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Constitutionalizing Environmental Rights in Pakistan: Article 9A, Provincial Governance, and the Implementation Challenge

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ABSTRACT

With the adoption of Article 9A through the Pakistan's Constitution (Twenty-Sixth Amendment) Act, 2024, Pakistan's environmental constitutionalism has reached a new milestone by explicitly stating the right to a clean, healthy and sustainable environment for every person. The present research study focuses on the possibility of addressing the implementation gap between the environmental laws and implementation of those laws in Pakistan, especially under a decentralized provincial government, through the process of constitutionalization of environmental protection. The research is doctrinal in nature and a qualitative approach has been used to analyze the constitutional provisions, environmental legislation, judicial interpretation and institutional structures relating to the protection of environment from Shehla Zia v. WAPDA to Article 9A. The results show that Article 9A bolstered the moral and legal basis for environmental protection by making environmental quality a constitutional right and, possibly, increasing the liability of judges and government. Its transformative capacity is, however, limited by institutional fragmentation, limited resources, poor institutional enforcement, low technical capacity and inconsistent behavior of regulators across provinces. The issues are stark in Punjab's industry regulatory stress, failures in implementation in Sindh, and institutional and resource limitations in Balochistan. Constitutional recognition is not sufficient to address Pakistan's environmental governance deficit, the study finds. Improved environmental institutions with greater autonomy and capacity, sufficient fiscal and technical resources, better federal-provincial coordination, more transparent enforcement and judicious oversight are essential to the implementation of Article 9A.



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Introduction

Strategic environmental vulnerability, fragmented institutions and continued environmental governance failures have further exacerbated Pakistan's vulnerability to the negative impacts of climate change. Floods, heatwaves, droughts, glacial melt, irregular monsoons and water stress are becoming more frequent and severe, making climate change not just an environmental, but also a governance, development and constitutional issue. This vulnerability was put on display with the catastrophic 2022 monsoon floods, which impacted around 33 million people, resulted in over 1,700 fatalities and economic losses and damages of over US\$30 billion (ReliefWeb, 2023). In addition to the immediate humanitarian and economic impacts, such events highlighted Pakistan's inadequate preparedness for predicting environmental disasters, effective environmental adaptation, controlling environmentally harmful activities, and enforcing environmental standards, as well as its inability to coordinate between different institutions. The increasing urbanization, water scarcity, ecosystem degradation, and weak environmental governance systems are also contributing factors that exacerbate Pakistan's geographical vulnerabilities to climate risks (Ahsan et al., 2022). Therefore, environmental crisis emerging in Pakistan is not just a result of environmental exposure but has strong linkages with the institutional capability of the state to convert environmental laws and policies into effective regulatory and protective results.

Pakistan has a wide network of law and institutional framework for environment protection. The Pakistan Environmental Protection Act 1997 introduced the core legislation on environment and it gave institutional mandate to environmental agencies to control pollution, fix environmental standards, do environmental assessment, and implement environmental compliance. The Pakistan Climate Change Act, 2017 then further reinforced the national climate change framework for mainstreaming it in development planning and policy. Environmental Impact Assessments (EIAs) and Initial Environmental Examinations (IEEs) were also established as tools to help minimise environmental impacts prior to the approval of development projects. However, these legal measures have not always been translated into equal and effective environmental protection. However, weak institutional capacity, limited financial resources, low technical capacity, and lack of environmental monitoring, as well as unreliability of data, political interference, and administrative fragmentation have resulted in a longstanding disconnect between environmental law and implementation (Hameed et al., 2025; Shah, 2025).

This implementation gap is especially evident in the performance of Environmental Protection Agencies (EPAs). Studies have shown that environmental regulatory institutions have been short of trained personnel, laboratory and monitoring equipment, financial resources and environmental information. They reduce the effectiveness of the audit, monitoring, compliance and enforcement of environmental standards and effective sanctions by regulatory bodies. Likewise, EIAs can be used as a tool to prevent environmental damage, or they can be used as a method to be followed for approval of a project. Lack of public participation also decreases transparency and accountability in environmental decision-making. However, regulatory bodies can be hindered from reacting effectively to influential industrial players by political and economic influence (Hameed et al., 2025; Shah, 2025; Tunio et al., 2025). The central governance issue is not just that there are no environmental laws, it is that the institutional ability to implement, monitor and enforce them is limited.

With the Eighteenth Constitutional Amendment, various environmental responsibilities were transferred to provincial government, making the challenge more complex. The decentralisation has had two positive impacts on environmental policies: it has allowed them to be more flexible and to take local ecological and socioeconomic conditions into account, while simultaneously introducing significant institutional and coordination problems. In many cases, this began with a lack of adequate financial and other resources, technical capacity, administrative capability, monitoring mechanisms and intergovernmental coordination. As a result, environmental governance is becoming more decentralised and spread out at the federal and provincial level (Saleem et al., 2025; Tunio et al., 2025a; Zaheer, 2019; Ehtasham et al., 2021; Iqbal et al., 2024). This fragmentation is especially a concern as environmental and climate risks often cross administrative lines. The coordinated action between various levels of government is essential for addressing the challenges posed by floods, water scarcity, pollution, ecosystem degradation, and water displacement due to climate change. The lack of institutional capacity may thus lead to a greater gap between legal accountability and enforcement if decentralization is not properly managed.

The constitutional aspect of the protection of the environment has also changed significantly. Prior to the explicit recognition of an environmental right, Pakistani courts have introduced environmental protection by developing it from existing fundamental rights. The Supreme Court in a landmark case *Shehla Zia v. WAPDA* (PLD 1994 SC 693) interpreted the right to life under Article 9 to be broad enough to include the right to be safe from the environment. This jurisprudence has played a crucial role in environmental public interest litigation and helped the courts to hold the environment accountable under existing constitutional safeguards (Ahmed et al, 2025; Rajper et al, 2024). Judicial recognition, however, was not a constitutional environmental right per se. Judicial reasoning, statutory law, administration and institutional capacity continued to be vital for environmental protection.

Article 9A, introduced into the Constitution of Pakistan by the Constitution (Twenty-sixth Amendment) Act, 2024, has significantly altered the status of this constitutional position. Article 9A provides that: “Every person shall be entitled to a clean, healthy and sustainable environment.” The provision is an important step forward in the environmental constitutionalism of Pakistan as the environment is now explicitly mentioned in the constitution. By placing the protection of the environment in the constitution, the position of individuals and communities harmed by environmental harm is enhanced, and judicial review of government decisions, development policies, regulatory failures and environmental harm is more robust. It could also provide a greater space for public interest litigation and improve governance for environmental protection when it is not being carried out properly.

Recognition of the Constitution, however, does not automatically mean environmental protection. What is fundamental is to ensure that Article 9A turns a formally declared constitutional right into a concrete and sustainable governance tool of nature. A constitutional environmental right requires a definition of its scope by courts, the inclusion of environmental issues in decision making by public decision makers, the enforcement of environmental standards by regulatory agencies and co-ordination of environmental responsibilities by federal and provincial governments. If the institutional capacity, monitoring mechanisms, financial resources and enforcement frameworks remain insufficient, Article 9A might largely be in the nature of a declaration instead of a change. The shortcomings in the implementation of the

Pakistan Environmental Protection Act, 1997, and Pakistan Climate Change Act, 2017 have highlighted the need to critically examine the practical impact of the constitutionalization (Haider, 2025; Hameed et al., 2025; Rajper et al., 2024; Ullah & Hussain, 2025).

Considering the above backdrop, this study seeks to investigate if and how Article 9A can address the continued implementation gap between the environmental legal framework and environmental governance in Pakistan. The study does not presume that constitutional recognition is always a panacea for better environmental outcomes, but rather explores the institutional and legal context in which Article 9A can be an effective accountability and regulatory transformation tool. Its emphasis is on the question of whether constitutionalization can help to increase the accountability of the government, improve the performance of institutions, make the enforcement of the environment more effective, make judicial oversight more effective and facilitate better cooperation between federal and provincial authorities. The study thus seeks answers to two key questions: What is the extent of the government's ability to effectively deliver upon the constitutional right to a clean, healthy and sustainable environment? and Does the constitutionalisation of environmental rights through Article 9A help reduce the gap in environmental law and institutional implementation in Pakistan?

The study has two objectives: to assess the capacity and effectiveness of governmental and environmental institutions to actualize the right to a clean, healthy and sustainable environment enshrined in the Constitution; and to explore whether and how the constitutionalization of environmental rights, as reflected in Article 9A, can help close the gap between environmental law and its real-life application. The study links constitutional law to institutional capacity and the enforcement of regulations, judicial review and environmental governance, which further the emerging literature on environmental constitutionalism in Pakistan. Its conclusions will apply to a variety of stakeholders, including: judges, lawyers, policy makers, environmental regulators, civil society organizations and researchers who are interested in environmental rights and governance. Finally, the impact of Article 9A should be measured not just on a constitutional basis but on its potential to shape government action, enhance institutional accountability, boost the regulatory effectiveness and achieve real environmental outcomes for current and future generations.

The remainder of this paper is organized as follows. Section 2 reviews the relevant literature and theoretical foundations, Section 3 presents the research methodology, Section 4 discusses the findings and their implications, and Section 5 concludes with policy recommendations and directions for future research.

Literature Review

Environmental Health Rights and Law Implementation

Environmental protection and the relationship between the environment and human rights has changed significantly in the last 50 years. While previous approaches focused almost exclusively on the environment as a means of economic development, modern environmental law is more concerned with the quality of the environment as a necessary precondition for human dignity, human health and survival. The shift can be traced back to the Stockholm declaration of 1972 and to other international events that have since associated environmental protection with human rights. Knox and Pejan (2018) believe that a healthy environment is essential to the effective

exercise of human rights, and Lode et al. (2016) have shown that environmental protection is interlinked with a number of Sustainable Development Goals (SDGs), notably those involving health, sustainable cities, water and climate action. The developments have stimulated states to incorporate environmental issues within their national legal and institutional structures. There are generally two aspects to environmental rights: a substantive and a procedural aspect. Substantive rights deal with access to the necessary environmental conditions, such as clean air, safe water and freedom from toxic emissions (Shelton 2008; Preston 2024). Procedural rights give the individual access to information on the environment, a right to be involved in decision-making and a right to a proper remedy through the courts, which are tools for protecting these substantive rights (Knox & Pejan, 2018; Preston, 2024). Thus, it can be said that, as far as practical matters are concerned, it is not much good to recognise an environmental right unless there are institutions that are able to enforce it. Thus, the effectiveness of environmental rights relies on the linkages among legal recognition, institutional capacity, institutional enforcement, and public accountability.

Pakistan has put in place a significant statutory framework through Pakistan Environmental Protection Act, 1997 and Pakistan Climate Change Act, 2017. The former introduced the main regulatory framework for pollution control, environmental standards, environmental assessment and Environmental Protection Agencies (EPAs), whereas the latter introduced the legal framework towards climate change planning and institutional coordination (Hameed et al., 2025; Rajper et al., 2024). Yet, previous studies show that there is a gap between legislation and environmental outcomes. The financial resources of EPAs are still insufficient, technical expertise is not sufficient, monitoring capacity is weak, environmental data is insufficient, and the enforcement is inconsistent (Ahmed et al., 2025; Hameed et al., 2025; Shah, 2025). So, the primary problem of Pakistan today is not that there is a lack of legislation but weak implementation of the legislation. This has been a gap that has been filled by judicial intervention in the past. In *Shehla Zia v. WAPDA* (PLD 1994 SC 693), the Supreme Court introduced an important precedent on the doctrine of Environmental Constitutionalism by defining the constitutional right to life under Article 9 to include protection from environmental hazards. However, such judicial interpretation relied on a case-by-case interpretation of environmental protection, which meant that the scope of it was open to interpretation. The introduction of Article 9A in the Constitution (Twenty sixth Amendment) Act, 2024 marks a major change in the constitution as it has explicitly stated that every person has the right to a clean, healthy and sustainable environment. This enhances the ethical and legal basis of environmental protection but the effectiveness is not guaranteed. The literature has not given due consideration to the ability of Article 9A to address the longstanding institutional and enforcement gaps in Pakistan. This study fills this void by analysing the potential of constitutional environmental recognition to enhance accountability, regulation and environmental governance.

Sustainable Development and Constitution of Pakistan

The introduction of Article 9A into the Constitution by the Twenty-Sixth Amendment has shifted the nature of environmental protection in Pakistan from a 'judicial discretion' to a constitutional right. In the past, only Article 9 (right to life) and Article 14 (dignity) have been used to achieve temporary environmental relief, which has led to diverse approaches by different judges. It was now introduced as Article 9A of the Constitution, which provides the right to a clean, healthy

and sustainable environment alongside the rights to free expression and property, making the state responsible to ensure that the environment is preserved for present and future generations (Rajper et al., 2025), and to safeguard it from any attempt to promote fast growth at the expense of ecological health (Haider, 2025). The amendment is in response to the climate emergency faced by Pakistan which has caused devastating floods, heatwaves and water shortages which has significantly impacted agriculture and affected the country's low income communities, farmers and industrialized regions (Yousaf et al., 2025). Article 9A now constitutionally mandates the state to implement policies for the protection of citizens from environmental degradation (Tarar & Tarar, 2025) and gives an additional boost to environmental justice to the marginalised who were not able to challenge the harmful development project before (Khuhro et al, 2024).

There is still poor implementation, however. Major construction projects frequently require Environmental Impact Assessments (EIAs) that lack scientific substance, community engagement, and are sometimes seen as a bureaucratic exercise to serve other interests rather than provide meaningful environmental analysis (Ehtasham et al., 2021). Institutional capacity and better enforcement of EIA are key prerequisites for the promise of Article 9A (Saleem et al., 2025). For example, Strategic Environmental Assessments are not often carried out, government priorities are on speed and short-term profit rather than sustainability (Ali & Batool, 2023; Ullah et al. 2022) and infrastructure projects are built without engaging the community, leading to a gap between the constitutional promises in Article 9A and the reality of development (Saqib et al., 2023). In terms of jurisprudence, the Precautionary Principle, which has been there since *Shehla Zia v. WAPDA*, always has been applied by the courts and now the Article 9A empowers judges to rely on the Constitution's text rather than on the implied rights it grants. (Khan, 2025). The concept of "intergenerational equity" is often invoked in the context of Green Benches, although they may in fact be largely symbolic when implementation of their directives or mandates is ignored by executive authority (Ullah & Hussain, 2025). Last, cultural and religious values, especially Islam's principle on environmental stewardship, can contribute to the acceptance of the legitimacy of Article 9A, making compliance a legal and ethical duty, and thus improving the sustainability development architecture of Pakistan (Fatima & Maraghzar, 2024).

Environmental Governance and Policy Implementation

Pakistan's environmental governance framework is marred by disjointed federal-provincial cooperation, not by the ideal of having citizen, business and government working together. The 18th Amendment of 2010 was supposed to give authority to the provinces to tackle environmental issues but instead of that, it created an authority vacuum (Zaheer, 2019). Since then, the provinces have created their own legislation, but lack of resources and qualified staff makes enforcement difficult, and there is no one really responsible for matters affecting the country at large, such as climate change and smog. (Adam et al., 2022) This decentralised system has had a negative impact on the environment and is supported by empirical evidence. Tunio et al. (2025a), and Ding et al (2024), however, reported that fiscal decentralization was positively correlated with environmental damage between 1982 and 2023 as provinces had more resources and power, the environmental damage was higher. They claim this is due to institutional asymmetry, in which provinces were given the responsibility to protect the environment, but were lacking the capacity to do so, and weak local monitoring gave industries license to pollute more, offering solid proof that Pakistan's governance structure has failed to stop climate change.

Implementing gap is the biggest failure of governance, as indicated in the literature. The policy frameworks, such as National Climate Change Policy have strong statements but rarely have a bottom-up effect when implemented at the ground level (Hameed et al., 2025; Tunio et al. 2025b). The weakness of the EPA against large polluters (Yousaf et al., 2025) and the fact that political interests are more inclined toward industrial development than towards the preservation of the environment. EIA are routinely conducted as paper exercises (Adam et al., 2022); public hearings are managed or excluded denying communities their input into decisions made that impact their lives (Preston, 2024). This situation has been compounded by the increasing urbanisation, especially in Lahore, where the city is increasingly suffering from lack of basic services such as waste collection, air and water pollution, etc. The chronic pollution problems faced by Punjab can be an example of governance failures due to failure to enforce a ban on burning crops and vehicles (Adam et al., 2022). Likewise, the smallholder farmers in rural areas are still suffering loss of water supply despite the promises of adaptation assistance (Yousaf et al., 2025) and the systemic paralysis in achieving outcomes for vulnerable communities (Shah, 2025).

These systemic failures are areas that are addressed by Article 9A, which provides a potential remedy for a right to a clean environment. It puts in place a new chain of accountability, extending environmental protection from policy preference to constitutional requirement (Haider, 2025), allowing the judiciary to demand accountability from the executive. Ongoing monitoring of compliance through mandamus may be especially useful in addressing the government's 'slow response' (Rajper et al., 2024), and in instances of constitutional recognition, environmental checks will be required for all development projects. Systemic institutional revitalization is required to realize the potential of Article 9A, which involves capacity building, greater monitoring budget (Tunio et al., 2025a) and better federal-provincial coordination. Participation of civil society and private sector in decision making is also crucial (Iqbal et al., 2024). However, the transition towards transparent and citizen-oriented governance will not be possible without the willingness of the political and the capacity of institutions to perform their constitutional duties (Zaheer, 2019; Shah, 2025; Tunio et al. 2024).

It has been reported that there are lots of essays and books published about environmental laws, and that there has been a lot written about judicial activism in Pakistan. However, very little research has focused exclusively on the post amending of Article 9A (e.g., Hameed et al., 2025; Rajper et al, 2024) have focused on looking into the possibilities of the Article 9A to be effective, and the previous legislation's failure, but they have not documented how this new constitutional right works with the decentralized method of governance. It has not been established, at present, whether the addition of Article 9A can automatically overcome the institutional weaknesses that exist in the Environmental Protection Agencies. Also, if Article 9A can work effectively, there is no evidence that will be, or has been found, that gives any indication that it will work under a new framework of legislation. Little to no research to date is able to show that, amongst other things, the new constitutional right is related to carbon emissions or the actions of a given province(s) to combat smog. Most papers or articles will look at only either the law (text) or the science (data); few if any look at both together. This proposal is designed to provide an analysis of the ability of Article 9(A) to transform the way Pakistan has governed historically and to provide guidance on how best to implement Article 9A so that it may be effective in practice. Ultimately the intent of this research is to bridge the gap between legal theory and actual environmental conditions in Pakistan.

Research Methodology

This thesis will use the qualitative and doctrinal legal research methodology as a framework to analyze the Constitution of Pakistan, statutory laws and judicial decisions. Because Pakistan is one of the most climate vulnerable countries in the world, the research will examine how laws can provide solutions to environmental issues. The research has asked a number of questions in order to establish why there are significant deficiencies/implementation gaps in the current system. Even with the enactment of the Pakistan Environmental Protection Act, 1997; the Pakistan Climate Change Act, 2017; and after the passage of the 26th Amendment and the introduction of Article 9A, environmental degradation continues to occur in Pakistan. The research evaluates how these amendments will help to overcome the governance deficiencies within the current regulatory framework.

The methodology will focus on a before-and-after analysis. The analysis will assess how the Supreme Court interpreted the "Right to Life" with regard to environmental rights in the past compared to today with respect to the newly created fundamental right to a clean and healthy environment. Through this assessment, the research will highlight barriers to regulatory enforcement and suggest that the new constitutional framework will create environmental sustainability for all.

Model for Document Analysis

This research project primarily use Document Analysis as methodology to identify, assess and evaluate the legal/institutional framework for environmental protection in Pakistan through systematic review/evaluation to determine the “gaps” about the manner in which the law has been applied by documenting all respective cases and records. To accomplish this point, Document or Document Analysis has been used to classify all documents into three main categories so that a thorough assessment of the “Implementation Gap” can be achieved.

The first method of document analysis includes the review of constitutional/statutory documents including the Constitution of the Islamic Republic of Pakistan, 1973 and, particularly, the 26th Amendment increases the rights protection and includes the "right to a clean and healthy environment" within Pakistan's constitutional framework with regards to environmental protection. Because of this case, this thesis utilizes as documents reviewing various statute laws which includes the Pakistan Environmental Protection Act, 1997 (PEPA) and the Pakistan Climate Change Act, 2017 to analyze/identifies both the formal regulatory framework and statutory authority of all environmental agencies in Pakistan.

The second type of documents reviewed/analyzed is Judicial Decisions/Case Law. The right enjoyed previously under the Constitution regarding the right to a clean environment by virtue of Judicial Interpretation. This study examines/makes documentary reference to unavoidable/rational landmark decisions including but not limited to *Shehla Zia v WAPDA* etc. The examination of these legal records will assist in monitoring the manner in which the submissions made by the courts have historically filled a void regarding governance and how will the court administer the substantive change (enactment of Article 9A through 26th Amendment) and hold the Government accountable.

Thirdly, Academic Literature and Institutional Reports were examined in the study, including Peer Reviewed Articles and Institutional Reports, such as those published by ReliefWeb and WWF. The documents evaluated were a source of empirical data demonstrating how the planning of environmental issues failed to be properly planned and enforced in regard to environmental impact during disasters, such as the 2022 Floods. Through the analysis of diverse literature, it was determined by the thesis that there is a great institutional asymmetry that exists between the laws on paper and what environmental conditions exist in Pakistan.

Justification for Document Analysis

Document analysis can be considered a good choice for this study since it is relevant to the legal analysis that focuses on the constitutionality of environmental rights. Indeed, in legal studies, the official wording is the key determinant in establishing what the text actually means. Hence, when discussing the gap between the legal wording and practice, the best approach is to refer to the official texts of the Constitution and Federal Acts in order to determine where the legal framework falls short. Moreover, the use of document analysis is justified by the recent amendment of the constitution – Article 9A was introduced as late as October 2024, which means that little empirical data is available on this subject. This, therefore, means that it is necessary to analyze the existing legal and institutional precedent in order to establish how this new constitutional arrangement will help overcome the existing governance problems.

Data Collection

The current study is based on secondary data derived from a thorough literature review of legal documents, cases (case law), published academic studies, policy analysis and reports regarding issues associated with environmental constitutionalism and environmental rights within Pakistan. These various sources provide the study with a strong basis for valid, credible, reliable and complete collection of data to support the research framework. The total number of sources used in conducting this research was thirty-one (31), of which four (4) were primary legal sources (consisting of three [3] statutes and one [1] case law precedent) constituting the legally binding basis for the research. The remaining twenty-seven (27) sources were secondary sources which were classified as twenty-three (23) peer-reviewed articles, two (2) published academic textbooks, one (1) policy analysis and one (1) institutional report.

Environmental Mechanisms

The performance of any legal system strongly relates to the functioning of the institutions which drive the enforcement of that system. There are many environmental systems (i.e., administrative, executive, and regulatory) that are in place in Pakistan to deal with environmental deterioration resulting from the vulnerability of climate change. To fully comprehend the relationship of the 26th Amendment with environmental sustainability you must thoroughly review the historical operation of the statutory bodies that implement the law and their poor operational efficiency due to ineffective governance.

Constitutionalizing Sustainability: The Paradigm Shift of Article 9A

A primary way that Article 9A has helped to address longstanding problems in governance is to provide a constitutional guarantee of the right to a "clean, healthy, and sustainable environment," which has now been provided as an independent and distinct provision within the Constitution.

As a structural fix to the long-standing systemic failures of the provincial and federal systems, the 26th Amendment also places a burden of strict judicial accountability on all statutory authorities in relation to their performance of duties related to implementation and enforcement of environmental rights. As a result of the fact that, if a provincial EPA fails to enforce pollution control standards or to perform adequate assessments of the risks of climate change, the effect is not only an administrative failure, but also represents a direct violation of an individual fundamental human right, citizens now have the ability to circumvent weak enforcement practices through constitutional courts in order to seek redress. Therefore, the 26th Amendment effectively closes the implementation gap and enables the procedural transition of Pakistan's environmental regulatory systems from fundamentally flawed statutory authorities into constitutionally imposed regulatory authorities, thus laying the important legal framework for a clean and healthy environment for all.

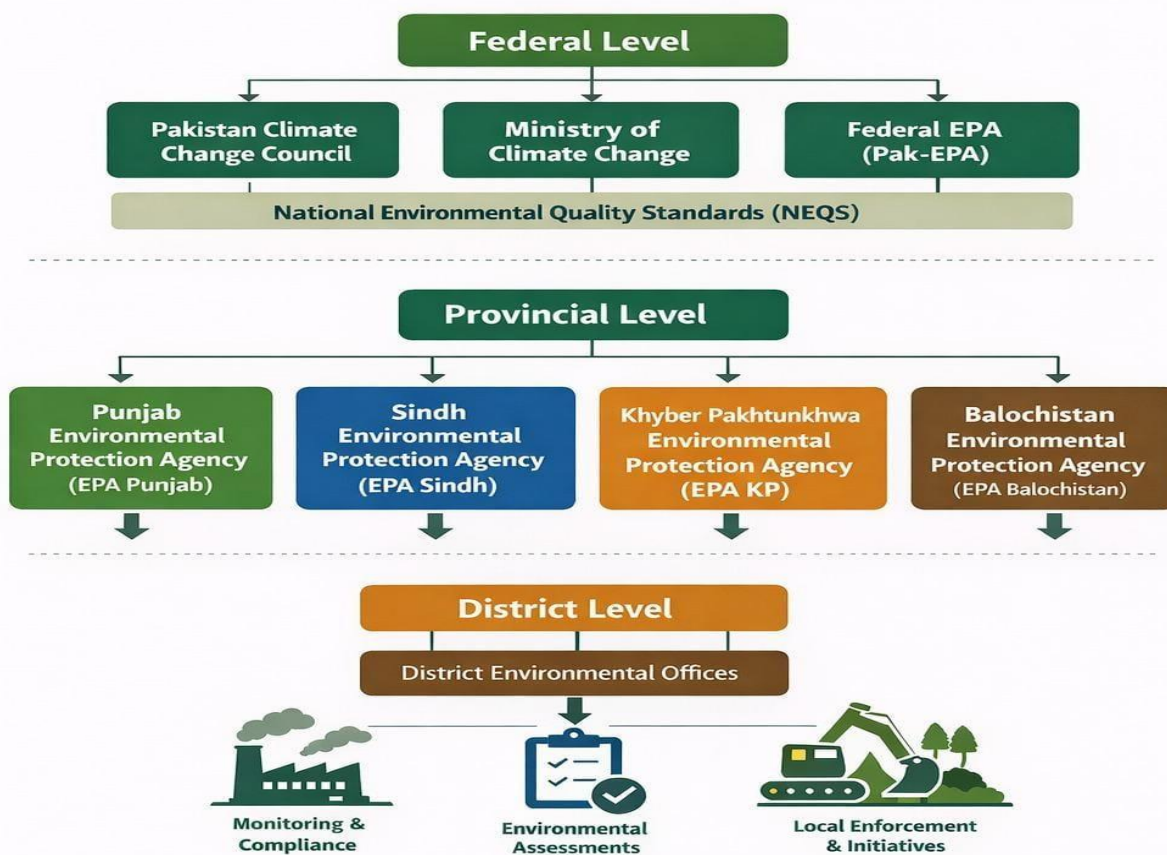


Figure 1: Hierarchical structure of Federal and Provincial Environmental Mechanisms in Pakistan.

Central Government Institutional Mechanism

Pakistan has historically relied on specialized statutory frameworks for managing the environment, which were intended to formalize the regulatory mechanisms. Specifically, the Pakistan Environmental Protection Act, 1997 (PEPA) established Environmental Protection Agencies (EPAs) at both the federal and provincial levels for regulating emissions; enforcing

National Environmental Quality Standards (NEQS); and monitoring industrial compliance with NEQS. There were also subsequent legislative developments, such as the Pakistan Climate Change Act, 2017, which attempted to address the ongoing increase in climate risk through the establishment of many apex institutions, including the Pakistan Climate Change Council. Nevertheless, while these statutes provided a solid foundation for regulatory development, the application of these statutes has been weakened by ongoing gaps between the intended and actual implementation, and inadequate institutional enforcement capacity.

Provincial Enforcement Disparities and Legal Framework

Environmental governance was entirely devolved to the Provinces of Pakistan after the 18th Amendment to the Constitution passed in 2010, so each Province needed to enact its own laws and establish independent EPA offices. The intention behind the decentralizing of Environmental governance was to improve the Environmental management of each Province along Regional lines; however, the decentralized nature of Environmental governance has created large discrepancies within and between the Provinces with regard to their institutional capacity, preparedness for disasters, and capacity to enforce Environmental regulations.

Punjab: The Province of Punjab has enacted the Punjab Environmental Protection Act, 1997 (amended 2012), and the EPA of Punjab works to mitigate the severe Urban Smog issues in Punjab, as well as the hazardous waste produced by Punjab's highly industrialized area. The EPA of Punjab has developed the Punjab Environmental Quality Standards (PEQS) and requires Environmental Impact Assessments (EIAs) to be conducted; however, the EPA of Punjab has not been able to overcome the systemic Governance issues relating to the regulation of the vast amount of industrial emissions produced in Punjab and Agriculture emissions also.

Sindh: The Sindh Environmental Protection Act, 2014 governs Environmental protection in the Province of Sindh, and the Sindh EPA is primarily responsible for the management of Metro Solid Waste and the extremely large volume of Industrial Effluent which is discharged by the Industry located in Metro Sindh, especially on the Coastal Areas of Sindh. The Enforcement of Environmental Laws is greatly hampered due to the overlapping Jurisdictions of Municipal Government Authorities. Coastal and Marine Pollution occurrences are very serious in Sindh.

Khyber Pakhtunkhwa (KPK) - The KPK EPA has the authority to implement the 2014 KPK EPAs Environmental Protection Act, which provides direction for addressing deforestation and regulating the environmental impact of the mining sector. As KPs geographical location, given its vulnerability to melting glaciers and irregular climatic fluctuations, continues to evolve; the enforcement of environmental protections is directly linked to climate resiliency and hindered by both difficult mountainous landscapes and resources being consumed through extraction of the province's minerals.

Balochistan - The Balochistan EPA is established under the Balochistan EPA enacted in 2012; its role focuses on managing acute water shortages; assembling a comprehensive plan for the protection marine based ecosystems; and providing oversight for Balochistan's expanding mining industry. The Balochistan EPA relies heavily on organizations to create partnerships focusing on how to develop a cooperative relationship with the government, but the efficiencies of doing so are constrained by an inadequate staff and geographic limitations impacting compliance.

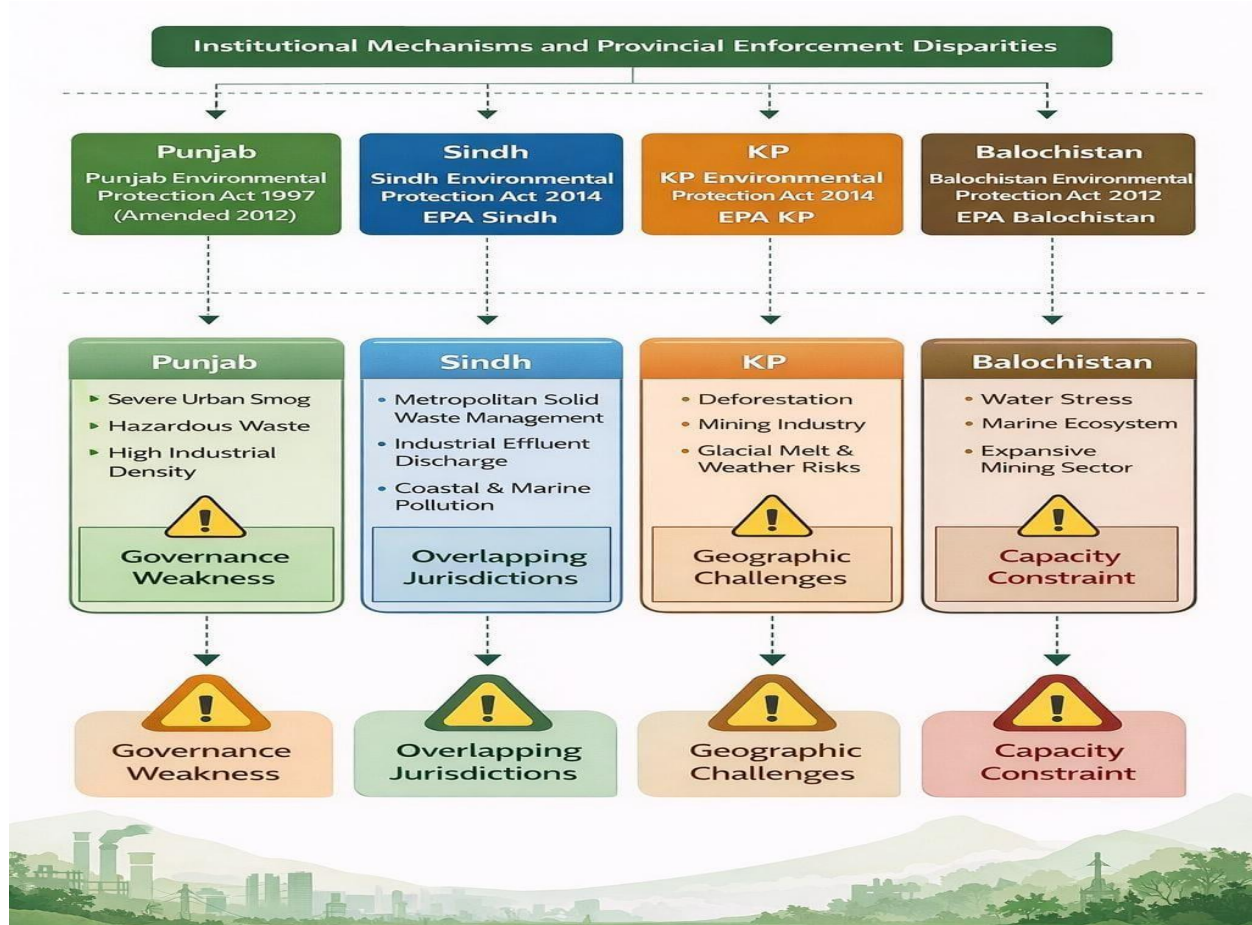


Figure 2: Institutional Mechanisms and Provincial Enforcement Disparities

The Implementation Challenges in Constitution of Pakistan

Although Pakistan's decentralized framework seems to provide an adequate level of environmental governance at first glance, there is a severe lack of supreme legal accountability in the system, which is a significant weakness with regard to pre-2024 governance. The federal and provincial Environmental Protection Agencies (EPAs) in Pakistan operate primarily under the authority of ordinary statutes, and thus are unable to take action against repetitive occurrences of environmental degradation; accordingly, the legal response to such failures has been to treat these agencies' shortcomings as administrative inefficiency rather than as violations of citizen rights. Public interest litigation that sought to compel action from these agencies has relied upon judicial activism through the use of interpretative broadening of the right to life contained in Article 9 of the Pakistan Constitution; however, such reliance on derivative rights has created an everlasting implementation gap for Pakistan's most climate-vulnerable citizens, resulting in a lack of access to a formal legal remedy to address their concerns.

Findings and Discussion

Institutional Effectiveness in Securing a Clean, Healthy, and Sustainable Environment

This section investigates the performance of state institutions in meeting their environmental responsibilities and makes sense of it within the context of the reconfiguration of the constitution provided for by the Twenty-Six Amendment. Special focus is on the recently added Article 9A, which establishes the right of all citizens to a clean, healthy and sustainable environment. The new amendment means that environmental protection is given a higher constitutional profile, and before this day, it was mostly treated as a secondary role of the province in regulating. The Amendment makes this entitlement a Fundamental Right, placing a consistent obligation on the Federation as a whole to meet a standard of environmental performance, which goes beyond administration to ensure constitutional compliance. Thus, the state's responsibility for maintaining ecological health of the air and water it supplies to people has become a legally binding constitutional duty (Shaikh, 2024).

Punjab is the home to most of the industrial and agricultural activities in Pakistan and is governed by the Punjab Environmental Protection Act, 1997, which provides the main law in Pakistan for pollution control and ecological management in the province. The province has been struggling with high levels of seasonal smog for decades, which has made both Lahore and Faisalabad the world's most polluted cities (World Bank, 2023). A provincial Environmental Protection Agency (EPA) was set up to tackle these issues, but the power of large industrial actors has long been a restriction on the regulatory capabilities of the EPA, with their interests more likely to be geared towards industrial growth than environmental protection (Sial, 2018). Article 9A changes this equation by ensuring that current provincial protections, like the discharge of toxic effluents from the Kasur tanneries, still exist, albeit with a stronger constitutional foundation, which is no longer on the grounds of economic expediency or administrative convenience (Tarar & Tarar, 2025). This means the Amendment is not just a policy preference but a legal fact by making public health a constitutional right. Therefore, the Amendment is not merely a policy choice but a legal reality: public health is more important than industrial profit. It also provides provincial statutes with much greater enforceability than existed before, and gives Green Benches and environmental tribunals the legal power to impose greater scrutiny and binding injunctive relief on polluters, changing the provincial system of governance from reactive smog-emergency-management to proactive, long-term urban planning (Yousaf et al., 2025).

The environmental governance in Sindh is based on the Sindh Environmental Protection Act 2014, which addresses a unique set of environmental challenges, such as the release of untreated municipal waste and industrial effluents into the Arabian Sea that has led to degradation of coastline and deterioration of livelihoods of fishing dependent communities (Hameed et al, 2025). The performance of the institutions in this regard has been substandard in the past, lacking not only jurisdiction to punish large municipal bodies and water utilities for their polluting practices on a systemic basis, but also political support (Asghar et al., 2024). The Twenty-Sixth Amendment has transformed the right to environment into a higher order right, as has impacted the legislations' implementation and judicial scrutiny of the government's action in the province. The provincial government now has constitutional (not administrative) responsibility to resolve long-standing issues like ecological degradation of Manchar Lake and

Karachi coastlines, which are no longer local administrative failures, but violations of a fundamental right. Article 9A makes the gap between the written law and real law a little smaller by allowing citizens to use the High Court's original jurisdiction to claim the state's negligence in waste management places a substantive requirement on municipal projects that they include environmental impact assessments as part of the constitutional guarantee of the right to life (Shaikh, 2024; Hameed et al., 2025).

The Khyber Pakhtunkhwa Environmental Protection Act, 2014 lays out the regulations for the management of the province's ecosystems; however, enforcement of the act has been hindered by illegal logging activities, unregulated stone crushing and rapid glacial melting caused by climate change (Ahmed et al., 2025). While provincial programs like the Billion Tree Tsunami are positive policy moves, they have been undermined by weak enforcement of their policies and lack of a legal framework that protects biodiversity from commercial encroachment (Khan et al., 2024). Under the Twenty-Sixth Amendment the province's natural resources are now included in the Constitution and citizens can now seek judicial remedies instead of turning to the discretion of the policy administrators. The constitutionalization transforms the passive role of the state as an administrator of environmental rights into an active duty as a trustee of the environment to take action against illegal exploitation (Shelton, 2008). The shift from a "right" to "duty" has given forests and watersheds greater potential for the provincial government and judiciary to act against illegal mining and deforestation, as well as provided a more robust normative basis for distributing benefits from activities like the province's "Green Growth" program (Ahmed et al., 2025; Khan et al., 2024).

Despite having a large geographical surface, water scarcity, and intense technical and financial challenges with EPA (Tunio et al., 2025a), implementation of the Balochistan Environmental Protection Act, 2012 is the most difficult task in the province. Environmental sustainability has been put aside in the favour of infrastructure and security, leading to unregulated mining and lack of adaptation to climate change amongst vulnerable groups (Khayam & Ahmad, 2020). The Twenty-Sixth Amendment highlights and attempts to rectify this inequality: A citizen in Lahore has the same constitutional right to clean air and water as a citizen in Balochistan, and thus the provincial government is under pressure to implement more effectively and the citizens have constitutional grounds to demand more resources from the federal government and technical assistance for them. (Tunio et al., 2025a) Article 9A raises the status of the Balochistan EPA to the core mechanism to address harms under the Constitution, thereby addressing the human rights aspect of the human suffering caused by chronic water scarcity and depletion of groundwater resources. It also mandates adherence to a high environmental threshold in the development of such large-scale projects undertaken by the federal government, such as CPEC investments in Gwadar, as a constitutional duty towards the local population (Khayam & Ahmad, 2020).

Until before the Twenty-Sixth Amendment, environmental governance in Pakistan's four provinces has taken many different shapes and forms, leaving each with its own set of priorities and principles. The issue in Punjab was balancing production of industrial products with the air quality (Sial, 2018), in Sindh it was the unavailability of technical infrastructure and failure of regulatory powers to enforce standards for municipal waste (Hameed et al., 2025), in KP it was the lack of accountability of officials and pervasive institutional corruption which was causing erosion of natural resources (Khan et al., 2024), and in Balochistan it was the chronic fiscal

decentralization shortcomings and weak technical infrastructure (Tunio et al., 2025a). The result was a long-lasting implementation gap, where environmental protection was regarded as an "administration option" and not a state responsibility. Article 9A is designed to counter this fragmentation by setting a common "floor" for environmental protection, based on the concept of a Fundamental Right, which creates constitutional pressure that will be felt by each of the provinces to ensure that provincial administration is aligned with federal human rights obligations (Tarar & Tarar, 2025). In all four jurisdictions, the question that should be considered rather than whether a specific policy is administratively reasonable is whether a specific state action or inaction infringes a citizen's constitutional right to sustainable environment (Shaikh 2024). Combined, the results suggest that the Twenty-Sixth Amendment has improved the effectiveness of the governance system not only by imposing an added layer of statutory commitment on government, but also by making the responsibility to protect the environment a constitutional requirement for government. Environmental justice becomes then not a privilege for higher status citizens but a right extended to all citizens regardless of provincial boundaries (Yousaf et al., 2025).

Environmental rights: constitutionalisation of rights

The focus of this section is on the second objective of the study, that is, the role of the constitutionalization of environmental protection and its effect on the gap between formal law and its actual implementation. In the past the environmental laws in Pakistan have been of ordinary legislative status and could thus be ignored, watered down, or indefinitely postponed by the executive. The Twenty-Sixth Amendment is a fundamental shift in the relationship between state and citizen, by giving these protections constitutional status. Without this Amendment, a clean environment was not considered a policy goal, but a right to be achieved; a wide, and sometimes elusive, judicial reading of the right to life, Article 9, was required for redress when states failed to take action to cleanse the environment (Khan et al., 2024). By incorporating article 9A into the constitution, the burden of interpretation has been removed, giving environmental protection equal standing with other constitutionally protected rights, such as freedom of expression and the right to a fair trial. The Amendment thus eliminates the necessity to infer what the environment's importance is to the Constitution, and instead provides assurances through the text. By doing so, it significantly increases the legal price of environmental non-compliance to provincial governments as well as to private actors, and provides each and every citizen with an enforceable legal instrument, which did not exist before (Haider, 2025).

A recurring issue in provincial EPAs is their institutional inadequacy and a lack of resources to enforce effectively, which is the topic of Section 4.1. The constitutionalization of the right to the environment is a judicial solution to this deficiency. The right is now entrenched in the Constitution, and citizens can circumvent under-resourced provincial regulatory bodies and instead go straight to the High Courts or Supreme Court, under Articles 199 and 184(3) of the Constitution, respectively. This is a judicial path that enables the judiciary to issue writs forcing the executive to take prompt corrective measures to address environmental degradation (Hameed et al., 2025). For instance, if the Sindh government and the Punjab government do not pay sufficient attention to the issue of marine pollution or smog, the judiciary has the potential of declaring the failure to address it as the violation of a Fundamental Right of the people, which in turn, will force them to allocate resources and exert political will to address the issue. In this

regard, the Twenty-Sixth Amendment doesn't introduce any additional layers of administrative obligation; it makes environmental protection a constitutional obligation that provincial inefficiency cannot serve to evade (Khan et al., 2024).

Conclusion, Policy Recommendations and Limitations

Conclusion

The right to a healthy, clean and sustainable environment has been introduced in the constitution of Pakistan, which is a great leap forward in the environmental governance system of the country. The 26th Amendment adds environmental protection to the fundamental rights of the people, which increases the constitutional responsibility of the state in protecting the citizens from pollution and degradation of the environment. This places environmental protection not only on the agenda of policy preference, but also on the grounds of state responsibility in the constitutional framework (Tarar & Tarar, 2025). The impact of this constitutional protection, however, will depend on the institutional capacity, financial resources, administrative autonomy and enforcement mechanisms of the authorities tasked with its implementation. Thus, there is a critical implementation gap for Pakistan that exists because the constitutional provisions are progressive, but their enforcement is not robust, and there is limited institutional capacity (Tunio et al., 2025a).

The impact of this Article 9A should also be taken into account in the context of post-18th Amendment governance structure of Pakistan, in which almost all environmental duties are transferred to the provinces. Thus, the capacity of the institutional frameworks at a provincial level is a key component of the process of operationalizing constitutional environmental rights. Punjab offers a relatively good scenario in terms of policy actions taken on smog and air pollution. However, the persisting power of big industrial players and lack of regulatory enforcement also shows that constitutional recognition is not enough. Article 9A, however, gives citizens a greater constitutional basis to seek judicial remedies when environmental authorities are not performing their duties (Tarar & Tarar, 2025).

Sindh exemplifies a higher level of implementation gap. The realization of environmental rights has been hampered by the weak enforcement of environmental regulations and poorly planned urban development despite the high levels of exposure to urban, industrial, air and water pollution. Therefore, Article 9A is especially significant in establishing a constitutional framework for citizens to seek greater environmental resource and public health protection (World Bank, 2023). The comparatively strong environmental policy efforts in Khyber Pakhtunkhwa include Billion Tree Tsunami. But there is still a need to take more steps to overcome the climate change and environmental degradation challenge problems faced by the rural communities (Yousaf et al., 2025). Balochistan is facing the severest institutional requirement due to its susceptibility to climate related disaster, low capacity of its administration and poor environmental governance systems. In this context, constitutional protection is still largely aspirational, if environmental institutions are deficient in terms of human, financial, and enforcement resources (Zaheer, 2019).

In general, the 26th Amendment should be seen as a beginning rather than an end to a constitutional framework of environmental governance that is rooted in rights. Whether it is effective or not will depend on the capacity of federal and provincial entities to convert

constitutional commitments into actionable environmental standards, sufficient environmental programmes, effective environmental regulation, and accessible environmental justice. Sustainable environmental governance cannot be only about the courts, although the judiciary can play an important role in ensuring that governments act. It needs institutional coordination, sufficient financial and administration resources, clear enforcement and meaningful public engagement. The future implications of Article 9A will ultimately be the ability of Pakistan to close the loop between mere constitutional obligation and effective implementation in ensuring environmental protection for current and future generations (Ullah & Hussain, 2025).

Policy Recommendations

In order to make the constitutional provision in Art. 9A a reality of substantive environmental protection, there is a need for reform of institutions, regulatory autonomy, financial assistance, judicial effectiveness, and citizen involvement. Provincial Environmental Protection Agencies need more autonomy in administrative and financial management, including clear accountability processes. More independence of institutions would mean that these institutions would be less susceptible to political and commercial pressures and enhance their ability to investigate offences, implement environmental compliance and successfully hold polluters to account. This should include appointments based on merit, adequate technical staffing, predictable funding and clear performance monitoring. Second, dedicated units dedicated to environment enforcement should be created within existing policing and regulatory system. Environmental law enforcement officers, ecological crime investigators, evidence recovery specialists and compliance officers may be drawn upon to enhance the response to illegal logging, hazardous materials disposal, industrial pollution and toxic dumping. The strength of enforcement capacity could also be enhanced by effective interagency cooperation, including between EPA, police and local governments.

Third, the Federal government must create a dedicated Constitutional Environmental Protection Fund to tackle environmental capacity issues in Provinces. The allocation mechanism should be based on a needs approach, where provinces and regions with a high climate vulnerability, environmental degradation and institutional limitations, especially Balochistan, should be considered first. The fund should be transparent, properly audited, and have measurable environmental performance indicators so that the implementation of Article 9A is done in an equitable manner on a federation wide basis. Fourth, judges' competence in environmental litigation should be enhanced. There is an urgent need for specialized training of judges and legal practitioners at the Federal Judicial Academy in the field of constitutional environmental rights, environmental laws, climate litigation, scientific evidence and new emerging environmental jurisprudence. This would enhance consistency and quality of environmental adjudication. Fifth, digital/ participatory environmental governance needs to be institutionalized. Digital platforms could allow citizens to gain access to environmental data, identify violations, check government reaction to the violations and see if the government is complying with the regulations. Citizen generated information can augment state monitoring capacity, augment transparency and accountability when suitably verified and integrated within formal monitoring systems.

Finally, there is a need to improve the coordination between the various federal institutions, between the different provincial governments, between the Environmental Protection Agencies and the local authorities, between the courts and civil society, as well as with the affected communities, in order to implement Article 9A effectively. The multi-level environmental

governance framework should be based on clear institutional responsibilities, shared environmental indicators, interoperable monitoring systems and regular public reporting. Together, these reforms would contribute to a fairer, accountable and sustainable approach to environmental governance in Pakistan and bring about a shift from a constitutional promise to an institutional reality of Article 9A.

References

1. Adam, H., Khan, M. S., & Ali, S. (2022). Environmental governance and the 18th Amendment: A critical analysis of provincial capacity in Pakistan. *Journal of Environmental Planning and Management*, 65(4), 567–585.
2. Ahmed, S., Khan, A., & Malik, M. (2025). Judicial activism and environmental jurisprudence in Pakistan: From Shehla Zia to Article 9A. *Pakistan Law Review*, 42(1), 45–63.
3. Ahsan, M., Bilal, M., & Raza, S. (2022). Climate change vulnerability and environmental governance in Pakistan: A review of institutional gaps. *Environmental Science & Policy*, 136, 112–125.
4. Ali, M., & Batool, S. (2023). Environmental risks in mega-projects: A study of CPEC infrastructure development. *Sustainable Development Quarterly*, 15(2), 88–104.
5. Ding, Y., Tunio, F. H., & Nabi, A. A. (2024). Harmonizing the complexities of financial development and fiscal decentralization in highly populated nations for monitoring environmental quality. *Heliyon*, 10(21).
6. Ehtasham, M., Qadir, A., & Ghufraan, M. (2021). Effectiveness of Environmental Impact Assessment (EIA) in Pakistan: Challenges and way forward. *Environmental Monitoring and Assessment*, 193(12), 802.
7. Fatima, N., & Maraghzar, A. (2024). Islamic perspective on environmental stewardship and its relevance to modern legal frameworks. *Journal of Islamic Legal Studies*, 10(1), 22–39.
8. Haider, A. (2025). Review of the 26th Amendment to the Constitution of Pakistan and the Fundamental Right of a Clean and Healthy Environment: A Case Study of New Article 9A. *International Journal of Law and Legal Advancement*, 1(1).
9. Hameed, U., Saeed, S., & Shahid, A. (2025). The right to a healthy environment in Pakistan: Legal recognition, enforcement challenges, and the way forward. *Law Research Journal*, 3(1), 61–71.
10. Iqbal, M. Z., Shahzad, K., & Arshad, M. (2024). Public participation in environmental decision-making: A case study of Punjab. *Governance and Public Policy Review*, 11(3), 142–159.
11. Khan, Z. (2025). Judicial interpretation of the Precautionary Principle post-Article 9A. *Supreme Court Review of Pakistan*, 19(2), 77–94.
12. Khuhro, A. A., Solangi, S., & Mahar, T. (2024). Environmental justice and marginalized communities: The impact of constitutional reforms in Sindh. *Sindh University Law Journal*, 18(1), 55–72.
13. Knox, J. H., & Pejan, R. (Eds.). (2018). *The human right to a healthy environment*. Cambridge University Press.
14. Lode, B., Schönberger, P., & Tedsen, E. (2016). Clean air, healthy life: Lifting the veil on the Sustainable Development Goals. *Journal of European Environmental & Planning Law*, 13(2), 147–170.

15. Preston, B. J. (2024). Substantive and procedural environmental rights: A global perspective. *Journal of Human Rights and the Environment*, 15(1), 12–35.
16. Rajper, S. A., Khuhro, M. R., & Iftikhar, E. (2024). *Climate change, environmental constitutionalism, right to life, and the inclusion of Article 9A to the Constitution through the 26th Constitutional Amendment*. *Qlantic Journal of Social Sciences*, 5(4), 414–425. <https://doi.org/10.55737/qjss.v-iv.24282>
17. ReliefWeb. (2023). *Pakistan: 2022 Monsoon Floods - Situation Report*. <https://reliefweb.int/report/pakistan/pakistan-2022-monsoon-floods-situation-report>.
18. Saleem, R., Anwar, S., & Jamil, F. (2025). Institutional capacity and environmental monitoring in the post-18th Amendment era. *Pakistan Development Review*, 64(1), 102–121.
19. Saqib, M., Rehman, A., & Ullah, I. (2023). Environmental sustainability in road infrastructure projects: A case study of Pakistan. *Journal of Sustainable Development*, 16(5), 45–60.
20. Shah, T. (2025). The implementation gap: Why environmental laws fail in Pakistan. *Asian Journal of Public Administration*, 47(2), 89–107.
21. Shaikh, N. (2024, November 4). Article 9A of the Constitution of Pakistan: A step in the right direction. *Paradigm Shift*. <https://www.paradigmshift.com.pk/article-9a-constitution/>.
22. Shelton, D. (2008). Stockholm Declaration (1972) and Rio Declaration (1992). In *Max Planck encyclopedia of public international law*. Oxford University Press.
23. Tarar, M., & Tarar, A. (2025). Constitutionalizing environmental rights: Implications for policy and governance in Pakistan. *Policy Studies Journal*, 53(1), 120–138.
24. Tunio, F. H., Nabi, A. A., Feng, Z. R., Magdalena, R., & Dawood, M. (2025). Climate damage resilience: How fiscal decentralization, environmental and economic factors shape the climate. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-025-07093-4>.
25. Tunio, F. H., Feng, Z. R., Fraz, T. R., Shahbaz, M., Khan, N. R., & Khamdamov, S. J. (2025). Environmental pollution and green intergovernmental fiscal relations: Fiscal decentralization for sustainable governance. *Journal of Environmental Management*, 394, 127313.
26. Tunio, F. H., Nabi, A. A., Dawood, M., & Shaikh, S. U. D. (2024). Fiscal policy for economic growth and environmental quality: insights from Pakistan's fiscal decentralization. *Discover Sustainability*, 5(1), 211.
27. Ullah, Z., Fen, T. X., Tunio, F. H., & Ullah, I. (2022). Impact of CO2 emissions, exchange rate regimes, and political stability on currency crises: evidence from south asian countries. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 9(2), 29-36.
28. Ullah, S., & Hussain, B. (2025). The efficacy of green benches in Pakistan's High Courts. *Asia Pacific Journal of Environmental Law*, 28(1), 55–74.
29. World Bank. (2023). *Pakistan climate and development report*. World Bank Group.
30. Yousaf, A., Kiran, A., Iqbal, M. A., & Hussain, M. (2025). Climate change effects on rural livelihoods in Pakistan: Legal and policy analysis. *GeoJournal*, 90(25).
31. Zaheer, F. (2019). *Legislation and the practices of environmental governance for sustainable development in Pakistan: A post 18th Amendment assessment*. *Journal of Political Studies*, 26(2), 97–110.