
BIODIVERSITY WITHOUT BENEFIT: REASSESSING INDIA'S LEGAL COMMITMENTS IN LIGHT OF THE KUNMING-MONTREAL FRAMEWORK

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ABSTRACT

This paper critically evaluates India's Biological Diversity Act, 2002 (BDA), in light of the 2023 amendments, with respect to the commitments of the Kunming-Montreal Global Biodiversity Framework (GBF). The paper traces the evolution of international biodiversity governance from the Convention on Biological Diversity (CBD) and the Nagoya Protocol to the GBF and situates India's legislative framework within this global context. It argues that while the BDA has institutionalized Access and Benefit-Sharing (ABS) mechanisms and established multi-tiered governance structures, gaps such as corporate accountability, weak enforcement, and the dilution of penalties through the 2023 amendment persist and undermine India's obligations under the GBF. The analysis highlights the tension between judicial interventions that expanded environmental rights under Article 21 of the Indian Constitution and legislative reforms that curtail oversight. As India enters a critical phase of green innovation and just transition policies, the paper calls for recalibrating biodiversity governance to prioritize equitable benefit-sharing, community participation, and ecological justice.

Keywords: Biodiversity Law, Access and Benefit-Sharing, India, Kunming-Montreal Framework, Ecological Justice, Environmental Governance

1. INTRODUCTION

“The value of biodiversity is that it makes our ecosystems more resilient, which is a prerequisite for stable societies; its wanton destruction is akin to setting fire to our lifeboat”, states Johan Rockstrom, a famous Swedish scientist that is recognised for his work on global sustainability. Borrowing from the definition found in Article 2 of the Convention on Biological Diversity (CBD)¹, "Biological diversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."² Simply put, biodiversity provides everything in nature that we need to survive, including food, clean water, medicine, and shelter. This urgency is supported by the most recent data, which is the "Global Assessment Report on Biodiversity and Ecosystem Services"³ by IPBES, a seminal recent work stressing biodiversity loss. This thorough report claims that the fast-declining biodiversity poses a major threat to world ecosystems, human well-being, and sustainable development.⁴ Though the general focus falls on the risk of extinction of certain species, factors such as ecosystem extent and condition, biotic integrity, and total biomass, have all deteriorated sharply from the prehistorical baseline.⁵

With a great variety of flora and fauna supported by its varied climatic and geographical circumstances, India is one of the most biodiverse countries. In order to guarantee the preservation of biodiversity, India has passed a number of laws acknowledging its significance. The Biological Diversity Act, 2002, serving as the primary legislation of India with respect to biodiversity governance was enacted keeping in mind the objectives of the Convention on Biological Diversity, aligning national conservation efforts with the global objectives.⁶ CBD adopted at the United Nations Conference on Environment and Development (UNCED), is an

¹ Convention on Biological Diversity (adopted 22 May 1992, entered into force December 29 1993) (CBD) art 2.

² Matilda Petersson & Peter Stoett, 'Lessons Learnt in Global Biodiversity Governance' (2022) 22 Int'l Env't Agreements: Pol L & Econs 333 2Intl.

³ IPBES, *Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, (IPBES/7/10/Add.1, 2019).

⁴ Ankita Singh & others, 'The Silent Crisis: Navigating the complexities of biodiversity loss in the Anthropocene' (2023) RSD12.

⁵ IPBES, *Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, (IPBES/7/10/Add.1, 2019); Alejandro E. Camacho, 'De- and Re-Constructing Public Governance for Biodiversity Conservation' (2020) 73 Vand L Rev 1585.

⁶ Sikkim Biodiversity Board, 'Abs Mechanism Under the Biological Diversity act, 2002' (2015) https://sbbsikkim.nic.in/pdf/abs/abs_guidance_manual.pdf accessed 10 April 2025.

international treaty which aims at maintaining a balance between benefit-sharing, sustainable usage, and conservation of biodiversity.⁷

A notable milestone was achieved when parties to the CBD adopted the Post-2020 Global Biodiversity Framework in 2022, an agreement aimed at halting and reversing Biodiversity loss by 2030. The core of this framework emphasises the importance of equitable Access and Benefit-Sharing (ABS) mechanisms related to the utilisation of genetic resources, as well as the promotion of corporate responsibility and accountability.⁸ The ecological diversity of India, identified by a wide variety of species and ecosystems, underscores the importance of establishing effective mechanisms for Access and Benefit-Sharing (ABS) and frameworks for corporate accountability. Scholars have similarly emphasised the ecological and justice dimensions of biodiversity loss in India, arguing that legal frameworks remain fragmented and weakly enforced. This paper argues that India's Biological Diversity Act, 2002, especially after the 2023 amendments, falls short of the Kunming-Montreal Framework. It establishes the effectiveness of existing ABS mechanisms and the extent to which corporate accountability is enforced, thus critically examining whether current governance frameworks adequately address contemporary biodiversity challenges. The central research question addressed is: How effective is India's Biological Diversity Act, 2002, in enforcing corporate accountability and facilitating Access and Benefit-Sharing (ABS) mechanisms under the Post-2020 Global Biodiversity Framework?

2. THE INTERNATIONAL FRAMEWORK

The Convention on Biological Diversity was established to balance benefit-sharing, sustainable use, and biodiversity conservation by ensuring: a) the preservation of biological diversity; b) the sustainable use of biological diversity components; and c) the equitable distribution of benefits derived from genetic resource utilisation, which includes: - access to genetic resources; - the transfer of pertinent technologies; - the availability of adequate funding.⁹ While the Nagoya Protocol sought to ensure fair benefit-sharing, due to its ambiguous and inflexible

⁷ Convention on Biological Diversity (adopted 22 May 1992, entered into force December 29 1993); 'A Review of International Conventions Which Affect the Work of Botanic Gardens' (1999) 3 Botanic Gardens Conservation News.

⁸ IPBES, *Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, (IPBES/7/10/Add.1, 2019); Torsten Kurth & others, *The Biodiversity Crisis Is a Business Crisis* (Boston Consulting Group, 2021).

⁹ 'A Review of International Conventions Which Affect the Work of Botanic Gardens' (1999) 3 Botanic Gardens Conservation News.

rules, and further, due to complex national level compliance and procedures implementation became difficult.¹⁰

These shortcomings created the necessity for a more flexible and dynamic framework, resulting in the formation of the Post-2020 Global Biodiversity Framework, also known as the Kunming-Montreal Global Biodiversity Framework.¹¹ The Post-2020 Global Biodiversity Framework (GBF) is an initiative adopted under the Convention on Biological Diversity (CBD).¹² While it was built on the lessons of the Aichi Biodiversity targets which was set with the ideology of addressing biodiversity loss by 2020, it also advocates for the equitable and fair distribution of benefits that result from the utilisation of genetic resources, thereby directly aligning with the Nagoya Protocol and ABS regimes.¹³

This framework was brought in with the idea of halting and reversing the loss by 2030 to achieve a healthier ecosystem, as it places a strong emphasis on promoting the incorporation of biodiversity into economic, financial, and development systems.¹⁴ ¹⁵ An important part of the GBF's mission is to promote the incorporation of biodiversity values into public and corporate policies and practices at all governmental and non-profit levels. The Kunming-Montreal Global Biodiversity Framework (GBF) presents an approach with 23 interlinked targets, aiming not only to stop the decline of biodiversity but also to reshape development in a way that prioritises ecological sustainability, fairness, and responsibility. The framework extends beyond mere conservation, connecting biodiversity into the foundation of governance, finance, and social institutions. It achieves this by focusing on three essential aspects: ecological integrity, human well-being, and systemic transformation. For example, the goals aimed at restoring damaged ecosystems, conserving 30% of terrestrial and marine areas, and preventing species extinction (Targets 2-4) are rooted in the protection of biodiversity hotspots particularly significant for India, home to four of the world's biodiversity hotspots. Similarly,

¹⁰ Jeffrey A. Langholz & Wolf Krug, 'New Forms of Biodiversity Governance: Non-State Actors and the Private Protected Area Action Plan' (2004) 7 J Int'l Wildlife L & Pol'y 9.

¹¹ Convention on Biological Diversity (adopted 22 May 1992, entered into force December 29 1993).

¹² IUCN, *Post-2020 Global Biodiversity Framework* (Issues Brief, November 2022) <<https://iucn.org/resources/issues-brief/kunming-montreal-global-biodiversity-framework>> accessed 10 April 2025.

¹³ Matilda Petersson & Peter Stoett, 'Lessons Learnt in Global Biodiversity Governance' (2022) 22 Int'l Env't Agreements: Pol L & Econs 333 2Intl.

¹⁴ IUCN, *Post-2020 Global Biodiversity Framework* (Issues Brief, November 2022) <https://iucn.org/resources/issues-brief/kunming-montreal-global-biodiversity-framework> accessed 10 April 2025.

¹⁵ Grumbine, R. Edward, and Jianchu XU, 'Five Steps to Inject Transformative Change into the Post-2020 Global Biodiversity Framework.' (2021) BioScience 71, no. 6 <https://www.jstor.org/stable/27078739> accessed 10 April 2025.

objectives related to sustainable agriculture, wildlife trade, and urban planning (Targets 5, 10, 12) resonate with India's ongoing challenge of balancing biodiversity with rapid economic development.

In the context of India's legal and institutional framework, the GBF significantly enhances the importance of Access and Benefit-Sharing (ABS) through Target 13, while also incorporating corporations through Target 15, which requires disclosures related to biodiversity risks. The variables at play are closely linked to India's Biological Diversity Act of 2002, where the provisions for Access and Benefit Sharing are often not enforced effectively and applied unevenly to corporate entities. The systemic targets of the GBF – mobilizing finance (Target 19), eliminating harmful subsidies (Target 18), and integrating biodiversity into decision-making at all levels (Target 14) underscore the necessity for not only new legislation but also significant institutional reforms in India. The framework serves as both a guide and a reflection, it encourages India to assess whether its existing biodiversity policies genuinely address the magnitude of the ecological crisis and if they fall short, to adjust governance as needed.¹⁶ It becomes essential to critically assess the Biodiversity Act's implementation as India looks to connect its national biodiversity plan with the GBF. The following section assesses the Biological Diversity Act of 2002's legal, institutional, and political capacity to deliver on the Post-2020 Global Biodiversity Framework's crucial assertions.

3. INDIA BIOLOGICAL DIVERSITY ACT

India's ratification of the CBD in February 1994 served as an opportunity for domestic reforms, which included the development of the Biological Diversity Bill (1999) and, in the end, the Biological Diversity Act (2002). The legislative initiatives closely corresponded with the objectives of CBD by developing frameworks for Access and Benefit-Sharing (ABS), promoting the conservation of biodiversity, and acknowledging the rights of communities regarding traditional knowledge. India's active involvement with CBD encompassed the formulation of the National Biodiversity Strategy and Action Plan (NBSAP), which was a collaborative effort aimed at incorporating biodiversity considerations throughout various levels of governance.¹⁷ India was an integral part of the CBD's negotiating process that resulted

¹⁶ '2030 Targets (with Guidance Notes)' (Convention on Biological Diversity) <https://www.cbd.int/gbf/targets> accessed 10 April 2025.

¹⁷ Shalini Bhutani & Ashish Kothari, 'The Biodiversity Rights of Developing Nations: A Perspective from India' (2002) 32 *Golden Gate UL Rev* 587.

in the 2010 Nagoya Protocol on Access and Benefit-Sharing. The Protocol implemented CBD Article 15 by establishing a more comprehensive framework aimed at ensuring equitable benefit-sharing from the use of genetic resources. India's insistence on legally binding ABS mechanisms reflects its concern regarding biopiracy and the historical exploitation of traditional knowledge by foreign entities without consent or compensation.¹⁸

India's Biological Diversity Act (BDA), enacted in 2002, was a stepping stone towards its obligations under the CBD, following its ratification in 1994. The foundation of the act was based on ensuring conservation of biodiversity, sustainable use of its components, and fair and equitable sharing of benefits arising from the use of its resources.¹⁹ The Act was an attempt to institutionalise biodiversity governance through a multitiered structure of the National Biodiversity Authority (NBA), State Biodiversity Boards (SBBs), and local Biodiversity Management Committees (BMCs).²⁰

The Act's sections 3, 6, and 7 are the most important parts for controlling entry:

- a) Section 3 limits access to biological resources and related knowledge for non-citizens and foreign entities, mandating prior approval from the National Biodiversity Authority (NBA).²¹
- b) Section 6 requires obtaining prior approval from the NBA before applying for any form of Intellectual Property Rights, whether in India or abroad, when such rights are based on research or information relating to biological resources accessed from India or associated traditional knowledge.²²
- c) Section 7 imposes responsibilities on Indian citizens and companies, mandating that they inform the State Biodiversity Boards (SBBs) in advance before acquiring any biological resource for commercial use.²³

¹⁸ David Kothamasi & E. Toby Kiers, 'Emerging Conflicts between Biodiversity Conservation Laws and Scientific Research: The Case of the Czech Entomologists in India' (2009) Vol. 23, No. 5

¹⁹ Mitra Pal Singh, 'Biodiversity in India: Implementation and Barriers for Regulatory Acts' (2024) JSIANE Vol. 4, Issue 1.

²⁰ Pallavi Tiwari & Ujwal Prabhakar Nandekar, 'Impact of the Biological Diversity (Amendment) Act 2023 on Biodiversity Protection Regime in India: An Empirical Study' (2025) JIPR Vol 30.

²¹ Biological Diversity Act, s 3.

²² Biological Diversity Act, s 6.

²³ Biological Diversity Act, s 7.

Sections 19-21 of the Act establish the groundwork for Access and Benefit-Sharing (ABS). Section 21 clearly outlines that benefit-sharing can be either in monetary or non-monetary terms, granting the NBA the authority to establish the terms. The Biological Diversity Rules of 2004 (Rules 14-20) provided additional details on the process, while the 2014 Guidelines on ABS sought to clarify the mechanisms for benefit-sharing, encompassing joint IPR ownership, technology transfer, and capacity-building.²⁴ The Act outlines a three-tier structure with respect to implementation, with the NBA operating at the national level, SBBs functioning at the state level, and Biodiversity Management Committees (BMCs) working at the local level. However, research indicates significant issues with coordination among these entities. BMCs, the most fundamental element, frequently remain just a concept on paper. Their responsibilities in upholding People's Biodiversity Registers (PBRs) are often not met consistently, hindered by insufficient funding, training, and institutional backing.²⁵ Similarly, the State Boards often lack sufficient resources and possess limited power when it comes to addressing corporations that do not comply, and the operations of the NBA have been hindered by insufficient transparency and slow processing of applications.²⁶

In spite of its progressive objectives, the BDA has encountered persistent obstacles in its implementation, particularly in the areas of institutional coordination, corporate compliance, and ABS enforcement. The ground reality, as per NBA's official data, a total of 5,923 approvals had been granted as of September 2025, of which 857 were direct access permissions for bioresources since the Act went into effect, only a small minority have resulted in genuine benefit-sharing agreements, and even fewer have turned into monetary or community-level advantages.²⁷ A significant ruling in *Divya Pharmacy v. Union of India*, where the court clarified that domestic companies are not exempt from ABS obligations under Section 7, thereby reinforcing the principle that codified traditional knowledge, such as

²⁴ National Biodiversity Authority 'Approval Granted to the Applicants' <http://www.nbaindia.org/content/683/61/1/approvals.html> accessed on 10 April 2025.

²⁵ Mitra Pal Singh, 'Biodiversity in India: Implementation and Barriers for Regulatory Acts' (2024) JSIANE Vol. 4, Issue 1; Matilda Petersson & Peter Stoett, 'Lessons Learnt in Global Biodiversity Governance' (2022) 22 Int'l Env't Agreements: Pol L & Econs 333 2Intl.

²⁶ Aathira Perinchery, 'Bioresource Access and Benefit-Sharing: How Far Have We Come in India?' (Sandhya Sekar ed, Mongabay, 9 April 2020) <https://india.mongabay.com/2020/04/india-bioresource-access-and-benefit-sharing-how-far-have-we-come/> accessed 10 April 2025.

²⁷ National Biodiversity Authority 'Approval Granted to the Applicants' <<http://www.nbaindia.org/content/683/61/1/approvals.html>> accessed on 10 April 2025; Ministry of Environment, Forest & Climate Change, Implementation of Nagoya Protocol on Access and Benefit Sharing <http://nbaindia.org/uploaded/pdf/Implementation%20of%20Nagoya%20Protocol%20in%20India.pdf> accessed on 10 April 2025.

Ayurvedic formulations, still necessitates benefit-sharing.²⁸ However, the recent amendment of the Biodiversity Act has drawn criticism for weakening enforcement capacity and contradicting judicial clarity, furthering the complications of biodiversity governance by creating a disconnect between the judiciary and legislature.

4. ACCESS AND BENEFIT-SHARING MECHANISMS: PRACTICE VS. PRINCIPLE

The Access and Benefit-Sharing (ABS) principle, established under the Convention on Biological Diversity (CBD) and further developed by the Kunming-Montreal Global Biodiversity Framework (GBF), which builds upon the Nagoya Protocol, attempts to establish a system that ensures communities preserving biodiversity and traditional knowledge receive fair compensation when their resources are utilised for research or commercial endeavours. The Biological Diversity Act of 2002 in India, along with its ABS Guidelines from 2014, aims to bring this vision to life through the implementation of prior informed consent, mutually agreed terms, and a multi-layered approach that includes the National Biodiversity Authority, State Biodiversity Boards, and Biodiversity Management Committees.²⁹

Simply put, it can be understood that the motive behind these agreements is to ensure the protection of biological resources, but who are these entities that play the role of sharing their benefits? The sectors that rely heavily on biological resources are pharmaceuticals, agriculture, and biotechnological companies and more. Despite the existence of the Biodiversity Act, the engagement with corporate remains superficial. The compliance by these corporations is generally weak as many companies either fail to report their usage or underreport their obligations.³⁰ The BDA does not have a structured approach for mandatory corporate disclosures concerning biodiversity utilisation. No standardised reporting templates, timelines, or third-party verification mechanisms exist. In industries such as pharmaceuticals and biotech, this creates a regulatory gap, allowing companies to utilise resources without fulfilling benefit-

²⁸ *Divya Pharmacy v. Union of India* 2018 SCC OnLine Utt 1035; Pallavi Tiwari & Ujwal Prabhakar Nandekar, 'Impact of the Biological Diversity (Amendment) Act 2023 on Biodiversity Protection Regime in India: An Empirical Study' (2025) JIPR Vol 30.

²⁹ Ministry of Environment, Forest & Climate Change, *Implementation of Nagoya Protocol on Access and Benefit Sharing* <http://nbaindia.org/uploaded/pdf/Implementation%20of%20Nagoya%20Protocol%20in%20India.pdf> accessed on 10 April 2025; Alaknanda, 'A Critical Analysis of Implementation of Access and Benefit Sharing in India' (2020) E-JAIRIPA Vol. 1 (01).

³⁰ Mitra Pal Singh, 'Biodiversity in India: Implementation and Barriers for Regulatory Acts' (2024) JSIANE Vol. 4, Issue 1.

sharing responsibilities. Moreover, a direct clash frequently arises between the ABS framework and intellectual property laws, particularly when companies pursue patents while omitting the biological origin of their inputs which is a tactic that entirely bypasses ABS.³¹

The 2023 Amendment, in spite of existing inadequacies further weakens the framework. It dilutes enforcement instead of strengthening it. A significant and debated modification is the decriminalisation of offences under the Act, which substitutes criminal penalties, such as imprisonment, with monetary fines determined by administrative officers. The government presents this initiative as a means to simplify enforcement and enhance the “ease of doing business.” However, it is an action that diminishes the deterrent effect and weakens the accountability for corporations and research organisations that exploit biological resources.³² Further, there is an exemption created for AYUSH practitioners and users of codified traditional knowledge. This action weakens the integrity of India’s ABS framework, especially in light of the Kunming-Montreal Global Biodiversity Framework’s (GBF) Target 13, which calls for an expansion in benefit-sharing scope and inclusivity. The amendment simplified the access procedures for specific sectors, such as start-ups, research institutions, and non-commercial users, with the intention of fostering innovation in biotechnology and industries based on biodiversity. However, this leniency has raised questions on regulatory monitoring, particularly the rebranding of commercial activity as research to avoid obligations under ABS provisions. Furthermore, by refining the definition of benefit claimers and providing procedural shortcuts for certain industries, the amendment undermines the participatory role of local communities and Indigenous Peoples. This aspect was a fundamental element of the original legislation and a vital component of the GBF’s vision for fair biodiversity governance.³³ The 2023 Amendment signifies a notable change in policy, aimed at promoting commercial access to biological resources at the cost of community rights and ecological justice.

5. ADDRESSING THE ISSUES WITH INDIA AND ITS ECOLOGICAL JUSTICE

In India, environmental regulation is not based on strong legislative execution but on

³¹ Ministry of Environment, Forest & Climate Change, *Implementation of Nagoya Protocol on Access and Benefit Sharing* <http://nbaindia.org/uploaded/pdf/Implementation%20of%20Nagoya%20Protocol%20in%20India.pdf> accessed on 10 April 2025.

³² Pallavi Tiwari & Ujwal Prabhakar Nandekar, ‘Impact of the Biological Diversity (Amendment) Act 2023 on Biodiversity Protection Regime in India: An Empirical Study’ (2025) JIPR Vol 30.

³³ Alaknanda, ‘A Critical Analysis of Implementation of Access and Benefit Sharing in India’ (2020) E-JAIRIPA Vol. 1 (01).

constitutional and judicial involvement. While the Indian Constitution initially overlooked environmental rights, the 42nd Amendment of the Constitution brought forth Articles 48A and 51A(g)³⁴, which mandated both the state and its citizens to safeguard and enhance the environment. As time progressed, the judiciary especially the Supreme Court broadened the scope of Article 21 (Right to Life)³⁵ to encompass the right to a clean and healthy environment through significant decisions like *Subhash Kumar v. State of Bihar* and *Virender Gaur v. State of Haryana*, determining that environmental pollution poses a threat to the fundamental right to life and dignity.³⁶ Through Public Interest Litigation (PIL), courts introduced principles like Sustainable Development, Polluter Pays, and the Precautionary Principle, leading to the establishment of the National Green Tribunal (NGT) in 2010. The NGT has issued crucial rulings, such as the ban on rat-hole mining in Meghalaya in *State of Meghalaya v. All Dimasa Students Union* and directives on waste disposal, air pollution, and river pollution.³⁷ These interventions underscore how the judiciary has functioned as an institutional that intervenes to correct the bureaucratic inaction and industrial negligence.

Scholars highlight that despite the broadened rights by the courts, the enforcement of the same is substantially weak. Numerous PILs manage to secure court orders, yet often fall short in terms of ongoing implementation or effective follow-up strategies. Judicial intervention tends to be a response, activated only after considerable damage has taken place, instead of actively preventing ecological injustice through forward-thinking governance. Moreover, in numerous instances, legal instruments are either unreachable or ineffective for the communities most affected, particularly Indigenous and forest-dwelling groups, resulting in their ongoing marginalisation within environmental justice systems.³⁸ The 2023 Amendment to the Biological Diversity Act adds to these worries by significantly limiting the scope of judicial authority. The amendment diminishes the role of judicial review in biodiversity-related violations by decriminalising offences and shifting enforcement authority from courts to administrative officers. The exclusion of AYUSH practitioners and those utilising codified

³⁴ The Constitution of India, 1950, art. 48A; art. 51A(g.)

³⁵ The Constitution of India, 1950, art. 21.

³⁶ *Subhash Kumar v. State of Bihar* 1991 SCC OnLine SC 42; *Virender Gaur v. State of Haryana* (1995) 2 SCC 577; Peggy Rodgers Kalas, 'Environmental Justice in India' (2000) 1 Asia-Pac J on Hum Rts & L 97.

³⁷ *State of Meghalaya v. All Dimasa Students Union* (2019) SCC OnLine SC 822; Ubaid Sidique & Khurram Zaidi 'Rising to the challenge: A systematic review of the development of environmental justice in India' (2024) India Review Vol. 23, No. 4.

³⁸ Shubhajeet Shome, 'Environmental Justice Movement and Ecological Conflicts in India' (2020) 11 Indian JL & Just 204.

traditional knowledge further limits the scope of accountability under the law.

5.1.Can there be innovation for the just transition without exploitation?

An emerging risk for ecological justice in India is the global shift towards a “just energy transition” to renewable energies, where new industries such as including green hydrogen, biofuels, and biotech-driven carbon are rising in response to climate change intersecting with the territories, knowledge systems, and cultural identities of Indigenous and local communities.³⁹ In this context, the Access and Benefit-Sharing (ABS) mechanism under India’s Biological Diversity Act, 2002 becomes a necessary safeguard to ensure that the just transition does not become a form of ecological oppression. In the recent times as per Intellectual property rights and traditional knowledge, India has witnessed cases where pharmaceuticals and biotech companies have extracted and patented genetic resources such as the neem and turmeric plants without prior consent or benefit-sharing.⁴⁰ Such practices not only breach ethical standards but also highlight a fundamental flaw in legal systems i.e., for traditional knowledge to be freely exploited or used for innovation. The 2023 Amendment, by exempting codified knowledge, worsens this situation. This raises the question of whether India's transition to green innovation will include reparative justice for communities whose knowledge and resources are the foundation of new wealth in the context of just transition?

6. CONCLUSION

India is now at a crucial point with respect to biodiversity governance and ecological justice. While the Biological Diversity Act, 2002 offers a legislative blueprint aligned with the principles of the Convention on Biological Diversity and the Kunming-Montreal Global Biodiversity Framework (GBF), as shown in the paper, its implementation remains riddled with inconsistencies, weak enforcement, and limited participation especially after the amendment.

The Access and Benefit-Sharing (ABS) regime, designed to promote justice and equity, frequently operates more as a mere procedural formality than as a true mechanism for empowerment. Corporate accountability remains low, as compliance measures are often weakened or overlooked, particularly since the 2023 Amendment that limited judicial oversight

³⁹ Kristy Galloway McLean & others, ‘Energy Innovation and Traditional Knowledge’ (2012) Tropical Issue Series.

⁴⁰ James O. Young, ‘Profound offense and cultural appropriation, The Journal of aesthetics and art criticism’ (2005) 135-146.

and exempted powerful industries from essential obligations. The judiciary has been extensively instrumental in moulding environmental law in India, interpreting constitutional provisions to encompass environmental rights and intervening when legislation and administration have fallen short. However, this strong tradition of judicial advocacy now faces obstructions, as legislative reforms limit its scope, resulting in affected communities having fewer options for seeking justice. The global initiative to achieve a just energy transition serves as an additional layer of urgency. As India transitions to renewable and bio-based economies, the promise of innovation is accompanied by the threat of emerging forms of biopiracy, exclusion, and dispossession, unless biodiversity laws are adjusted to address these issues. It is of high importance that the ABS framework in India should transition from transaction-centric approach to one that encompasses participation, consent and justice.

In order to meet its global responsibilities and uphold its constitutional promises, India needs to implement substantial reforms that extend beyond mere symbolic actions. A genuine transformative approach to biodiversity governance should guarantee fair benefit-sharing while also establishing accountability, respecting community rights, and integrating ecological justice throughout all levels of policy and practice. Unless India reforms its biodiversity governance, peaceful coexistence of nature and humans would remain an aspiration. It is imperative that the social and political ideology shifts from anthropocentric to a holistic ecocentric approach. This initiative will then create a change at the grassroot level. Otherwise, what will remain of humanity when nature's treasury runs dry, who would then bear the responsibility for biodiversity's silent collapse?