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# ENVIRONMENTAL CRIMES AND LEGAL STRUCTURE IN INDIA

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## ABSTRACT

Environmental crimes, including illegal deforestation, wildlife trafficking, industrial pollution, and the improper disposal of hazardous waste, pose severe threats to ecological stability and human well-being. These crimes disrupt biodiversity, contaminate natural resources, and endanger the health of present and future generations. In India, the challenges are intensified by rapid industrialization, urbanization, and population growth, which have placed immense pressure on natural ecosystems. Addressing these issues requires a robust legal and institutional framework capable of enforcing environmental accountability.

This paper critically examines the evolution of environmental crime regulation in India, tracing its development through constitutional provisions, legislative enactments, and judicial interpretations. The Constitution of India, through Articles 21, 48A, and 51A(g), establishes the right to a clean environment as a fundamental aspect of life and imposes duties on both the state and citizens to protect nature. Several major laws, including the Water (Prevention and Control of Pollution) Act, 1974; the Air (Prevention and Control of Pollution) Act, 1981; the Environment (Protection) Act, 1986; and the Wildlife (Protection) Act, 1972, collectively form the foundation of India's environmental governance.

The paper also explores significant judicial interventions such as *M.C. Mehta v. Union of India* and *Vellore Citizens Welfare Forum v. Union of India*, which have advanced key principles like sustainable development, the precautionary approach, and the polluter-pays principle. Despite this extensive legal framework, enforcement remains a persistent challenge due to weak institutional mechanisms, inadequate penalties, limited technical capacity, and low public awareness.

The study concludes that strengthening environmental governance in India requires not only stricter implementation of existing laws but also greater public participation, enhanced institutional coordination, and the integration of modern technology for monitoring and compliance. Ensuring environmental justice and accountability is essential for achieving sustainable and equitable development.

## **1. Introduction**

Environmental crimes have emerged as a critical global concern, posing severe threats to ecological balance, public health, and sustainable development. In India, rapid industrialization, urban expansion, and population growth have intensified environmental degradation, leading to rising levels of air and water pollution, deforestation, illegal mining, and wildlife trafficking. These unlawful activities not only damage ecosystems but also undermine the constitutional right to a clean and healthy environment, recognized under Article 21 of the Indian Constitution.

To address these growing challenges, India has developed a comprehensive legal framework for environmental protection. Major legislations such as the Environment (Protection) Act, 1986; the Water (Prevention and Control of Pollution) Act, 1974; and the Air (Prevention and Control of Pollution) Act, 1981 serve as the backbone of environmental governance. The judiciary, through landmark judgments, has further expanded environmental jurisprudence by introducing principles like sustainable development, polluter pays, and the precautionary approach.

Despite these efforts, weak enforcement, limited public awareness, and institutional constraints continue to hinder effective implementation. This paper examines the nature of environmental crimes in India, the evolution of legal frameworks, key judicial interventions, and the ongoing challenges in achieving environmental justice and accountability.

## **2. Concept and Nature of Environmental Crimes**

Environmental crimes refer to unlawful acts that harm or endanger the environment and disrupt the ecological balance essential for life. These crimes are distinct in nature because they often have diffuse victims, meaning that the entire community, ecosystem, or even future generations suffer the consequences. Unlike conventional crimes, the victims are not easily identifiable, and the harm is usually widespread and long-term.

Another characteristic feature is their scientific complexity, as proving environmental damage requires technical expertise, scientific investigation, and data analysis. This complexity makes detection, assessment, and prosecution particularly challenging. Furthermore, environmental crimes often occur within corporate or governmental contexts, where decisions are collective

and accountability becomes diluted.

Common types of environmental crimes include air and water pollution through industrial emissions and discharge of effluents; illegal deforestation and mining, which destroy habitats and natural landscapes; wildlife crimes such as poaching and illegal trade of endangered species; hazardous waste disposal, including violations of waste management norms; and noise and land pollution, resulting from unregulated construction, vehicular activity, and improper dumping of solid waste.

These crimes not only threaten ecological integrity but also violate the fundamental right to a clean environment, emphasizing the urgent need for stronger regulation and enforcement mechanisms.

### **3. Evolution of Environmental Law in India**

Environmental protection in India has developed through a progressive blend of constitutional mandates, statutory enactments, and judicial interpretation. Over time, these three pillars have collectively shaped a comprehensive legal framework aimed at balancing ecological preservation with economic growth.

#### ***3.1 Constitutional Provisions***

The Indian Constitution lays a strong foundation for environmental governance. Article 48A, under the Directive Principles of State Policy, directs the State to protect and improve the environment and to safeguard the country's forests and wildlife. Article 51A(g), a Fundamental Duty, imposes an obligation on every citizen to protect and enhance the natural environment, including forests, lakes, rivers, and wildlife. Furthermore, through judicial interpretation, Article 21—which guarantees the right to life—has been expanded by the Supreme Court to include the right to a clean and healthy environment, thus elevating environmental protection to the status of a fundamental right.

#### ***3.2 Key Legislative Framework***

A series of landmark legislations reinforce these constitutional values. These include The Water (Prevention and Control of Pollution) Act, 1974, The Air (Prevention and Control of Pollution) Act, 1981, and The Environment (Protection) Act, 1986, which together form the

core of India's environmental regulatory regime. Additionally, The Forest (Conservation) Act, 1980, The Wildlife (Protection) Act, 1972, The Public Liability Insurance Act, 1991, and The National Green Tribunal Act, 2010 have further strengthened environmental protection, creating both preventive and remedial mechanisms for addressing ecological harm.

#### **4. Institutional and Judicial Framework**

The enforcement of environmental laws in India rests upon a complex institutional and judicial network that collectively aims to safeguard ecological integrity, regulate industrial activity, and ensure compliance with environmental standards. Over the years, India has developed a multi-tiered structure of governance that integrates administrative agencies, statutory bodies, and judicial forums to implement and monitor environmental protection measures. Despite several challenges, this institutional framework remains the backbone of India's environmental governance system.

##### ***4.1 Enforcement Agencies***

The Central Pollution Control Board (CPCB), established under the Water (Prevention and Control of Pollution) Act, 1974, is the primary national agency responsible for the prevention and control of pollution. It formulates standards for air and water quality, coordinates with State Pollution Control Boards (SPCBs), and provides technical assistance to ensure compliance. It also advises the central government on matters concerning pollution abatement and environmental improvement.

The State Pollution Control Boards (SPCBs) function as the regional arms of the CPCB. They issue consent for industrial operations, monitor pollution levels, and enforce compliance within their respective states. However, these boards often face constraints in manpower, equipment, and funding, which limits their enforcement capacity. Strengthening the institutional capacity of SPCBs is therefore essential for effective environmental regulation at the grassroots level.

The Ministry of Environment, Forest and Climate Change (MoEFCC) serves as the central administrative authority overseeing the formulation and implementation of national environmental policies. It evaluates environmental impact assessments (EIAs), grants environmental clearances for developmental projects, and coordinates international commitments such as the Paris Agreement. The MoEFCC also frames policies related to forest conservation, biodiversity protection, and climate adaptation strategies.

The Wildlife Crime Control Bureau (WCCB), established under the Wildlife (Protection) Act, 1972, plays a critical role in combating wildlife trafficking and illegal trade in endangered species. It coordinates with international organizations such as INTERPOL and CITES to curb transnational wildlife crimes. The Bureau collects intelligence, assists law enforcement agencies, and ensures prosecution of offenders under wildlife protection laws.

One of the most significant institutional innovations in India's environmental governance is the National Green Tribunal (NGT), created under the National Green Tribunal Act, 2010. The NGT provides a specialized judicial forum for the effective and expeditious resolution of environmental disputes. It has jurisdiction over all civil cases where a substantial question relating to the environment arises under various enactments, including the Environment (Protection) Act, 1986 and Water and Air Acts. The Tribunal's establishment marked a paradigm shift toward environmental justice, allowing for the principles of sustainable development, the polluter-pays principle, and precautionary principle to be judicially enforced.

#### ***4.2 Role of the Judiciary***

Beyond statutory institutions, the Indian judiciary—particularly the Supreme Court and High Courts—has been a driving force in shaping environmental jurisprudence through judicial activism. The courts have expanded the interpretation of Article 21 of the Constitution to include the right to a clean and healthy environment as a fundamental right. Through Public Interest Litigations (PILs), the judiciary has intervened in numerous cases to address environmental degradation, enforce accountability, and direct the government to implement protective measures. Landmark cases such as *M.C. Mehta v. Union of India* and *Vellore Citizens Welfare Forum v. Union of India* have established key principles that continue to guide environmental law in India.

In essence, India's institutional and judicial framework represents a blend of administrative regulation and judicial oversight. While the system has made notable progress, its success ultimately depends on the effective coordination, transparency, and empowerment of these institutions to ensure genuine environmental justice.

### **5. Challenges in Combating Environmental Crimes**

Despite India's extensive environmental legislation and a proactive judiciary, the country continues to struggle with effectively preventing and prosecuting environmental crimes. These

challenges stem from institutional weaknesses, legal gaps, socio-political pressures, and limited public engagement. Together, they undermine the enforcement of environmental laws and impede the achievement of sustainable environmental governance.

### ***5.1 Weak Enforcement and Institutional Limitations***

One of the foremost challenges in addressing environmental crimes in India is weak enforcement. Although laws such as the Environment (Protection) Act, 1986 and Air and Water Acts provide strong statutory provisions, their implementation is inconsistent. The Central and State Pollution Control Boards (CPCB and SPCBs) are often under-resourced and understaffed, which limits their ability to monitor industries and respond promptly to violations. Environmental inspections are infrequent, and many industries continue to operate without valid consent or compliance certifications. Consequently, violations such as illegal effluent discharge, unregulated mining, and hazardous waste dumping often go undetected or unpunished.

Furthermore, the conviction rate in environmental cases remains low due to procedural delays, weak investigation, and insufficient coordination between environmental agencies and law enforcement authorities. Many cases drag on for years, diluting their deterrent effect. The absence of a centralized database for tracking environmental offenses also hampers data-driven enforcement and policy formulation.

### ***5.2 Corruption and Political Influence***

Corruption and political interference pose another major challenge. In several instances, environmental clearances and project approvals have been influenced by vested economic and political interests, compromising ecological sustainability. The environmental clearance process is often criticized for being a mere formality rather than a rigorous assessment of potential ecological impact. Such irregularities have resulted in the sanctioning of industrial and infrastructure projects in ecologically sensitive areas, leading to deforestation, loss of biodiversity, and pollution.

Additionally, local authorities may face pressure from political or corporate actors to overlook violations or delay enforcement actions. This culture of impunity weakens public trust in environmental governance and erodes institutional credibility.

### ***5.3 Lack of Technical Expertise and Scientific Capacity***

Environmental crimes often involve complex scientific and technical evidence—such as pollutant analysis, emission data, and ecological impact assessments—which require specialized knowledge to interpret and present effectively in court. Unfortunately, many enforcement officials, prosecutors, and even judges lack sufficient training in environmental science and forensic investigation. This knowledge gap results in poorly constructed cases, weak prosecution, and difficulty in securing convictions. Establishing specialized environmental investigation units and enhancing scientific collaboration between regulatory and research institutions could significantly improve enforcement capacity.

### ***5.4 Inadequate Punishments and Legal Loopholes***

The penalties prescribed under several environmental laws are often insufficient to deter offenders. In many cases, fines are nominal compared to the profits gained through illegal activities such as mining, logging, or pollution. Furthermore, procedural loopholes allow violators to exploit delays in the judicial process. There is an urgent need to revise these penalties to reflect the true cost of environmental damage and to hold corporate executives personally liable for deliberate violations.

### ***5.5 Public Awareness and Community Participation***

Another major constraint is the lack of environmental awareness among citizens. Many people remain unaware of their environmental rights, the existence of redressal mechanisms such as the National Green Tribunal (NGT), or their own duties under Article 51A(g) of the Constitution. Without active citizen participation, monitoring and reporting of environmental crimes remain limited. Public education, environmental literacy programs, and community-based monitoring can play a crucial role in bridging this gap.

### ***5.6 Way Forward***

To overcome these challenges, India must focus on institutional strengthening, capacity building, and technological modernization. Investing in digital monitoring systems, remote sensing, and data analytics can enhance detection and transparency. Additionally, fostering inter-agency collaboration, ensuring judicial efficiency, and encouraging community involvement are essential for creating a robust and accountable environmental protection

framework.

## **6. Comparative Perspective**

A comparative analysis of environmental crime regulation reveals significant differences between India and developed jurisdictions such as the United States and the European Union (EU). In these regions, environmental crimes are treated as serious felonies rather than minor regulatory offenses. Strong institutional frameworks, rigorous enforcement mechanisms, and specialized legal provisions ensure accountability for environmental violations.

In the United States, the Environmental Protection Agency (EPA) plays a central role in implementing federal environmental laws such as the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act. The U.S. system emphasizes strict liability and imposes both civil and criminal penalties, including imprisonment, for corporate and individual offenders. The Department of Justice (DOJ) works closely with the EPA to prosecute environmental crimes, ensuring deterrence through consistent enforcement and public transparency.

Similarly, the European Union has adopted comprehensive directives, including the Environmental Crime Directive (2008/99/EC), which mandates that member states criminalize serious environmental offenses. The EU also integrates environmental accountability into trade, energy, and industrial policies, promoting a holistic approach to sustainable governance.

In contrast, India's environmental legal system, though extensive and progressive, continues to face challenges in enforcement and institutional capacity. Weak monitoring, limited prosecution, and insufficient deterrence undermine the effectiveness of its environmental laws. Bridging these implementation gaps requires India to adopt best practices from global models, such as specialized environmental prosecutors, stronger penalties, and enhanced inter-agency coordination, to ensure meaningful environmental justice.

## **7. Recommendations**

To effectively combat environmental crimes and strengthen environmental governance in India, a multidimensional approach is essential. The following recommendations aim to improve enforcement, accountability, and public participation while promoting technological and institutional innovation.

First, **enforcement mechanisms** must be strengthened by empowering the **Central Pollution Control Board (CPCB), State Pollution Control Boards (SPCBs)**, and local authorities with adequate funding, trained manpower, and operational autonomy. These institutions should function independently, free from political influence, to ensure fair and efficient regulation.

Second, the establishment of **special environmental courts and dedicated police units** would enable the timely investigation and prosecution of eco-crimes. Specialized investigative wings can focus on complex cases involving corporate or transnational environmental violations.

Third, **enhanced penalties** are necessary to ensure deterrence. Corporate officers and decision-makers should be held personally liable for negligence or deliberate environmental harm. Fines and imprisonment terms must be proportionate to the ecological and social damage caused.

Fourth, **capacity building and training programs** for judges, prosecutors, and enforcement officers are vital to improve scientific understanding and case handling.

Fifth, **public participation** should be encouraged through citizen monitoring, environmental education, and whistleblower protection to promote transparency and accountability.

Finally, the **use of technology**, including satellite surveillance, digital pollution tracking, and AI-based environmental monitoring systems, can revolutionize detection and compliance. Collectively, these measures will strengthen India's environmental governance framework and ensure effective prevention and prosecution of environmental crimes.

## **8. Conclusion**

Environmental crimes pose one of the most pressing challenges to sustainable development by eroding ecological integrity, threatening human health, and depleting natural resources. While India has established a comprehensive legal and institutional framework for environmental protection, including progressive legislation and an active judiciary, the persistent gap between law and enforcement continues to undermine its effectiveness. Weak monitoring systems, limited institutional capacity, and low conviction rates allow environmental offenders to escape accountability, resulting in continued ecological degradation.

To achieve genuine environmental justice, India must transition from a reactive to a preventive approach. This shift requires proactive policy implementation, strict enforcement of

environmental laws, and the integration of modern technologies for real-time monitoring and data-driven decision-making. Strengthening institutional mechanisms, enhancing inter-agency coordination, and imposing stricter penalties are crucial steps toward ensuring deterrence and compliance.

Equally important is fostering public awareness and participation. Citizens, communities, and civil society organizations must be empowered to act as stakeholders in environmental protection through information access, environmental education, and whistleblower protection. The judiciary, through its continued vigilance, must also ensure that environmental governance remains transparent and accountable.

Ultimately, safeguarding India's environment demands a collective effort that balances economic growth with ecological preservation. A preventive, participatory, and technology-driven framework will be essential to uphold environmental justice and secure a sustainable future for generations to come.

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