Naveen Shodh Sansar (An International Refereed / Peer Review Multidisciplinary Research Journal)
RNI No.- MPHIN/2013/60638, ISSN 2320-8767, E- ISSN 2394-3793, Scientific Journal Impact Factor (SJIF)- 8.054,
April to June 2026, E-Journal, Vol. I, Issue LIV (54), ISO 9001:2015 - E2024049304 (QMS)

Rights of Trees and Forests: A Commerce Perspective on Natural Capital, Environmental Governance, and Global Biodiversity Goals

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Abstract - Biodiversity constitutes a critical form of natural capital that underpins ecological stability, economic productivity, and long-term commercial sustainability. The World Economic Forum (2020) estimates that over US$44 trillion of global GDP is moderately or highly dependent on nature, underscoring the economic significance of biodiversity. In India, ecosystem services—including pollination, carbon sequestration, and non-timber forest products—generate substantial value for agriculture, forestry, trade, and rural livelihoods. Despite their economic importance, these services remain largely excluded from national accounting systems, corporate reporting, and measures of trade competitiveness.

This paper develops a commerce-based multidisciplinary framework to examine the rights of trees and forests through the lenses of natural capital accounting, corporate governance (CSR and ESG), trade competitiveness, environmental law, and social justice. The study adopts a qualitative, policy-oriented research design based on secondary data drawn from constitutional provisions, biodiversity legislation, corporate disclosure frameworks, ecosystem valuation studies, and reports published by the World Bank, UNEP, IPBES, IUCN, WWF, and the Dasgupta Review.

The analysis identifies three interrelated challenges in India's biodiversity governance: an implementation deficit, reflected in limited institutional and corporate enforcement despite progressive judicial interventions; an integration gap, arising from the inadequate incorporation of biodiversity into GDP estimation, CSR strategies, ESG reporting, and business decision-making; and an alignment gap, characterized by insufficient policy convergence with international biodiversity commitments, including the Sustainable Development Goals and the Kunming–Montreal Global Biodiversity Framework (2022–2030).

The paper recommends integrating biodiversity into Green GDP and natural capital accounting frameworks, strengthening biodiversity-linked CSR investments and ESG disclosure standards, promoting community-based forest commerce under the Forest Rights Act, 2006, and aligning trade and development policies with global biodiversity commitments. By positioning biodiversity as productive natural capital rather than merely an environmental or legal concern, the study demonstrates that conserving trees and forests is fundamental to economic resilience, commercial competitiveness, human well-being, and sustainable development.

Keywords: Biodiversity governance; natural capital accounting; corporate social responsibility (CSR); environmental, social and governance (ESG); rights of nature; Green GDP; Sustainable Development Goals (SDGs); Kunming–Montreal Global Biodiversity Framework (GBF 2022–2030); India.

Introduction - Biodiversity constitutes the foundation of ecological stability, economic productivity, and sustainable development. Beyond its ecological significance, biodiversity represents productive natural capital that supports agriculture, forestry, trade, tourism, ecosystem services, and long-term commercial resilience. According to the World Economic Forum (2020), more than US$44 trillion of global GDP is moderately or highly dependent on nature, highlighting the close relationship between biodiversity conservation and economic prosperity. However, accelerating habitat loss, climate change, pollution, and unsustainable resource use have placed global biodiversity under unprecedented pressure. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2019) estimates that nearly one million species are threatened with extinction, while the *WWF Living Planet Report* (2022) documents a substantial decline in monitored wildlife populations worldwide. These trends demonstrate that biodiversity loss has become not only an environmental concern but also an economic and developmental challenge.

India occupies a unique position within global biodiversity governance as one of the world's seventeen megadiverse countries, supporting nearly 7–8% of recorded species despite accounting for only 2.4% of the global land area. The *India State of Forest Report* (FSI, 2023) estimates

forest cover at 21.71% of the country's geographical area, although forest quality and ecological integrity remain uneven. India's forests generate valuable ecosystem services, including carbon sequestration, watershed protection, pollination, biodiversity conservation, and livelihood support for millions of people. Nevertheless, these ecosystem services continue to receive limited recognition within conventional measures of economic performance, public finance, and corporate decision-making.

The growing recognition of biodiversity as productive natural capital has expanded the relevance of commerce in environmental governance. The Dasgupta Review (2021) argues that sustainable economic development depends upon incorporating the value of nature into national accounting systems and policy decisions. Similarly, Corporate Social Responsibility (CSR), Environmental, Social and Governance (ESG) reporting, sustainability accounting, and Green GDP have emerged as important mechanisms for integrating biodiversity into business strategy and public policy. Despite these developments, biodiversity remains inadequately reflected in economic planning and corporate governance, limiting the effectiveness of conservation efforts and sustainable development initiatives.

India has established a comprehensive constitutional and legal framework for biodiversity conservation. Article 48A directs the State to protect and improve the environment, while Article 51A(g) places a fundamental duty upon citizens to safeguard forests, wildlife, and the natural environment. Landmark judicial decisions, including *T.N. Godavarman Thirumulpad v. Union of India* and *Mohd. Salim v. State of Uttarakhand* (2017), have further strengthened environmental jurisprudence. These constitutional provisions are complemented by legislation such as the Wildlife (Protection) Act, 1972, the Environment (Protection) Act, 1986, the Biological Diversity Act, 2002, and the Forest Rights Act, 2006. However, institutional fragmentation, uneven implementation, and limited integration of biodiversity into economic policy continue to constrain effective biodiversity governance.

Although biodiversity has been widely studied from ecological, legal, and policy perspectives, comparatively limited attention has been devoted to examining it through a commerce-oriented multidisciplinary framework that integrates natural capital accounting, corporate governance, constitutional principles, environmental rights and duties, and global biodiversity commitments. Addressing this gap, the present study analyses the rights of trees and forests through the lens of commerce and sustainable development. It argues that biodiversity conservation should be understood not merely as an environmental obligation but as a strategic investment in natural capital that supports economic resilience, responsible business practices, social well-being, and the achievement of national and global sustainability goals.

Review of Literature

Legal and Judicial Perspectives: The recognition of legal rights for nature has emerged as an important development in environmental jurisprudence. Stone (2010) argued that natural entities such as trees, forests, and rivers should possess legal standing, laying the intellectual foundation for the Rights of Nature movement. In India, judicial interventions such as *T.N. Godavarman Thirumulpad v. Union of India* and *Mohd. Salim v. State of Uttarakhand* (2017) expanded environmental protection through constitutional interpretation. Internationally, Ecuador, Bolivia, and New Zealand have recognized legal rights for nature through constitutional or statutory mechanisms, demonstrating that effective implementation depends upon institutional governance and community participation (Boyd, 2017; Cullinan, 2011). From a commerce perspective, secure legal protection of biodiversity provides an institutional foundation for sustainable resource governance, responsible investment, and long-term economic resilience.

Economic and Commercial Perspectives: Recent literature increasingly recognizes biodiversity as productive natural capital essential for sustainable economic development. The Dasgupta Review (2021), the World Bank (2021), and the TEEB initiative emphasize that ecosystem services generate substantial economic value but remain inadequately reflected in GDP and national accounting systems. International frameworks such as the System of Environmental-Economic Accounting (SEEA) further support integrating environmental assets into economic planning. In India, studies by FSI (2023), CSE (2019), Gadgil and Guha (1995), and Kashwan (2020) highlight the relationship between biodiversity, governance, and sustainable development. Emerging corporate mechanisms such as CSR, ESG reporting, sustainability accounting, and responsible investment provide opportunities to incorporate biodiversity into business strategy, although practical integration remains limited. Recent commerce-oriented research has also emphasized the economic valuation of forest biodiversity by linking ecosystem services with human health, sustainable development, and the Sustainable Development Goals, thereby strengthening the application of natural capital accounting within biodiversity governance (Garg, 2025).

Human Rights and Duties: Internationally, biodiversity conservation has increasingly been recognized as a human rights issue. The UN Human Rights Council Resolution 48/13 (2021) recognized the right to a clean, healthy, and sustainable environment, while SDG 15 emphasizes biodiversity conservation. In India, Article 21 and Article 51A(g) together establish a constitutional framework that combines environmental rights with civic responsibilities. Ethical frameworks such as the Earth Charter (2000), together with scholars including Nash (1989) and Cullinan (2011), argue that environmental stewardship extends

beyond legal compliance to moral responsibility. From a commerce perspective, these principles increasingly influence corporate governance, ESG performance, responsible supply chains, and stakeholder accountability.

Social Welfare and Community Empowerment: Biodiversity conservation contributes significantly to social welfare, livelihood security, and inclusive development. Shiva (1988) demonstrated the close relationship between ecological degradation, gender justice, and community empowerment, while the Chipko Movement highlighted the importance of local participation in forest conservation. Gadgil and Guha (1992, 1995) linked ecological inequality with socio-economic disparities, and the Forest Rights Act (2006) strengthened community participation in forest governance. CSE (2019) further documents how community-based conservation improves both biodiversity outcomes and rural livelihoods. However, relatively little research has examined biodiversity as a driver of inclusive economic development within a commerce-oriented framework.

Global Frameworks and Comparative Experiences : International biodiversity governance has evolved through a series of influential treaties, scientific assessments, and policy frameworks that increasingly recognize biodiversity as both an ecological necessity and an economic asset. The Convention on Biological Diversity (CBD, 1992) established the first comprehensive global framework for biodiversity conservation, sustainable use, and equitable benefit-sharing. More recently, the Kunming–Montreal Global Biodiversity Framework (2022–2030) reaffirmed global commitments by establishing measurable targets, including the conservation of at least 30% of terrestrial and marine ecosystems by 2030.

Scientific assessments have significantly strengthened the evidence base supporting biodiversity policy. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services Global Assessment Report (2019) documents accelerating biodiversity loss and its implications for ecosystem services, while the Intergovernmental Panel on Climate Change Sixth Assessment Report (2022) emphasizes the interdependence of climate change and biodiversity conservation. Similarly, the World Wide Fund for Nature Living Planet Report (2022) and the International Union for Conservation of Nature Red List (2023) provide internationally recognized indicators for assessing biodiversity trends and conservation priorities.

The scholarly literature has also advanced the Rights of Nature discourse through influential contributions by Stone (2010), Nash (1989), Cullinan (2011), and Boyd (2017). Comparative experiences from Ecuador, Bolivia, and New Zealand demonstrate that legal personhood for ecosystems can be effectively implemented when supported by robust governance institutions, clearly defined guardianship structures, and community participation.

From a commerce perspective, these global frameworks increasingly emphasize natural capital accounting, sustainable finance, ESG reporting, biodiversity disclosure, and responsible investment as essential components of long-term economic resilience. Recent commerce-oriented scholarship has further emphasized integrating biodiversity conservation with forest finance, public policy, and sustainable development through multidisciplinary frameworks that connect ecological sustainability, human health, and economic resilience (Garg, 2026)**.** Nevertheless, Indian scholarship has only partially examined these emerging international developments. Although scholars such as Ghosh (2021) and Nakazora (2023) discuss India's evolving environmental jurisprudence, relatively limited research has systematically compared India's biodiversity governance with contemporary global policy frameworks while examining their implications for commerce, corporate governance, and sustainable economic development. This comparative gap provides an important justification for the present study.

Synthesis of Literature and Research Gaps: The literature demonstrates substantial progress in understanding biodiversity from legal, ecological, economic, and governance perspectives. Legal scholarship has strengthened environmental jurisprudence, ecological economics has established biodiversity as productive natural capital, and international frameworks have reinforced global commitments to conservation. Nevertheless, existing research remains fragmented across disciplines.

Five key research gaps emerge. First, biodiversity governance has received limited interdisciplinary analysis integrating law, commerce, and environmental governance. Second, ecosystem services remain inadequately incorporated into national accounting, Green GDP, CSR, ESG reporting, and corporate decision-making. Third, institutional implementation continues to lag behind legal recognition. Fourth, the contribution of biodiversity to community empowerment and inclusive development remains underexplored in commerce research. Finally, relatively few studies systematically compare India's biodiversity governance with contemporary global frameworks while examining implications for sustainable commerce and economic policy.

Accordingly, this study adopts a commerce-based multidisciplinary perspective that integrates environmental law, natural capital accounting, corporate governance, biodiversity economics, community participation, and international biodiversity commitments to better understand the rights of trees and forests.

Research Gaps, Research Questions, and Objectives

Research Gaps: The literature demonstrates substantial progress in environmental law, biodiversity conservation, ecological economics, and global governance. However, several important gaps remain.

First, biodiversity research in India remains largely

fragmented across legal, ecological, economic, and policy disciplines, with limited integration from a commerce perspective. Second, although natural capital accounting and ecosystem valuation have advanced considerably (Dasgupta, 2021; World Bank, 2021; TEEB, 2010), biodiversity continues to receive inadequate recognition within national accounting, Green GDP, CSR, ESG reporting, and corporate decision-making. Third, existing studies devote relatively little attention to integrating constitutional rights, environmental duties, community participation, and corporate governance within a unified biodiversity governance framework. Finally, limited comparative research examines India's biodiversity governance alongside emerging international frameworks such as the CBD, Sustainable Development Goals (SDGs), and the Kunming–Montreal Global Biodiversity Framework (2022–2030).

These gaps justify the need for a commerce-based multidisciplinary analysis integrating environmental law, natural capital accounting, corporate governance, biodiversity economics, and global sustainability commitments.

Research Questions:

1. The study seeks to address the following questions:
2. How are the rights of trees and forests recognized within India's constitutional, legal, and judicial framework, and how do these compare with selected international experiences?
3. How can biodiversity and ecosystem services be integrated into natural capital accounting, Green GDP, CSR, ESG reporting, and sustainable economic policy?
4. How can constitutional principles, corporate governance, and community participation strengthen biodiversity governance and sustainable development?
5. How can India's biodiversity governance be better aligned with international frameworks such as the CBD, SDGs, and the Kunming–Montreal Global Biodiversity Framework?

Research Objectives: The objectives of the study are:

1. To examine the recognition of the rights of trees and forests within India's constitutional and legal framework and compare selected international experiences.
2. To evaluate biodiversity as productive natural capital and examine the role of natural capital accounting, Green GDP, CSR, and ESG in biodiversity governance.
3. To analyse the contribution of constitutional principles, corporate governance, and community participation to effective biodiversity governance.
4. To assess India's biodiversity governance in relation to major international biodiversity frameworks and identify opportunities for strengthening sustainable commerce and environmental policy.

Justification of the Study: This study adopts a commerce-oriented multidisciplinary perspective to examine biodiversity as productive natural capital linking environmental governance, corporate responsibility, constitutional principles, and sustainable development. By integrating legal, economic, governance, and policy perspectives, the study contributes to the growing discourse on biodiversity as a strategic economic asset while offering policy insights for strengthening sustainable commerce and biodiversity governance in India.

Scope, Limitations, and Significance

Scope: The study examines the rights of trees and forests through a commerce-based multidisciplinary perspective that integrates environmental law, natural capital accounting, corporate governance, constitutional principles, community participation, and global biodiversity governance. It positions biodiversity as productive natural capital that supports ecological sustainability, economic resilience, and long-term commercial development.

The analysis focuses primarily on India while drawing selected comparative insights from Ecuador, Bolivia, New Zealand, and Colombia. It covers major legal, policy, and institutional developments between 2000 and 2025, including the Biological Diversity Act (2002), the Forest Rights Act (2006), the Sustainable Development Goals (2015), and the Kunming–Montreal Global Biodiversity Framework (2022–2030). Methodologically, the study adopts a qualitative, doctrinal, comparative, and policy-oriented approach based on constitutional provisions, legislation, judicial decisions, policy reports, and scholarly literature.

Limitations: The study relies exclusively on secondary sources and therefore does not include primary field surveys or quantitative ecological analysis. Comparative discussion is limited to selected international experiences that are particularly relevant to biodiversity governance. The analysis focuses primarily on terrestrial biodiversity, especially forests and trees, and does not examine marine ecosystems in detail. While institutional and governance issues are discussed, the study does not propose state-specific implementation models, instead emphasizing broader national policy implications.

Significance: The study contributes to the growing literature on biodiversity governance by examining the rights of trees and forests through a commerce-oriented multidisciplinary perspective. It extends existing scholarship by integrating environmental law, natural capital accounting, corporate governance, CSR, ESG, constitutional principles, and sustainable development within a single analytical framework.

From a commerce perspective, the study highlights biodiversity as productive natural capital that underpins agriculture, forestry, trade, tourism, sustainable investment, and long-term economic resilience. It demonstrates the relevance of biodiversity valuation for Green GDP, sustainability accounting, responsible business practices, and public policy.

The study also offers policy relevance by identifying

opportunities to strengthen biodiversity governance through improved institutional coordination, natural capital accounting, community participation, and alignment with international biodiversity commitments. By linking environmental conservation with economic development and sustainable commerce, it provides useful insights for policymakers, businesses, researchers, and civil society.

Conclusion: Although the study is limited to secondary evidence and selected comparative experiences, it provides a comprehensive commerce-based analysis of biodiversity governance. By integrating legal, economic, institutional, and policy perspectives, it demonstrates that biodiversity conservation should be understood not only as an environmental responsibility but also as a strategic component of sustainable commerce, economic resilience, and long-term development. The study therefore contributes to both academic scholarship and evidence-informed policymaking while providing a foundation for future empirical and interdisciplinary research.

Methodology: This study adopts a **qualitative, doctrinal, comparative, and policy-oriented** research design to examine the rights of trees and forests from a commerce-based multidisciplinary perspective. Rather than generating primary ecological or quantitative data, the study analyses biodiversity governance through legal, economic, institutional, and policy frameworks.

The research relies exclusively on **secondary sources**, including constitutional provisions, environmental legislation, judicial decisions, government reports, international agreements, and peer-reviewed scholarly literature. Key legal sources include the Constitution of India, the Wildlife (Protection) Act, 1972, the Environment (Protection) Act, 1986, the Biological Diversity Act, 2002, the Forest Rights Act, 2006, and landmark judicial decisions such as *T.N. Godavarman Thirumulpad v. Union of India* and *Mohd. Salim v. State of Uttarakhand*. Government reports from the Forest Survey of India (FSI), Ministry of Environment, Forest and Climate Change (MoEFCC), NITI Aayog, and the Centre for Science and Environment (CSE), together with international frameworks including the Convention on Biological Diversity (CBD), the Sustainable Development Goals (SDGs), the Kunming–Montreal Global Biodiversity Framework, IPBES, UNEP, WWF, IUCN, the World Bank, and the Dasgupta Review, provide the principal documentary evidence.

The analysis is organized around five interrelated themes: **(i)** legal and constitutional frameworks, **(ii)** natural capital accounting and commerce, **(iii)** environmental rights and constitutional duties, **(iv)** community participation and social welfare, and **(v)** international biodiversity governance. This thematic approach facilitates a comparative evaluation of biodiversity governance while highlighting its implications for sustainable commerce, corporate governance, and public policy.

The qualitative and secondary-data approach is appropriate because the study seeks to analyse legal, institutional, and governance issues rather than ecological conditions. Although the exclusive use of secondary sources limits empirical validation, the study enhances reliability through the triangulation of legislation, judicial decisions, government publications, international reports, and scholarly literature. As no human participants or field investigations were involved, formal ethical approval was not required. The study nevertheless adheres to accepted standards of academic integrity through accurate interpretation, proper attribution, and APA (7th edition) referencing.

Secondary Evidence and Interpretation

Overview of Secondary Evidence: This section analyses secondary evidence obtained from authoritative national and international sources to examine biodiversity trends, ecosystem valuation, governance challenges, and India's position within the global biodiversity framework. As the study adopts a qualitative, doctrinal, and policy-oriented research design, the evidence presented is intended to support thematic interpretation rather than statistical hypothesis testing. The selected tables and figures are derived from internationally recognized databases and government reports, including the IUCN Red List, the World Wide Fund for Nature (WWF), the Forest Survey of India (FSI), the World Bank, and the Dasgupta Review.

Table 1. Threatened Species in India, 2023 (IUCN Red List)

Category	Number of Species (India)	Global Context (%)
Mammals	96	6.2% of global
Birds	82	7.5% of global
Reptiles	53	4.8% of global
Amphibians	74	9.1% of global
Plants	387	8.4% of global
Total	**1,212**	—

Source: IUCN Red List of Threatened Species (2023).

Interpretation: The IUCN Red List (2023) records **1,212 threatened species** in India, illustrating the country's dual status as both a global biodiversity hotspot and a region facing increasing ecological pressure. Amphibians are particularly vulnerable, representing **9.1% of the world's threatened amphibian species**, reflecting growing stress on forest and freshwater ecosystems. The large number of threatened plant species further highlights the importance of protecting forest ecosystems that sustain biodiversity, ecosystem services, and rural livelihoods. From a commerce perspective, continued biodiversity loss threatens productive natural capital that underpins agriculture, forestry, ecotourism, medicinal resources, and numerous nature-dependent economic activities.

Table 2. Forest Quality Distribution in India, 2023

Category	Area (sq km)	% of Total Forest Area
Very Dense Forest	99,779	12.37%
Moderately Dense Forest	308,502	38.40%
Open Forest	304,499	37.89%
Plantation / Other Forest	89,500+	11.34%

Source: Forest Survey of India (2023).

Interpretation: Although India's overall forest cover has remained relatively stable, the distribution of forest quality presents a more nuanced picture. Very dense forests constitute only a small proportion of total forest area, while open forests and plantation forests account for a considerable share. This suggests that increases in overall forest cover should not automatically be interpreted as improvements in biodiversity. Forest quality, species composition, and ecological integrity remain equally important indicators for assessing biodiversity conservation. These findings reinforce the need for policies that prioritize ecosystem quality alongside quantitative forest expansion.

Synthesis of Evidence and Interpretation: The secondary evidence reveals several important patterns relevant to biodiversity governance and sustainable commerce.

First, despite India's strong constitutional framework and extensive environmental legislation, biodiversity conservation continues to face significant institutional and governance challenges. The available evidence indicates that legal recognition alone is insufficient unless accompanied by effective implementation, institutional coordination, and community participation.

Second, biodiversity represents substantial economic value through ecosystem services such as carbon sequestration, pollination, watershed protection, forest products, and climate regulation. Nevertheless, these contributions remain inadequately reflected in national accounting systems, Green GDP estimation, public policy, corporate reporting, and investment decisions. From a commerce perspective, this underscores the importance of integrating natural capital accounting, biodiversity valuation, Corporate Social Responsibility (CSR), and Environmental, Social and Governance (ESG) frameworks into economic planning and business strategy.

Third, comparative international evidence suggests that countries combining legal recognition with effective governance institutions, community participation, and policy integration have achieved stronger biodiversity outcomes. India's constitutional framework and environmental legislation provide a strong foundation; however, greater policy coherence and closer alignment with international biodiversity commitments can further strengthen conservation efforts and sustainable development.

Overall, the evidence demonstrates that biodiversity should be recognized as productive natural capital that supports ecological stability, economic resilience, commercial sustainability, and human well-being. Strengthening biodiversity governance therefore requires coordinated legal, institutional, economic, and policy interventions capable of integrating environmental conservation with sustainable commerce and long-term national development.

Findings and Discussion

Overview of Findings: The analysis indicates that India possesses a comprehensive constitutional framework, progressive environmental legislation, and an active judiciary committed to biodiversity conservation. However, the effective protection of trees and forests continues to be constrained by institutional, economic, and policy challenges. The findings highlight the need to strengthen biodiversity governance through greater integration of legal frameworks, natural capital accounting, corporate governance, community participation, and international policy commitments.

Institutional and Governance Challenges: The study finds that India has made significant progress in recognizing environmental rights through constitutional provisions and judicial decisions, particularly *T.N. Godavarman Thirumulpad v. Union of India* and *Mohd. Salim v. State of Uttarakhand* (2017). Nevertheless, legal recognition has not always been supported by effective institutional arrangements, administrative coordination, or statutory implementation.

Comparative experiences from New Zealand, Ecuador, and Colombia demonstrate that successful biodiversity governance depends upon clearly defined governance institutions, community participation, and long-term policy commitment rather than legal recognition alone. These experiences suggest that strengthening institutional capacity remains essential for improving biodiversity governance in India.

Biodiversity as Productive Natural Capital: The analysis demonstrates that biodiversity remains insufficiently integrated into economic planning despite growing international recognition of its economic value. The Dasgupta Review (2021), the World Bank (2021), and TEEB emphasize that ecosystem services contribute significantly to economic production but remain inadequately reflected in national accounting systems, Green GDP, and corporate reporting.

Although India's forest cover has remained relatively stable, changes in forest quality indicate that quantitative expansion alone does not ensure ecological sustainability. From a commerce perspective, integrating biodiversity valuation, natural capital accounting, CSR, and ESG reporting into business strategy and public policy would strengthen sustainable economic development and long-term commercial resilience.

Global Governance and Policy Alignment: The study further finds that India's biodiversity governance is broadly consistent with international environmental commitments but would benefit from stronger policy integration. Global frameworks such as the Convention on Biological Diversity,

the Sustainable Development Goals, and the Kunming–Montreal Global Biodiversity Framework provide important guidance for biodiversity conservation and sustainable development.

Comparative evidence suggests that countries combining legal protection with institutional accountability, community participation, and economic incentives have achieved more effective biodiversity outcomes. Strengthening policy coherence between national biodiversity initiatives and international commitments would enhance India's environmental governance and global leadership.

Discussion: The findings demonstrate that biodiversity governance should be understood as an integrated legal, economic, institutional, and social process. From a commerce perspective, biodiversity represents productive natural capital supporting agriculture, forestry, trade, tourism, sustainable investment, and long-term economic resilience. Consequently, biodiversity conservation should be incorporated more systematically into natural capital accounting, Green GDP, CSR, ESG reporting, and broader development planning.

The analysis also highlights the importance of linking constitutional rights with environmental duties, strengthening community participation, and integrating biodiversity conservation with climate action and sustainable development strategies. Comparative international experiences reinforce that effective biodiversity governance depends not only on legal recognition but also on institutional effectiveness, public participation, and policy coordination.

Overall, the study demonstrates that protecting trees and forests extends beyond environmental conservation to become an essential component of sustainable commerce, responsible governance, and inclusive development. Strengthening the integration of legal institutions, economic valuation, corporate responsibility, community participation, and international biodiversity commitments can significantly improve biodiversity governance while supporting India's long-term sustainable development objectives.

Conclusion and Policy Recommendations

Conclusion: This study examined the rights of trees and forests through a commerce-based multidisciplinary perspective integrating environmental law, natural capital accounting, corporate governance, constitutional principles, and global biodiversity governance. The analysis indicates that India possesses a strong constitutional and legislative framework for biodiversity conservation, supported by progressive judicial interventions. However, institutional coordination, economic integration, and policy implementation remain key challenges.

From a commerce perspective, biodiversity should be recognized as productive natural capital that supports agriculture, forestry, trade, tourism, ecosystem services, and long-term economic resilience. Although forest cover has remained relatively stable, evidence relating to forest quality, threatened species, and ecosystem degradation demonstrates that biodiversity conservation requires greater emphasis on ecological quality rather than quantitative indicators alone. Similarly, the limited incorporation of ecosystem services into national accounting, Green GDP, CSR, ESG reporting, and corporate decision-making highlights the need for stronger integration between biodiversity and economic policy.

Comparative experiences from New Zealand, Ecuador, and Colombia further demonstrate that effective biodiversity governance depends not only on legal recognition but also on institutional accountability, community participation, and policy coherence. Overall, the study concludes that biodiversity conservation should be viewed as an essential component of sustainable commerce, responsible governance, and long-term economic development rather than solely as an environmental obligation.

Policy Recommendations: The study proposes the following recommendations:

Strengthen institutional governance by improving coordination among government agencies, strengthening Biodiversity Management Committees, and supporting effective implementation of environmental legislation.

Integrate biodiversity into economic policy through natural capital accounting, Green GDP, biodiversity valuation, CSR, ESG reporting, and sustainability accounting.

Promote constitutional environmental stewardship by strengthening awareness of environmental rights and duties and encouraging responsible environmental practices among public institutions, businesses, and citizens.

Enhance community participation by supporting implementation of the Forest Rights Act, recognizing indigenous and local knowledge, promoting women-led conservation initiatives, and linking biodiversity conservation with livelihood security and rural development.

Strengthen international policy alignment by integrating national biodiversity strategies with the Convention on Biological Diversity, the Sustainable Development Goals, and the Kunming–Montreal Global Biodiversity Framework while promoting India's experience in biodiversity governance within international forums.

Final Remarks: Protecting trees and forests is simultaneously a constitutional responsibility, an economic necessity, and a prerequisite for sustainable development. As one of the world's megadiverse countries, India possesses strong legal foundations, rich community conservation traditions, and significant opportunities to integrate biodiversity into commerce and public policy. By recognizing biodiversity as productive natural capital and strengthening institutional coordination, corporate responsibility, community participation, and international cooperation, India can enhance biodiversity governance

while promoting sustainable commerce, ecological resilience, and long-term economic prosperity.

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