

## ENVIRONMENTAL CRIMES AND LAW ENFORCEMENT IN PAKISTAN

Dr. Parveen Gul<sup>\*1</sup>, Bushra Zeb<sup>2</sup>, Kainat<sup>3</sup>

<sup>\*1,2</sup>Lecturer in Law, Department of Law, University of Malakand, Dir Lower Chakdara

<sup>3</sup>Practicing Lawyer, Peshawar.

<sup>\*1</sup> [parveengul28@gmail.com](mailto:parveengul28@gmail.com), <sup>2</sup> [khan.bushrazeb@gmail.com](mailto:khan.bushrazeb@gmail.com), <sup>3</sup> [kainatgul543@gmail.com](mailto:kainatgul543@gmail.com)

### Corresponding Author: \*

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### ABSTRACT

Environmental crimes endanger both Pakistan's biological diversity and natural ecosystems, together with public health conditions. The country confronts multiple ecological challenges because of wildlife poaching, illegal logging, industrial pollution, and improper waste disposal. Despite having a legal framework to address these issues, enforcement remains weak due to institutional limitations, corruption, and lack of coordination among regulatory agencies. This research paper assesses the incidence of environmental crimes in Pakistan, current legislation on the issue, and the implementation of the laws. Employing cases and legal research, the paper aims to identify weaknesses in the governance area and offer suggestions for its improvement concerning environmental law enforcement. Leveraging technology for monitoring, strengthening institutional capacity, increasing public awareness, and fostering inter-agency collaboration are crucial for improving environmental governance. This research aims to contribute to effective law enforcement strategies and sustainable environmental policies in Pakistan.

**Keywords:** Environmental Crimes, Law Enforcement, Illegal Logging, Wildlife Poaching.

### INTRODUCTION

Environmental crimes have become one of the biggest challenges of the modern world as they directly affect states' global ecosystems, human health, and economic relations. In Pakistan, these are analyzed in illegal logging, wildlife poaching, industrial pollution, and improper waste disposal. These activities pollute natural resources, impact climate change, destroy habitats, and force-displace local people (Khan et al., 2020).

However, the main challenge has been poor compliance with these laws, limited institutional capacity, corruption, and a lack of inter-agency policy coherence and coordination (Ahmed, 2021). The anti-environment degrading laws of Pakistan are the Pakistan Environmental Protection Act 1997, the Forest Act 1927, wildlife protection acts, etc., but these have not been implemented effectively (Government of Pakistan, 1997).

This research aims to assess the extent of environmental crimes in Pakistan, evaluate the adequacy of the laws in the region and determine the difficulties in implementing them. Some of the main goals of this paper are to outline the gaps in governance and suggest recommendations to strengthen law enforcement. Eradicating these challenges is inevitable for achieving long-term environmental sustainability and compliance with global environmental standards (WWF-Pakistan, 2021).

### OVERVIEW OF ENVIRONMENTAL CRIMES IN PAKISTAN

Pakistan is surrounded by several environmental crimes, among which most of them have a terrible impact on biological diversity as well as human

health. The different ecological crimes that are evidenced in the country comprise the following:

### **1. Illegal Logging and Deforestation**

Deforestation, otherwise called the act of logging or timber production that is carried out outside legal regulation, is one of Pakistan's most significant and prevalent environmental and socio-economic problems. There is evident danger due to the fast depletion of forests in the world, including loss of biodiversity, ecological changes, and intervals of destruction of properties. As many measures have been put in place to conserve forest resources, various cases exist of people engaging in unlawful exercises that negatively impact the forest. Thus, weak law enforcement and corruption are the two prime causes of violations in Pakistan's framework of illegal logging.

Forest protection laws remain the most infringed laws because of corruption and the fact that there is inadequate funding or resource allocation to the enforcement agencies. Namely, as Ali et al. (2021) stated, there is always a high level of cooperation between the forest officials and the loggers in most regions. Also, economic factors make people turn to register in organized and unorganized forms of criminal operations to engage in logging. According to Ahmed and Qureshi (2020), thousands of people are employed in the timber trade, even if they work illegally.

Some of the most common causes of deforestation in Pakistan include farming and the expansion of cities. The unrestricted use of agricultural land and urbanization has forced the shrinking of forest cover (Khan & Shah, 2019). Besides these, improper use of forests has violated the legal process in the forest. According to the UN Development Program (UNDP, 2022), Pakistan has no effective forest management structure, enabling high logging.

Some of the significant impacts caused by deforestation include soil erosion, loss of fauna and flora, and climate alteration. Research shows that the overall percentage of forests in the total area of Pakistan stands at less than 5%, which is increasing concern for environmental problems (Rahman et al., 2021). Also, the penetration of timber and plywood brought about deforestation and depletion of tree topography, which implied natural occurrences such as floods. According to the Pakistan Meteorological

Department (2023), deforestation has also led to other occurrences, such as flash floods in the northern part of the country.

The social and economic impacts of deforestation are also felt to a great extent. Traditional reliance on forests leads to financial challenges among the communities relying on the forests in the current society. Zafar et al. (2021) also show that Indigenous people of the Khyber Pakhtunkhwa and Gilgit-Baltistan have been displaced and earn less. There are other impacts of the loss of the forests. The effects of the loss of forests also extend to tourism, wildlife conservation as well and ecological factor.

### **2. Wildlife Poaching and Trafficking**

Either directly or indirectly, poaching and Wildlife trafficking are significant concerns in the protection of Wildlife in Pakistan. The country has diverse ecosystem structures and many species of animals, but most of them are at risk due to hunting and selling. The lack of strong implementation of legal instruments to protect wildlife and the high demand for exotic animals and animal products secure the existence of this unlawful activity (Sheikh & Molur, 2020).

However, the wildlife of Pakistan is under tremendous pressure from poaching, including snow leopards, markhor, and pangolins. Its fur, horn, and scales are famed in the black markets, and these animals are used in illicit practices (Mahmood et al., 2019). In addition, hunting the houbara bustard (*Chlamydotis undulata*), a migratory bird, has come under criticism from the international community because the species is listed as vulnerable (Khan et al., 2021).

Another problem that originates from poaching is that certain species cause disruptions in the ecosystem as predators and prey are wiped out from the population (WWF-Pakistan, 2022).

Consequently, the following factors have been accredited to wildlife trafficking in Pakistan. Poaching and famine help in the non-implementation of wildlife protection laws, while the international market is highly active in selling exotic animals and body parts of the species (Sheikh & Molur, 2020). Wildlife products are trafficked through several modes that bring illegal wildlife products, especially to China and the Middle East,

for traditional medicine and luxury products (Mahmood et al., 2019).

That is why corruption within the organizations that are supposed to regulate and combat the trafficking process also poses another impediment to enforcing anti-trafficking measures. Wildlife traffickers and border checkpoints can take advantage of rarely enforced legislation, resulting in negligible or no risk of facing the law (Khan et al., 2021).

Current efforts by Pakistan include having several laws that regulate the actions taken against wildlife poaching and trafficking, such as The Pakistan Wildlife Protection Act, and provincial laws, such as the Punjab Wildlife (Protection, Preservation, Conservation, and Management) Act (WWF-Pakistan, 2022). Moreover, Pakistan is a signatory to international treaties such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), through which it is prohibited to trade in endangered species (Sheikh & Molur, 2020).

Nevertheless, enforcement is challenging due to the issues in the availability of enforcement resources and lack of public awareness. Some attempts have also been made by governments and other NGOs like WWF-Pakistan and the Snow Leopard Foundation to involve the community in conservation activities and to develop the capacity of police agencies (Mahmood et al., 2019).

### **3. Industrial Pollution**

The problem of industrial pollution in Pakistan is critical due to air, water, and soil pollution. The problem has been worsened in this case due to increased industrialization, a lack of firm policies and procedures to adhere to, and an unmoving implementation of environmental policies. This paper aims to discuss the causes and effects of industrial pollution in Pakistan and seek ways by which the effects may be reduced. Industrial pollution results from man's careless actions, hampering the environment's growth and its future. The proximity with which industrialized toxic waste directly into natural water sources can be seen as one of the major causes of industrial pollution in Pakistan. Several industrial effluents, especially from textile, leather tanning, and chemical units, are released in rivers and canals without treatment

(Ahmad & Rehman, 2020, January 31). Besides this, industrial plants mostly do not offer proper collection, storage, and disposal facilities for hazardous wastes, which means they accumulate on the surface and in the water tables (Rashid et al., 2019).

One is air pollution due to significant carbon monoxide, sulfur dioxide, and particulate matter emissions from industries. Their low fuel quality, along with the use of old machinery, helps further deteriorate the air quality of cities, including Karachi and Lahore (Hassan et al., 2022).

Pollution in industrial areas poses a very gloomy effect on the environment and has a knock-on impact on individuals and the entire ecosystem. People who suffer most are those from marginalized regions that use polluted water for drinking and irrigation in case of any disease breakout, such as cholera or dysentery (Ali & Javed, 2018). Exposure and soil contamination remain silent threats that negatively affect agricultural yield and, as such, human sustenance. To this effect, industrial emissions lead to asthma and chronic bronchitis. As per the study done by Shah et al. in 2021, pollution adversely affects cardiovascular and other health consequences of industries and environmental factors.

### **4. Improper Waste Disposal**

Waste management, more so improper waste management, is a critical concern in Pakistan's society and environment. Its poor management arises due to the exponential rate at which the nation is urbanizing, its giant populace, and the inefficiency of resulting waste management regulations. Discriminate disposal of solid wastes leads to pollution of the environment, diseases, and financial losses (Ali et al., 2021).

There are many causes of poor waste disposal in Pakistan. One of these is the absence of structures to transport and adequately dispose of wastes. According to Khan et al. (2020), in big cities, it is estimated that about 40% of the data is not collected and ends up being dumped open, burned, or buried. Moreover, there is a low sensitization of the general public on the matters of waste and recycling segregation, which worsens the situation (Ahmed & Raza, 2019).

Pollution of the environment, ranging from water, air, and soil pollution, results from poor waste disposal. In this case, open dumping sites pollute fresh water sources and impose severe health impacts on human health. (Javed et al., 2022). The incineration of waste also generates gases such as carbon monoxide and dioxins, which contaminate the air and cause respiratory diseases (Khalid & Mehmood, 2021). Likewise, littering has contributed to poor hygiene and the proliferation of diseases affecting vulnerable persons in the community (Farooq et al., 2018).

The official waste management policies within the government of Pakistan include the Pakistan Environmental Protection Act of 1997, among others, and the Clean Green Pakistan initiative. However, the enforcement is inefficient and financially corrupt, which is the primary reason for all these issues (Rahman & Qureshi, 2020). The problem is that most local authorities do not have enough money to implement proper waste management collection and recycling programs and are not ready to deal with those problems.

#### **LEGAL FRAMEWORK FOR ENVIRONMENTAL PROTECTION**

To control environmental crimes, Pakistan has enacted a few laws. These legislation include the following;

##### **a. Pakistan Environmental Protection Act (PEPA) 1997**

The Pakistan Environmental Protection Act (PEPA) of 1997 serves as the foundation for environmental governance in the country. Environmental legislation in the country includes an act requiring environmental impact assessment and another offering regulatory measures on pollution (Government of Pakistan 1997). Nevertheless, this law has not been implemented to the full extent due to low compliance.

##### **b. The Forest Act, 1927**

This act is important for deforestation and the illegal trade of timber, which is regulated in the Forest Act of 1927. Government policy also provides consequences for those who get involved in the unlawful exercise of logging. However, the act is

commonly encountered with corruption and a lack of supervision (Ali, 2018).

##### **c. Wild Protection Laws**

Each province in Pakistan has its own employment protection laws to govern hunting, poaching, and the protection of endangered species of animals. Nevertheless, these laws are compromised due to a lack of funds and inadequate measures (WWF-Pakistan, 2021).

##### **d. National Climate Change Policy 2012**

This policy was prepared to address other climate-induced environmental impacts by mainstreaming climatic change policies within the nation (Ministry of Climate Change, 2012). Nonetheless, the act's enforcement has proved to be a significant issue of concern.

#### **CHALLENGES IN LAW ENFORCEMENT**

Despite anti-environmental laws exist in Pakistan, their enforcement measures remain considerably inadequate because of numerous systematic and institutional issues. These are the reasons why regulatory mechanisms are not efficient in reducing environmental degradation. They include the lack of a strong institutional framework, the influence of corruption and politics, issues involving public awareness and compliance, and the lack of cohesion among the numerous environmental organizations.

##### **a. Institutional Capacity**

There is a severe lack of enforcement of most environmental laws due to the weak institutional capacity of the regulating bodies. As stated earlier, these environmental units do not have adequate financial and human resources to enforce these regulations (Zafar, 2020). The available funding makes it difficult for the agencies to perform routine inspections, supervise environmental offences, and enforce remedies. Also, inadequate personnel in the enforcement institutions result in inefficiency and make them even have the poorest performance in the regulation of environmental standards. Lack of resources and human power renders agencies ineffective, so they cannot monitor industries, businesses, and individuals to check corruption.



**b. Corruption and Political Influence**

Political connection significantly affects environmental laws since they are enhanced through corrupt processes. These include cases where the offenders engage in corrupt practices by purchasing influence from political offices or any other superior figure in the same or other government agencies (Ahmed, 2021). Legal enforcement agencies often ignore these vices due to the influence of bribery or pressure from other authorities, which makes their legal systems questionable. Consequently, industries that pollute or exploit natural resource sources go on with such practices without any hindrance. To fight corruption in environmental governance reforms, measures that should be taken are accountability, transparency, and equal application of the law.

**c. Public Awareness and Compliance Issues**

Another factor that compromises the enforcement of environmental law is the lack of public awareness and compliance with the provisions of the law. Most people and organizations do not know or perhaps do not adhere to environmental laws, or sometimes they choose not to do so due to the lack of proper checks and balances (Hassan, 2022). Education also remains a significant cause of loss in addressing the issue since people do not know their roles in conserving the environment. This is the reason why public education campaigns, as well as outreach programs, must be conducted. On the same note, even higher penalties for permit noncompliance can effectively discourage environmental compliance threats.

**d. Lack of Coordination Among Agencies**

The division of power between federal, provincial, and local governments results in blurred roles and authority for environmental protection organizations. There is a problem of either overlapping jurisdiction of Law enforcement organs or a lack of cooperation between different agencies (Nadeem & Hameed, 2019). They are all short life span organizations, and they operate independently; this leads to variability in the regulations and enforcement. In order to solve this problem, there is a need for enhanced cooperation between the agencies and departments entitled to environmental protection and management through information and operational

cooperation and the involvement of the same legal basis.

**RECOMMENDATIONS FOR STRENGTHENING ENVIRONMENTAL LAW ENFORCEMENT**

**a. Strengthening Institutional Capacity**

An essential objective of reformulation is to strengthen the capacity of regulators in Pakistan as part of an action plan to improve environmental law enforcement. This has led to increased demand for more funds, better training systems, and better personnel recruitment in the field. Most of the environmental agencies in the country work with inadequate means and, therefore, cannot monitor or enforce the laws. Thus, these institutions can enhance their supervisory and enforcement capacity by increasing their budget and workforce. Also, special educational courses would assist the officials in gathering adequate knowledge to handle complicated cases about the environment and laws.

**b. Enhancing Legal Frameworks**

There is a need to reform and enhance Pakistan's current environmental laws concerning present-day dynamics. Increasing the penalties for violation of environmental laws may discourage the culprits or organizations that contribute to the deterioration of the environment. Currently, laws to protect the environment are not well implemented, and penalties are not stiffer. This can be achieved if the fines are increased and the law states that the offender must be imprisoned and the punishment should be repeated. In addition, this would reduce the legal relativity that the violators would use in freely polluting the environment, increasing effective compliance among the firms and industries on the set environmental benchmarks and standards (Ali, 2018).

**c. Public Awareness Campaigns**

It is essential to increase public awareness of environmental laws and their responsibilities. Most organizations and even individuals are still ignorant of the effects that they pose on the environment. Awareness to the people, especially in schools, through educational programs, media campaigns, and workshops, may help people change their ways

and adhere to the laws governing the environment. Since promoting environmental consciousness can enlist the support of the public, enforcing laws will not always be necessary for them to adapt to environmentally friendly practices.

#### **d. Use of Technology in Monitoring**

There is enthusiasm for using technology in responding to environmental problems because it supports law enforcement exercises. Techniques like satellite surveillance, remote sensing, and digital tracking systems also assist the authorities in identifying violations occurring in their respective regions in the shortest time possible. For instance, satellite data can be applied for monitoring deforestation, unlawful mining operations and industrial pollution. Further, automation is also employed in industries where the emissions and the wastewater are monitored before being released into the environment as per specified environmental norms. Employing such technology increases the effectiveness of policing in apprehending and preventing crime since there is no need for manual examination (Zafar, 2020).

#### **e. Inter-Agency Collaboration**

Enhanced cooperation between different government departments is necessary for concrete enforcement of environmental law. One way of minimizing the problem is by coordinating a central environmental enforcement team with bodies like the EPA, law enforcement agents, and local authorities. It is only possible if all the company members involved in the management process insist on their norms, guaranteeing that they are detected and tackled in the best way possible when the violations occur. Moreover, engaging with nongovernmental organizations (NGOs) and other research institutions can produce more support for enforcement initiatives. Through the enhancement of inter-agency cooperation, the government can realize the formulation of proper environmental enforcement.

#### **CONCLUSION**

Environmental crimes in Pakistan pose significant threats to ecosystems, public health, and sustainable development. Though legal measures are meant for

the approach of legal instruments and environmental violations, the lack of enforcement mechanisms, corruption, and resources hamper the implementation of these legal frameworks. A combination of legal orientation, institutional development, societal sensitization, and technology adoption is called to tackle these challenges. Efforts from all three sectors & technological advances will help Pakistan progress toward enhanced environmental governance and ultimate conservation of the environment.

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