
FROM CRIMINAL SANCTIONS TO CIVIL PENALTIES: ASSESSING THE EFFICACY OF THE ADJUDICATION MECHANISM IN THE BIOLOGICAL DIVERSITY (AMENDMENT) ACT, 2023

Arun, Research Scholar at Bennett University (Times Now Group), Greater Noida, U.P.¹

ABSTRACT

The Biological Diversity (Amendment) Act 2023 represents a paradigm shift in India's environmental governance framework, shifting from criminal penalties to civil penalties, and implementing an adjudication-based system of environmental enforcement. This is a legislative shift that is a part of a global trend towards decriminalisation and regulatory streamlining, which is often linked to “trust-based governance” and more efficient administration. The primary purpose of the Act is to streamline the process for biodiversity management, to simplify compliance requirements, and to enhance the responsiveness of regulatory bodies to biodiversity management. Yet, the change implies significant questions about the effectiveness of deterrence, the breadth of administrative discretion and the effectiveness of enforcement in respect of protection of biological resources. The paper critically examines the effectiveness of the adjudication mechanism provided for in the amended Act by a doctrinal and comparative legal research method. It contends that while civil penalties can aid in efficiency of judicial proceedings and lower judicial burden, they are highly reliant on institutional capacity, proportionality of the penalties and certainty of enforcement. The research also points to a lack of deterrent and possible inconsistencies in adjudication, which can help to make things difficult for conservation. It suggests a balanced enforcement mechanism with a mix of civil and criminal penalties to sustain compliance and ensure biodiversity conservation in India.

Keywords: Biological Diversity Act 2023; Civil Penalties; Adjudication Mechanism; Environmental Law; Decriminalisation; Regulatory Governance; Biodiversity Protection; India; Compliance; Criminal Sanctions.

¹ Research Scholar at Bennett University (Times Now Group), Greater Noida, U.P

Introduction

The Biological Diversity Act, 2002, was introduced as an all-encompassing legislation for regulating access to biological resources, sustainable use of these resources and implementing fair and equitable benefit sharing as per India's international commitments under the Convention on Biological Diversity and Nagoya Protocol. The Act originally had a very strict enforcement approach, which was mainly criminal, imposing imprisonment and fines on those involved in any violation concerning unauthorised access, transfer and commercial use of biological resources without prior permission from the competent authorities. This punitive mechanism was designed to ensure that the system is followed rigorously and that it prevents exploitation of biodiversity. In practice, however, it frequently resulted in delays in procedure, extended litigation and administrative inefficiencies, reducing the effectiveness of biodiversity governance.

To tackle these challenges, the Biological Diversity (Amendment) Act, 2023 provides for a major change in the regulatory approach by substituting monetary fines for imprisonment as punishment and setting up an adjudication system with designated adjudicating officers. This reform reflects India's policy of "ease of doing business" and trust-based regulation which seeks to minimise criminalisation of minor regulatory violations, rationalise compliance processes, and promote research and innovation and sustainable use of biological resources.²

However, there are significant legal and policy issues to consider in this transition. Eliminating criminal liability can diminish the deterrent effect of the law, especially when the biological resources are sensitive resources exploited on a large commercial scale or when they are biopiracy. Moreover, the success of the new civil penalty system relies on the institutional capacity, independence and professionalism of the adjudicating bodies. Issues of procedural fairness, uniformity of application and the possibility for regulatory discretion to be applied differently to individual cases also arise. To conclude, a critical evaluation is needed to see if the new paradigm from criminal sanctions to civil penalties under the Amendment 2023 is enough to provide effective, equitable, and sustainable biodiversity protection in India.

² Mishra, P. (2025). The Biological Diversity (Amendment) Act 2023: A gateway to sustainable access? *Environment and Development Journal*, 27(1), 1–15.

Objective of the Study

The study aims to:

- Look at the changes made to the 2023 Amendment from criminal sanctions to civil penalties
- Analyse the structure and the working of the adjudication mechanism.
- Discuss effectiveness of civil penalties in complying with the rules.
- Identify legal and institutional difficulties in implementation.
- Recommend policy proposals to enhance enforcement of biodiversity

Research Methodology

The methods used in this study are doctrinal and analytical.

Doctrinal Approach

This is a doctrinal research based study that focuses on the legal framework for protecting biodiversity in India, specifically the Biological Diversity Act, 2002 and the Biological Diversity (Amendment) Act, 2023. It comprises a systematic study of the main legal sources, such as statutes, amendments, and access and benefit-sharing related rules. Further, the government report, policy document, official publications from the Ministry of Environment, Forest and Climate Change and National Biodiversity Authority are critically analyzed to identify the policy intentions behind the amendment. Where relevant, judicial interpretations are also taken into account to analyse how courts have interpreted the obligations and enforcement mechanisms related to biodiversity. In addition, international environmental agreements like the Convention on Biological Diversity (CBD) and the Nagoya Protocol are studied to assess India's adherence to global environmental obligations. This doctrinal analysis enables to detect legal principles, interpretative issues and loopholes in the revised regulatory regime.³

³ Tiwari, P., & Nandekar, U. P. (2025). Impact of the Biological Diversity (Amendment) Act 2023 on biodiversity protection regime in India. *Journal of Intellectual Property Rights*, 30(2), 177–187.

Analytical Approach

The study is analytical and provides analytical evaluation of the effectiveness of the civil penalty regime introduced by the Biological Diversity (Amendment) Act, 2023. It includes a systematic evaluation of the effectiveness of the transition from criminal to civil penalties in meeting the goals of deterrence, compliance and continued biodiversity governance. The analysis is targeted toward the functional efficiency and outcomes of civil penalty systems, such as their effectiveness as a deterrent and to ensure that environmental regulations are being enforced in time.

In addition, the study examines institutional capacity of adjudicating bodies charged with enforcing the new enforcement mechanism. This encompasses an assessment of their technical expertise, independence, procedural efficiency, and their capacity to deal with complex biodiversity-related disputes. Consistency of administration is also explored in depth as is the provision of administrative infrastructure.⁴

Moreover, the study draws insights from other jurisdictions' approaches in environmental law to provide a global best practice framework for India's approach. The study compares the civil and criminal liability regime of hybrid systems and highlights the strengths and weaknesses of the Indian system. This analytical approach gives an all-round view of the effectiveness of the revised Act in meeting regulatory efficiency, and ecological protection and deterrence goals.

Data Sources

The main sources of secondary data sources used in the present study are mainly derived from the fundamental sources that form the basis of the Biological Diversity (Amendment) Act, 2023 and the enforcement. These are sources like authoritative textbooks, peer-reviewed journal articles, scholarly research papers and government publications related to legal reforms, environmental regulation and biodiversity governance in India. Reportage of statutory bodies like Ministry of Environment, Forest and Climate Change and National Biodiversity Authority is also checked to capture policy implementation and administration views.

Along with domestic literature, the study also includes comparative international legal

⁴ Ministry of Environment, Forest and Climate Change. (2023). Biological Diversity (Amendment) Act, 2023. Government of India.

literature for contextualizing India's regulatory approach in the international frameworks of environmental governance. This involves academic publications, policy analysis and enforcement related to biodiversity laws, environmental compliance systems and enforcement mechanisms in various jurisdictions. Comparative literature can facilitate the identification of best practices and alternative forms of enforcement, especially of a civil and criminal nature.

The study is not of primary fieldwork or empirical data collection but extensively uses secondary and comparative legal resources, which allows for a comprehensive, structured and analytically sound analysis of the adjudication mechanism in the amended Act.

Result:

Table 3: Distribution of Research Methodology Components in the Study on the Biological Diversity (Amendment) Act, 2023

Research Component	Key Focus Areas	Weight/Importance (%)
Doctrinal Approach	Statutes, rules, CBD, Nagoya Protocol, judicial interpretation	40%
Analytical Approach	Effectiveness of civil penalties, institutional capacity, comparative models	35%
Data Sources (Secondary)	Books, journals, reports, policy documents, international literature	25%

Interpretation

The distribution of components of research methodology adopted in the study of the Biological Diversity (Amendment) Act, 2023 is presented in the table below. It signifies that the research framework and methodology are highly dependent on the doctrinal approach accounting for 40 percent, while the research method relies on statutory provisions, legislative changes, international conventions like Convention on Biological Diversity, and judicial interpretations. It reflects the importance of legal text and formal sources as key components in building up the

analytical framework of the research.⁵

The analytical component represents 35 percent of the methodology, highlighting the strength of the assessment of civil penalties, institutional capacity of the enforcement bodies and comparative enforcement formats. This indicates the focus of the study on critical analysis of mechanisms of implementation in practice. The secondary data sources account for 25 percent and include scholarly literature, government reports and policy documents on both the doctrinal and analytical aspects of the subject. Overall, the distribution is reflective of a balanced methodology and has a stronger legal and evaluative orientation.

Distribution of Research Methodology Components (Biological Diversity Amendment Act, 2023)

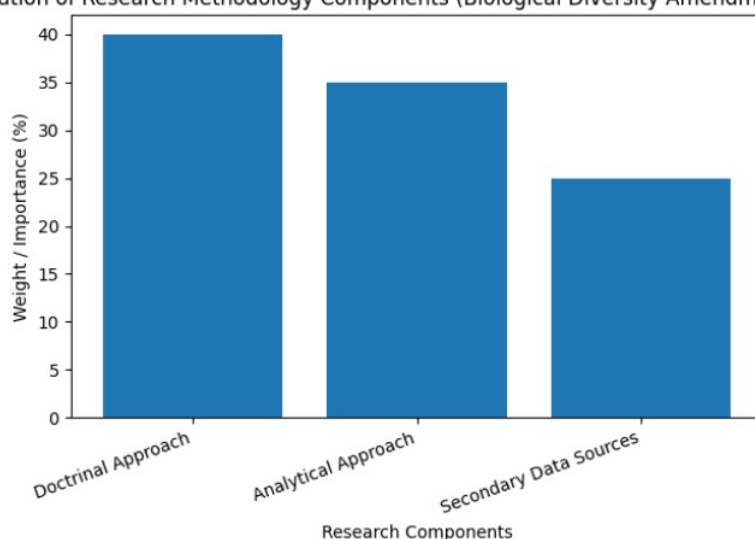


Figure 3: Distribution of Research Methodology Components in the Study on the Biological Diversity (Amendment) Act, 2023

Move away from Criminal Sanctions and toward Civil Penalties

Nature of Reform

The Biological Diversity (Amendment) Act, 2023 brings about a paradigm shift in the enforcement mechanism, taking away the custodial penalties and substituting it with monetary fines under the aegis of designated adjudicating officers. This is a radical change from the former punitive criminal enforcement scheme of the Biological Diversity Act, 2002 (Biodiversity Act), which was based largely on prosecution and incarceration as means to

⁵ National Biodiversity Authority. (2024). Annual report on biodiversity governance in India.

securing compliance. The reform marks a step towards a regulatory civil enforcement system that emphasizes an efficient administration, simplicity of procedure, and speed of the processes for the clearing of the violation.

The revised framework defines violations of access, utilisation, and benefit-sharing mechanisms to be no longer criminal, but civil offences punishable by a fine. Rather, they are handled by civil penalties that are determined by adjudicating bodies that have the authority to determine violations and impose financial penalties. This change aligns with a wider policy stance of “trust based governance” and minimalizing the use of the criminal justice system.⁶

This shift in norms also affects the nature of environmental enforcement, as criminalization is removed and may diminish the enforcement effect, however. Reform, of course, is not only a change in procedure, but also a change in the perception and regulation of biodiversity violations in the environmental legal framework in India.

Policy Rationale

The aim of “promoting a more facilitative governance framework” is the primary policy rationale for the Biological Diversity (Amendment) Act, 2023 and is closely linked to “improving regulatory efficiency”. One of the important factors is the minimization of judicial burden, because the previous criminalization model under the Biological Diversity Act, 2002 led to a lot of litigations, delay in the judicial processes and overloading the criminal justice system. Adjudicating officers are expected to resolve violations more quickly – the amendment aims to achieve this through the adoption of a civil penalty regime – which will enhance overall enforcement efficiency.

Another priority is to increase ease of compliance, including for researchers, industries and institutions involved in the use of biological resources. The reform also seeks to promote research and innovation, with the intention of alleviating the criminal prosecution risks resulting from procedural and/or technical infringement and liberalising access to biological resources for the purposes of science.

Also, the streamlining of regulatory process is supposed to establish a more predictable and transparent compliance atmosphere. These benefits have not been without concern, however,

⁶ United Nations. (2022). Convention on Biological Diversity implementation guidelines.

as the transition has brought into question the effect on deterrence, particularly in instances of severe and extensive biodiversity offences. However, critics say that fines won't stop companies from doing what's bad for the environment, just to make a profit.⁷

The Adjudication Mechanism

The Biological Diversity (Amendment) Act, 2023 establishes a structured adjudication framework where adjudicating officers will have the main task to enforce civil penalties. These officers have the authority to investigate alleged violations, to conduct formal inquiries, to establish the degree of non-compliance, to impose monetary penalties, to determine environmental damage resulting from illegal access or misuse of biological resources. This institutional structure marks a major departure from the previous institutional structure in the Biological Diversity Act, 2002, which relied on criminal prosecution in judicial courts for enforcement.

The amendment shifts the enforcement responsibility from the criminal courts to administrative adjudication, thereby making the resolution of cases quicker and judicial backlog less. The mechanism aims to enhance the regulatory efficiency and streamline compliance process. At the same time, this transition introduces an element of reliance on the decisions made by the executive which may lead to inconsistencies, lack of transparency, and fluctuations in the process of making decisions. The success of the adjudication system relies on the independence, expertise and accountability of the officers who adjudicate.

Discussion

The Biological Diversity (Amendment) Act, 2023 replaces the existing criminal penalties with civil ones, which streamlines the process and facilitates prompt action for enforcing compliance.

This transition helps to lighten the load for criminal courts and minimizes the stigma of criminal prosecution and encourages compliance in a voluntary sense. The effectiveness of such an approach, however, will depend on the extent to which monetary penalties are high enough to offset economic gains from the non-compliance. Low and/or unevenly applied penalties can

⁷ Sharma, R. (2023). Decriminalisation trends in Indian environmental law. *Indian Journal of Environmental Law*, 18(2), 45–62.

fail to produce noteworthy deterrence.⁸

One of the main issues is the lower deterrent effect of civil penalties as opposed to criminal penalties, especially when the actors are corporations or when a large number of biological resources have been exploited. For these organizations, fines can be viewed more like business expenses than punishment, which decreases the preventive impact of fines. The adjudication system is also constrained institutionally, as there is limited technical expertise among adjudicating officers, potential risk of inconsistent application of penalties, no independent oversight of the adjudication system, and a broad administrative discretion that can result in a selective application of penalties.⁹

Furthermore, in high-value biodiversity sectors, economic powerful actors can go ahead and commit violations, if the returns from the violations are greater than the costs of the violations. This demonstrates weaknesses in compliance oversight. Thus, a hybrid approach to enforcement, where light penalties are applied to minor breaches and more severe penalties if the harm is serious and/or deliberate, seems more appropriate for achieving effective governance of biodiversity and long-term regulatory compliance.

Comparative Perspective

International Frameworks and Enforcement Standards

Different international environmental governance systems set important rules for the protection and sustainable management of biological resources, such as the Convention on Biological Diversity (CBD). They stress the importance of laws being ineffective if they are not accompanied by the necessary robust, consistent and effective regulatory mechanisms. The implementation of biodiversity commitments relies on states' capacity to deliver concrete results in enforcing the law.

Under such international mechanisms, one of the key points is the need for the capacity to enforce. This includes the availability of effective regulatory institutions, well-defined legal processes, and monitoring systems in place to identify and correct violations. Enforcement

⁸ Gupta, A. (2024). Regulatory reforms and biodiversity governance in India. *Environmental Policy Review*, 12(1), 78–95.

⁹ Singh, V., & Verma, P. (2024). Environmental adjudication and administrative penalties in India. *Law and Society Review India*, 11(2), 55–73.

mechanisms should also be effective at encouraging compliance by individual, corporate and other entities exploiting the biological resources.¹⁰

In addition, international standards place emphasis on the fact that accountability and deterrence are at the heart of environmental governance. Any legal measure, even if well formulated, can be ineffective if it is not accompanied by credible enforcement measures. Thus, global biodiversity frameworks support states to establish robust and effective enforcement systems that are built on clear legislation and effective enforcement, without compromising the conservation goals.

The Principle of Proportionate Penalties

Proportionality of penalties is a key cornerstone of international biodiversity and environmental law, requiring that penalties for violations be "proportional, fair, and context-sensitive. These principles include the severity of penalties must match the nature, gravity and consequences of the environmental damage done. Minor or technical violations that do not cause any serious or significant ecological harm are usually sanctioned by lighter civil or administrative sanctions, while more serious violations such as the exploitation of biological resources on a large scale or irreversible ecological damage will be sanctioned more severely in terms of punitive measures.

This proportional approach has two important functions. It is fair, in that it won't allow for excessive punishment for minor violations, and Second, it provides enhanced deterrence because serious offenders can have a better reason to fear the consequences of their actions, as the consequences are meaningful and outweigh the economic gain of not complying. International treaties, laws and conventions, such as the biodiversity governance standards, highlight that overly high or low penalties may weaken the credibility of regulation and its effectiveness in achieving compliance.

Thus, proportionality contributes to a fair and fair enforcement system. It helps to facilitate sustainable environmental governance and ensures that penalties are legally valid, and practically aligned with conservation objectives and ecological protection needs.¹¹

¹⁰ Kumar, S. (2023). Criminal to civil transitions in environmental enforcement. *Journal of Indian Legal Studies*, 14(1), 23–41.

¹¹ OECD. (2021). Environmental compliance and enforcement systems.

Responsibility and governance of institutions

One of the core elements of good environmental governance in global legal frameworks is institutional accountability. Practices throughout the jurisdictions focus on the need for regulators tasked with enforcing biodiversity and environmental legislation to be transparent, consistent and fair in their procedures. This protects against arbitrary, biased or outside pressures affecting enforcement action. To ensure that enforcement authorities do not exercise discretionary powers to the detriment of the public interest, there needs to be clear oversight mechanisms, such as internal review systems, independent monitoring bodies and judicial oversight.¹²

If accountability measures are not robust, the regulations may be implemented in a preferential way, with penalties applied differently to firms in the same industry, and the people's confidence in environmental governance systems may be undermined. It is, however, crucial that institutional design include features which support the uniformity of interpretation and application of the legal provision in various cases and in different regions. Moreover, ongoing audits, performance reviews, and reporting systems reinforce administrative accountability and enhance compliance results.

The global models of environmental governance also emphasize the accountability of institutions, not just a legal responsibility, but also a moral one, where they have to act for the common good of ecological sustainability. Increasing institutional accountability ultimately increases the credibility, effectiveness and legitimacy of environmental enforcement structures, which will lead to improved environmental protection of biodiversity resources.¹³

Adoption of Hybrid Enforcement Models

The integration of civil, administrative and criminal liability into a single environmental governance framework has become the trend across a number of jurisdictions in the world. This is rooted in the understanding that environmental offenses are of many types, have various degrees of harm, and have different levels of impacts; thus, the enforcement action must be differentiated. Minor or technical violations are typically handled with civil fines or

¹² National Law University Delhi. (2025). Environmental regulatory reforms in India: A critical review. NLU Delhi Working Paper Series.

¹³ IUCN. (2023). Biodiversity law and enforcement frameworks: Global review report.

administrative sanctions, which are often more efficient and expedient. There is also a level of seriousness when it comes to violations of the law, with intentional acts of ecological damage, exploitation of natural resources on a large scale or repeated infringements of the law being prosecuted criminally to ensure strong deterrence and accountability.¹⁴

The hybrid model is an improvement on the regulatory flexibility as it allows the authorities to adopt a more flexible approach when deciding on the enforcement measures to be taken regarding the severity of the offence. It also increases the overall compliance, preventing offenders from simply considering the penalties as a cost of doing business. Moreover, civil and criminal means lead to an enhanced responsiveness of the legal system and allow to keep the standards of environmental protection. A hybrid system of enforcement is more effective than purely civil or purely criminal systems when it comes to achieving sustainable biodiversity governance and longer-term ecological conservation goals.

Conclusion

As a result, the Biological Diversity (Amendment) Act, 2023 is a major and forward-looking change in India's environmental governance framework, from a mostly criminal approach to environmental enforcement, to a civil penalty-based adjudication approach. The rationale behind this reform is partly to increase administrative efficiency, lighten the load for judges and facilitate compliance for stakeholders involved in the use of biological resources. The purpose of introducing adjudicating officers and monetary penalties is to speed up the resolution of violations and facilitate regulatory processes.¹⁵

Nevertheless there are important concerns with the amended framework about long term effectiveness of biodiversity protection, but these benefits are worth considering. A major issue is the potential for lessening the deterrent effect, as civil fines may not always be enough to deter high dollar or intentional ecological offenses. Furthermore, the institutional capacity, discretion in enforcement and differential application of penalties can impact the consistency and credibility of the regulatory regime. There is also the danger that the preventive effect of monetary penalties will be diminished by the fact that they become part of the cost of operations

¹⁴ World Bank. (2022). Environmental governance and regulatory effectiveness.

¹⁵ Rajan, K. (2024). Adjudicatory mechanisms in Indian regulatory law. *Indian Journal of Public Administration*, 70(4), 332–349.

for economically strong parties.

Thus, the overall effectiveness of the Act is contingent on the robustness of institutional mechanisms, the proportionality of the penalties and the effectiveness of monitoring and oversight systems. In this regard, a transition towards a hybrid enforcement model (mild violations, civil penalties and serious and intentional damage, criminal penalties) can be seen as a more balanced and effective way of achieving both regulatory efficiency and long-term biodiversity conservation.¹⁶

¹⁶ Bhat, S. (2023). Quasi-decriminalisation in environmental laws in India. National Law School Working Paper Series.

REFERENCES

1. Mishra, P. (2025). The Biological Diversity (Amendment) Act 2023: A gateway to sustainable access? *Environment and Development Journal*, 27(1), 1–15.
2. Tiwari, P., & Nandekar, U. P. (2025). Impact of the Biological Diversity (Amendment) Act 2023 on biodiversity protection regime in India. *Journal of Intellectual Property Rights*, 30(2), 177–187.
3. Ministry of Environment, Forest and Climate Change. (2023). Biological Diversity (Amendment) Act, 2023. Government of India.
4. National Biodiversity Authority. (2024). Annual report on biodiversity governance in India.
5. United Nations. (2022). Convention on Biological Diversity implementation guidelines.
6. Sharma, R. (2023). Decriminalisation trends in Indian environmental law. *Indian Journal of Environmental Law*, 18(2), 45–62.
7. Gupta, A. (2024). Regulatory reforms and biodiversity governance in India. *Environmental Policy Review*, 12(1), 78–95.
8. Singh, V., & Verma, P. (2024). Environmental adjudication and administrative penalties in India. *Law and Society Review India*, 11(2), 55–73.
9. Kumar, S. (2023). Criminal to civil transitions in environmental enforcement. *Journal of Indian Legal Studies*, 14(1), 23–41.
10. OECD. (2021). Environmental compliance and enforcement systems.
11. World Bank. (2022). Environmental governance and regulatory effectiveness.
12. Bhat, S. (2023). Quasi-decriminalisation in environmental laws in India. National Law School Working Paper Series.
13. Rajan, K. (2024). Adjudicatory mechanisms in Indian regulatory law. *Indian Journal of Public Administration*, 70(4), 332–349.
14. IUCN. (2023). Biodiversity law and enforcement frameworks: Global review report.
15. National Law University Delhi. (2025). Environmental regulatory reforms in India: A critical review. NLU Delhi Working Paper Series.