
CONSTITUTIONAL RESPONSES TO CLIMATE CHANGE- A COMPARATIVE STUDY OF ENVIRONMENTAL RIGHTS AND JUDICIAL APPROACHES IN INDIA, THE USA, AND GERMANY

Shivani Selvakumar, LL.M., Gujarat National Law University, Gandhinagar.

ABSTRACT

Climate Change has started as an environmental problem, which now creates a major threat to human rights because it endangers human existence and health, livelihood, and intergenerational equity. While international agreements such as the United Nations Framework Convention on Climate Change, the Kyoto Protocol, and the Paris Agreement set global obligations, yet their efficacy ultimately depends on how nations incorporate these agreements into their national legal frameworks. Accordingly, this study examines how national constitutions function as instruments that transform international climate commitments into national laws with enforceable legal rights and duties. This research paper undertakes a comparative study of constitutional methods that India, Germany, and the United States utilize to fight climate change through their environmental protection systems, including constitutional provisions, judicial interpretation, and institutional frameworks that shape environmental protection. India represents a rights-based constitutional model in which environmental protection has been incorporated into fundamental rights through judicial interpretation; Germany, in contrast, operates through a duty-based system that derives authority from written constitutional provisions; while the United States follows an independent statutory framework that operates differently from the other two countries. Through the comparison, the study concludes that effective constitutional responses to climate change require a balance between enforceable rights, institutional accountability, and democratic legitimacy, with particular emphasis on safeguarding the interests of future generations.

Keywords: climate change, intergenerational equity, International agreements, judicial interpretations, constitutional responses.

A. INTRODUCTION

Climate Change has been a constant global challenge, making it a question of the fundamental human right rather than an environmental concern. The occurrence driven by human-induced activities like emissions from industries, exploitation of resources and development projects at the cost of the environment, poses a substantial threat to the right to live in a healthy environment. The adverse effects of climate change transcend boundaries and generations, making it an acute crisis that needs to be addressed internationally. International agreements and conventions with an aim to conserve the atmosphere are put forth in a collective effort to preserve the atmosphere for the present and future generations. However, the non-binding nature of international conventions and treaties relating to environmental protection has proved to be a failure in achieving their objective. This reflected a need for national recognition and acknowledgement to protect the environment. Thus, it is now a question about the ability of the constitution to protect and safeguard the life and liberty of the individual from this environmental crisis.

The international legal framework has aided in moulding the existing national approach to climate change. The legal principles like the “common but differentiated responsibility” laid down in the United Nations Framework convention on Climate Change (UNFCCC), reduction targets for emissions laid down in the Kyoto Protocol 1997, a nationally determined contributions introduced by the Paris agreement in 2015, a huge step in establishing an international order but this could be successful only when national constitutions and machineries implement them in countries through policies and laws. Without the national constitutions, enforcing international commitments is next to impossible. Thus, the constitution, being the supreme law, provides for the implementation of international treaties; for instance, Article 253 of the Indian constitution provides for the power to enact legislation to implement international agreements.¹ Ultimately leading to the constitutionalizing of the remedy for protection from climate change.

In this light, the supreme laws of the nation, the constitution stands above in providing rights and creating duties with respect to the environment. The constitutions of countries that were initially drafted and enforced to secure civil rights and social justice, defining the structure and powers of the government, are now resorted to for reinterpretation to address concerns of the

¹India Const. art 253.

ecosystem. Throughout the years, the courts have resorted to judicial activism and innovation to interpret fundamental rights to provide for a healthy and clean environment, thereby creating an obligation on the state to ensure the fundamental rights of the citizens are not violated. Since environmental degradation jeopardizes fundamental rights like the right to life and human dignity, there has been a rapid shift from environmental preservation policies of the legislative branch to the judiciary for the recognition of the right and the remedy.

Various countries have different outlooks on the interpretation of rights with regard to climate change; it is imperative to compare the stands taken by countries to make positive progress in the battle against climate change. This article analyses the constitutional responses to climate change, including the role of the judiciary in environmental issues in India, the United States of America and Germany. The main areas of comparison include identifying explicit provision for environmental protection in the constitution, the judicial approach, examining the courts' role in interpreting rights to enforce obligations, and the institutional and doctrinal implications of how these constitutional responses influence future climate litigation. Thus, reflecting the role of the constitution in bridging the gap between human and environment, ensuring there is sustainable development.

B. CLIMATE CHANGE

Climate change is the prolonged shift in temperatures and weather patterns. It can be either a natural activity, like volcanic eruptions, etc. or due to human activities, primarily by burning of fossil fuel, etc.². Climate change can be experienced in many ways as it impacts all aspects of a person's health, agriculture, biodiversity, and temperature in general. The last decade (2015-2024) was the warmest on record, with a gradual increase since the 1850s.³ Countries have come together to deal with climate change in a collective attempt to reduce human causes of climate change. Notable agreements are the United Nations Framework Convention on Climate Change (UNFCCC)⁴, which provides for common but differentiated responsibilities, in accordance with the capability and capacity of each nation. The Kyoto Protocol (1997)⁵ provides for binding emission targets for the developed countries. The recent Paris Agreement

² United Nations 'What is Climate Change?' (United nations) <https://www.un.org/en/climatechange/what-is-climate-change>

³ *Id.*

⁴ United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107.

⁵ Kyoto Protocol to the United Nations framework Convention on Climate Change, Dec. 11, 1997, 2303 U.N.T.S. 148.

established the concept for Nationally Determined Contributions (NDC), where the countries, on their own responsibility set targets on emissions for their country.⁶ It is evident that the countries have come together in a collective effort to curb the harmful effects of climate change internationally. Various mitigation strategies are followed to sustain the environment. At the national level, most of the time, it overlaps with the development of the country, hence it is essential to take mitigation steps and policy decisions to sustain both the environment and development.

C. INDIA

The international environmental law had a substantial part in shaping the environmental provisions of the Indian constitution; it paved the way for the inclusion of explicit provisions for the protection of the environment. India, being one of the signatories of the Stockholm declaration, popularly known as the Magna Carta on human environment. The 42nd Constitution Amendment Act, 1976, added two important provisions relating to environmental protection, to fulfil the promises made at the Stockholm Conference⁷, making India the first country to have provisions relating to the environment explicitly embedded in the constitution.

(a) CONSTITUTIONAL PROVISIONS

The 42nd Constitutional Amendment Act, 1976, introduced two substantial articles, Article 48-A and 51-A (g), to protect and preserve the environment. Article 48-A, added as a part of the Directive principle of state policy, reads as “the state shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country”. Since it has been included in the directive principles of state policy, it is a mandate on the state to ensure there is an ecological balance and protect the environment for the present and future generations. It acts as a guideline for the state to formulate policies in a way to promote the welfare of the people and protect the environment.⁸ It demonstrated the growing awareness that economic progress and development must not be at the cost of the environment, hence it must be balanced with ecological stability.⁹ The Article laid the foundation for a wide range of legislations and policies in relation to environmental protection in line with the international standards and

⁶ The Paris Agreement, Dec. 12, 2015, art. 4.

⁷ The Constitution (Fort-Second Amendment) Act, 1976

⁸ Neha Kaur, ‘*The Impact of Environmental Law on Constitutional Provisions of India Related to Environmental Protection and Sustainable Development*’ (2024)

⁹ P. Leelakrishnan, *Environmental Law in India* (6th edn, LexisNexis 2023) 46-48.

agreements, namely The Environment (Protection) Act, 1986¹⁰, a broad, comprehensive legislation enacted under Article 253, displaying India's obligation under the Stockholm declaration.

Article 51A (g) puts forth the fundamental duties of its citizens. It was also based on the principles of the Stockholm Conference, 1972, it emphasized on the moral duty of individuals and states to safeguard the environment for present and future generations.¹¹ The Rajasthan High court in the case of *L.K Koolwal v. State of Rajasthan*¹², held that citizens can compel the municipal corporations to carry out their functions in furtherance of protecting the environment while interpreting Article 51A (g) as an article that establishes both a collective right and duty relationship. The supreme court invoked Article 51A (g) to reiterate the constitutional duty of both the citizens and the government institutional to maintain an ecological balance and prevent pollution.¹³ In many instances, the courts have interpreted Article 21 of the Constitution to include a right to a healthy and clean environment. The court in *Maneka Gandhi v. Union of India*¹⁴ held that the right to life is not only limited to physical existence, but also a right to live with dignity. This laid a foundation for Article 21 to be interpreted with environmental rights. Throughout the evolution of the interpretational ambit of Article 21, the right to a healthy environment has become an integral component of human rights.

Article 48A, 51A (g) and 21 are so interconnected in a way that it bridges the gap between state responsibility and the duty of the citizen and simultaneously provides for the right to a healthy environment. The articles together have evolved to back the emerging judicial doctrines like climate justice, sustainable development, right against adverse effects of climate change.¹⁵

(b) EVOLUTION OF CLIMATE JURISPRUDENCE - JUDICIAL INNOVATION

The Indian judiciary is capable of addressing constitutional challenges to climate change. This can be attributed to the ease of filing a public interest litigation, also known as the epistolary

¹⁰ Environment (Protection) Act 1986 (Act No. 29 of 1986) (India)

¹¹ Declaration of the United Nations Conference on the Human Environment Principle 1, U.N Doc. A/CONF.48/14/Rev. 1 (June 16, 1972) (Stockholm Declaration).

¹² (1988) AIR Raj 2

¹³ *M.C. Mehta v. Union of India* (2002) 4 SCC 356

¹⁴ 1978 AIR 597

¹⁵ *M.K. Ranjitsinh v. Union of India* (2024) SCC 570

jurisprudence developed to address the violations against fundamental rights of its citizens.¹⁶ Thus, a substantial threat of climate change having an adverse effect on human health or life is sufficient to invoke the writ jurisdiction under Article 32. Throughout the years, the court interpreted the fundamental rights along with a wide range of complementary rights like basic necessities, health, livelihood, etc. In the field of environment protection was a series of M.C. Mehta cases filed in the form of public interest litigations. This was an era of international doctrines been embedded into the environmental jurisprudence in India. The courts reinforced principles such as intergenerational equity, public trust doctrine, polluters pay and sustainable development.

In a crucial ruling, the Supreme Court in the case of MK Ranjitsinh v. Union of India and others held the “right to be free from the adverse effects of climate change” as a part of Article 21 and 14.¹⁷ The case was a petition filed with regard to the protection of the endangered bird species, it revolved around the overhead construction of power transmission lines, the court did not reverse the previous ruling in 2021, it provided constitutional protection against the adverse effects of climate change. The judgement connected adverse effects of climate change, like pollution, temperature rise, and extreme weather, with fundamental rights, and also recognized disproportionate distribution of burden on the vulnerable population.¹⁸ It is considered pivotal as the court challenged the inaction of the government on climate measures. The ruling substantiated that the detrimental effects of climate change infringe upon citizens' fundamental rights.¹⁹ The judgment acknowledged that climate-specific goals will have to be balanced against other competing and contradicting environmental and public policy goals.²⁰

In a pending case of Ridhima Pandey v. Union of India, the Supreme court is in progress to examine India's International climate obligations and the extension of judicial supervision of government compliance and coordinated climate action.²¹ The recent rulings of the Supreme Court clearly indicate the ever-widening horizon of environmental protection from

¹⁶ Deepa Badrinarayana, *The Emerging Constitutional Challenge of Climate Change: India in Perspective* 19 Fordham Envtl L Rev 1 (2009) https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?params=/context/elr/article/1638/&path_info=Badrinarayana_Emerging_20Constitutional_20Challenge_20of_20Climate_20Change.pdf

¹⁷ (2024) S.C.C. 570.

¹⁸ *'A Breath of Fresh Air: Supreme Court's Verdict Propels Climate Justice to the Forefront in India | Climate Connection'* <https://climateconnection.org.in/updates/breath-fresh-air-supreme-courts-verdict-propels-climate-justice-forefront-india>

¹⁹ *Id.*

²⁰ (2024) S.C.C 570.

²¹ *'Climate Change Obligations of the State' (Supreme Court Observer)* <https://www.scobserver.in/cases/climate-change-obligations-of-the-state-ridhima-pandey-v-union-of-india/>

developmental activities, and the active role of the judiciary in keeping a check on the government and citizens from degrading the environment.

D. GERMANY

The basic law of Germany is an institutional framework that provides rights not only for the present generation but also for future generations who could potentially be affected by the decisions made at present. The German constitution contains provisions outlined as state objectives covering a wide range of subjects like the, environmental protection, maintenance of peace, fiscal responsibility and European integration.²² The climate litigation plays a substantial role in the betterment of legislative policies regarding the climate. The German Basic law ensures the right to the environment under Article 20a, and with the judicial interpretation of this Article, it has delivered a landmark ruling on the federal Climate Protection Act (KSG) in March 2021, and ever since, the constitutional framework of Germany has been in the spotlight.

(a) ARTICLE 20a-

Article 20a of the basic law of Germany, established in 1994, states that, “mindful also of its responsibility towards future generations, the state shall protect the natural foundations of life and animals by legislation and, in accordance with law and justice, by executive and judicial action, all within the framework of the constitutional order”. The article was introduced in 1994 due to the rise in environmental awareness among politicians and the delimitation of competencies between the federal government and the states.²³

Prior to the introduction of Article 20a through the 1994 amendment, environmental protection was ensured by interpretation of Article 2(2) of the constitution, which established “the right to life and physical integrity”.²⁴ However, the protection under Article 2 (2) is only for protecting human health from pollution. The states duty to respect human dignity under Article 1 (1)²⁵ were interpreted to include protection of environment, but the scope of the protection

²² Claudia E Haupt, ‘The Nature and Effects of Constitutional State Objectives: Assessing the German Basic Law’s Animal Protection Clause’ 16 *Animal Law Review* 213 (2010).

²³ Nils Bernsdorff and Claudia Pilar Arzabe, ‘Environmental Protection In National Constitutions - Article 20a Of The German Grundgesetz (Constitution) As An Example’ *Օրինականություն/Legality* 37 (2024) <https://www.prosecutor.am/storage/.pdf>

²⁴ *Grundgesetz* [GG] [Basic Law] 1949, art 2(2). (Ger.).

²⁵ *Id.* art 1(2).

was meagre compared to what is enshrined in Article 20a after the amendment.

(b) NATURE AND SCOPE OF THE ARTICLE

It is categorized as a state objective, which is more of a guiding principle than a subjective right of the individual. The character of a state objective is that it binds all three organs of the government. The purpose of the state objective is to create a legal effect where in it does not create any obligations on the people nor does it create any right against the authorities. The state objectives are more of a direction to the legislature to fulfil the task, but the legislature has the liberty to decide on how to fulfil this state objective.²⁶ In theory, the legislature has the liberty to decide when to act on the state's objective. Hence, the “protection of the natural foundations of life” is a legislative duty at the discretion of the legislature with respect to the “means” by which it is to ensure it. The state authorities are responsible not only to avoid harm caused but also to repair the harm that has already been done and preserve the natural foundation of life.²⁷

The article 20a explicitly provides for the protection of the future generation, from its words “mindful also of its responsibility towards the future generation”. It is clear from the text that the state authorities are to be mindful of the decisions that are not detrimental to the interests of future generations in any way, as was recently upheld in the 2021 ruling on the Federal Climate Protection Act. It is a legally binding responsibility on the state authority for the future, making them accountable for the impact their acts have on the future. This aspect of the Article is in line with the Sustainable Development Goals laid down in the Rio Declaration.²⁸

(c) 2021 RULING OF THE FEDERAL CONSTITUTIONAL COURT ON THE CLIMATE PROTECTION ACT

In 2021, the Federal Climate Protection Act was challenged in the federal constitutional court by claimants including minors and adults, from different jurisdictions of Germany and also included people from Nepal and Bangladesh. The claimants were also supported by an environmental association that joined the case by filing separate applications. They jointly

²⁶ *Id.*

²⁷ Christian Calliess, ‘*International Justice and Climate Change A Perspective from German Constitutional law: State Objective v. Individual Right?*’ <https://www.jura.fu-berlin.de/fachbereich/einrichtungen/oeffentliches-recht/lehrende/calliessc/Aktuelles/Ressourcen/Intergenerational-Justice-and-Climate-Litigation.pdf>

²⁸ *Id.*

challenged the federal Act, which provides a mechanism for reducing the yearly greenhouse gases emission. The act clearly states the emission quantities that are forbidden and quantities that are permitted.²⁹ The claimants contended that the targets set by the Act were too low and the permissible quantity of GHG emission were too high, and that the Act did not provide for mitigation targets after the year 2030.

In Germany, a complaint is maintainable before the court only when there is a violation of fundamental rights by abuse of power.³⁰ The complainants have to prove that there was a violation of their fundamental right due to the exertion of public power and that all alternative remedies should have been exhausted. For persons who are not citizens of Germany, they must establish that they are protected by the fundamental rights of Germany. The complaint of the citizens was held maintainable due to violations of the fundamental right to life, well-being, liberty. The application of the environmental associations was denied admissibility as the measures challenged did not affect them individually.

After due consideration, the Federal Constitutional Court held that the Federal Climate Protection Act is partly unconstitutional and demanded revision of the Act. The verdict imposed on the government an obligation to consider the impact on the rights of the future generation, regarding the burden imposed on them for GHG emissions in comparison to the efforts taken today. The verdict took into consideration the potential infringement of the young complainant's fundamental rights. This verdict sets the precedent for a new intergenerational dimension in climate litigation.

(d) JUDICIAL INNOVATION

The federal constitutional court, through the judicial interpretation of Article 20a, puts forth the innovative aspect of the judiciary to provide justice that transcends generations. In the ruling of Neubauer et al. interpreted article 20a to a justiciable constitutional duty, thereby imposing enforceable obligations to protect the climate on the legislature. The most notable innovation is the concept of "intertemporal freedom," which protects the future generation from being burdened by the disproportionate burdens of climate protection obligations.³¹

²⁹ Gerd Winter, 'The Intergenerational Effect of Fundamental Rights: A Contribution of the German Federal Constitutional Court to Climate Protection' 34 J. Envtl. L. Law 209 (2022) <https://doi.org/10.1093/jel/eqab044>

³⁰ Act on the Federal Constitutional court, Bundesgesetzblatt [BGBl] I 1473, art 90(1) (Ger.).

³¹ Mathias Hong, 'Intertemporal Freedom in the Historic Climate Protection Ruling of the German Federal

E. UNITED STATES OF AMERICA

The United States Constitution has no explicit provisions regarding the protection of environment or climate change. Most of the responses towards climate change and protection are through statutory federal law like the Clean Air Act, and judicial interpretation rather than express constitutional provision. The power of the federal government to regulate the emission targets has long challenged on constitutional grounds. The US constitution is silent regarding the protection available to citizens from the destructive activities of the government towards the environment necessary for a healthy life.³²

(a) FEDERAL CONSTITUTION-

The federal constitution of the US is based on the presumption that an environment having the capacity to support a healthy, thriving society is already existing³³, but there are no explicit provisions that back up this presumption. In comparison to other countries, it neither does it protect the environment nor does it recognize that the right to the environment is interconnected to protect other inherent rights of the citizens. Environmental regulations evolved only through federal statutes, by interpreting Article 1, Section 8, Clause 3 in a way to grant power to the federal government substantial constitutional authority to legislate on environmental matters. This stand has often been used to justify the constitutional validity of environmental legislation, due to its transboundary nature.

(b) THE CLEAN AIR ACT AND THE ENVIRONMENTAL PROTECTION AGENCY

Environmental protection legislations often evolved through judicial intervention, by interpreting the commerce clause, granting power to the federal government to legislate on these matters. Prior to the modern environmental era, the issues relating to the environment were dealt in connection with health and land conservation laws. The earliest statutory law on climate is the Air Pollution control Act 1955, it is one of the earliest federal Act to recognize air pollution as a national issue. However, the 1955 Act did not make any regulations or impose

Constitutional Court (2023) Verfassungsblog <https://verfassungsblog.de/intertemporal-freedom-in-the-historic-climate-protection-ruling-of-the-german-federal-constitutional-court>

³² Katie F. Kuh, 'How the US Constitution Fails to Protect the Environment' (Feb. 5, 2024) <https://countercurrents.org/2024/05/how-the-us-constitution-fails-to-protect-the-environment/>

³³ *Id.*

any directions to curb pollution; it funded research in the prevention of air pollution. Prior to the 1970 most of the environmental management was dispersed across many departments, as the air quality fell under the department of health, education and welfare.³⁴

The modern environmental movement began from the late 1960s and 1970s, along with rising awareness among the public regarding the impact of environmental degradation. In response to the uproar on the need for protection from harmful impacts of environmental pollution, the Reorganization Plan No. 3 of 1970 established the Environmental Protection Agency (EPA)³⁵, which is a statutory and administrative formation in a wider constitutional framework of federal powers, instead of a constitutional body. The main aim of the EPA is to “protect human health and the environment”, its core functions is to enforce regulations, conducting research and monitor compliance.³⁶ The EPA, under its regulatory authority, established substantial statutes, including the Clean Air Act of 1970. It has set out a standard to maintain the quality of air, namely the National Ambient Air Quality Standards (NAAQS) under the CAA, 1970.

(c) THE ROLE OF JUDICIAL REVIEW

The scope of the Clean Air Act’s jurisdiction over prescribing standards for greenhouse gases emission were challenged by the federal courts. The efforts of the government to regulate emissions were challenged. The most prominent case of US climate litigation is the *Massachusetts v. EPA* in the year 2007, it laid a cornerstone for future climate litigations. Many environmental groups challenged the EPA’s denial of a rulemaking petition to regulate greenhouse gas emissions from motor vehicles. The plaintiff’s contention was that inaction of the government would lead to climate-induced harms, causing adverse effects on human health. They claimed to compel the government to enforce regulations on carbon dioxide emissions with regard to the CAA.³⁷ The Supreme Court ruled that the federal government could regulate carbon emissions under the Clean Air Act through the EPA. The court reasoned that if the EPA refuses to regulate the emissions, it would cause imminent harm, and the EPA is obligated under the CAA to regulate the greenhouse gas emissions if it is determined to endanger the

³⁴ Julia Schatz, *'Climate Change Litigation in Canada and the USA'* 18 *Review of European Community & International Environmental Law* 129 (2009), <https://onlinelibrary.wiley.com/doi/10.1111/j.1467-9388.2009.00635.x>.

³⁵ ‘U.S.C. Title 5 - GOVERNMENT ORGANIZATION AND EMPLOYEES’ <https://www.govinfo.gov/>

³⁶ OA US EPA, ‘About EPA’ (Jan. 18 2013), <https://www.epa.gov/aboutepa>

³⁷ Troxell M, ‘*The Constitutionality of Contributing to Climate Change*’ (2023) 37 *Brigham Young University Prelaw Review*. Vol. 37, Article 14. <https://scholarsarchive.byu.edu/byuplr/vol37/iss1/14>

health and welfare of the public.³⁸

However, the decision establishing the obligation on the EPA was overruled in 2022 in the case of *West Virginia v. EPA*. The Supreme Court did not question the authority, but limited the power of the EPA by emphasizing that only the congress has the authority to regulate economically impactful regulations.³⁹ Throughout the years the courts have failed to address the complex situation of climate change in the US; however, the case of *Juliana v. US* has highlighted the role of the judiciary in climate litigation. The litigation involved twenty-one individuals and two non-profit organizations contending that the government's support for fossil fuels was violating their right to life, liberty and property. They argued based on the public trust doctrine, claiming the government had the duty to protect the environment critical to human beings. However, after a long battle against the procedural compliances, the Supreme Court denied the plaintiffs' relief. The case took climate litigation to a new dimension by introducing the intergenerational equity concept, and called for governments' obligation to protect future generations.⁴⁰

(d) STATE CONSTITUTIONS

The state constitutions in the US do provide for environmental protection, unlike the federal constitution, which does not have an explicit provision relating to environmental protection. However, six states in the US do provide for explicit environmental protection in their constitutions (Hawaii, Illinois, Massachusetts, Montana, Pennsylvania and Rhode Island), but such language is not present in their bill of rights demarcating their level of protection, while the others do have interpretive provisions that provide for environmental protection.⁴¹ Many states in the US are opting for the Green Amendment, which is included in the Bill of Rights in the Constitution, to provide a broader scope of protection. This green amendment creates a mandate through the constitution recognizing a healthy environment on the same pedestal as

³⁸ Mina Juhn, 'Taking a Stand: Climate Change Litigants and the Viability of Constitutional Claims' 89 *Fordham L Rev* 2731 (2021) <https://ir.lawnet.fordham.edu/flr/vol89/iss6/14>

³⁹ Jonathan H. Adler, 'West Virginia v. EPA: Some Answers about Major Questions' (2021-2022) Faculty Publications. 2152. <https://www.cato.org/sites/cato.org/files/2022-09/Supreme-Court-Review-2022-Chapter-2.pdf>

⁴⁰ Lisa Heinzerling, 'Climate Change in the Supreme Court' (2008) Georgetown Law Faculty Publications and other works. <https://ssrn.com/abstract=1087385>

⁴¹ Rachel Webb, 'Environmental Rights in State Constitutions' *Climate Law. Blog* (Aug. 31 2021) <https://blogs.law.columbia.edu/climatechange/2021/08/31/environmental-rights-in-state-constitutions/>

the other rights.⁴²

F. CONCLUSION

The global climate crisis has created a larger public awareness regarding the adverse effects of climate change. There has been a lot of agitation and protests compelling the government to fulfill its obligations towards its citizens. The crisis has forced countries to reimagine rights and duties, not limiting them to the present generations, but rather to future generation irrespective of whether it is for the individual or the collective. The comparative analysis between India, the United States and Germany showcases three dissimilar but complementary approaches in their constitutional approaches towards environmental protection. India showcases a rights-based approach, while Germany has a duty-based approach, and the United States has a statutory approach. Each country has a distinctive approach to climate change. As stated above, environmental degradation sabotages fundamental rights and sustainable development. The constitutional approaches in the three nations prove that judicial activism empowers the states to address climate change more efficiently.

India, through the 42nd amendment, introduced two integral provisions, Article 48A and 51A (g), that provide for environmental protection. The latter article is a duty on the part of the citizens to safeguard the environment, while the former is a state obligation towards preserving the environment. German basic law contains an explicit constitutional mandate under Article 20a, on the state to protect the natural foundations of life, being mindful of the future generations, it imposes a positive duty on all three branches of the state to protect the environment and is obligated to the present as well as the future generation. While the United States federal constitution does not have any express provision on environmental protection and climate change. However, they have a separate statutory law (Clean Air Act) and a statutory body (Environmental Protection Agency) that are obligated towards the citizens of the country. The state constitutions, however, provide for the right to a healthy environment, and explicit provisions are being added through green amendments.

The judiciary in India has taken up an activist approach in dealing with environmental cases. Public interest litigations are used as a key source for defending rights against the adverse effects of climate change. There is extensive interpretation of Article 21 reinforced doctrines

⁴² “Green Amendments” and the Right to a Healthy Environment’, Earth Law Center <https://www.earthlawcenter.org/blog-entries/2024/2/green-amendments-and-the-right-to-a-healthy-environment>

like sustainable development, and recently, through the M.K. Ranjitsinh judgement, recognized climate specific fundamental right. The judiciary has intervened to the extent of supervising executive action, creating policy frameworks, to fill in the legislative gaps. The German federal constitutional courts have established the justiciability of state objectives through judicial innovation, through the 2021 ruling of Neubauer et. al. and reiterated intertemporal rights by creating a mandate on the state to take into consideration the future generations in climate policy making, thereby becoming the first successful case on intergenerational equity in climate litigation. Which was not quite successful in the Juliana v. EPA case. The role of the judiciary is much more restrained in comparison to the other two countries at the federal constitutional level. The rulings have empowered regulatory agencies, but the court has time and again refrained from interpreting rights to include climate or environmental rights due to a lack of explicit legislative mandate for the same. Thereby strictly adhering to the doctrine of separation of powers.

India, Germany and the United States symbolize distinctive models of constitutional responses. India has developed a unique judicial activism approach, expanding rights to make climate obligations as enforceable constitutional rights and encouraging active litigation. Whereas Germany establishes an environmental protection duty on all three branches of government to preserve natural resources for the present and future generations. While the United States adheres to federalism, citizens must depend on legislative action, as there is no federal constitutional right to climate protection. However, there are still limitations; India has to strengthen implementation, Germany needs to enhance citizen participation, and United States lacks explicit provisions. The countries can borrow positive aspects from each other, suitable for their country to establish a robust procedure to enhance the constitutional responses to climate change.

REFERENCES

1. 'A Breath of Fresh Air: Supreme Court's Verdict Propels Climate Justice to the Forefront in India | Climate Connection'
<<https://climateconnection.org.in/updates/breath-fresh-air-supreme-courts-verdict-propels-climate-justice-forefront-india>>
2. Bernsdorff N and Pilar Arzabe C, 'Environmental Protection In National Constitutions - Article 20a Of The German Grundgesetz (Constitution) As An Example' [2024] Ορημωλϋωνιϋρνιϋ / Legality 37 <<https://www.prosecutor.am/storage/.pdf>>
3. Calliess C, 'International Justice and Climate Change: A Perspective from German Constitutional Law: State Objective v. Individual Right?'
4. 'Climate Change Obligations of the State' (*Supreme Court Observer*)
<<https://www.scoobserver.in/cases/climate-change-obligations-of-the-state-ridhima-pandey-v-union-of-india/>>
5. "'Green Amendments" and the Right to a Healthy Environment' (*Earth Law Center*)
<<https://www.earthlawcenter.org/blog-entries/2024/2/green-amendments-and-the-right-to-a-healthy-environment>>
6. (*Earth Law Center*) <<https://www.earthlawcenter.org/blog-entries/2024/2/green-amendments-and-the-right-to-a-healthy-environment>>
7. Haupt C, 'The Nature and Effects of Constitutional State Objectives: Assessing the German Basic Law's Animal Protection Clause' (2010) 16 Animal Law Review 213
<<https://lawcommons.lclark.edu/alr/vol16/iss2/3>>
8. Heinzerling L, 'Climate Change in the Supreme Court' [2008] Georgetown Law Faculty Publications and Other Works
<<https://scholarship.law.georgetown.edu/facpub/451>>
9. Hong M, 'Intertemporal Freedom in the Historic Climate Protection Ruling of the German Federal Constitutional Court' [2023] Verfassungsblog
<<https://verfassungsblog.de/intertemporal-freedom-in-the-historic-climate-protection->

ruling-of-the-german-federal-constitutional-court/>

10. Kaur N, 'The Impact of International Environmental Law on Constitutional Provisions of India Related to Environmental Protection and Sustainable Development' [2024] SSRN Electronic Journal <<https://www.ssrn.com/abstract=4697849>>
11. Kuh KF, 'How the US Constitution Fails to Protect the Environment' (5 February 2024) <<https://countercurrents.org/2024/05/how-the-us-constitution-fails-to-protect-the-environment/>>
12. Leelakrishnan P, *Environmental Law in India* (3 ed., 1 reprint, LexisNexis Butterworth 2009)
13. Nations U, 'What Is Climate Change?' (*United Nations*) <<https://www.un.org/en/climatechange/what-is-climate-change>>
14. Troxell M, 'The Constitutionality of Contributing to Climate Change' (2023) 37 Brigham Young University Prelaw Review <<https://scholarsarchive.byu.edu/byuplr/vol37/iss1/14>>
15. US EPA O, 'About EPA' (18 January 2013) <<https://www.epa.gov/aboutepa>>
16. 'U.S.C. Title 5 - GOVERNMENT ORGANIZATION AND EMPLOYEES' <<https://www.govinfo.gov/content/pkg/USCODE-2010-title5/html/USCODE-2010-title5-app-reorganiz-other-dup92.htm>>
17. Webb R, 'Environmental Rights in State Constitutions' (*Climate Law Blog*, 31 August 2021) <<https://blogs.law.columbia.edu/climatechange/2021/08/31/environmental-rights-in-state-constitutions/>>
18. Winter G, 'The Intergenerational Effect of Fundamental Rights: A Contribution of the German Federal Constitutional Court to Climate Protection' (2022) 34 *Journal of Environmental Law* 209 <<https://academic.oup.com/jel/article/34/1/209/6420385>>