

India's economy heavily depends on **coal as a primary energy source**, contributing to **high carbon emissions**. While the country aims for **500 GW of renewable energy capacity by 2030**, transitioning away from **coal-based infrastructure** presents financial and industrial challenges.

6.3.2 Insufficient Climate Finance and Investment Barriers

India requires billions in climate investment to scale up renewable energy projects, climate adaptation measures, and low-carbon urban planning. However:

- Limited government funding hampers renewable expansion.
- Private-sector climate investments remain insufficient due to regulatory uncertainty.
- International climate finance commitments often fall short of India's sustainability needs.

Expanding financial incentives and strengthening international partnerships are essential to overcoming these funding challenges.¹³⁵.

¹³⁴ Environment Protection Act, No. 29 of 1986, §3 (India).

¹³⁵ Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/10/Add.1, 55 I.L.M. 740 (2016)

6.4 Industrial Resistance and Corporate Accountability Challenges

6.4.1 Industrial Lobbying Against Climate Regulations

Large industrial sectors often push back against stricter climate regulations, arguing that:

- Emission reduction targets could slow economic growth.
- Industrial restructuring for sustainability is costly.
- Regulatory frameworks for carbon neutrality remain unclear.

6.4.2 Weak Corporate Compliance Mechanisms

Although India has introduced market-driven environmental mechanisms such as the Perform, Achieve, and Trade (PAT) Scheme and Renewable Energy Certificates (RECs), corporations often evade compliance due to weak regulatory oversight. Strengthening corporate climate accountability is crucial to enforcing sustainable business practices.

6.5 Community Vulnerabilities and Social Inequities in Climate Justice

6.5.1 Climate Displacement and Marginalized Communities

India faces severe climate vulnerability, with coastal erosion, flooding, and agricultural distress disproportionately affecting low-income and marginalized communities.

- Rural populations suffer from unpredictable weather patterns that disrupt farming.
- Urban poor communities experience deteriorating air quality due to industrial expansion.
- Indigenous populations face land rights disputes related to deforestation.

6.5.2 Gender Inequality in Climate Governance

Women in rural communities bear the brunt of climate impacts, yet lack representation in climate policy discussions. Strengthening gender-responsive climate policies can ensure equitable climate adaptation strategies.

6.6 Institutional Weaknesses and Policy Implementation Gaps

6.6.1 Weak Enforcement of Environmental Laws

India's regulatory bodies, including the Central Pollution Control Board (CPCB) and State Environmental Authorities, struggle with:

- Limited funding for monitoring climate regulations.
- Corruption and policy inefficiencies.
- Lack of inter-ministerial coordination for climate action¹³⁶.

6.6.2 Lack of Public Awareness and Climate Education

Effective climate governance requires **public engagement**, yet:

- Limited access to climate litigation restricts citizen participation.
- Educational institutions lack climate justice integration in curricula.

Expanding grassroots climate awareness campaigns can strengthen community-led climate activism.

6.7 Future Directions for Strengthening Climate Justice in India

To overcome these challenges, India must focus on:

1. Codifying climate justice as a constitutional mandate.
2. Strengthening industrial compliance mechanisms for emission reductions.
3. Expanding climate finance strategies to support renewable transitions.
4. Enhancing public participation and grassroots climate advocacy.
5. Reforming environmental regulatory institutions to improve enforcement.

¹³⁶ Central Pollution Control Board, *Weak Enforcement of Environmental Policies in India*, Ministry of Environment, Forest & Climate Change (2021).

CHAPTER 7: GLOBAL PRECEDENTS AND LESSONS FOR INDIA:

Countries worldwide have developed legal, institutional, and policy frameworks to address climate justice, creating valuable precedents that India can learn from. Many nations have established constitutional climate mandates, binding emissions reduction targets, carbon trading systems, and strong enforcement mechanisms.

This chapter analyzes global climate governance models, focusing on key precedents from Germany, the Netherlands, the United States, and China, and identifying lessons India can adopt to strengthen its own environmental policies.

7.2 Constitutional Climate Recognition and Governance Models

7.2.1 Germany: Climate Protection Act (2021)

Germany's Climate Protection Act (2021) is a landmark legal precedent that compels government compliance with emission reduction targets¹³⁷. The law:

- Establishes binding climate objectives, legally requiring emission reductions.
- Mandates sector-specific targets for energy, transport, and industry.
- Allows courts to hold the government accountable for failing to meet climate goals¹³⁸.

Germany's model demonstrates the importance of constitutionally binding climate mandates, a key lesson for India.

7.2.2 Netherlands: Urgenda Climate Case (2019)

The **Urgenda Foundation v. Netherlands case (2019)** set a **judicial precedent in climate litigation**:

- Dutch courts ruled that the government must reduce emissions by 25% compared to 1990 levels¹³⁹.
- Established legal liability for failing climate commitments.

¹³⁷ German Federal Constitutional Court, *Climate Protection Act Ruling*, BvR 2656/18 (Mar. 24, 2021).

¹³⁸ Neubauer et al. v. Germany, BvR 78/21, German Federal Constitutional Court (2021)

¹³⁹ Urgenda Found. v. Netherlands, HR 20 December 2019, ECLI:NL:HR:2019:2006 (Neth.)

- Strengthened the role of citizen-led climate litigation.

India can adopt a stronger climate litigation framework to hold industries and government accountable for sustainability failures.

7.3 Carbon Trading and Market-Based Climate Solutions

7.3.1 European Union Emissions Trading System (EU ETS)

The EU Emissions Trading System (EU ETS) is the largest carbon trading mechanism globally¹⁴⁰:

- Implements a cap-and-trade system for industries.
- Requires corporations to purchase carbon credits for emissions exceeding their allowances.
- Encourages investments in clean energy and sustainability projects.

India's Perform, Achieve, and Trade (PAT) Scheme could benefit from stronger enforcement mechanisms modelled after the EU ETS.

7.3.2 China's National Carbon Market

China launched its mandatory carbon market in 2021, covering industries like power generation and manufacturing. Key features include:

- Strict government oversight to prevent emissions violations.
- Mandatory participation for high-emission industries.
- Financial incentives for transitioning to clean technologies.

India can strengthen market-driven carbon regulations, ensuring stricter industrial compliance.

¹⁴⁰ European Commission, *EU Emissions Trading System (EU ETS) Overview*, EU Climate Regulation Report (2021).

7.4 Climate Adaptation Strategies in Vulnerable Regions

7.4.1 United States: Federal Climate Adaptation Plans

The U.S. has developed regional climate adaptation strategies, focusing on:

- Disaster preparedness for hurricanes, wildfires, and floods.
- Investment in coastal resilience for vulnerable regions.
- Integrating climate risk assessments into urban planning.

India can replicate risk-based adaptation models, ensuring climate resilience for coastal cities, agricultural lands, and urban centers.

7.5 Role of Courts and Legal Frameworks in Climate Governance

7.5.1 Climate Litigation Models in Global Legal Systems

Country	Major climate litigation cases	Legal Outcome
India	M.C. Mehta Cases (1987-1997)	Strengthened industrial accountability
Germany	Neubauer et al. V. Germany (2021)	Expanded Climate Protection Act
United States	Juliana v. United States (2015)	Raised youth climate activism
Netherlands	Urgenda Climate Case (2019)	The government is legally required to reduce emissions

India can strengthen its judicial enforcement mechanisms by adopting mandatory climate compliance laws, similar to Germany and the Netherlands.

7.6 Lessons India Can Adopt from Global Precedents

7.6.1 Strengthening Climate Legislation and Constitutional Mandates

India must consider:

- Codifying climate justice as a fundamental right.
- Creating legally binding environmental protection laws.
- Mandating government accountability for climate failures.

7.6.2 Expanding Carbon Market Regulations

To achieve sustainability goals, India can:

- Enhance market-based carbon pricing mechanisms.
- Introduce stricter emissions trading regulations.

7.6.3 Improving Climate Litigation Frameworks

India must:

- Strengthen judicial directives for climate accountability.
- Expand legal avenues for climate advocacy.

CHAPTER 8: CONCLUSION:

India's journey toward climate justice has been marked by significant advancements and persistent challenges. While the country has demonstrated strong commitments through international agreements, renewable energy expansion, and legal precedents, its constitutional, economic, and enforcement barriers continue to pose difficulties in realizing a fully sustainable and equitable environmental governance model.

India's reliance on judicial activism for climate policy enforcement, rather than a constitutionally mandated framework, underscores the need for explicit legal recognition of climate justice. Countries like Germany, the Netherlands, and China provide valuable lessons in codifying climate obligations, enforcing corporate accountability, and strengthening carbon market mechanisms. Adopting binding commitments similar to the European Union's climate laws could ensure stricter industrial compliance and emissions reductions.

Despite India's ambitious renewable energy targets, the financial and regulatory hurdles in transitioning away from coal dependence and fossil fuel reliance remain daunting. Expanding climate finance mechanisms, integrating market-driven carbon pricing models, and incentivizing green investments will be critical for achieving long-term sustainability goals.

Climate justice must also be socially inclusive, addressing the vulnerabilities of rural and marginalized communities disproportionately affected by climate change. Strengthening grassroots climate movements, gender-responsive policies, and public engagement initiatives will foster a more equitable distribution of climate resilience efforts.

Institutional weaknesses, such as inconsistent enforcement of environmental laws, fragmented regulatory structures, and overlapping state policies, necessitate urgent structural reforms. India must build a stronger climate governance framework, ensuring effective policy implementation and legal accountability for industrial actors.

Looking ahead, India has the potential to lead global climate governance by embracing policy innovation, judicial empowerment, and sustainable economic transitions. Codifying climate justice as a fundamental right, reinforcing regulatory institutions, expanding financial mechanisms, and enhancing public participation will be instrumental in creating a resilient and forward-looking climate policy framework. The urgency of climate action demands legal,

economic, and institutional shifts, and India must seize this moment to pioneer sustainable environmental governance for future generations.

This decisive transformation will not only reinforce India's global leadership in climate governance but also ensure a prosperous and sustainable future for its people.

SUGGESTIONS:

1. Strengthening Constitutional Recognition of Climate Justice

Unlike some nations that **explicitly codify climate justice as a constitutional right**, India relies on **judicial interpretations under Article 21 (Right to Life)**. Your research could:

- Argue for a constitutional amendment recognizing climate justice as a fundamental right.
- Compare India's approach with Germany's Climate Protection Act and the Netherlands' legally binding climate obligations.
- Analyze global trends in constitutional climate litigation.

2. Expanding Climate Justice Litigation in India

India's climate justice cases rely on **Public Interest Litigation (PIL)**, but there is no **binding enforcement mechanism** to ensure **government accountability for climate commitments**.

Your work can:

- Examine cases like *M.C. Mehta v. Union of India*, highlighting their contributions to environmental justice.
- Compare India's judicial activism with structured climate litigation models in Germany and the Netherlands.
- Recommend institutional reforms for stronger climate liability laws.

3. Addressing Climate Justice Inequities: Rural & Marginalized Communities

The **disproportionate impact** of climate change on **low-income communities, indigenous populations, and vulnerable rural groups** remains an overlooked crisis. You can:

- Investigate environmental displacement issues affecting coastal and farming communities.
- Discuss gender and social justice in climate policy, advocating for inclusion of vulnerable groups in decision-making.
- Recommend solutions for equitable access to climate finance and resilience strategies.

4. Strengthening Climate Justice in India's Carbon Policies

Market-driven carbon mechanisms like the **Perform, Achieve, and Trade (PAT) Scheme** exist in India, but their alignment with **climate justice principles remains weak**. Your research could:

- Evaluate whether India's carbon markets protect or disadvantage vulnerable communities.
- Compare India's approach with China's strict carbon trading system and the EU's regulatory framework.
- Offer recommendations to ensure fairness in carbon pricing and emissions reduction strategies.

5. Public Engagement & Grassroots Climate Advocacy

Public movements have driven climate justice reforms globally, yet India's climate activism faces policy access limitations. Your research could:

- Explore how citizens can legally challenge unsustainable industrial practices.
- Assess India's grassroots climate movements and their impact on governance.
- Recommend stronger mechanisms for community-led climate litigation.

"Climate justice is not just about reducing emissions; it is about ensuring fairness, accountability, and protection for the most vulnerable communities who bear the brunt of environmental degradation." – Mary Robinson

