

Role of National Green Tribunal and Climate Change Litigation: Potentials and Limitations

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Abstract

The National Green Tribunal was created in 2010 and has the purpose of providing expeditious environmental justice and eventually becoming a significant judicial institution in the environmental field¹. The court makes rulings directly on a variety of climate-related cases (air pollution, deforestation, protection of the coastal areas, and violations of international climate treaties) in an effective way. The paper explores the National Green Tribunal and its performance by researching its strengths and weaknesses in its role to litigate climate change issues in India. It reviews various causative factors behind the nature of environmental issues which affect the climate system on Earth and trigger climate-change lawsuits.

In the context of the Indian setting, the National Green Tribunal plays a prominent role in the system of regulations of climate governance². This paper critically analyses the power, role, strengths, and weaknesses of the National Green Tribunal in handling issues related to climate change through a qualitative literature review based on leading climate change litigations in India. In addition, the research will also provide recommendations, based on its performance examination, to alleviate the weaknesses noticed and enhance the performance of the Tribunal in litigation on climate.

Keywords: Climate Change, Environmental Justice, Polluter Pays Principle, Precautionary Principle, Sustainable Development.

¹ A. Singh & S. Dimri, Environment Justice and Role of National Green Tribunal in India: An Analysis (2024).

² *Id.* (referring to A. Singh & S. Dimri, 2024).

INTRODUCTION

Today, climate change is one of the most burning global environmental issues. It has a significant impact on ecosystems, society, and the global economy. There are numerous reasons, particularly man-made activities, leading to these climate issues actively nowadays. The international legal system has been trying to address the issues relating to climate change selectively through climate litigation in various countries. Among numerous countries, India is one of the countries that set up a separate tribunal for resolving disputes relating to the environment, as well as in cases involving climate change. This paper reviews the strengths and weaknesses faced by the National Green Tribunal in establishing climate change related litigation and measures of improving its effectiveness.

Literature Review

It is a well-known fact amongst scholars that the National Green Tribunal (NGT) is a specialised institution that strengthens the Indian environmental justice system, mainly through expert-oriented adjudication and faster. To lessen procedural delaying and technical obstacles in environmental litigation, preliminary study considers the tribunal as an access-to-justice mechanism.

Bhattacharyya (2023) points out the model of administrative justice by the NGT as well as its time-constrained procedures, noting that it is made up of a hybrid body of judges and experts. Kodiveri (2022) locates Indian climate litigation in the broader global climate accountability movement and points out that, although the country has no special climate law, environmental jurisprudence and litigation on the basis of the public interest allow the courts and the NGT to act indirectly in climate matters.

Although it is important to note that enforcement is now stronger due to the institutional mechanisms that include the NGT, Kaur and Kumar (2023) highlight the problem of implementation and compliance. Kumar (2022) connects the climate mitigation objectives with the tribunal forest conservation and biodiversity protection activities.

Comparative studies by Diksha and Yadav (2025) state the NGT is more ambitious than most of the environmental tribunals in the world but limited by the jurisdiction and enforcement reliance. Tomar and Bhanu (2024) and Vyas and Pandya (2021) stress the role of the tribunal in implementing sustainable development and environmental rule of law by such concepts as precaution, polluter pays, and intergenerational equity.

Recent works also develop the climate-related aspect. Singh (2025), and Feng et al. (2025) relate climate justice and human rights models, and pollution-related lawsuits as promoters of climate mitigation, respectively. Such international human rights principles as the Strasbourg Principles (2022), directly influence the progressive environmental adjudication.

Nevertheless, the current literature has covered aspects of environmental justice in general with little emphasis on the NGT in the context of climate change litigation, effectiveness in enforcement and the ability to deal with complex climate science and transboundary responsibilities. This paper fills these gaps with the potentials and limitations of the tribunal in the climate litigation.

Research Methodology

The research is qualitative in terms of the approach to the doctrine. It is mainly founded on a thorough examination of legal statutes, constitutional matters, court cases and available academic references on environmental and climate law. The study also involves a case study examination of key decisions of the National Green Tribunal in the attempt to consider its overall functional operation on matters of climate change. Analytical findings are supported with the help of secondary sources, including research articles, policy reports, institutional publications, and legal commentaries.

Research Objective

To explore the legal and constitutional background of the National Green Tribunal and critically analyse its performance in deciding and settling climate change related cases in India. Another purpose of the study is to evaluate the extent to which the powers, procedures, and jurisprudence of the Tribunal have been useful in the governance of the environment and in climate justice.

CONCEPTUAL FRAMEWORK

Climate change litigation is a relatively recent area of the law that deals with alleviating climate-related damages and taking legal action against states, businesses, and other polluters. It has been found that three major avenues of climate litigation can be used (1) to attack governmental policies regarding climate; (2) to demand reparation by polluters; and (3) to bring suit against those who do not comply with environmental protection and preservation duties. Within the context of environmental governance,

climate change litigation has become a key tool that can institute liability on both the state and non-state actors. On this basis, the National Green Tribunal is seen more as an adjudicative agency that will be involved in settling all the environmental disputes, including those that occur out of climate litigation.

UNDERSTANDING CLIMATE CHANGE LITIGATION

To understand the climate change litigations, it is necessary to understand the meaning of the word “climate change” and the causes of climate change.

The term "climate change" refers to a cyclical alteration in the Earth's climate, comprised of different variations of weather conditions that prevail over an extended period. It is currently growing due to several human activities over the last 50 years. The scientific evidence is also clear that these shifts are not being caused by long-run natural climate cycles. Their primary causes are global warming and human activities.

In India, there are several reasons that cause climate change, such as extreme emission of greenhouse gases in the air, environmental degradation due to deforestation, biodiversity loss, and violations of climate agreements at the international level.

1. Emission Standards and Pollution:

Air that is unfit for normal use, popularly known as contaminated or polluted air. The air is mainly polluted due to the emissions of greenhouse gases (GHGs). These greenhouse gases consist mostly of CO₂ (carbon dioxide), CH₄ (methane), and N₂O (nitrous oxide)³. Among all these gases, carbon dioxide is in the top place in contributing to climate change and global warming. Air pollution in India has become so severe, especially in urban areas. Air quality in Delhi, Kolkata, Mumbai, Chennai, and Bangalore, among other urban Indian cities, has exceeded the tolerable level of exposure and hazardous effects of the pollution are experienced frequently in these cities. The Indian government has also prescribed emission standards for several sources of pollution, such as industries, thermal power plants, and vehicles, to regulate

³ T. Feng et al., Synergies of Air Pollution Control Policies: A Review, 350 J. Env'tl. Mgmt. [page number] (2025), <https://doi.org/10.1016/j.jenvman.2025.124655>.

these pollutants through several legislations. But enforcement or execution has not been sufficient, which has led to legal action against this issue.

Area of litigation: In these areas, the litigation is predominantly concerning emission standards and air pollution disputes – as such, the disputes involved in such cases hold liable industries and the government for vehicular, industrial emissions and nonadherence to environmental norms. Everyone from NGOs and public interest groups to affected citizens can sue governments and polluters, seeking damages as well as investment in cleaner technologies.

2. Deforestation and Loss of Biodiversity

Deforestation, along with the loss of biodiversity, is another crucial factor in growing climate issues. Forests are absorbing large amounts of Carbon dioxide (CO₂) from the atmosphere, which is now gradually decreasing due to widespread deforestation. Due to unnatural uses of land, construction projects and different development activities, deforestation has taken place majorly, and these activities also directly contribute to producing greenhouse gases. The resilience of ecosystems is also hampered due to the loss of biodiversity.

Area of litigation: In India, there have been multiple lawsuits that fight over the unnatural land use, violation of the Forest Act, deforestation, and projects that cause the loss of biodiversity and threaten wildlife.

3. Non-Compliance with International Obligations

India is a signatory member of multiple international agreements relating to climate change. The Paris Agreement is one of the most crucial agreements of all, with the objective of reducing greenhouse gases to a certain level and focusing on development through low-carbon activities. Although the legal system in India plays a crucial role in mitigating climate change activities, critics argue that initiatives taken by the Indian government are not effective in fulfilling its commitment towards the international agreement.

Area of litigation: Litigation relating to climate Change is mainly associated with the non-compliance with international commitments, including legal action against government accountability, Public Interest litigation.

4. Protection of Coastal Zones and Ecosystems

Coastal ecosystems such as mangroves, wetlands, and coral reefs play a significant role in balancing the Earth's climate system. Due to man-made pollutions, rising sea levels, extreme weather events, and coastal erosion, coastal ecosystems are getting badly affected, which directly impacts the global Climate system⁴. Thus, the protection of the coastal zone is very crucial to prevent impact on the climate system as well as to maintain biodiversity, natural livelihood, and guarantee sustainable development.

Area of litigation: In India, Litigation concerning this area includes violations of Coastal Regulation Zones (CRZ) to prevent the encroachment of the coastal regions for commercial and residential development. Ecosystem protection cases are also filed to curb the activities of sand mining, tourism, and industrialisation.

The NGT has performed actively to deal with these issues by passing orders to prevent illegal activities in CRZ areas, ensuring the preservation of coastal ecosystems. In the case of the **Kochi Coastal Zone**, the National Green Tribunal has decided the case in favour of the protection of the ecosystem or environment over development in environmentally sensitive coastal zones.

EVOLUTION AND MANDATE OF THE NATIONAL GREEN TRIBUNAL (NGT)

The idea of having a special tribunal on environmental issues in India was first proposed in the 1980s⁵. One of the turning points was made in 1986 by the Oleum Gas Leak incident, following which the Supreme Court of India highlighted the need and purpose of specialised environmental courts⁶. This necessity of a specific body was further expressed by the Commission of India in the 186th report in 2003, which recommended that the environment litigation be dealt with through a special body. The enactment of the National Environmental Tribunal Act of 1995 and the National Environment Appellate Authority Act of 1997 did not help the situation because these

⁴ Intergovernmental Panel on Climate Change [IPCC], Climate Change 2022: Impacts, Adaptation and Vulnerability (2023), <https://doi.org/10.1017/9781009325844>.

⁵ Diksha & A.K. Yadav, National Green Tribunal An Access to Justice Mechanism: A Comparative Analysis (2025).

⁶ P. Pooja, Laws and Institutions Relating to Environmental Protection in India: Challenges for Enforcement, 10 SFS (2025), <https://doi.org/10.53555/sfs.v10i1.3625>.

institutions could not meet the demands of the issue⁷. As a result of this, in 2010, the Indian Government introduced the National Green Tribunal (NGT) by the National Green Tribunal Act, 2010⁸. The main aim of the tribunal is to offer justice rapidly, and there is an intention of clearing all the environmental cases within a six-month period⁹. The jurisdiction of the NGT only adjudicates issues including ecological protection, forest conservation, biodiversity preservation, water resource management, and prevention and control of different kinds of pollution in India. It also has the power to listen to appeals against breaches of environmental legislation and policies, making it instrumental in promoting sustainable development goals in the country. The NGT, though not a climate-specific organization, has emerged as the main body that is used to decide all environmental litigation, including the climate ones.

The NGT's Jurisprudence in Climate Change Cases

The National Green Tribunal jurisprudence on cases involving climate change is seen as a holistic and creative approach to environmental law. The tribunal is not dependent on the procedural framework of a specific court, and its ruling is grounded on fundamental principles, such as the precautionary principle, polluter pays principle and sustainable development¹⁰. These principles will guide how the tribunal will deal with the various issues, especially those that are not explicitly presented in the form of climate change litigation.

Judgments and Orders of the National Green Tribunal

Here are some most highlighted cases discussed below, where the National Green Tribunal has been playing a pivotal role in dealing with climate litigations¹¹:

⁷ R. Tomar & A.P. Bhanu, Role of the National Green Tribunal in Balancing the Economic and Legal Dimensions of Sustainable Development (2024).

⁸ Id. (referring to A. Singh & S. Dimri, 2024).

⁹ K.P. Vyas & M.H. Pandya, Role of National Green Tribunal and Environmental Justice: Retrospect and Prospect (2021).

¹⁰ The Strasbourg Principles of International Environmental Human Rights Law (2022), <https://doi.org/10.4337/9781802204292.00011>.

¹¹ A. Bhattacharyya, National Green Tribunal and Environmental Justice Delivery - Dispensing Environmental Justice through Administrative Process (June 22, 2023), <https://doi.org/10.2139/ssrn.4488046>.

- **Delhi Air Pollution Case (2016):** One of the most featured instances where the National Green Tribunal has been central to the climate litigation dispute is the Delhi Air Pollution Case (2016). The air pollution caused by vehicular emissions is determined as one of the greatest contributors to air pollution in India and thus indirectly affects global warming and consequently climate change. Thus, the Green Tribunal directed the government to take necessary steps scientifically in cities where air pollution is high due to vehicular pollution. This helps to restore air quality and acknowledge the nexus between air pollution and climate change.
- **Illegal Mining in Uttarakhand (2014):** In Uttarakhand, the National Green Tribunal has ordered a ban on illegal mining activities. This helps to control deforestation and soil erosion, further reducing the exposure of the region due to climate change.
- **Coastal Regulation Zone (CRZ) Case (2019) - Surfing Federation of India v. Union of India & Ors., W.P.:** A week earlier, in a case related to the destruction of coastal ecosystems through developmental activities, the National Green Tribunal came out with orders for enforcing steeper environmental norms and conservation steps –a key thrust area of climate adaptation strategies.
- **Delhi-Dehradun Expressway Afforestation (2025):** In this case, there were worries about the destruction of over 10,000 trees and a lack of adequate reporting on compensatory afforestation works. The National Green Tribunal has asked the chief forest officers of Uttarakhand and Uttar Pradesh, along with the Union Ministry of Environment, Forest, and Climate Change (MoEF&CC), to provide a detailed explanation of the compensatory afforestation that is lagging in the Delhi-Dehradun Expressway project to resolve the issue¹².
- **Jagatpura Drain Realignment in Mohali (2025) Situation:** This drain, once it exits from the city of Chandigarh, is essentially a channel with high sides in a rural setting. According to the complainant, this realignment may disrupt the ecological and hydrological equilibrium of the area. The National Green Tribunal

¹² M. Kumar, Role of National Green Tribunal in Forest Conservation: An Analysis, 148 Indian Forester (2022), <https://doi.org/10.36808/if/2022/v148i3/166567>.

is hearing objections to the proposed realignment of the Jagatpura drain in Mohali, and it claimed that it is contrary to the Environmental Clearance given by the State Environment Impact Assessment Authority in 2014.

After analysis of the above cases, it is proven that the National Green Tribunal is an effective mechanism to mitigate climate issues.

REMEDIAL ACTIONS AND COMPLIANCE MECHANISMS

It is one of the prime functions of the National Green Tribunal, not only to hear environmental cases but also to enforce its orders, including levying fines, maintaining cleanliness, and enforcing significant rules to maintain healthy environmental standards. However, the ability of the National Green Tribunal to enforce and implement its orders has faced several challenges in some crucial areas, which prevent it from making a significant impact on the climate change issue.

Potentials of the National Green Tribunal in Addressing Climate Change

The area of Strengths that make the National Green Tribunal a significant player in dealing with climate litigation includes:

Accessibility and Expedited Justice: The tribunal is set up with highly specialised features that settle the environmental issues within a six-month time from the date of submissions. It is a systematic platform to facilitate quick and prompt justice to the litigants and provides a clear guideline to resolve all the environmental conflicts along with the climate litigations. With this systematic framework, the National Green Tribunal is confident that judicial respite is not only available but also fast enough to protect the ecosystems and human population against permanent harm.

Expertise in Environmental Matters:

The National Green Tribunal is composed of environmental lawyers, scientists, engineers, and policy makers, which is a major strength. Using the experience of these members, the tribunal itself can deal with litigation that is complicated in nature, related to climate change, often with a range of legal cases, technical concerns, and evaluations of environmental harm.

Advocating Environmental Rule of Law:

The National Green Tribunal can be regarded as one of the most influential institutions in India that facilitates and enforces environmental legislation. It conserves the environment and attempts to avert climate change in a uniform manner by using different legal doctrines and principles.

Setting up a Model Future Climate Action: The National Green Tribunal has decided several environmental cases and has set great precedents in the issues of climate change. The precedent of such cases is regularly used as a point of reference when dealing with future complicated climate-related matters.

Encouraging the Development of New Policy. The existing precedents of the National Green Tribunal make it easier to come up with all-inclusive new policies in India to tackle climate problems.

LIMITATIONS AND CHALLENGES

The National Green Tribunal has been facing many restrictions and challenges to deal with climate-change litigation despite its potential:

Jurisdictional Constraints:

There is also a tendency of clashes between the tribunal and the litigants due to the lack of a clear jurisdiction of the National Green Tribunal on the territory of India¹³. Its ability to tackle climate problems is sometimes subject to political or legislative intervention because of the jurisdictional constraints.

Implementation and Enforcement Lapses: The National Green Tribunal is mandated to order and penalise, but the execution and enforcement of the orders is a big challenge due to the inefficient implementation measures. Moreover, there is a need to develop a sufficient analysis system, especially in the appraisal of significant environmental projects and discouraging their negative climate effects over time.

¹³ H. Kaur & R. Kumar, India and Climate Changes: A Study of Legal Framework, 7 Legal Rsch. Dev. (2023), <https://doi.org/10.53724/lrd/v7n4.4>.

Technical and Scientific Complexities: Climate change litigation often requires technical specialists due to the highly technical nature of climate change analyses and complex scientific subject matter.

Balancing Development and Environmental Protection: The National Green Tribunal has contributed to a balance between economic growth and environmental conservation. Several environmentally damaging development projects significantly contribute to the climate issue, which indirectly impacts maintaining this balance by the National Green Tribunal.

Public Participation and Awareness: Public participation is necessary to deliver effective climate justice. But there are very few people who are aware of the changes in the Earth's climate system and its consequences. The National Green Tribunal has tried to raise awareness in advancing Public Interest Litigation, but this progress is ongoing and still inadequate.

COMPARATIVE ANALYSIS WITH INTERNATIONAL CLIMATE LITIGATION

Since its establishment, the National Green Tribunal has been actively working on the climate issue in India. It is quite advanced and provides an effective remedy compared to other tribunals at the international level. While International courts and other tribunals, including the International Court of Justice (ICJ) and the European Court of Human Rights, have made partial contributions to addressing climate issues, in the same place, India is dealing with the issue directly and establishing several precedents in this matter¹⁴. But still, India is not at the forefront in dealing with this climate issue. There are many countries at the front level from which India can learn valuable lessons, such as the Netherlands, which is one of the front-level countries where citizens are more aware of climate issues. At times, people successfully hold their governments accountable for ineffective climate policy, which may open new insights for National Green Tribunals of other countries.

¹⁴ A. Singh, Local Actions to Global Conversations: India's Climate Justice Movement and the Expansion of Human Rights Framework, [Volume Number] J. Hum. Rts. & Env't (2025), <https://doi.org/10.1007/s41134-025-00373-z>.

RECOMMENDATIONS AND FUTURE DIRECTIONS

Recommendations to strengthen the National Green Tribunal's role in climate change litigation. Based on the above analysis and considering that these are still early days in terms of NGT's involvement, the following recommendations could be suggested:

- **Empower National Green Tribunal and Strengthen its Capacity:** Extending the domain of jurisdiction, allowing National Green Tribunal to take up issues directly on international climate responsibility, and also providing constitutional immunity in or for enforcing the orders.
- **Strengthening Coordination between Other Environmental and Climate Institutions and the National Green Tribunal:** The National Green Tribunal should promote greater coordination in implementing government policies of climate change by other environmental or climate-related institutions such as Ministry of Environment, Forest and Climate Change (MoEFCC), Indian Council of Forestry Research and Education (ICFRE), Indian Meteorological Department (IMD), National Action Plan on Climate Change (NAPCC), Environmental Protection Agencies (EPAs), Green India Mission, so on¹⁵.
- **Fostering Public Interest Litigation:** By encouraging the engagement of ordinary people and NGOs in those cases being related to climate change, the role of the climate issues would become more visible and would create awareness among the environments.
- **Capacity Building for Adjudication and Enforcement:** Proper distribution of capacity and resources to ensure that the National Green Tribunal is better able to address scientific and technical problems of climate change litigation.
- **Harmonisation with International Climate Law:** To make it more functional in climate justice litigation, the National Green Tribunal must enhance its international coordination of decisions on climate themes and international climate law. The National Green Tribunal can handle the transboundary problems of climate change more effectively and efficiently by aligning the

¹⁵ A. Kodiveri, Climate Change Litigation in India, in Climate Change Litigation in Asia (Jolene Lin & Douglas A. Kysar eds., 2022), <https://doi.org/10.1017/9781009106214.025>.

domestic institutions with the global frameworks and enriching the national law to reflect the decision of the climate change policymaking.

CONCLUSION

The National Green Tribunal has been a revolving wheel towards the achievement of environmental justice in India, and its role in climate litigation cannot be overemphasised. The implementation of the concept of the environmental rule of law by the tribunal is one of the striking characteristics in implementing climate-change issues despite continuous challenges, particularly regarding enforcement and jurisdiction limitations. With these issues addressed and experience utilised with related countries in the global climate-litigation movement, the National Green Tribunal has been able to make itself better in promoting global climate justice.

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