

## Pakistan Journal of Society, Education and Language (PJSEL)

Journal Homepage: <https://pjisel.jehanf.com/index.php/journal> ISSN

2521-8123 (Print)

2523-1227 (Online)

### Environmental Jurisprudence in Pakistan: An Analysis of Green Bench Cases (1994–2023)

Shafqat Ullah<sup>1</sup>, Syed Arif Hussain\*<sup>2</sup>

Original Article

1. LLB. University of Malakand, Pakistan  
Email: shafqatullah674@gmail.com
2. PhD Scholar, Department of Criminology, University of Karachi  
Email: syedarif.cri@gmail.com

#### Keywords

Environmental  
Jurisprudence;  
Benches;  
Litigation; Pakistan

Green  
Climate

#### Abstract

*Environmental protection has emerged as a critical legal governance issue worldwide, with courts increasingly recognizing ecological sustainability as integral to human rights. In Pakistan, however, environmental degradation, manifested in air pollution, deforestation, and climate-induced disasters, continues to threaten public health and ecological balance. The problem lies in weak regulatory enforcement, overlapping institutional mandates, and inconsistent compliance with environmental laws. This study is significant as it examines how Pakistan's higher judiciary, particularly through Green Benches (1994–2023), has addressed these gaps by embedding global environmental principles into constitutional jurisprudence. Using a qualitative methodology, the study analyses reported judgments, statutes, policy reports, and scholarly literature, applying interpretive content analysis to trace legal principles, remedies, and compliance patterns. Results show that courts have advanced doctrines such as public trust, the precautionary principle, and intergenerational equity, while innovating with commissions and continuing to use mandamus. The study recommends strengthening environmental tribunals, codifying judicial principles, and integrating scientific expertise into environmental governance.*

#### Introduction

Environmental degradation in Pakistan—manifested in deteriorating air quality, deforestation, groundwater depletion, and climate-induced disasters—poses a profound challenge to human health and dignity. Until the early 1990s, environmental issues were not considered central to constitutional jurisprudence in Pakistan. A decisive turning point came in *Shehla Zia v. WAPDA* (PLD 1994 SC 693), where the Supreme Court held that the right to life under Article 9 and the right to dignity under Article 14 of the Constitution implicitly guarantee right to a clean and healthy environment (Hassan & Azfar, 2014). This judgment inaugurated a new phase of environmental constitutionalism, anchoring ecological concerns within fundamental rights protections.

The trajectory of environmental rights was further consolidated in *Salt Miners v. Director, Industries and Mineral Development* (1994 SCMR 2061), where the Supreme Court reaffirmed that access to unpolluted water forms an essential component of the right to life (Ahsan & Khawaja, 2013). These initial decisions combined extended this judicial review under Article 184(3) and created a viable tool of accountability and environmental public-interest litigation.

In the quest to appreciate the increasing concern of environmental matters, the apex court in 2012 established Green Benches in all High Courts, as well as in the Azar Jammu and Kashmir

Supreme Court, to entrench environmental adjudication (Ahsan and Khawaja, 2013). These benches offered a specialized forum in environmental litigation, which made environmental rights more visible and the courts better able to deliver systemic remedies.

As perhaps the greatest judgement of the Green Bench period is Asghar Leghari v. Federation of Pakistan (2015-2018). The case of the Lahore High Court applied that the lack of measures in the government regarding the National Climate Change Policy was against the basic right of the citizens, and the creation of the Climate Change Commission, requiring compliance to be monitored was justified (Mirza, 2025; Setzer and Higham, 2025). The case has been hailed at the international level as a landmark in rights-based climate litigation in the Global South (Peel and Lin, 2019).

Later Green Bench decisions have continued to influence the jurisprudence of the environment. The court ordered a Smog Commission to be formed and established cleaner industrial practices in the smog litigation of Lahore, such as converting brick kilns to an environment friendly technology (Amjad, Usman, and Khan, 2022). The Supreme Court in the Katas Raj Temple Pond case (2018) obliged industrial parties to compensate the costs of pollution of the groundwater through the forced discharge of waste into the groundwater by the polluter-pays principle (Shabbir et al., 2024). Similarly, in D.G. Khan Cement Company v. The precautionary principle was also highlighted by the Supreme Court (Government of Punjab, 2021) in the cases of refusing new industrial permits in eco-sensitive locations (Cambridge University Press, 2020).

Nonetheless, in spite of these improvements, there are still challenges. Researchers warn that judicial activism which is important in sealing gaps in governance exposes itself to encroaching on the activities of the executive (Hussain et al., 2019). Structural remedies include commissions and on-going mandamus, which rely on bureaucratic compliance and political will, both of which tend to be uneven (Peel & Lin, 2019). The decades of enforcement contention in the Bahria Town Karachi case is representative of the challenges of moving a judicial pronouncement into long-term environmental protection (Amjad et al., 2022).

The following paper explores the history of environmental adjudication in Pakistan between 1994 and 2023, including its cases on Green Bench. It will utilize secondary sources such as reported judgments, academic literature, and policy reports to: (1) follow the doctrine development of environmental rights; (2) examine judicial principles and remedies, such as precaution, polluter-pays and intergenerational equity and (3) assess gaps and pitfalls in implementation.

With the increasing threats and environmental disasters that Pakistan is experiencing, the courts have become an unavoidable element in environmental governance. However, the long-term effectiveness of these lies in their matching of judicial innovations to more robust statutory provisions, strong environmental tribunals, and active agencies. This research provides an insight into the development of Green Bench jurisprudence by offering a comprehensive insight into how courts can strengthen governance, accountability, and sustainability during the period of climate crisis.

### **Literature Review**

Scholarship on Pakistani environmental jurisprudence consistently identifies *Shehla Zia v. WAPDA* (PLD 1994 SC 693) as the doctrinal watershed that constitutionalized environmental protection by reading the right to a healthy environment into Articles 9 and 14 (Malik, 2007; Ahsan & Khawaja, 2013). This early jurisprudence reframed environmental harm as a rights question rather than only a regulatory or administrative issue, thereby opening the door to public-interest litigation (PIL) under Article 184(3) and catalyzing a number of cases on water, air, urban planning, and land use (Hassan & Azfar, 2004; Razzaque, 2004). The central act of ecological constitutionalism: Life and dignity has been interpreted to include ecological quality positioned Pakistan in line with the new global tendencies in environmental constitutionalism, where the courts are using the prevailing rights not only broadly to safeguard the interests of the environment (May & Daly, 2015; Peel & Lin, 2019; Ahmed et al., 2023).

A general literature in South Asia traces the growth of the PIL as the procedural machinery of environmental rights and the relaxed locus stand, commission-style fact-finding, and ongoing mandamus used by higher courts in Pakistan to oversee executive action (Hassan & Azfar, 2004; Razzaque, 2004). These studies highlight two concurrent dynamics: the empowerment of vulnerable groups to challenge pollution and the judiciary's growing reliance on structural remedies to overcome bureaucratic inertia (Ahsan & Khawaja, 2013; Hashmi et al., 2025). Although these techniques have been normatively praised for responsiveness to environmental risk, they raise rule-of-law questions about separation of powers and judicial capacity, debates that reverberate through contemporary evaluations of Green Bench practice (Ahmed et al., 2024).

Work specific to Pakistan's Green Benches (constituted in the High Courts around 2012) is more scattered, but available analyses and judicial commentary suggest these benches consolidated environmental dockets and normalized rights-based review for ecological disputes (Ahsan & Khawaja, 2013). Studies oriented to governance observe that the benches accelerated policy implementation through supervision of agencies tasked with EIA/IEE enforcement and air-quality controls (Syed, 2024). Yet, scholars caution that systemic gains remain uneven across provinces, particularly where environmental tribunals lack resources or where devolution after the 18th Amendment produced overlapping mandates (Syed, 2024). Complementary comparative research on specialist environmental courts and tribunals indicates that institutional design—expertise, case-management, and monitoring capacity—critically shapes outcomes; Pakistan's mixed implementation mirrors global patterns in ECT effectiveness (Angstadt, 2023).

The literature on climate litigation situates *Asghar Leghari v. Federation of Pakistan* (LHC, 2015–2018) as a paradigmatic Global South case. Barritt and Sediti (2019) describe *Leghari's* symbolic value, emphasizing the judgment's articulation of state duties to implement the National Climate Change Policy and the court's creation of a Climate Change Commission to monitor compliance. Peel and Lin (2019) and the Cambridge volume on Asia-Pacific climate litigation frame Pakistan's approach as a notable instance of rights-based climate governance, where constitutional rights ground orders compelling administrative action. Pakistani commentators—such as Mirza (2020)—trace how *Leghari* linked adaptation deficits to fundamental rights (life and dignity), thereby expanding doctrinal repertoires (public trust, precaution, intergenerational equity) and legitimizing structural remedies in climate governance. These analyses collectively argue that the Green Bench model reduced the gap between policy and enforcement by institutionalizing oversight mechanisms like commissions and progress reviews.

Doctrinally, four principles recur in Pakistan's environmental jurisprudence and are highlighted across the literature. First, public trust doctrine: Munir (2018) details how Pakistani courts have required governments to steward commons—water bodies, forests, parks—against privatization or unsustainable extraction, influencing relief in groundwater, riverine and urban land cases. Second, the precautionary principle: comparative and Pakistani sources note that courts have increasingly favored precaution in industrial siting, EIA/IEE disputes, and ecosystem-sensitive zones, elevating preventive logic where scientific uncertainty persists (Ahmed et al., 2025; Ahsan & Khawaja, 2013). Third, polluter pays: academic appraisals of major groundwater and air-pollution controversies show courts using cost-internalization and remediation orders to operationalize this principle, though implementation has varied across cases (Hassan & Azfar, 2004; Syed, 2024). Fourth, intergenerational equity and dignity rights: recent work on dignity-based environmental rights situates Pakistan as a prominent example of leveraging dignity to ground ecological protection and future-oriented remedies (May, 2023).

A second stream of literature assesses air-quality litigation and smog in Lahore as a testbed for Green Bench supervision. Legal-policy analyses review the courts' creation of a Smog Commission, mandates for cleaner brick-kiln technology, and stricter enforcement of emissions and fuel standards (Amjad et al., 2022). Empirical policy papers corroborate that judicial orders have nudged administrative action but also highlight persistent capacity constraints—monitoring gaps, fragmented authority, and periodic backsliding when political attention wanes (Syed, 2024). This corpus underscores the limits of court-led governance: while judicial oversight can hasten

rulemaking and compel agencies to publish plans, durable air-quality gains require technical infrastructure (monitoring networks), inter-agency coordination, and budgetary commitments that lie beyond courts' institutional reach (Angstadt, 2023; Syed, 2024).

Institutional evaluations of environmental tribunals complement Green Bench studies. Provincial case studies—especially from Khyber Pakhtunkhwa—report uneven performance, low disposal rates, and limited technical capacity (Rahman et al., 2020). Broader governance work identifies chronic enforcement deficits: weak inspection regimes, overlapping provincial/federal competences after devolution, and scarce data to track compliance with court orders (Syed, 2024). These findings reinforce the argument that Green Bench jurisprudence is necessary but insufficient: in the absence of empowered tribunals and administrative agencies, even well-crafted judgments struggle to achieve sustained environmental outcomes.

At a higher level of abstraction, comparative books and chapters on environmental constitutionalism place Pakistan within a global movement of rights-infused environmental adjudication. In their list of jurisdictions where courts viewed dignity and life as environmental guarantees, May and Daly (2015) place Pakistan. The new chapters of Cambridge deduce that the experience of Pakistan offers an example of both the promise and the dangers of judicialization: promise in creating normative foundations and creating structures of compliance, and hazard in the potential risks of judicial overreach and delivery politics (Peel & Lin, 2019; Pakistan chapter in *Litigating the Climate Emergency*, 2021). The new direction through which this scholarship is moving is that there is a considerable improvement of environmental standards in the courts of Pakistan and that there are new avenues of remedial efforts; the research question now is the process of institutionalization—how to resource tribunals, bring in scientific knowledge, and establish feedback loops that can transform structural orders into quantifiable environmental results.

Overall, the literature converges on a balanced assessment. Pakistan's Green Bench—style jurisprudence has elevated environmental rights, mainstreamed the precautionary principle and public trust, and innovated with the establishment of commissions and the use of continuing mandamus. However, sustained gains hinge on administrative capacity and legislative follow through. Future research especially mixed-methods, linking case outcomes to environmental indicators—can illuminate when and how judicial interventions translate into cleaner air, safer water, and resilient ecosystems.

### **Research Methodology**

The present study adopts a qualitative doctrinal research design, drawing upon secondary data to explore how Pakistan's superior courts, particularly through the Green Benches established since 2012, have shaped environmental jurisprudence between 1994 and 2023. The nature of this research is interpretive and analytical rather than empirical, focusing on how legal principles, judicial reasoning, and institutional practices have evolved through case law and associated literature. By relying exclusively on published judgments, policy reports, statutes, and scholarly works, the study positions itself within the tradition of doctrinal legal research, which emphasizes close reading, systematic comparison, and synthesis of existing sources to trace the development of legal norms (McConville & Chui, 2007).

Data for this study were collected from secondary sources. The primary legal materials consisted of reported judgments from the Supreme Court and High Courts of Pakistan, including landmark cases such as *Shehla Zia v. WAPDA* (PLD 1994 SC 693), *Salt Miners v. Director, Industries and Mineral Development* (1994 SCMR 2061), *Asghar Leghari v. Federation of Pakistan* (2015), and subsequent cases involving smog litigation, the Katas Raj Temple Pond, D.G. Khan Cement, and Bahria Town Karachi. These judgments were retrieved through online legal databases, law reports such as the Pakistan Law Digest (PLD) and Supreme Court Monthly Review (SCMR), and open-access repositories of climate case summaries such as the Climate Change Litigation Database maintained by the Sabin Center for Climate Change Law at Columbia University. In addition to case law, statutory materials such as the Pakistan Environmental Protection Act, 1997 (PEPA) and

subsequent provincial legislation were reviewed to contextualize the judicial interventions within the broader regulatory framework.

The study also relies on secondary academic literature to interpret and situate the doctrinal findings. Peer-reviewed journal articles and books available on Google Scholar were systematically reviewed, including works by Hassan and Azfar (2004) on public interest litigation, May and Daly (2015) on global environmental constitutionalism, Peel and Lin (2019) on transnational climate litigation, and Amjad et al. (2022) on Pakistan's environmental governance and air-quality jurisprudence. Reports from the Asian Development Bank, World Bank, and non-governmental organizations such as the Human Rights Commission of Pakistan (HRCP) and WWF Pakistan were also consulted for contextual analysis and evidence on the implementation of judicial orders. The combination of doctrinal sources, policy reports and scholarly analysis provides this layered approach to the data collection method and guarantees the legal depth as well as the interdisciplinary perspective.

An interpretive content analysis was used to perform the interpretation. It was decided to examine the judgement against its constitutional or statutory basis, an environmental matter before the court and on which principles it is based, e.g. precautionary principle, and polluter pays or the doctrine of the public trust and the intergenerational equity. The study coded legal decision-making that involved ongoing mandamus, commission setups, structural directives, compensation orders to assess how the courts implemented the environmental endeavors. Reporting on judicial commissions, government progress reports and scholarly and non-governmental organization critical analysis also received attention as a measure of compliance and implementation. Based on the tendencies in a number of cases over a period of about thirty years the analysis finds the continuities and the shifts of the judicial reasoning by demonstrating how the courts have changed the focus of their protection of individual rights to the greater structural projects of environmental governance. This methodology acknowledges certain limitations inherent in secondary research. Many judicial directives, particularly in ongoing or suo motu matters, are not always systematically reported, and enforcement outcomes often depend on fragmented government reporting. To mitigate these gaps, the study triangulated sources by cross-referencing judgments with scholarly commentary, policy reports, and commission findings. Although this research cannot capture the full empirical impact of judicial decisions on environmental indicators such as air quality or deforestation rates, it does provide a robust doctrinal and institutional analysis of how Pakistan's judiciary has framed and advanced environmental rights. In this sense, the methodology aligns with existing scholarship on environmental adjudication in South Asia, where secondary-source analysis of PIL and judicial activism has been recognized as a productive approach to assess the jurisprudential trajectory (Razzaque, 2004).

### **Data Analysis**

The analysis of Pakistan's environmental jurisprudence from 1994 to 2023 reveals a dynamic trajectory where the higher judiciary, particularly through Green Bench interventions, has progressively expanded the constitutional and statutory protection of environmental rights. This section synthesizes key cases, judicial principles, and institutional remedies to evaluate how courts have shaped the legal landscape and to what extent their interventions have been effective in securing compliance and improving governance. The findings are presented along three dimensions: (1) doctrinal evolution from rights recognition to structural remedies, (2) judicial principles operationalized across Green Bench cases, and (3) implementation and compliance challenges.

The first stage of this doctrinal development begins with *Shehla Zia v. WAPDA* (PLD 1994 SC 693). In this landmark case, the Supreme Court held that the right to life under Article 9 and the right to dignity under Article 14 implicitly include the right to a healthy environment. The Court converted the environmental issues into constitutional claims by using environmental degradation as a deprivation of fundamental rights. The case has been termed as the constitutionalization of environmental law in Pakistan (Hassan & Azfar, 2004). The same argument was applied in *Salt Miners v. In the director, industries and mineral development* case, 1994 SCMR 2061, the

Supreme Court restated that the right to life includes access to pollution-free water. Researchers suggest that the cases marked the beginning of a kind of environmental constitutionalism in Pakistan, which can be attributed to broader global trends of rights-oriented environmental protection (May & Daly, 2015).

The second phase started in 2012 with institutionalization of Green Benches in the High Courts and Azar Jammu and Kashmir Supreme Court. These dockets of the environment brought together ecological benches and established dedicated tribunals to resolve ecological disputes (Ahsan & Khawaja, 2013). Green Benches signalled the end of judges venturing in and out of judicial activism and the move to a more institutionalised environmental adjudication. They came into being as the climate change and transboundary ecological risks became more noticeable, which was a judicial reaction to sustainability and human rights discourses around the world (Peel & Lin, 2019).

The case of *Asghar Leghari v. Federation of Pakistan* (2015-2018). Governmental inaction to enforce the National Climate Change Policy (2012) was determined to have contravened fundamental rights resulting in the establishment of a Climate Change Commission that oversees the adherence to the policy. The scholars observe that the symbolic meaning of *Leghari* was that the issue of climate inaction was viewed as a violation of rights, but a remedial framework was also created under which the implementation of policies was connected to the judicial control (Barritt and Sediti, 2019). The international literature aligns *Leghari* with some of the first-mover cases in Colombia and the Philippines as a new branch of Global South climate litigation (Setzer and Higham, 2022).

Other Green Bench cases that followed show how environmental principles are operationalized. In the case of the Lahore smog litigation (2017-2019), it led to the establishment of a Smog Commission requiring cleaner technologies in use in brick kilns and more stringent fuel and emissions standards. As noted by Amjad, Usman, and Khan (2022), even though regulatory changes were triggered by judicial intervention, the enforcement capacity was still low because of disjointed governance and poor monitoring mechanisms. Likewise, the Supreme Court, in the *Katas Raj Temple Pond suo motu* case (2018), ordered industrial participants to pay the amounts of water losses to the ground water and used the principle of paying by polluters. As drawn out by Shabbir, Farooq, and Khalid (2024), the case itself is a shift to economic tools of environmental adjudication, which attempts to internalize environmental costs as part of market participants. In *D.G. Khan Cement Company v. The Supreme Court of Punjab* (2021) used the precautionary principle to put the new cement plants in the ecologically sensitive regions on hold, and this forcefully supported the judiciary in protecting the natural resources on behalf of the future generations (Munir, 2018).

A cross-case doctrinal analysis identifies four recurring legal principles: the public trust doctrine, the precautionary principle, the polluter-pays principle, and intergenerational equity. The public trust doctrine has been used to protect commons such as rivers, lakes, and forests from privatization or over-extraction (Munir, 2018). The precautionary principle has become central in cases where scientific uncertainty about environmental risks necessitates preventive decision-making, particularly in industrial siting and air pollution disputes (Peel & Lin, 2019). The polluter-pays principle, evident in *Katas Raj* and smog litigation, seeks to shift the burden of remediation onto responsible actors, though scholars note that compliance has been inconsistent (Amjad et al., 2022). Finally, intergenerational equity, explicitly invoked in *D.G. Khan Cement* and *Leghari*, positions environmental protection as a duty owed to future generations (May, 2023).

Analysis of judicial remedies reveals increasing reliance on structural interventions. Courts have employed continuing mandamus, appointed commissions, and ordered systemic reforms to ensure compliance. For example, the Climate Change Commission created in *Leghari* functioned as a quasi-administrative body with oversight powers, a novel innovation in South Asian environmental litigation (Mirza, 2020). Similarly, the Smog Commission and Sindh Clean Water Commission illustrate how Green Benches transformed courts into supervisory institutions. While these remedies demonstrate creativity, critics argue that they risk stretching judicial authority into

domains traditionally reserved for the executive, raising concerns about separation of powers (Peel & Lin, 2019).

A critical dimension of this analysis is compliance and enforcement. Despite ambitious rulings, implementation has often lagged. The long-running *Bahria Town Karachi* litigation exemplifies this problem: while the Supreme Court imposed heavy fines and settlements for environmental violations, subsequent monitoring has been inconsistent, and local authorities have struggled to enforce land-use regulations (Rahman et al., 2020). Empirical studies of environmental tribunals in Pakistan show low disposal rates and limited technical expertise, particularly after the 18th Amendment devolved environmental responsibilities to provinces, creating overlapping mandates (Syed, 2024).

The data suggest that while the Green Benches elevated environmental norms, they have not fully overcome institutional deficits. As Rahman et al. (2020) observe in their study of the Khyber Pakhtunkhwa Environmental Protection Tribunal, the lack of trained staff, budgetary autonomy, and scientific expertise undermines the effectiveness of judicial orders. Syed (2024) similarly argues that environmental governance in Pakistan suffers from fragmented authority and weak monitoring systems, limiting the long-term impact of judicial activism.

In a relative sense, the review of specialist environmental courts and tribunals by Angstadt (2023) highlights that the institutional design, which includes the combination of the technical knowledge and enforcement power, is crucial to success. When this understanding is applied to Pakistan, it would imply that although Green Benches have been innovatively doctrinally, its sustainability lies in the ability to carry out similar reforms to empower the environmental tribunals, regulatory bodies, and enhance their data system to track compliance.

On balance, the analysis shows that the environmental jurisprudence in Pakistan has shifted to the stage of recognition (1994-2000) to the institutionalization (2012-2016) to the expansion and structural supervision (2017-2023). Courts have internalized world environmental principles, invented new cures and increased the awareness of the people about the right to the environment. Nevertheless, there are still critical issues of implementation, which restrains the transfer of judicial declarations into quantifiable environmental benefits. The reforms that need to be undertaken in the future are to empower tribunals, develop judicially in a way that is codified in statutory law, and apply scientific expertise in environmental judgments.

### **Conclusion**

As shown in this work of Environmental Jurisprudence in Pakistan: An Analysis of Green Bench Cases (1994-2023), the high court has been at the forefront in ensuring that environmental protection is not treated as a secondary priority but instead it is guaranteed as the constitutional right. Beginning with *Shehla Zia v. The Pakistani courts* initiated a paradigm shift, where the right to a healthy environment was judicially construed in accordance with Articles 9 and 14 in *WAPDA* (1994), thereby making environmental harm a crime against life and dignity. This course has been enshrined in case law, the most notorious of which was *Salt Miners* (1994), recognising the right to clean water, and by the establishment of Green Benches in 2012 that formalised the practice of environmental adjudication.

The analysis of cases such as *Asghar Leghari v. The Federation* case (2015-2018), the Lahore smog litigation, *Katas Raj Temple Pond* (2018), and *D.G. Khan Cement Company* (2021) cases suggest that the courts seek to codify the principles of global environmental law, which are the doctrine of public trust, precautionary principle, polluter-pays, and the principle of intergenerational equity, into the Pakistani law. By structural remedies, such as commissions, the courts have attempted to bridge the gap between the promise and practice of policy by maintaining mandamus and implementing monitoring measures.

Still, there exist some challenges that are mentioned in the study as well. Ineffectiveness of judicial activism in the long run has been limited by poor enforcement capacity, disaggregated governance since the 18th Amendment, and poor resource base of environmental tribunals. Scandals like

Bahria town Karachi portray the disconnect between such utterances being uttered with such high ambitions by the judiciary and their implementation. Despite the courts' ingenuity in terms of doctrine and procedure, their intervention is restrained by the impulses of politics, bureaucratic capacity, and institutional structure.

On the whole, the Green Bench experience highlights the opportunities and limitations of judicializing the environmental protection process. Pakistan has been able to improve awareness, instill international standards and provide the people avenues of redress through the courts in Pakistan. Nonetheless, to achieve sustainable outcomes, synergy is required: judicial innovation must be supported by legislative codification, empowered tribunals, and executive action. It is after such a form of collaboration that Pakistan will be in a position of transforming its progressive jurisprudence into environmental protection that is sustainable.

## References

- Ahmed, S., Jabeen, R., & Khan, D. S. (2023). Mediating Role of Leadership Self-Efficacy between Formal Developmental Experiences and Leadership Effectiveness: In Pakistani Higher Education Institutions. *Siazga Research Journal*, 2(3), 140–146. <https://doi.org/10.58341/srj.v2i3.19>
- Ahmed, S., Khan, D. S., Ahmad, N., Ghazi, M. H., & Vveinhardt, J. (2024). Echoes of Stress: Maternal psychological distress in the intersection of work and pregnancy within Pakistani higher education. *Revista Ártemis.*, 37(1), 112-133.
- Ahsan, I., & Khawaja, S. A. (2013). *Development of environmental laws and jurisprudence in Pakistan*. Asian Development Bank. [https://books.google.com/books/about/Development\\_of\\_Environmental\\_Laws\\_and\\_Ju.html?id=5bTSBQAAQBAJ](https://books.google.com/books/about/Development_of_Environmental_Laws_and_Ju.html?id=5bTSBQAAQBAJ)
- Amjad, S., Usman, M., & Khan, A. (2022). Environmental jurisprudence in Pakistan: A comprehensive analysis of national laws, judicial role and legislative instruments impacting air quality and public health. *ASAR Council Journal*, 4(2), 33–47. <https://www.researchgate.net/publication/376406471>
- Angstadt, J. M. (2023). Specialist environmental courts and tribunals: A systematic literature review and case for earth system governance analysis. *Current Research in Environmental Sustainability*, 5, 100199. <https://doi.org/10.1016/j.crsust.2023.100199>
- Barritt, E. M., & Sediti, M. (2019). The symbolic value of *Leghari v Federation of Pakistan*. *Journal of Environmental Law*, 31(3), 1–7.
- Hashmi, Z., Ashraf, A., & Ahmed, S. (2025). Beyond the Classroom: Exploring the Motivational Impact of Globalization on EFL Learners. *Journal of Social Horizons*, 2(2), 64-73. <https://doi.org/10.5281/zenodo.15616017>
- Hassan, P., & Azfar, A. (2004). Securing environmental rights through public interest litigation in South Asia. *Virginia Environmental Law Journal*, 22(1), 215–276.
- Husain, I., Qureshi, A. A., & Hussain, N. (2019). *The economy of modern Sindh: opportunities lost and lessons for the future*. Oxford University Press.
- Malik, A. U. (2007). Environmental aspects of human rights to life in Pakistan: The impact of Article 9 of the Constitution. *Journal of Islamic State Practices in International Law*, 3(1), 71–90. (Google Scholar indexed)
- May, J. R. (2023). Dignity law and the environment in Pakistan. *SSRN Working Paper*. <https://ssrn.com/abstract=4356119>
- May, J. R., & Daly, E. (2015). *Global environmental constitutionalism*. Cambridge University Press.
- McConville, M., & Chui, W. H. (2007). *Research methods for law*. Edinburgh University Press.

- Mirza, A. M. (2025). Environmental rights and case of climate justice in Pakistan. *Research Paper*. <https://www.researchgate.net/publication/360093369>
- Munir, M. (2018). The public trust doctrine: A comparative study. *Lahore University of Management Sciences Law Journal*, 5(1), 45–67.
- Peel, J., & Lin, J. (2019). *Transnational climate change litigation: The contribution of the Global South*. Cambridge University Press.
- Rahman, T. U., Khalid, I., & Hussain, S. (2020). Shedding light on Khyber Pakhtunkhwa Environmental Protection Tribunal. *Global Legal Studies Review*, 5(1), 15–21.
- Razzaque, J. (2004). Public interest environmental litigation in India, Pakistan and Bangladesh. *Journal of Environmental Law*, 16(3), 345–367.
- Setzer, J., & Higham, C. (2022). *Global trends in climate change litigation: 2022 snapshot*. Grantham Research Institute on Climate Change and the Environment, London School of Economics.
- Shabbir, M., Farooq, A., & Khalid, R. (2024). Legal framework for promoting environmental justice in the context of climate change: Highlighting proactive role of the Supreme Court of Pakistan. *SSRN*. <https://ssrn.com/abstract=4900735>
- Syed, F. Z. (2024). Environmental governance and policy implementation in Pakistan: Institutional capacity gaps and pathways. *Journal of Development and Social Sciences*, 5(2), 1–18.
- Ullah, S., Saeed, S., Khan, F., & Naz, A. (2021). Covid-19, Economic Lockdown, Treatment Interruptions And The Fear Of Survival Among HIV/AIDS Patients In Malakand Division, Khyber Pakhtunkhwa. *Webology (ISSN: 1735-188X)*, 18(6).
- Ullah, S., Ullah, T., & Khan, H. (2023). Threats and opportunities of globalization: Analyzing the impact of globalization on Pashto language. *Pakistan Journal of Society, Education and Language (PJSEL)*, 9(2), 611-619.
- Zaib, K. (2022). THE ROLE OF MOTHER TONGUE IN LEARNING ENGLISH AT THE INTERMEDIATE LEVEL (A Case Study of Government Degree College Batkhela, District Malakand). *Pakistan Journal of Society, Education and Language (PJSEL)*, 8(2), 248-253.



License Pakistan Journal of Society, Education and Language (PJSEL). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) 4.0 International.