



The Role of Constitutional Courts in Shaping Climate Policy

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Abstract

Climate change has surfaced as one of the most urgent global issues of the twenty-first century, necessitating collaborative efforts from governments, international organizations, and judicial bodies. In numerous jurisdictions, constitutional courts have increasingly assumed a pivotal role in influencing climate policy through the interpretation of constitutional rights, the enforcement of environmental responsibilities, and the assurance of governmental accountability. This article explores the changing function of constitutional courts in climate governance, with an emphasis on judicial activism, constitutional environmentalism, and rights-based climate litigation. The research employs a doctrinal and analytical methodology, drawing on constitutional provisions, landmark judicial rulings, international environmental principles, and academic literature. The article examines how courts in nations such as India, Germany, the Netherlands, and Colombia have broadened constitutional rights to encompass environmental protection and climate justice. Additionally, it assesses the advantages and drawbacks of judicial involvement in policy formulation. The study concludes that constitutional courts have emerged as crucial players in climate governance by bridging gaps between legislative and executive branches, fostering sustainable

development, and ensuring intergenerational equity. Nevertheless, effective long-term climate governance necessitates institutional collaboration and comprehensive legislative frameworks to support judicial initiatives.

Keywords: Climate Change, Constitutional Courts, Climate Litigation, Environmental Governance, Sustainable Development.



1. Introduction

Climate change has emerged as a pivotal challenge in contemporary governance, impacting ecosystems, economies, and human rights globally. The increase in global temperatures, severe weather phenomena, loss of biodiversity, and environmental degradation have necessitated that states develop climate policies focused on both mitigation and adaptation. Despite international accords like the Paris Agreement and national environmental regulations, governments frequently struggle to execute effective climate strategies. This gap in governance has increasingly prompted citizens, environmental organizations, and civil society groups to seek judicial intervention from constitutional courts. Constitutional courts have become significant entities in climate governance by interpreting constitutional rights and state responsibilities in environmentally progressive manners. Courts in various jurisdictions have acknowledged the link between climate change and essential rights, including the right to life, health, dignity, and a clean environment. Judicial rulings have impacted governmental climate policies, enhanced environmental accountability, and broadened the notion of constitutional environmentalism. In India, the judiciary has taken an active stance in environmental protection through Public Interest Litigation (PIL) and a broad interpretation of Article 21 of the Constitution. Likewise, courts in Europe and Latin America have increasingly acknowledged climate-related responsibilities as constitutional obligations. Landmark cases such as *Urgenda Foundation v. State of the Netherlands*, *Neubauer v. Germany*, and *Future Generations v. Ministry of the Environment (Colombia)* illustrate the growing role of courts in influencing climate governance. This article provides a critical analysis of the role of constitutional courts in shaping climate policy. It investigates the constitutional underpinnings of climate adjudication, the judicial methodologies employed in various jurisdictions, and the ramifications of judicial intervention within democratic governance.

2. Literature Review

The body of scholarly literature concerning climate litigation and constitutional environmentalism has grown considerably in recent years. Lisa Vanhala posits that courts are increasingly acting as governance entities when legislative bodies do not adequately tackle climate issues. Joana Setzer and Lisa Vanhala additionally note that climate litigation has transformed into a worldwide phenomenon that impacts climate governance via rights-based strategies and accountability in policy.

Anna-Julia Saiger highlights the importance of domestic courts in upholding international climate obligations as stipulated in the Paris Agreement, asserting that these courts play a crucial role in converting international commitments into domestic governance frameworks. In a similar vein, Agnes Hellner and Yaffa Epstein examine European climate litigation and determine that constitutional provisions related to the environment assist courts in distributing institutional responsibilities for climate mitigation.

In the context of India, Gitanjali N. Gill and Gopichandran Ramachandran analyze climate litigation as a pivotal instrument for sustainability governance and the enforcement of environmental law. They classify Indian climate jurisprudence into three approaches: climate-conscious, climate-accountability, and climate-futurity. Furthermore, recent academic work on Indian climate governance underscores the growing judicial involvement in climate policy, which has arisen from the lack of comprehensive climate legislation.

While the current body of literature thoroughly examines climate litigation and judicial activism, there is still a necessity for an in-depth constitutional analysis regarding the influence of courts on climate policy via rights-based adjudication and institutional accountability. This article aims to fill that void.



3. Research Methodology

This research employs a doctrinal and analytical methodology. It predominantly utilizes secondary sources, which encompass constitutional provisions, judicial rulings, statutes, academic articles, books, international treaties, and policy documents. The study conducts a comparative examination of significant climate litigation cases from India and other countries to discern judicial trends in climate governance. It scrutinizes constitutional principles such as sustainable development, the precautionary principle, the public trust doctrine, intergenerational equity, and environmental rights through the lens of judicial interpretation. The nature of the research is qualitative, emphasizing legal analysis over the collection of empirical data.

4. Constitutional Courts and Climate Governance

4.1 Constitutional Environmentalism

Constitutional environmentalism pertains to the incorporation of environmental protection and ecological sustainability within constitutional law and governance. It acknowledges that a healthy environment is vital for safeguarding human life, dignity, and sustainable development. In recent decades, numerous countries have either explicitly included environmental rights and responsibilities in their constitutions or have evolved them through judicial interpretation. Consequently, constitutional courts have emerged as key institutions in upholding environmental obligations and ensuring governmental accountability regarding issues of environmental degradation and climate change.

The idea of constitutional environmentalism has arisen from the increasing awareness that safeguarding the environment should not be viewed solely as a policy issue, but rather as a constitutional matter intertwined with fundamental rights and the obligations of the state. Numerous constitutions globally now include clauses pertaining to environmental preservation, sustainable development, the protection of natural resources, and the rights of future generations.

These constitutional clauses frequently establish responsibilities for both the state and its citizens to enhance and safeguard the environment.

In India, the evolution of constitutional environmentalism saw significant progress following the Forty-Second Constitutional Amendment Act of 1976, which incorporated Article 48A and Article 51A(g) into the Constitution. Article 48A mandates the State to safeguard and enhance the environment, as well as to protect forests and wildlife, whereas Article 51A(g) establishes a fundamental responsibility for citizens to preserve the natural environment. Although these articles are included within the Directive Principles of State Policy and Fundamental Duties, the Indian judiciary has interpreted them alongside Article 21, which ensures the right to life and personal liberty.

The Supreme Court of India has consistently affirmed that the right to life as stipulated in Article 21 encompasses the right to a clean and healthy environment. Through significant rulings including *M.C. Mehta v. Union of India*, *Subhash Kumar v. State of Bihar*, and *Vellore Citizens Welfare Forum v. Union of India*, the Court has broadened the scope of environmental rights within the constitutional framework. Furthermore, the judiciary has integrated international environmental principles such as sustainable development, the precautionary principle, the polluter pays principle, and the public trust doctrine into the jurisprudence of the Indian Constitution.

Constitutional environmentalism has progressively shifted from conventional environmental protection to governance that emphasizes climate issues. Previously, environmental law mainly focused on matters like pollution management, forest preservation, industrial oversight, and wildlife conservation. Nevertheless, the escalating danger posed by climate change has expanded constitutional adjudication into a more comprehensive framework that encompasses climate justice, carbon governance, transitions to renewable energy, and safeguarding at-risk communities.



Contemporary constitutional courts are increasingly acknowledging climate change not merely as an environmental challenge but also as a matter of constitutional and human rights. Climate change impacts essential rights such as the right to life, health, food, water, shelter, livelihood, and human dignity. As a result, courts in various jurisdictions have embraced rights-based frameworks for climate litigation. For instance, the German Constitutional Court in *Neubauer v. Germany* recognized that insufficient climate action could impose burdens on future generations and infringe upon constitutional freedoms. Likewise, the Dutch Supreme Court in *Urgenda Foundation v. State of the Netherlands* determined that the government has a legal duty to decrease greenhouse gas emissions to safeguard human rights.

Another significant element of constitutional environmentalism is the concept of intergenerational justice. Courts are progressively recognizing that current generations are stewards of natural resources for the benefit of future generations. The judicial acknowledgment of intergenerational equity guarantees that environmental and climate policies prioritize long-term ecological sustainability over immediate economic benefits. This principle has gained particular relevance in climate litigation, where courts evaluate whether state actions adequately safeguard future populations from climate-related damages.

Constitutional courts play a significant role in environmental governance by promoting governmental accountability and the execution of policies. In instances where legislative or executive bodies do not adequately address climate issues, courts frequently step in to uphold constitutional responsibilities and environmental pledges. By means of judicial review, courts evaluate the alignment of state policies with constitutional tenets and international environmental commitments.

Consequently, constitutional environmentalism has emerged as a vibrant and progressive field within constitutional law. It embodies the increasing

recognition that safeguarding the environment and managing climate issues are vital elements of constitutional democracy, the protection of human rights, and the pursuit of sustainable development. As a result, constitutional courts assume a pivotal role in influencing environmental and climate policy by reconciling developmental priorities with ecological conservation and social equity.

4.2 Judicial Activism and Climate Policy

Judicial activism concerning environmental issues has become one of the most notable advancements in contemporary constitutional governance. In numerous nations, the judiciary has assumed an active role in tackling environmental degradation and climate change, especially when legislative and executive bodies have not acted sufficiently or promptly. Environmental issues like air pollution, deforestation, loss of biodiversity, industrial pollution, and climate change frequently necessitate immediate action; however, governments may postpone intervention due to political, economic, or administrative limitations. In these circumstances, constitutional courts have intervened to safeguard environmental rights and uphold governmental accountability.

The emergence of environmental judicial activism is intricately linked to the broadening of constitutional rights and the increasing acknowledgment of environmental protection as a vital aspect of the right to life, health, and human dignity. Judicial bodies have progressively and expansively interpreted constitutional clauses to tackle environmental issues. By means of Public Interest Litigation (PIL), judicial review, and rights-based adjudication, the judiciary has reshaped environmental governance and enhanced accountability regarding climate matters.

Judicial intervention has played a crucial role in climate governance, as courts have instructed governments to develop and execute effective climate policies, manage greenhouse gas emissions, protect forests and biodiversity, and enhance mechanisms for environmental impact assessments. Additionally, courts have overseen adherence to environmental regulations and



international climate obligations. In numerous cases, judicial rulings have forced governments to implement more stringent environmental standards and climate mitigation strategies.

In India, the Supreme Court along with several High Courts has significantly influenced environmental protection by adopting activist interpretations of Article 21 of the Constitution. The judiciary has acknowledged that environmental degradation has a direct impact on the quality of life and public health. Landmark cases such as *M.C. Mehta v. Union of India*, *Vellore Citizens Welfare Forum v. Union of India*, and *Indian Council for Enviro-Legal Action v. Union of India* illustrate how the courts have broadened environmental jurisprudence by incorporating international environmental principles into domestic constitutional law.

Environmental judicial activism primarily functions through the implementation of specific foundational environmental principles, which have become pivotal in climate adjudication and the development of policy.

Sustainable Development

The concept of sustainable development aims to harmonize economic growth with the preservation of the environment. It underscores the necessity for development to satisfy the requirements of the current generation without jeopardizing the capacity of future generations to fulfil their own needs. Courts often reference this principle when adjudicating cases related to industrialization, infrastructure initiatives, mining, and the exploitation of natural resources. In the case of *Vellore Citizens Welfare Forum v. Union of India*, the Supreme Court acknowledged sustainable development as a fundamental component of Indian environmental legislation. The Court highlighted that economic advancement must not come at the expense of ecological harm and environmental deterioration. This principle has emerged as a pivotal benchmark in climate governance, promoting development policies that are environmentally responsible.

Precautionary Principle

The precautionary principle mandates proactive measures in circumstances where there is a potential for environmental damage, even in the absence of complete scientific certainty regarding the harm. This principle asserts that insufficient scientific evidence should not serve as a justification for delaying actions intended to avert environmental degradation. Judicial bodies implement the precautionary principle in matters related to hazardous industries, pollution, climate-related risks, and ecological harm. This principle places the onus of proof on industries or project advocates to prove that their operations are environmentally benign. Its significance is particularly pronounced in climate change litigation, as the harms associated with climate change frequently entail long-term and uncertain repercussions.

Polluter Pays Principle

The principle of the polluter pays asserts that those individuals, industries, or entities that cause environmental damage are obligated to cover the costs associated with preventing and rectifying that damage. This principle fosters accountability for environmental issues and deters the irresponsible use of natural resources. Indian courts have consistently upheld the polluter pays principle in cases related to industrial pollution and environmental harm. In the case of *Indian Council for Enviro-Legal Action v. Union of India*, the Supreme Court determined that industries responsible for pollution are fully liable for compensating affected individuals and for the restoration of harmed ecosystems. Furthermore, this principle underpins climate governance by highlighting the corporate responsibility for environmental damage and carbon emissions.

Public Trust Doctrine

The public trust doctrine asserts that specific natural resources, including air, water, forests, rivers, and coastlines, are entrusted to the state for the public's benefit. Consequently, governments bear a fiduciary responsibility to safeguard these resources against privatization, overexploitation,



and ecological harm. This doctrine has emerged as a significant judicial instrument in environmental litigation. In the case of *M.C. Mehta v. Kamal Nath*, the Supreme Court determined that the state is prohibited from transferring public natural resources for private commercial purposes if such a transfer jeopardizes ecological balance or the public interest. This doctrine strengthens the obligation of the government in climate governance and environmental protection.

Intergenerational Equity

The concept of intergenerational equity highlights the importance of fairness in the utilization and safeguarding of natural resources between current and future generations. It acknowledges that future generations are entitled to inherit a sustainable and healthy environment. Courts are progressively applying this principle in climate-related legal cases, as climate change presents enduring threats to future populations. The judicial acknowledgment of intergenerational equity guarantees that contemporary development and policy choices do not inflict irreversible environmental damage on future generations. Cases like *Neubauer v. Germany* exemplify how courts employ this principle to assess the sufficiency of climate legislation and long-term strategies for emission reductions.

Collectively, these principles have evolved into essential components of contemporary environmental law and climate governance. Constitutional courts depend on these principles to interpret environmental rights, evaluate governmental actions, and establish criteria for sustainable policy-making. Consequently, judicial activism has turned courts into pivotal players in climate governance, guaranteeing that environmental protection stays at the forefront of constitutional democracy, human rights, and sustainable development.

5. Landmark Climate Litigation Cases

5.1 India

India has experienced considerable growth in environmental and climate-related litigation in recent decades. The Indian judiciary, especially the Supreme Court and the National Green Tribunal (NGT), has been instrumental in broadening environmental jurisprudence and enhancing climate governance. By employing innovative constitutional interpretation and engaging in judicial activism, the courts have acknowledged environmental protection as a vital aspect of the right to life and sustainable development. Numerous landmark cases have played a significant role in the evolution of environmental constitutionalism in India, establishing a framework for climate-aware governance.

M.C. Mehta v. Union of India

The case of *M.C. Mehta v. Union of India* stands as a significant landmark in the realm of Indian environmental law. Environmental attorney M.C. Mehta initiated a number of Public Interest Litigations (PILs) in the Supreme Court, tackling concerns including industrial pollution, river pollution, vehicle emissions, and environmental deterioration. These legal actions reshaped the judiciary's function in environmental management and laid down numerous essential principles of environmental law in India.

One of the key contributions of the *M.C. Mehta cases* was the enhancement of Article 21 of the Constitution of India. The Supreme Court construed the "right to life" under Article 21 to encompass the right to exist in a clean, healthy, and pollution-free environment. This interpretation greatly expanded the range of fundamental rights and affirmed environmental protection as a constitutional duty.

The Court acknowledged that the deterioration of the environment poses a direct risk to human health, ecological stability, and overall quality of life. As a result, the judiciary started to regard environmental protection not just as a policy concern but as an issue of constitutional rights and



public welfare. Furthermore, the Court highlighted the obligation of the State as outlined in Article 48A and the essential responsibility of citizens under Article 51A(g) to safeguard and enhance the environment.

In the case of the *Oleum Gas Leak*, which was included in the M.C. Mehta litigation, the Supreme Court established the principle of "absolute liability." The Court determined that industries involved in hazardous operations are completely liable for any damage resulting from industrial accidents, irrespective of negligence. This doctrine enhanced environmental responsibility and industrial regulation in India.

The *M.C. Mehta cases* played a significant role in driving substantial policy reforms. Judicial directives resulted in actions including the relocation of dangerous industries, the adoption of cleaner fuels such as Compressed Natural Gas (CNG) in Delhi, the regulation of vehicle emissions, and the safeguarding of rivers like the Ganga. These rulings illustrated the capacity of judicial intervention to directly affect the formulation of environmental and climate-related policies.

Overall, *M.C. Mehta v. Union of India* laid the foundation for environmental constitutionalism in India by integrating environmental protection with fundamental rights, sustainable development, and governmental accountability.

Ranjitsinh v. Union of India

The case of *Ranjitsinh v. Union of India* serves as a significant illustration of the judiciary's progressive stance on climate-conscious governance and the safeguarding of biodiversity. This case primarily focused on the preservation of the critically endangered Great Indian Bustard, a bird species that faces threats from habitat loss and collisions with overhead power transmission lines linked to renewable energy initiatives. The Supreme Court encountered the challenge of reconciling environmental conservation with India's obligations towards renewable energy advancement and climate mitigation objectives. Projects in renewable energy, such as solar and

wind power, are vital for diminishing greenhouse gas emissions and addressing climate change. Nevertheless, the Court acknowledged that efforts in climate action must not compromise biodiversity preservation and ecological stability.

In its ruling, the Supreme Court underscored the constitutional duty of the State to safeguard wildlife and maintain ecological equilibrium. The Court recognized that the conservation of biodiversity and climate governance are interrelated components of sustainable development. It instructed authorities to implement protective measures, such as placing power transmission lines underground in ecologically sensitive regions and establishing safeguards for endangered species. The case underscored the judiciary's function in fostering environmentally sustainable development that harmonizes economic growth, the expansion of renewable energy, and ecological conservation. Notably, the Court also acknowledged the wider ramifications of climate change on environmental rights and intergenerational equity. The *Ranjitsinh* judgment illustrates the contemporary progression of Indian environmental law from conventional pollution control to climate-sensitive governance that encompasses renewable energy, biodiversity conservation, and ecological sustainability.

National Green Tribunal (NGT)

The formation of the National Green Tribunal (NGT) through the National Green Tribunal Act of 2010 represented a pivotal advancement in India's environmental governance structure. The NGT was established as a dedicated judicial entity to facilitate the prompt and efficient resolution of environmental cases related to forest conservation, pollution management, biodiversity preservation, and climate change issues. The Tribunal has been instrumental in enhancing environmental compliance and enforcing environmental regulations in India. It possesses specialized knowledge in both environmental science and law, which allows it to tackle intricate ecological disputes more effectively than conventional courts. The NGT has the authority to adjudicate cases arising from key environmental legislation,



including the Environment Protection Act, Forest Conservation Act, Water Act, and Air Act.

The National Green Tribunal (NGT) has issued numerous significant rulings related to industrial pollution, illegal mining, waste management, river contamination, deforestation, and environmental impact assessments. Through these rulings, the Tribunal has fostered more stringent environmental regulations and increased accountability for both government entities and private sectors. A key contribution of the NGT has been its enforcement of the precautionary principle, the polluter pays principle, and the principle of sustainable development. The Tribunal has mandated environmental compensation from polluting industries, directed the restoration of harmed ecosystems, and required adherence to environmental standards in infrastructure and industrial initiatives. In the realm of climate governance, the NGT has tackled challenges such as air pollution, renewable energy initiatives, urban environmental management, groundwater depletion, and ecological preservation. The Tribunal has also overseen the execution of environmental clearances and environmental impact assessments, thereby reinforcing climate-sensitive governance. The NGT has established itself as a vital institution for environmental justice by offering accessible and specialized remedies for environmental damage. It has improved public engagement in environmental governance and promoted enhanced administrative accountability.

Nonetheless, in spite of its accomplishments, the NGT encounters obstacles including challenges in enforcement, administrative constraints, a lack of infrastructure, and sporadic conflicts with executive bodies. Still, it continues to be an essential institution within India's framework for environmental and climate governance. These pivotal cases and institutions illustrate the important influence of the Indian judiciary in formulating environmental and climate policy. By means of constitutional interpretation, judicial activism, and creative legal principles, Indian courts have enhanced environmental rights, encouraged sustainable development, and aided in the advancement of climate-aware governance.

5.2 Netherlands – *Urgenda Foundation v. State of the Netherlands*

The case of *Urgenda Foundation v. State of the Netherlands* is considered one of the most significant climate litigation cases globally. It represented a pivotal moment in international environmental law by affirming that governments possess a legal obligation to implement sufficient measures against climate change to safeguard human rights and environmental concerns.

The case was initiated in 2013 by the Urgenda Foundation, a Dutch environmental organization, along with nearly 900 citizens against the Government of the Netherlands. The petitioners contended that the existing climate policies of the Dutch government were inadequate to confront the threats posed by climate change, thereby breaching the State's duty of care towards its citizens. They argued that insufficient climate action jeopardized essential human rights, including the rights to life, health, and well-being. The plaintiffs based their claims on scientific evidence and international climate commitments, asserting that the Netherlands was failing to implement adequate measures to lower greenhouse gas emissions. They sought a judicial order mandating the government to establish more ambitious emission reduction targets in line with global climate obligations. In 2015, the Hague District Court issued a landmark ruling requiring the Dutch government to cut greenhouse gas emissions by at least 25% from 1990 levels by the year 2020. The Court determined that climate change represented a significant threat to human life and welfare, and that the government bore a constitutional and legal responsibility to avert foreseeable environmental damage. In 2019, the Dutch Supreme Court upheld the ruling, confirming that insufficient climate action contravened the European Convention on Human Rights, specifically Articles 2 and 8, which safeguard the right to life and the right to private and family life. The Court acknowledged that climate change poses real and immediate dangers to both current and future generations, and that governments have a proactive duty to implement preventive measures against such risks.



One of the most crucial elements of the *Urgenda case* was its rights-oriented approach to climate governance. The Court established a direct connection between climate protection and human rights obligations, thus reframing climate change from merely an environmental issue into a matter of constitutional and human rights. Furthermore, the ruling illustrated that courts have the authority to mandate governments to enhance climate policies when political institutions do not respond appropriately.

The *Urgenda* ruling emerged as a significant precedent for climate litigation on a global scale. It motivated analogous climate lawsuits in various nations and reinforced the function of courts in holding governments accountable for climate governance. This case demonstrated that constitutional courts have the capacity to actively shape climate policy by upholding legal and human rights obligations associated with environmental protection and sustainable development.

5.3 Germany – *Neubauer v. Germany*

The *Neubauer v. Germany* case signifies a significant advancement in constitutional climate litigation. Ruled upon by the German Federal Constitutional Court in 2021, this case examined the constitutional legitimacy of Germany's Climate Protection Act of 2019.

The petitioners, comprising young climate activists and environmental organizations, asserted that the government's climate legislation was insufficient as it deferred substantial emission reduction responsibilities to future generations. They argued that a lack of adequate climate action at present would greatly limit the freedoms and rights of younger and future populations, thus infringing upon the constitutional protections enshrined in the German Basic Law.

The German Constitutional Court issued a landmark ruling that acknowledges climate change as a constitutional matter related to fundamental rights and intergenerational justice. The Court determined that while the Climate Protection Act set emission reduction goals, it did not provide adequate long-term strategies beyond 2030.

Consequently, future generations would encounter disproportionate limitations and challenges in their pursuit of climate neutrality. The Court highlighted that the Constitution mandates the State to safeguard the foundations of natural life and the rights of future generations. It argued that postponing significant climate action would compel future citizens to endure severe restrictions on their economic and personal liberties to avert disastrous climate outcomes. Thus, insufficient climate legislation today poses a serious threat to the constitutional freedoms of future generations.

A significant aspect of the *Neubauer* ruling was its acknowledgment of intergenerational equity as a constitutional tenet. The Court emphasized that environmental safeguarding should take into account the rights and interests of future generations, and that climate policies must equitably allocate environmental burdens over time. Additionally, the ruling strengthened the precautionary principle in climate governance. The Court recognized scientific data indicating the long-term and possibly irreversible impacts of climate change. It determined that the State is required to implement proactive strategies to mitigate emissions before environmental damage escalates beyond control.

Subsequent to the ruling, the German government revised its Climate Protection Act by implementing more stringent emission reduction objectives and hastening the goals for climate neutrality. This exemplified the capacity of constitutional adjudication to directly influence national climate policy and legislative changes. The *Neubauer* case is regarded as a pivotal instance of constitutional climate litigation as it broadened the interpretation of constitutional freedoms to encompass safeguards against prospective climate-related limitations. Furthermore, it reinforced the function of constitutional courts in advancing sustainable development, climate justice, and responsibilities towards future generations.



5.4 Colombia – *Future Generations v. Ministry of the Environment*

The case of *Future Generations v. Ministry of the Environment* in Colombia stands as a leading example of environmental constitutionalism and rights-based climate litigation. Initiated in 2018 by a collective of young plaintiffs, the case contended that deforestation in the Colombian Amazon has a substantial impact on climate change, thereby endangering their constitutional rights as well as the rights of future generations.

The petitioners asserted that the rise in deforestation and environmental degradation posed a threat to essential rights, including the right to life, health, water, food, and a healthy environment. They further contended that the State had not met its constitutional and international responsibilities to safeguard the Amazon rainforest and address climate change.

The Colombian Supreme Court issued a groundbreaking ruling that acknowledges the Colombian Amazon rainforest as a "subject of rights" or a legal entity entitled to legal protection. The Court recognized the Amazon's vital function in regulating the global climate, preserving biodiversity, and maintaining ecological balance. The Court determined that environmental degradation and climate change present significant dangers not only to current populations but also to those of future generations. It underscored the principle of intergenerational equity, affirming that future generations have constitutional rights to a healthy and sustainable environment.

One of the most groundbreaking elements of the ruling was the Court's acknowledgment of nature as an entity with rights. By conferring legal personality upon the Amazon rainforest, the Court broadened the framework of constitutional environmental protection to include perspectives beyond those centered on humans. This demonstrated an ecocentric approach to environmental governance, wherein ecosystems are granted legal safeguards. The Court instructed the Colombian government to develop and execute action plans aimed at reducing deforestation,

safeguarding the Amazon ecosystem, and tackling climate change. Additionally, it mandated collaboration among national and local authorities, environmental agencies, and impacted communities to ensure effective environmental governance.

The *Future Generations* case made a substantial impact on global climate law by underscoring the rights of youth, the importance of environmental justice, and the necessity of ecological sustainability. It illustrated the potential for constitutional courts to serve a transformative function in safeguarding ecosystems and promoting climate accountability. Moreover, the ruling emphasized the increasing worldwide movement to acknowledge climate change as a matter of constitutional law, human rights, and intergenerational responsibility. It strengthened the notion that environmental governance should focus on long-term ecological sustainability and the safeguarding of future generations against irreversible environmental damage.

6. Impact of Constitutional Courts on Climate Policy

Constitutional courts have become significant entities in the realm of global climate governance. Over the past few decades, courts in various jurisdictions have increasingly taken action in environmental and climate-related issues to tackle governmental inaction, policy shortcomings, and breaches of environmental rights. By means of constitutional interpretation, judicial review, and rights-based adjudication, these courts have played a crucial role in shaping climate policy and enhancing environmental governance. The expanding influence of constitutional courts in climate governance underscores the understanding that climate change transcends being solely an environmental issue; it is also a matter of constitutional, human rights, and developmental significance. These courts have impacted climate policy by promoting accountability, broadening environmental rights, advocating for climate justice, and fostering legislative reform. Their actions have redefined environmental protection as



a vital aspect of constitutional democracy and sustainable governance.

6.1 Strengthening Government Accountability

One of the most important roles of constitutional courts in climate governance is enhancing governmental accountability. These courts require governments to meet their constitutional, statutory, and international environmental responsibilities by ensuring the effective execution of environmental policies and climate commitments. In numerous nations, governments have established climate policies and international agreements; however, they frequently struggle to implement them effectively due to political influences, economic motivations, administrative inefficiencies, or insufficient institutional coordination. In these circumstances, constitutional courts step in to guarantee that public authorities operate in alignment with constitutional principles and environmental duties. Through judicial review, courts assess if governmental policies and actions sufficiently safeguard environmental rights and adhere to climate-related obligations. Courts have mandated that governments lower greenhouse gas emissions, control industrial pollution, conserve forests and biodiversity, and develop strategies for climate adaptation.

The significant case of *Urgenda Foundation v. State of the Netherlands* serves as a notable illustration of judicial accountability in the realm of climate governance. The Dutch Supreme Court determined that the government's insufficient climate actions breached human rights obligations and mandated the State to implement more robust emission reduction strategies. In a similar vein, in India, both the Supreme Court and the National Green Tribunal have consistently overseen environmental compliance and instructed authorities to enforce pollution control measures, establish waste management systems, and develop conservation policies.

Judicial oversight additionally fosters transparency and administrative accountability. Courts frequently mandate that governments provide compliance reports, form monitoring committees,

and implement time-sensitive environmental initiatives. This strengthens institutional responsibility and guarantees that climate policies are not just symbolic but are put into practice effectively. Consequently, constitutional courts are essential in closing governance gaps and ensuring that environmental responsibilities are converted into significant action.

6.2 Expanding Environmental Rights

Another significant influence of constitutional courts on climate policy is the enhancement of environmental rights via judicial interpretation. Courts have increasingly construed constitutional rights to incorporate safeguards concerning environmental quality, ecological sustainability, and climate security. In numerous jurisdictions, constitutions do not specifically reference climate change or environmental rights. Nevertheless, constitutional courts have expanded the interpretation of existing fundamental rights, including the right to life, health, dignity, equality, and livelihood, to cover environmental protection.

In India, the Supreme Court has notably broadened the scope of Article 21 of the Constitution by acknowledging the right to a clean and healthy environment as an integral component of the fundamental right to life. Cases like *M.C. Mehta v. Union of India*, *Subhash Kumar v. State of Bihar*, and *Vellore Citizens Welfare Forum v. Union of India* have established that environmental protection is a constitutional duty associated with human welfare and public health.

In a similar vein, judicial systems in various nations have acknowledged rights associated with climate issues. The German Constitutional Court, in the case of *Neubauer v. Germany*, determined that insufficient climate legislation posed a risk to future constitutional liberties. Meanwhile, the Colombian Supreme Court affirmed the environmental rights of upcoming generations and provided legal safeguards for the Amazon rainforest.

The judicial expansion of environmental rights has enhanced climate governance by equipping citizens and communities with legal instruments to



contest environmentally detrimental actions and governmental negligence. Rights-based climate litigation enables individuals, environmental organizations, indigenous populations, and civil society groups to pursue judicial remedies for climate-related damages. This development in environmental rights signifies the increasing recognition that a healthy environment is crucial for the realization of all other human rights and freedoms.

6.3 Promoting Climate Justice

Constitutional courts have significantly contributed to the advancement of climate justice. Climate change does not impact all demographics uniformly; marginalized communities, indigenous populations, economically disadvantaged groups, and future generations frequently endure the most severe environmental challenges, even though they contribute the least to climate change. Climate litigation has increasingly brought to light matters of environmental inequality, ecological displacement, resource exploitation, and social vulnerability. Courts have tackled these issues by prioritizing fairness, equity, and the safeguarding of marginalized communities in climate governance. The concept of climate justice acknowledges that environmental protection must take into account social and economic disparities. Courts often assess whether environmental policies disproportionately affect vulnerable populations or infringe upon principles of equality and human dignity.

For instance, in the case of *Future Generations v. Ministry of the Environment*, the Colombian Supreme Court underscored the entitlements of younger and future generations to a healthy environment and sustainable ecological conditions. In a similar vein, Indian courts have often taken action to safeguard forest-dependent communities, tribal groups, and individuals impacted by industrial pollution and environmental degradation.

The judicial acknowledgment of indigenous and community rights has gained significant importance in situations related to deforestation,

mining, infrastructure initiatives, and the exploitation of natural resources. Courts are increasingly recognizing that indigenous communities hold traditional ecological knowledge and maintain a profound connection with natural ecosystems that require safeguarding. Furthermore, constitutional courts advocate for intergenerational justice by ensuring that current development does not jeopardize the environmental rights of future generations. This principle has become pivotal in climate adjudication, as climate change poses long-term and potentially irreversible ecological damage. Consequently, constitutional courts play a vital role in advancing climate justice by protecting at-risk populations, fostering equitable environmental governance, and ensuring fairness in the formulation of climate policies.

6.4 Encouraging Legislative Action

Judicial rulings frequently serve as catalysts for reform in legislation and policy regarding climate governance. Constitutional courts play a significant role in shaping climate policy by urging governments to create, enhance, or enforce environmental laws and regulatory frameworks. In numerous nations, climate litigation has revealed shortcomings in environmental legislation, prompting governments to establish more robust legal and institutional frameworks for climate action. Courts typically pinpoint inadequacies in current policies and instruct authorities to develop thorough climate strategies and measures for reducing emissions.

The *Neubauer v. Germany* case serves as a significant illustration of how judicial intervention can directly impact legislative reform. Following the German Constitutional Court's determination that the Climate Protection Act failed to sufficiently safeguard future generations, the government revised the legislation to incorporate more stringent climate targets and expedited emission reduction objectives. In a similar vein, judicial activism in India has played a crucial role in the development of environmental legislation and institutional structures. Judicial mandates in environmental matters have shaped the



establishment of regulatory bodies, pollution control systems, and specialized entities like the National Green Tribunal.

Judicial bodies also enhance the processes of environmental impact assessments and guarantee adherence to environmental regulations in sectors such as infrastructure, mining, industry, and energy projects. Judicial oversight frequently urges governments to implement policies that are more scientifically grounded and environmentally sustainable. In numerous cases, constitutional courts act as catalysts for policy change by underscoring the critical need for climate action and stressing constitutional responsibilities related to environmental safeguarding. Their rulings motivate legislative bodies and executive branches to pursue proactive initiatives that align with sustainable development and international environmental commitments. Consequently, constitutional adjudication has emerged as a vital tool for promoting environmental reform and fostering governance frameworks that are responsive to climate challenges.

7. Challenges and Limitations

While constitutional courts have significantly influenced climate policy and environmental governance, their involvement in climate-related issues is not without its challenges and limitations. Climate change presents a highly intricate and multifaceted problem that encompasses scientific uncertainty, economic factors, political decision-making, and the need for international collaboration. Although courts have made substantial contributions to environmental protection and the accountability of governments, various practical, constitutional, and institutional constraints hinder the effectiveness of judicial intervention in climate governance. Critics frequently contend that courts are not inherently equipped to serve as policy-making bodies and that excessive judicial activism may lead to conflicts within democratic governance. Additionally, the execution of judicial rulings often relies on administrative efficiency and political will, which cannot always be assured. Consequently, despite their increasing significance in climate governance,

constitutional courts encounter numerous structural and functional limitations.

7.1 Separation of Powers Concerns

One of the primary criticisms regarding judicial involvement in climate governance pertains to the principle of separation of powers. In constitutional democracies, governmental authority is typically distributed among the legislature, executive, and judiciary to uphold institutional equilibrium and avert the concentration of power. The formulation of climate policy is conventionally viewed as the duty of legislative and executive bodies, as it encompasses policy planning, economic prioritization, budget allocation, and administrative execution. Critics assert that excessive judicial activism in environmental issues may compromise democratic decision-making and encroach upon the powers of elected officials. When courts provide specific directives concerning emission reduction targets, industrial regulation, infrastructure development, or environmental policy, they may be seen as encroaching upon the realm of policy-making instead of remaining within the bounds of adjudication. Judicial intervention can sometimes provoke concerns regarding democratic legitimacy, given that judges are not representatives elected directly by the populace. Climate policies frequently necessitate the balancing of conflicting interests such as economic growth, industrial advancement, job creation, energy security, and environmental conservation. Opponents of judicial activism argue that such balancing necessitates political negotiation and public engagement, which are more suitably managed by legislative and executive entities.

For instance, in specific climate litigation cases, governments have contended that courts ought not to determine national climate policy, as these issues require technical expertise, resource distribution, and long-term strategic planning. Additionally, courts may encounter criticism for enforcing obligations that governments view as economically onerous or politically unfeasible.



Nevertheless, proponents of judicial intervention contend that courts primarily step in when governments do not meet their constitutional and environmental responsibilities. Judicial review serves as a protective measure against capricious or insufficient governmental actions, particularly when environmental harm endangers essential rights and public well-being. Despite this rationale, the conflict between judicial activism and democratic governance continues to pose a significant challenge in climate-related legal proceedings.

7.2 Institutional Capacity

Another significant limitation encountered by constitutional courts is the challenge of institutional capacity. Climate change represents a highly technical and scientifically intricate topic that encompasses environmental science, atmospheric research, energy policy, economics, biodiversity preservation, and technological advancements. Courts may not always have the specialized knowledge or institutional frameworks necessary to effectively tackle such complex matters. Judges are predominantly educated in law and constitutional interpretation, rather than in climate science or environmental management. As a result, courts frequently depend on expert committees, scientific studies, environmental organizations, and technical specialists when adjudicating climate-related cases. This reliance can occasionally lead to challenges in assessing scientific evidence and reconciling differing expert viewpoints. Climate governance necessitates long-term strategic planning, ongoing monitoring, and coordinated execution across various governmental agencies and sectors. Courts are typically structured to resolve disputes and interpret legislation, rather than to oversee continuous administrative operations. Consequently, they may lack the institutional framework essential for overseeing the implementation of long-term climate policies.

In certain instances, judicial directives may be expansive or challenging to implement, as courts are unable to directly manage environmental programs or enforce technical standards on a daily

basis. Specialized environmental entities, including environmental tribunals, regulatory bodies, and scientific organizations, are typically more adept at addressing the technical aspects of climate governance. While institutions like the National Green Tribunal (NGT) in India strive to close this gap by integrating legal and technical knowledge, obstacles related to infrastructure, personnel, scientific resources, and administrative coordination persist. Consequently, limited institutional capacity continues to pose a significant challenge that impacts the efficacy of judicial climate governance.

7.3 Enforcement Challenges

One of the most enduring challenges in environmental and climate litigation is the difficulty associated with enforcing judicial rulings. Even when courts issue progressive and well-founded decisions, the actual implementation frequently relies on the efficiency and willingness of executive authorities and administrative bodies. Environmental governance often suffers from bureaucratic delays, a lack of coordination among government departments, corruption, insufficient funding, and political opposition. Consequently, judicial orders concerning pollution control, forest conservation, emission reduction, or climate adaptation may not be fully executed in practice. In numerous developing nations, environmental regulations are compromised by inadequate monitoring systems and limited administrative capacity. Courts may instruct authorities to shut down polluting industries, rehabilitate damaged ecosystems, regulate illegal mining activities, or conduct environmental impact assessments, yet enforcement mechanisms may remain feeble or ineffective. Political opposition can also obstruct the implementation of climate-related judicial decisions. Governments may be reluctant to enforce stringent environmental measures due to worries about economic growth, industrial development, energy requirements, or electoral repercussions. Climate policies typically necessitate significant financial investment and structural reforms, which may not garner sufficient political backing.



For instance, even with multiple judicial actions addressing air pollution, waste management, and river conservation in India, challenges in implementation persist due to institutional inefficiencies and a lack of adherence by authorities. Likewise, climate litigation rulings in different nations occasionally encounter delays or incomplete compliance, as governments find it difficult to achieve their ambitious climate objectives.

Another challenge is that courts typically do not possess direct enforcement powers. They rely on administrative agencies and governmental authorities to implement judicial directives. If executive authorities do not comply effectively, judicial orders may end up being symbolic rather than transformative. Consequently, the difficulties in enforcement considerably restrict the practical influence of constitutional climate adjudication.

7.4 Policy Complexity

Climate governance encompasses a multitude of intricate scientific, economic, social, and political factors that may surpass the capabilities of the judiciary. Climate change is not merely a singular legal matter but rather a multifaceted global challenge that encompasses energy systems, industrial growth, transportation, agriculture, trade, public health, and international relations. Judicial bodies frequently find themselves tasked with adjudicating cases that involve complex scientific evidence, strategies for reducing emissions, transitions to renewable energy, carbon trading markets, and assessments of ecological risks. These matters require predictive evaluations and policy compromises that can be challenging for courts to assess in a thorough manner.

Climate policies necessitate the balancing of conflicting constitutional and developmental priorities. Governments are required to concurrently tackle economic growth, poverty alleviation, industrialization, energy accessibility, job creation, and environmental sustainability. Judicial rulings that emphasize environmental protection may occasionally lead to economic or administrative challenges if wider policy factors

are not sufficiently considered. Moreover, climate governance functions at both national and international tiers. International climate accords, like the Paris Agreement, entail diplomatic discussions, national obligations, and global collaboration frameworks that courts may have restricted power to enforce directly.

The enduring nature of climate change introduces further complexity. Climate policies frequently necessitate gradual transitions and strategic planning spanning decades, while judicial processes are usually reactive and specific to individual cases. Courts typically address disputes presented to them rather than develop comprehensive long-term climate strategies. Additionally, there exists the potential for inconsistent judicial interpretations. Various courts may embrace differing understandings of environmental rights, governmental duties, and climate responsibilities, leading to uncertainty in climate governance.

In spite of these obstacles, constitutional courts maintain a significant role in promoting environmental accountability and safeguarding constitutional rights. Nevertheless, effective climate governance ultimately demands collaboration among the judiciary, legislature, executive bodies, scientific institutions, civil society, and international organizations.

8. Suggestions and Recommendations

Given the increasing significance of constitutional courts in climate governance, it is essential to implement specific institutional and legal reforms to facilitate effective and equitable climate action. Although judicial intervention has notably bolstered environmental protection and accountability of governments, sustainable climate governance necessitates collaborative efforts among legislatures, executive bodies, judicial institutions, and civil society. The subsequent suggestions and recommendations aim to enhance climate governance and strengthen the influence of constitutional courts in developing sustainable environmental policies.



i. Governments should enact comprehensive climate legislation to complement judicial interventions.

Numerous nations continue to be without specific and thorough climate legislation that distinctly outlines governmental duties, targets for emission reductions, strategies for adaptation, and mechanisms for enforcement. In the lack of robust legislative structures, it frequently falls upon the courts to step in to fill policy voids and counter administrative inaction. Consequently, it is imperative for governments to implement comprehensive climate laws that integrate international climate obligations, scientific benchmarks, and constitutional principles regarding the environment. Well-defined statutory frameworks would diminish the overreliance on judicial intervention and offer enduring policy stability for climate governance.

ii. Judicial training on climate science and environmental governance should be strengthened.

Climate litigation encompasses complex scientific, environmental, and policy-related matters that necessitate specialized knowledge. Judges and judicial officials may not consistently have expertise in areas such as climate science, biodiversity preservation, carbon regulation, or environmental risk evaluation. Consequently, it is essential to implement specialized training programs for judges to improve their comprehension of climate-related issues. Cooperation among courts, scientific bodies, environmental specialists, and academic institutions can enhance the quality and efficacy of climate adjudication.

iii. Specialized environmental courts and tribunals should be empowered.

Specialized environmental courts and tribunals are essential for effective and expert-driven resolution of environmental disputes. Institutions like the National Green Tribunal (NGT) in India have highlighted the significance of integrating legal and technical knowledge in environmental governance. Governments ought to bolster these institutions by

enhancing infrastructure, augmenting technical expertise, ensuring sufficient staffing, and broadening jurisdiction as needed. Empowering specialized environmental agencies can improve environmental compliance and enable quicker resolution of climate-related conflicts.

iv. Public participation and environmental transparency should be enhanced.

Effective climate governance necessitates active engagement from the public and transparency in the processes of environmental decision-making. Citizens, local communities, indigenous groups, environmental organizations, and civil society institutions must be afforded significant opportunities to engage in the formulation of climate policy and the processes of environmental governance. Governments are responsible for ensuring access to environmental information, conducting transparent environmental impact assessments, and establishing public consultation mechanisms. Enhanced transparency and public participation can lead to improved accountability, bolster environmental democracy, and foster socially inclusive climate policies.

v. Courts should maintain a balanced approach respecting democratic governance while ensuring constitutional accountability.

While judicial intervention is crucial in instances of governmental failure or breaches of the constitution, it is imperative that courts uphold the principle of separation of powers and acknowledge the function of democratic institutions. Climate governance encompasses intricate economic, scientific, and policy factors that predominantly fall under the jurisdiction of legislative and executive bodies. Consequently, courts ought to embrace a measured and cautious approach that guarantees constitutional accountability without unduly encroaching upon policy-making responsibilities. Judicial review should prioritize the safeguarding of fundamental rights, the assurance of environmental compliance, and the prevention of arbitrary governmental actions, all while permitting elected institutions sufficient leeway in the execution of policies.



9. Conclusion

Constitutional courts have become pivotal entities in influencing climate policy and environmental governance within modern legal frameworks. In light of the escalating threats from climate change, environmental degradation, biodiversity decline, and ecological instability, courts globally have embraced a more proactive and rights-focused stance on environmental protection. By employing innovative constitutional interpretations, engaging in judicial activism, and utilizing rights-based adjudication, constitutional courts have broadened the range of environmental protections and enhanced governmental accountability in climate governance. A key contribution of constitutional courts has been the acknowledgment of environmental protection as a vital aspect of fundamental rights, including the right to life, health, dignity, equality, and a healthy environment. Judicial interpretation has elevated environmental issues from being mere policy considerations to constitutional and human rights responsibilities. Courts have increasingly acknowledged that climate change has a direct impact on human welfare, ecological sustainability, and intergenerational justice. As a result, environmental governance has become intricately linked with constitutional principles and democratic accountability.

Judicial intervention has significantly contributed to addressing governance deficiencies in instances where legislative and executive bodies have not acted promptly or sufficiently regarding climate issues. Through pivotal rulings, courts have compelled governments to enhance environmental regulations, lower greenhouse gas emissions, protect forests and biodiversity, and develop effective climate strategies. Notable cases such as *M.C. Mehta v. Union of India*, *Urgenda Foundation v. State of the Netherlands*, *Neubauer v. Germany*, and *Future Generations v. Ministry of the Environment* exemplify how constitutional courts have shaped both national and international climate governance by upholding constitutional obligations and environmental duties. The progression of climate litigation further demonstrates that constitutional courts have

evolved beyond mere dispute-resolution entities; they have emerged as vital institutions that promote environmental justice, sustainable development, and climate accountability. Courts have integrated key environmental principles, including sustainable development, the precautionary principle, the polluter pays principle, the public trust doctrine, and intergenerational equity into constitutional law. These principles now underpin contemporary environmental governance and climate adjudication.

Furthermore, constitutional courts have significantly contributed to advancing climate justice by safeguarding vulnerable communities, indigenous groups, future generations, and ecologically sensitive areas. The judicial acknowledgment of environmental disparities and intergenerational obligations illustrates the increasing recognition that climate change transcends mere environmental concerns, encompassing social justice and human rights issues as well. Nevertheless, in spite of these vital contributions, judicial measures alone are insufficient to address the global climate crisis. Climate governance presents a highly intricate and multifaceted challenge that encompasses scientific, economic, political, and administrative factors. Courts encounter limitations related to institutional capacity, challenges in enforcement, democratic legitimacy, and the complexity of policies. Excessive judicial involvement may also provoke concerns regarding the separation of powers and potential judicial overreach. Consequently, effective and sustainable climate governance necessitates coordinated collaboration among the judiciary, legislature, executive bodies, scientific institutions, civil society organizations, and international entities. Governments are required to implement comprehensive climate legislation, enhance environmental institutions, ensure the effective execution of policies, and encourage public engagement in environmental decision-making. Judicial intervention should serve as a tool for constitutional accountability while supporting democratic governance and the processes of policy-making.



In summary, constitutional courts have emerged as essential contributors in the worldwide battle against climate change. Their involvement in safeguarding environmental rights, enhancing accountability, and fostering sustainable development has profoundly influenced contemporary climate governance. However, the realization of enduring climate justice and ecological sustainability ultimately relies on a unified institutional commitment, robust political determination, effective legislation, and international collaboration.

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