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Green Extractivism And Customary Tenure: Indigenous Rights Of Tribal Communities In India In The Era Of Decarbonisation

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Abstract: India's decarbonization agenda encompasses renewable energy, transmission infrastructure, critical-mineral extraction, compensatory afforestation, and market-based conservation. Yet its implications for the customary land tenure and governance rights of tribal communities remain insufficiently examined in legal and policy scholarship. This article asks whether India's low-carbon transition strengthens or undermines the territorial autonomy of Scheduled Tribes residing in Fifth and Sixth Schedule areas. It argues that decarbonization may generate forms of green extractivism when climate-related interventions marginalize community rights, weaken Gram Sabha authority, and expand state or corporate control over tribal territories. Although the Forest Rights Act, 2006, formally recognizes individual and community forest rights, such recognition has limited practical value unless communities can effectively assert and exercise those rights. Comparative scholarship further indicates that decarbonisation can intensify territorial control through critical-mineral extraction, carbon markets, and conservation initiatives, often under the legitimizing rhetoric of sustainability. Methodologically, the study adopts a doctrinal and qualitative approach, analyzing constitutional provisions, the Forest Rights Act, the Panchayats Act, governmental reports, judicial decisions, and scholarly literature on legal pluralism, tribal displacement, and natural-resource governance. It develops a rights-based analytical framework linking decarbonisation to tenure security, free, prior, and informed consent, benefit sharing, and ecological justice. The article reframes tribal land conflicts not merely as implementation failures but as structural governance problems arising at the intersection of climate policy, customary tenure, and self-rule. It concludes that a just energy transition in India requires enforceable community forest rights, meaningful prior and informed consent, cumulative social and ecological assessments, equitable benefit sharing, and institutional recognition of customary authorities.

Keywords: Green Extractivism, Decarbonisation, PESA, FRA, Tribal autonomy, Legal Pluralism, Ecological Justice.

I. INTRODUCTION:

Globally, Indigenous Peoples are disproportionately affected by environmental conflicts. They are involved in agriculture document environmental conflicts, and more than three-quarters of these conflicts are associated with mining, fossil-fuel extraction, dams, and the agriculture, forestry, fisheries, and livestock sectors (Scheidel et al., 2023). The most frequently reported consequences include the loss of landscapes, livelihoods, and access to customary territories. These recurring harms demonstrate that land tenure is not merely a property issue but a central component of environmental justice, territorial autonomy, and Indigenous self-determination (Scheidel et al., 2023). In this context, the notion of “climate-friendly development” requires critical examination when ostensibly sustainable interventions continue to generate dispossession, ecological disruption, and unequal resource control for tribal communities.

In India, this global pattern is embedded within a long history of colonial forest control, postcolonial resource extraction, and the incomplete legal recognition of tribal customary rights. Adivasi territories have repeatedly been subjected to expropriation, forest nationalization, commercial exploitation, industrial expansion, infrastructure development, and displacement, notwithstanding constitutional safeguards and subsequent statutory reforms (Domínguez & Luoma, 2020). These processes have frequently treated forests and tribal lands as state-controlled resources or development zones rather than as lived territories governed through customary institutions, collective practices, and reciprocal relationships with the environment. The Forest Rights Act, 2006 was enacted to address this “historical injustice” by recognizing individual and community forest rights, regularizing historically unrecorded claims, and acknowledging the role of forest-dwelling communities in the conservation and sustainable management of forest landscapes (Domínguez & Luoma, 2020).

Nevertheless, the existence of rights in statutory language does not automatically ensure their effective enjoyment in practice. Forest-dependent communities remain among the most marginalized social groups, and the realization of their rights often depends on sustained mobilization, procedural persistence, access to administrative institutions, and resistance to official or private attempts to deny, dilute, or delay those rights (Gupta et al., 2022). This implementation gap is particularly significant because community rights under the FRA require more than formal recognition: they depend on accurate identification of claimants, accessible procedures, institutional responsiveness, and the capacity of Gram Sabhas and customary authorities to exercise meaningful control over community forest resources. Consequently, the distance between legal entitlement and substantive enjoyment remains a defining feature of India’s forest-governance regime.

This gap may become more pronounced as India accelerates its decarbonisation agenda. The transition involves the expansion of renewable-energy projects, transmission and transport infrastructure, critical-mineral exploration, compensatory afforestation, carbon-related initiatives, and other land- and resource-intensive interventions. Although these measures are presented as necessary responses to climate change, they may reproduce extractive patterns when they are implemented through centralized planning, compulsory land acquisition, weak consultation, or limited recognition of customary tenure. Decarbonisation can therefore create new pressures on Indigenous territories even while seeking to reduce dependence on fossil fuels. The key issue is not whether climate action is necessary, but whether its costs, benefits, and decision-making structures are distributed equitably and whether tribal communities retain authority over the lands and resources on which their social, cultural, and economic life depends.

II. LITERATURE REVIEW:

2.1. Legal Pluralism and the Recognition of Tribal Land Rights

Understanding tribal land rights in India requires an analysis of legal pluralism. For a considerable period, Indigenous customary claims existed primarily as informal rules that lacked effective recognition within the formal legal order. This reflected the dominance of legal centralism in forest governance, under which state law was treated as the principal source of legitimate authority while customary systems were treated as subordinate, local, or legally uncertain (M & C, 2018).

The enactment of the Forest Rights Act 2006 marked a significant departure from this approach. The FRA recognized that forest-dwelling communities possess historically grounded relationships with land and forests and sought to correct what it describes as a historical injustice. It provided a statutory basis for the recognition of both individual and community forest rights and acknowledged the role of forest-dependent communities in the use, management, conservation, and protection of forest resources (M & C, 2018). In this respect, the Act represented not only a land-rights reform but also an attempt to incorporate elements of legal pluralism into India's forest-governance framework.

Nevertheless, statutory recognition has not displaced the institutional dominance of state-centered governance. The recognition of customary rights remains dependent on administrative procedures, evidentiary requirements, official interpretation, and the willingness of implementing institutions to acknowledge community claims. Consequently, the FRA should be understood as a partial and contested incorporation of customary law rather than as a complete transformation of the legal order (Febrianty et al., 2026; M & C, 2018). The central issue is therefore not merely whether rights exist in statutory language, but whether tribal communities can exercise those rights in practice.

2.2. The Implementation Gap and Community Forest Rights

The effectiveness of the FRA is frequently limited by an implementation gap between formal entitlement and substantive enjoyment. Community forest rights cannot be effectively realized unless communities are able to identify and document their claims, access administrative procedures, participate in decision-making, and resist attempts to delay, reject, dilute, or individualize collective rights (G. Nirmalkumar, G. Kanagavalli, 2025). These requirements place considerable responsibility on communities that may already face administrative exclusion, limited legal resources, and unequal bargaining relationships with state agencies or private actors.

Evidence from Maharashtra indicates that community mobilization and sustained engagement with official procedures are often necessary for the recognition and exercise of forest rights (Gupta et al., 2022). This demonstrates that legal recognition alone does not guarantee effective control over community forest resources. Rights may remain inactive where claims are inadequately recorded, where institutional procedures are inaccessible, or where administrative authorities interpret community rights narrowly.

The problem is also evident in the treatment of community forest-resource rights. These rights may be delayed, curtailed, or reformulated in ways that weaken their collective character (Roy & Halder, 2026). When collective rights are converted into individualized or merely usufruct-based entitlements, communities may retain permission to use resources without acquiring meaningful authority to manage, conserve, regulate, or control them. The distinction between being recognized as a user and being empowered as a rights-bearing governing institution is therefore central to assessing the effectiveness of the FRA.

2.3. Customary Tenure, Collective Authority, and Environmental Governance

Customary tenure among India's tribal communities cannot be reduced to individual ownership of a defined parcel of land. It is a broader social and ecological system in which subsistence, religious practice, seasonal mobility, women's work, forest-product collection, cultural identity, and traditional ecological knowledge are interconnected (Roy & Halder, 2026). In Jharkhand, for example, sacred landscapes and forest rights are embedded within community networks and participatory forms of decision-making (Roy & Halder, 2026). Village authority over forests may also derive from traditional tribal systems and customary laws that operate alongside, and sometimes independently of, formal state law (Bara, 2022).

The wider literature supports the view that customary law can function as an integrated system of social and environmental governance. It may regulate access to natural resources, preserve biodiversity, support social stability, and establish responsibilities between community members and their surrounding environment (Jaenong et al., 2025). Where customary institutions are respected and included in formal governance arrangements, resource conflicts may be reduced and community rights may receive stronger protection (Jaenong et al., 2025). Conversely, where state institutions or corporate actors override customary authority,

communities may lose control over their traditional lands and environmental degradation may intensify (Jaenong et al., 2025).

This literature demonstrates why statutory title alone may be insufficient. A formal legal entitlement can remain ineffective if communities lack authority over land-use decisions, resource management, conservation practices, and the distribution of benefits. Customary institutions may continue to function socially while being ignored legally or bypassed administratively (Bara, 2022). The resulting gap between social legitimacy and formal authority is particularly important in the context of decarbonisation, where new projects may rely on state-issued permissions without adequately recognizing pre-existing community institutions.

2.4. PESA, Gram Sabhas, and the Problem of Decentralization

PESA was enacted to institutionalize self-governance through Gram Sabhas in Scheduled Areas and to recognize the importance of community institutions in managing local resources and social affairs (Gour, 2025). It provides a legal framework for connecting livelihood security, ecological sustainability, democratic participation, and social justice in tribal regions. The Act also recognizes the ownership of minor forest produce by Gram Sabhas, which is particularly significant because such resources constitute an important material foundation of tribal economies (Bara, 2022).

The promise of PESA lies in its commitment to democratic decentralization. A more sustainable model of forest and resource governance requires decision-making power to be located closer to the communities that depend on and manage those resources. Gram Sabhas can provide a forum for collective deliberation, local monitoring, implementation, and accountability. Their authority is especially important when proposed projects may affect community land, forests, livelihoods, cultural sites, or access to common resources (G. Nirmalkumar, G. Kanagavalli, 2025; Nirmalkumar et al., 2026).

However, the existence of decentralization legislation does not necessarily ensure decentralized governance. The authority of Gram Sabhas may be weakened when consultation is treated as a procedural formality, when consent is obtained without adequate information, or when decisions are made by higher-level administrative bodies before communities are meaningfully involved. The practical significance of PESA therefore depends on whether Gram Sabhas possess enforceable authority and whether their decisions are respected by state agencies, corporations, and project developers (Bara, 2022; Gour, 2025).

2.5. Green Extractivism and the Political Economy of Decarbonisation

The concept of green extractivism adds an important dimension to the analysis of low-carbon development. It draws attention to the possibility that environmental policies may reproduce extractive relations while being presented as responses to climate change. In this context, land, forests, minerals, and community territories may be reorganized to serve carbon markets, conservation projects, renewable-energy production, or strategic-mineral supply chains.

Comparative research illustrates how decarbonisation can create new political spaces in which states, markets, financial actors, and carbon-governance regimes acquire greater control over Indigenous territories (Nazar et al., 2026). In Brazil, carbon-market initiatives have been associated with inadequate consultation and the reclassification of land as “carbon territories.” Such processes may facilitate external accumulation while limiting the authority of communities whose lives and livelihoods are connected to those territories (Miranda & Sauer, 2025). Similarly, scholarship on Colombia identifies forms of green dispossession that affect livelihoods and Indigenous rights, although it also notes inconsistencies in how the problem is defined and a concentration of evidence in particular regions (Cabaña & Richter, 2025).

These comparative findings are relevant to India because they demonstrate that the language of sustainability does not, by itself, guarantee social justice or territorial protection. Low-carbon interventions may still produce dispossession if they are designed through centralized planning, rely on compulsory acquisition, marginalize customary institutions, or distribute benefits away from affected communities. The concept of green extractivism therefore provides a useful framework for examining whether decarbonisation changes the structure of resource governance or merely gives older extractive practices a new environmental justification.

2.6. Renewable-Energy Development and Tribal Territories in India

India's tribal regions are increasingly identified as locations with significant renewable-energy potential. These territories are governed through a complex legal framework involving the Fifth and Sixth Schedules, PESA, the FRA, and other laws concerning forests, land, and natural resources. Tribal communities also depend substantially on agriculture, forest produce, grazing areas, and common resources for their livelihoods and cultural continuity (Vanukuru et al., 2026).

Renewable energy may address genuine energy-access deficits, particularly through decentralized and off-grid systems that can improve local access to electricity (Vanukuru et al., 2026). However, the social and territorial consequences of renewable-energy expansion depend on the scale, location, ownership, and governance of projects. Large projects may require extensive land acquisition, transmission corridors, restrictions on customary use, or the reclassification of community territories. Without meaningful participation and enforceable benefit-sharing arrangements, renewable-energy development may reproduce the same patterns of displacement and unequal resource control associated with earlier extractive projects. The unresolved question is therefore whether India's low-carbon expansion will be community-controlled and livelihood-enhancing or whether it will become another mechanism of territorial appropriation. Answering this question requires attention to four interconnected dimensions: the security of customary and statutory tenure, the quality of consultation and consent, the distribution of economic and social benefits, and the protection of ecological integrity. These dimensions provide the basis for assessing whether India's decarbonisation pathway advances a just transition or reproduces green extractivism.

III. OBJECTIVES:

1. To examine whether India's decarbonisation trajectory reinforces or undermines tribal customary tenure and territorial autonomy.
2. To analyse the interaction between the Forest Rights Act, 2006, the Panchayats Act, 1996, constitutional protections, and emerging low-carbon development pathways.
3. To identify the governance gap between formal legal recognition and substantive tribal control over land, forests, natural resources, and collective decision-making.
4. To propose a rights-based framework for a just transition grounded in customary tenure, Gram Sabha authority, ecological justice, and equitable benefit sharing.

IV. RESEARCH QUESTIONS:

1. How does India's decarbonisation agenda reshape the customary tenure, territorial autonomy, and governance rights of tribal communities in Scheduled Areas?
2. To what extent do the FRA, PESA, constitutional protections, and related institutional mechanisms protect tribal communities from displacement, resource appropriation, and the weakening of customary authority in low-carbon development projects?
3. How do renewable-energy projects, transmission infrastructure, critical-mineral extraction, conservation initiatives, and carbon-related programmes affect community forest-resource rights, Gram Sabha decision-making, livelihood security, and ecological integrity?
4. What institutional, legal, and procedural conditions are necessary to ensure that decarbonisation supports a rights-based and locally accountable transition rather than reproducing green extractivism?

V. METHODOLOGY:

This study adopts qualitative doctrinal and secondary-data methodology. That approach is consistent with the most relevant literature, which frequently combines legal analysis, document review, thematic synthesis, and policy benchmarking rather than primary surveys when the research problem concerns governance architecture (Febrianty et al., 2026; Roy & Halder, 2026).

VI. SCOPE AND SELECTION CRITERIA:

The literature reviewed in this study is selected according to its relevance to tribal tenure, legal pluralism, forest governance, environmental justice, green extractivism, and decarbonisation. India-focused scholarship is prioritized because the study examines the interaction between national climate-transition policies and the legal position of tribal communities in India. Comparative literature from other countries of the Global South is included where it offers analytical insight into the ways in which low-carbon policies may affect Indigenous rights, customary governance, and territorial control.

Inclusion criteria:

- Scopus-indexed journal articles and scholarly books addressing tribal or Indigenous rights, legal pluralism, customary tenure, forest governance, green extractivism, environmental justice, or decarbonisation.
- India-focused studies examining the FRA, PESA, constitutional protections, community forest-resource rights, Gram Sabhas, Scheduled Areas, tribal displacement, or natural-resource governance.
- Comparative studies from the Global South that analyse carbon markets, conservation, renewable energy, critical minerals, or other low-carbon interventions in relation to Indigenous or customary land rights.
- Official secondary materials, including constitutional provisions, statutes, government reports, ministry guidelines, policy documents, and relevant judicial developments.
- Literature that examines the relationship between legal recognition and the practical enjoyment of rights, including questions of consultation, consent, participation, benefit sharing, and institutional accountability.

Exclusion criteria:

- Non-scholarly commentary that does not provide a clear legal, policy, theoretical, or empirical basis.
- Studies concerned solely with the technical efficiency, engineering design, or financial performance of renewable-energy systems without examining land, rights, livelihoods, or governance.
- Literature that does not engage with tribal or Indigenous tenure, self-governance, customary institutions, ecological integrity, or control over natural resources.
- Sources that discuss decarbonisation only as a technological or emissions-reduction issue without considering its social, territorial, legal, or distributive consequences. Additionally, the study utilizes tertiary sources to ensure terminological consistency and to evaluate how domestic practices align with international benchmarks regarding the rights of Indigenous and local communities (Khoiriah et al., 2026).

Analytical framework: The paper evaluates decarbonisation through four variables: tenure security, consent and participation, benefit sharing, ecological integrity.

VII. Historical Background:

7.1. Transformations in Indian Forest Governance:

Tribal customary rights to land use remained largely ignored by formal law until the Forest Rights Act (FRA) was passed, due to their connotations of subsistence, religious, and cultural connections to the land (M & C, 2018). Nevertheless, legal centralism perpetuated inequality in forest governance by regarding tribal rights as informal and fragile, leading up to the enactment of the FRA in 2006 (Devaprasad, 2020& Mohanty, 2020).

The passing of the FRA was a crucial development in the sense that it was an attempt to correct historical wrongs and a formal acknowledgment of individual and community forest rights (Mohanty, 2020& Domínguez, 2020). The Act recognizes the right of the community to forest use, management, conservation, and control over forest resources, thus rendering them common property (Mohanty, 2020& Domínguez, 2020). The Act also links environmental rights with social justice and places an emphasis on informed consent when relocating from important wildlife areas (Mohanty & Kumari, 2020)..

Notably, this transformation did not erase the past systems of governance. Forest rights in India are fragmented, hierarchical, and historically layered through different levels of governance including state-based, community-based, and individual-based ones (Bansal & Choudhury, 2021). The transition from colonial and postcolonial forest regulation to participatory governance has been uneven, not smooth (Bansal & Choudhury, 2021). Therefore, it is important to interpret legal recognition as partial inclusion of customary laws rather than their complete implementation (Febrianty et al., 2026; M & C, 2018).

7.2. Customary Tenure, Community Forest Rights, and Legal Pluralism:

Customary tenure among tribes in India is not just a way of owning a piece of land; it is a system whereby sustenance, religion, seasonal movement, women's work, usage of forest products and traditional wisdom are interlinked (Roy & Halder, 2026). In Jharkhand, sacred lands and forest rights are embedded in community networks and participative decision-making (Roy & Halder, 2026). In the case of ownership of forests, villages derive their legitimacy from traditional tribal land systems and laws, apart from the law (Bara, 2022).

The broader literature has supported this claim. Customary law works as an integrated by culture law governing all aspects including biodiversity and social stability (Jaenong et al., 2025). The existence of customary law is often correlated with better respect of the rights and lesser conflicts (Jaenong et al., 2025). The presence of the sovereignty-state regime weakens law and causes environmental degradation as corporations gain access to communities' traditional lands (Jaenong et al., 2025).

As a result, statutory titles are inadequate. The formal framework can still be insufficient in cases where some aspects of community forest resource rights are postponed or curtailed, or where rights are assigned in such a way that the concept of collective ownership loses its power (Roy & Halder, 2026). In India, individuals are understood as authorized users instead of managers with powers over use and control (Bara, 2022). While customary institutions may remain alive and active, they can be legally ignored and administratively bypassed (Bara, 2022).

7.3. PESA, Gram Sabhas, and the Problem of Decentralization:

PESA was enacted to institutionalize self-governance through Gram Sabhas in Scheduled Areas and to recognize community rights over natural resources and local institutions (Gour, 2025). It represents a constitutional route for reconciling livelihood security, ecological sustainability, and social justice in tribal regions (Gour, 2025). The Act also endows Gram Sabhas with ownership of minor forest produce, a core material basis of tribal economies (Bara, 2022).

PESA's promise lies in democratic decentralization. A sustainable model of forest governance shifts power downward and enables people to monitor, deliberate, implement, and participate in decisions over natural resources (Bara, 2022). In Maharashtra, where Gram Sabhas is recognized as primary authorities and receive capacity support, PESA is associated with stronger commons governance, improved minor forest produce incomes, and broader participation by women and marginalized sub-groups (Gour, 2025). That finding

matters because it shows that tribal self-governance can produce both ecological and developmental gains under real institutional conditions.

But PESA's implementation remains uneven. Administrative conflicts, market capture, weak capacity, and inconsistent political will constrain its developmental effects (Bara, 2022; Gour, 2025). In Jharkhand, PESA has been projected as progressive yet has not functioned successfully at the grassroots due to political apathy, internal conflicts, and lack of awareness (Bara, 2022). Even where entitlements over minor forest produce are recognized, forest departments often retain control over high-value trade and collection systems (Bara, 2022).

The result is a recurring contradiction. Gram Sabhas is legally invoked as symbols of consent and decentralization, but in practice they can be reduced to procedural formalities rather than substantive decision-making spaces (Roy & Halder, 2026). That contradiction is especially important for decarbonisation because energy and conservation projects often seek procedural approval without transferring real authority.

7.4. Displacement, Mining, and the Reworking of Tribal Lifeworld's:

Displacement in tribal regions is not only a matter of physical relocation. It is also economic, social, cultural, and ecological disembodying (Roy & Halder, 2026). Families may be counted as compensated while still losing forest access, kin proximity, ritual geographies, and dignified autonomy over land (Roy & Halder, 2026). This is why development-induced displacement in Jharkhand is better understood as a rupture of land-based social relations and customary authority than as a simple transfer of households (Roy & Halder, 2026).

India's extractive frontier illustrates this pattern sharply. Chhattisgarh shows a structural conflict between state-sponsored mineral extraction and Indigenous Forest rights (Kirti & Tanmay, 2026). The FRA can be systematically neutralized by alliances of state agencies and private capital in contested resource frontiers (Kirti & Tanmay, 2026). Jharkhand's extractive geography similarly turns forests, rivers, hills, sacred sites, and community spaces into mining, dam, industrial, and diversion corridors (Roy & Halder, 2026).

Resistance movements in these regions are not simply anti-development. They frequently demand development on different terms: respect for land rights, ecological limits, sacred sites, self-governance, and future generations (Roy & Halder, 2026). Adivasi assertions in movements such as Koel-Karo, Netarhat, and Pathalgadi have been grounded in customary rights and ecological belonging as well as constitutional critique (Roy & Halder, 2026). Environmental-justice scholarship supports reading these mobilizations as struggles over recognition and procedural justice, not only distributive harm (Nachet et al., 2021; Roy & Halder, 2026).

Global evidence puts these Indian conflicts into a wider pattern. Indigenous Peoples are affected in at least 34% of documented environmental conflicts worldwide (Scheidel et al., 2023). More than three-fourths of those conflicts arise from mining, fossil fuels, dams, and agriculture-forestry-fisheries-livestock sectors (Scheidel et al., 2023). The most common reported harms are landscape loss, livelihood loss, and land dispossession (Scheidel et al., 2023). Tribal India's experience therefore fits a broader global structure rather than an isolated domestic anomaly.

7.5. Conservation as a Precedent for Green Territorial Control:

Conservation is one of the clearest precedents for understanding how "green" governance can harm tribal communities. Colonial and postcolonial conservation policies often treated Indigenous land use as a threat while legitimizing state control over ecologically valuable spaces (Domínguez & Luoma, 2020). In India, the FRA was introduced partly to correct the historical injustice produced by exactly this kind of exclusionary conservation (Domínguez & Luoma, 2020).

Yet conservationist resistance to Indigenous land reform persisted. Litigation challenging the FRA contributed to a Supreme Court order threatening eviction of forest dwellers whose claims had been rejected, placing more than two million families at risk (Domínguez & Luoma, 2020). The legal vulnerability exposed by that episode shows how easily conservation can become territorial discipline rather than participatory stewardship.

Indigenous discourse on destructive development has long included a critique of conservation itself when conservation becomes a route to enclosure (Savyasaachi, 2008). Conservation projects, shifting-cultivation interventions, reserves of nature, and ethnobotanical extraction have historically displaced tribal communities and taken control over ancestral ground to sustain industrial political economy (Savyasaachi, 2008). This matters for decarbonisation because market-based conservation and carbon governance can reproduce similar territorial logic under a new climate rationale.

7.6. Decarbonisation, Renewable Energy, and Green Extractivism:

The concept of green extractivism captures a central paradox of the energy transition. Extractivism is not abandoned. It is rebranded as necessary for sustainability, net zero, and climate mitigation (Archer & Calvão, 2024). Political-ecology work shows that the rising demand for renewable energy and transition minerals has already produced new sacrifice zones and new forms of dispossessive coloniality (Archer & Calvão, 2024). Energy storage infrastructures, though often missing from public debate, are part of this expanding extractive landscape.

VIII. Analysis:

The evidence suggests that India's core problem is not an absence of rights language but a governance mismatch between statutory recognition and actual control. The FRA recognizes forest dwellers' rights, including collective rights to manage community forest resources, and was designed around the idea that ecological protection and social justice are compatible (Mohanty & Kumari, 2020). PESA similarly recognizes Gram Sabhas as key institutions for self-governance in Scheduled Areas and links local democracy to resource control (Gour, 2025).

But implementation remains uneven. In Maharashtra, positive outcomes appeared where Gram Sabhas were treated as primary authorities and backed by capacity building, correlating with better commons governance, higher income from minor forest produce, and wider participation (Gour, 2025). Elsewhere, market capture, legal conflict, and administrative weakness constrain the developmental promise of self-governance (Gour, 2025).

Mining and conservation both show how formal rights can be neutralized. Adivasi communities have faced the threat of mass eviction even under a law meant to recognize customary land rights, because title formalization mechanisms have often failed (Domínguez & Luoma, 2020). Industrial and infrastructure projects continue to multiply in resource-rich Adivasi territories, while the benefits extracted from those territories are not fairly shared with the communities most affected (Domínguez & Luoma, 2020).

Displacement in tribal India is wider than relocation alone. It includes economic, social, and cultural disruption, while formal compensation often captures only physical relocation or titled ownership (Roy & Halder, 2026). Environmental assessment processes also tend to ignore cumulative impacts across whole mining belts and forest corridors, which is directly relevant to low-carbon infrastructure planning (Roy & Halder, 2026).

Comparative decarbonisation research indicates why this matters now. Green extractivism often works not by openly denying Indigenous rights, but by redefining land as a strategic mineral zone, conservation unit, or carbon sink subject to administrative and market control (Miranda & Sauer, 2025; Nazar et al., 2026). That logic is compatible with the warning that formal recognition without mechanisms leaves Indigenous peoples able to "sit" within state frameworks only under state terms

IX. Statistical Representation of Secondary Data:

Table 1: Selected quantitative indicators from literature relevant to tribal tenure and green extractivism.

Indicator	Findings	Relevance to India
Global environmental conflicts	Indigenous Peoples affected in 34% of documented conflicts (Scheidel, 2023)	Signals structural exposure of Indigenous lands
Main conflict sectors	>75% linked to mining, fossil fuels, dams, and AFFL (Scheidel, 2023)	Mirrors tribal-region exposure to extraction
Most common impacts	Landscape loss 56%, livelihood loss 52%, land dispossession 50% (Scheidel, 2023)	Helps frame likely harms of green expansion
India tribal demography	705 recognized Scheduled Tribe communities, around 8% of population (Vanukuru, 2026)	Shows scale of affected population
Development displacement	Adivasis are nearly 50% of displaced persons but only 8% of population (Domínguez, 2020)	Indicates disproportional burden

X. Discussion:

The most defensible interpretation is that India is not facing a simple conflict between development and tradition. The deeper issue is whether decarbonisation will proceed through democratic tribal governance or through a greener form of centralized extraction. Where customary institutions and local governance coexist with state law in a complementary way, communities appear better able to preserve resource management systems and social integrity. Where state legality dominates through registration, licensing, and project approval, customary rights become symbolic and conflict persists (Febrianty et al., 2026).

This supports a conceptual shift in Indian scholarship. The problem should be analyzed not only as poor FRA or PESA implementation, but as a likely green-governance risk in which low-carbon transition policies can reproduce dispossession unless tenure, consent, and benefit-sharing are treated as preconditions rather than compensatory after thoughts (Nazar et al., 2026; Roy & Halder, 2026).

XI. Conclusion:

India's decarbonisation agenda appears likely to reproduce green extractivism when tribal land is treated primarily as a site for energy, minerals, carbon value, or conservation control rather than as a customary territorial lifeworld. Literature consistently shows that legal recognition alone is insufficient, while stronger outcomes emerge where community forest rights, Gram Sabha authority, and customary governance are substantively enforced (Gour, 2025; Gupta et al., 2022; Jaenong et al., 2025).

The title, objectives, and findings align around one core conclusion: a just transition for tribal communities in India requires moving from symbolic recognition to enforceable territorial democracy.

XII. Way Forward:

- Make Gram Sabha consent substantive and prior to project design (Roy & Halder, 2026).
- Treat community forest resource rights as transition safeguards, not residual claims (Mohanty & Kumari, 2020; Roy & Halder, 2026).
- Require cumulative social-ecological assessment across corridors, not single-project review (Roy & Halder, 2026).
- Link benefit sharing and climate governance to customary institutions and local authority (Gour, 2025; Jaenong et al., 2025).

REFERENCES

1. Archer, M., & Calvão, F. (2024). Sustaining Decarbonisation: Energy Storage, Green Extractivism, and the Future of Mining. *Antipode*, 57(4), 1259–1279. <https://doi.org/10.1111/anti.13066>
2. Bansal, A., & Choudhury, P. (2021). Forest Tenures in India and Sustainable Forest Management - An Analysis. *Indian Forester*, 147(8), 704. <https://doi.org/10.36808/if/2021/v147i8/164959>
3. Bara, A. H. (2022). Forest, Adivasis and the Rule of Panchayats (Extension to the Scheduled Areas) in Jharkhand: A Critical Inquiry. *Contemporary Voice of Dalit*, 18(3), 266–279. <https://doi.org/10.1177/2455328x221081648>
4. Cabaña, G., & Richter, K. (2025). Green extractivism in Colombia: A scoping review on indigenous rights and livelihood impacts, and policy and social movement responses. *The Extractive Industries and Society*, 25, 101808. <https://doi.org/10.1016/j.exis.2025.101808>
5. Domínguez, L., & Luoma, C. (2020). Decolonising Conservation Policy: How Colonial Land and Conservation Ideologies Persist and Perpetuate Indigenous Injustices at the Expense of the Environment. *Land*, 9(3), 65. <https://doi.org/10.3390/land9030065>
6. Febrianty, Y., Ryendra, N. R., Ahmad, A., & Ariyanto, A. (2026). Minority Protection and Legal Pluralism: Law and Public Policy in Indigenous Agrarian Disputes. *Potret Pemikiran*, 30(1), 31. <https://doi.org/10.30984/pp.v30i1.4152>
7. Gour, R. (2025). Impact of the PESA Act on the Sustainable Development of Tribal Communities in Maharashtra, India. *International Journal for Multidisciplinary Research*, 7(5). <https://doi.org/10.36948/ijfmr.2025.v07i05.56019>
8. Gupta, D., Sinha, M., & Chhatre, A. (2022). India's Forest Rights Act and indigenous claims to community forest resources: A case study of Lavari, Maharashtra. *World Development Perspectives*, 27, 100449. <https://doi.org/10.1016/j.wdp.2022.100449>
9. Jaenong, D. P., Ahimi, L. N., & Zubaedillah, Z. (2025). Customary Law and Natural Resource Governance: Strengthening Indigenous Rights in Environmental Management. *Hakim*, 3(2), 1164–1178. <https://doi.org/10.51903/t8hwbv11>
10. Khoiriah, S., Rudy, R., & Perbawati, C. (2026). Constitutional Recognition of Indigenous Peoples and Investment Policy in Indonesia: From Normative Ideals to Legal Realities. *Social Science and Humanities Journal*, 10(5), 10051–10056. <https://doi.org/10.18535/sshj.v10i05.2239>
11. Kirti, K., & Tanmay, T. (2026). Mining vs Forest Rights: A Political Ecology Study of Chhattisgarh. *International Journal of Versatile Research and Analysis*, 4(5). <https://doi.org/10.56975/ijvra.v4i5.706733>
12. M, D. P., & C, S. M. (2018). Indian Forest Rights Legislation: Significance of Recognizing the Legal Pluralism for Indigenous Peoples Rights. *Statute Law Review*, 41(1), 78–88. <https://doi.org/10.1093/slr/hmy010>
13. Miranda, J. G., & Sauer, S. (2025). Green extractivism and the invention of 'carbon territories' in the Brazilian Amazon. *Third World Quarterly*, 1–18. <https://doi.org/10.1080/01436597.2025.2588306>
14. Mohanty, H., & Kumari, S. (2020). Recognition of Forest Rights of Scheduled Tribes: In Context of Community Forest Rights. In *SSRN Electronic Journal*. RELX Group (Netherlands). <https://doi.org/10.2139/ssrn.3744845>

15. Nacet, L., Beckett, C., & MacNeil, K. S. (2021). Framing extractive violence as environmental (in)justice: A cross-perspective from indigenous lands in Canada and Sweden. *The Extractive Industries and Society*, 12, 100949. <https://doi.org/10.1016/j.exis.2021.100949>
16. Nazar, R. F., Nasser, F., Ramadhan, A., Lismiyah, E., & Lodewijk, D. P. Y. (2026). Natural Resource Policy and Indigenous Peoples' Rights in the Era of Decarbonisation. *Jurnal Pelita Raya*, 2(1), 41–54. <https://doi.org/10.65586/jpr.v2i1.58>
17. G. Nirmalkumar, G. Kanagavalli, K. V. (2025). Empowering India's Artisans: A Critical Policy Review of the PM Vishwakarma Scheme. *International Journal of Innovative Research in Management Studies*, 7(8), 10–22.
18. Nirmalkumar, G., Kanagavalli, G., Arumugam, U., & Gokila Devi, T. (2026). Explaining the Tamil Nadu Anomaly: Federal Trust Asymmetry and Artisan Engagement with the PM Vishwakarma Scheme. *ComFin Research*, 14(1), 19–32. <https://doi.org/10.34293/commerce.v14i1.9756>
19. Roy, A., & Halder, J. (2026). From Sacred Landscapes to Extractive Frontiers: Development-Induced Displacement, Ecological Stress and the Reworking of Tribal Lifeworlds in Jharkhand. *International Journal for Multidisciplinary Research*, 8(3). <https://doi.org/10.36948/ijfmr.2026.v08i03.81679>
20. Savyasaachi. (2008). Deforestation, Nature and Conservation: An Indigenous Discourse. *Contemporary Perspectives*, 2(2), 279–313. <https://doi.org/10.1177/223080750800200205>
21. Scheidel, A., Fernández-Llamazares, Á., Bara, A. H., Bene, D. D., David-Chavez, D., Fanari, E., Garba, I., Hanaček, K., Liu, J., Alier, J. M., Navas, G., Reyes-García, V., Roy, B., Temper, L., Thiri, M. A., Tran, D., Walter, M., & Whyte, K. P. (2023). Global impacts of extractive and industrial development projects on Indigenous Peoples' lifeways, lands, and rights. *Science Advances*, 9(23). <https://doi.org/10.1126/sciadv.ade9557>
22. Vanukuru, S. R., Vanukuru, N., Vanukuru, R. T., & Kapavarapu, S. S. (2026). Renewable energy on tribal lands of India. *Brazilian Journal of Development*, 12(6). <https://doi.org/10.34117/bjdv12n6-059>