



From the Forestry Law to Forest Fires: Evaluating Indonesia's 2014 Forestry Law in Protecting Climate Vulnerable Communities

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DOI: <https://doi.org/10.65815/f2zzrq57>

Submitted: 21-09-2024

Revised: 11-01-2025, 22-03-2025

Accepted: 15-04-2025

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Abstract

This paper evaluates the effectiveness of Indonesia's 2014 Forestry Law (UU No. 41/1999) in protecting climate-vulnerable communities, with a particular focus on the links between forest management, land use policies, and climate change adaptation. Indonesia's forests are among the most biodiverse in the world, but are also critically threatened by illegal logging, land conversion, and destructive practices such as slash-and-burn, which contribute significantly to carbon emissions and exacerbate climate impacts. The 2014 revision of the Forestry Law aims to provide a regulatory framework for sustainable forest management, yet its ability to protect vulnerable communities, especially those dependent on forest resources for their livelihoods, remains contested. This study critically analyzes how the law addresses both environmental protection and the rights of indigenous peoples and local communities who face increased exposure to climate hazards, such as forest fires and flooding, due to deforestation and poor land-use practices. By examining the law's implementation, the role of local governments, and the experiences of affected communities, this research assesses whether the law has succeeded in promoting sustainable forest management while ensuring that the most vulnerable populations are not further marginalized. Findings suggest that despite progress in forest



governance, the law's implementation often neglects community participation and fails to curb land use practices that contribute to climate vulnerability. The paper argues for an integrated approach that combines legal reforms with community-based initiatives to ensure that both forests and climate-vulnerable communities are better protected in Indonesia's climate policy framework.

[Tulisan ini mengevaluasi efektivitas UU Kehutanan Indonesia tahun 2014 (UU No. 41/1999) dalam melindungi masyarakat yang rentan terhadap perubahan iklim, dengan fokus khusus pada hubungan antara pengelolaan hutan, kebijakan penggunaan lahan, dan adaptasi perubahan iklim. Hutan Indonesia termasuk yang paling kaya keanekaragaman hayati di dunia, tetapi juga terancam secara kritis oleh penebangan ilegal, konversi lahan, dan praktik-praktik destruktif seperti tebang bakar, yang berkontribusi signifikan terhadap emisi karbon dan memperburuk dampak iklim. Revisi UU Kehutanan tahun 2014 bertujuan untuk menyediakan kerangka peraturan untuk pengelolaan hutan berkelanjutan, namun kemampuannya untuk melindungi masyarakat yang rentan, terutama mereka yang bergantung pada sumber daya hutan untuk mata pencaharian mereka, masih diperdebatkan. Studi ini secara kritis menganalisis bagaimana hukum tersebut menangani perlindungan lingkungan dan hak-hak masyarakat adat dan masyarakat lokal yang menghadapi peningkatan paparan terhadap bahaya iklim, seperti kebakaran hutan dan banjir, akibat deforestasi dan praktik penggunaan lahan yang buruk. Dengan meneliti implementasi hukum, peran pemerintah daerah, dan pengalaman masyarakat yang terdampak, penelitian ini menilai apakah hukum tersebut telah berhasil mempromosikan pengelolaan hutan berkelanjutan sekaligus memastikan bahwa populasi yang paling rentan tidak semakin terpinggirkan. Temuan menunjukkan bahwa meskipun ada kemajuan dalam tata kelola hutan, implementasi hukum sering mengabaikan partisipasi masyarakat dan gagal mengekang praktik penggunaan lahan yang berkontribusi terhadap kerentanan iklim. Makalah ini menganjurkan pendekatan terpadu yang menggabungkan reformasi hukum dengan inisiatif berbasis masyarakat untuk memastikan bahwa hutan dan masyarakat yang rentan terhadap iklim lebih terlindungi dalam kerangka kebijakan iklim Indonesia.]

Keywords: Forestry Law, Climate Vulnerability, Forest Fires, Sustainable Development, Indigenous Rights

Introduction

A. Background and Context

The rapid expansion of industrial plantation agriculture, particularly oil palm cultivation, has profoundly transformed Indonesia's environmental and socio-economic landscape over the past three decades. Indonesia is currently the world's largest producer of crude palm oil (CPO), with plantation areas expanding

from less than four million hectares in the early 2000s to more than sixteen million hectares in recent years. This expansion has contributed substantially to national economic growth, export earnings, employment generation, and rural development (Austin et al., 2019; Meijaard et al., 2020). Nevertheless, the plantation sector has simultaneously generated persistent environmental and social challenges that continue to attract international scholarly attention.

Industrial plantation development has become one of the principal drivers of tropical deforestation, peatland degradation, biodiversity loss, and greenhouse gas emissions in Indonesia (Gaveau et al., 2022; Pendrill et al., 2022). Forest conversion associated with oil palm expansion has fragmented critical habitats for numerous endangered species while reducing ecosystem resilience and carbon storage capacity (Carlson et al., 2018; IPCC, 2022). Peatland drainage and recurrent forest fires further intensify carbon emissions, making plantation-related land-use change a significant contributor to global climate change (Miettinen et al., 2017; IPCC, 2022). Consequently, Indonesia's plantation economy occupies a central position within international debates concerning sustainable development, biodiversity conservation, and climate mitigation.

Beyond ecological degradation, plantation expansion has intensified conflicts over land ownership and resource governance. Numerous studies document increasing disputes between plantation corporations, local communities, and Indigenous Peoples arising from overlapping land claims, weak legal recognition of customary territories, and inconsistent implementation of land governance policies (Myers et al., 2017; Li, 2014; Colchester et al., 2020). The concentration of land under large-scale plantation concessions frequently results in displacement, restricted access to traditional livelihoods, and the erosion of customary governance institutions (Dressler et al., 2017). These dynamics disproportionately affect Indigenous communities whose cultural identity, food security, and environmental stewardship depend upon secure tenure over ancestral lands.

The environmental and social consequences of plantation expansion are increasingly interpreted through the broader framework of climate justice. Rather than viewing climate change solely as an environmental problem, climate justice emphasizes the unequal distribution of environmental burdens, historical responsibility, and structural inequalities that shape vulnerability and adaptive capacity (Schlosberg & Collins, 2014). In countries such as Indonesia, where Indigenous territories overlap extensively with forest ecosystems targeted for agricultural investment, climate change cannot be separated from questions of land governance, legal recognition, and environmental justice. Consequently, evaluating plantation governance requires an integrated analysis of ecological sustainability, legal institutions, and human rights protections.

Indonesia's regulatory framework governing plantation development underwent significant reform with the enactment of Law Number 39 of 2014

concerning Plantations (hereinafter referred to as the 2014 Plantation Law). The legislation aims to enhance plantation productivity, strengthen investment certainty, improve competitiveness, and encourage sustainable plantation management. However, despite incorporating environmental management obligations and references to community participation, the law has been criticized for insufficiently protecting Indigenous land rights and for facilitating continued expansion of commercial plantations into customary territories (Bedner, 2016; Butt, 2020). These concerns have become increasingly salient amid growing international commitments to climate mitigation, biodiversity conservation, and Indigenous rights under global environmental governance frameworks.

Against this background, this study argues that understanding Indonesia's plantation governance requires moving beyond conventional assessments of environmental regulation toward a critical examination of how legal institutions distribute environmental benefits, burdens, and decision-making power. The 2014 Plantation Law therefore represents an important legal instrument through which competing objectives—economic development, environmental sustainability, climate mitigation, and Indigenous rights—intersect. Examining this legislation through the analytical lenses of climate justice and green colonialism provides an opportunity to evaluate whether Indonesia's plantation governance genuinely promotes equitable environmental protection or instead reproduces structural inequalities embedded within contemporary resource governance.

B. Climate Justice and Green Colonialism

Climate change has increasingly been recognized not merely as an environmental phenomenon but as a multidimensional issue involving questions of equity, power, and human rights. The concept of climate justice emerged as a response to the limitations of conventional environmental governance, which often prioritizes aggregate reductions in greenhouse gas emissions while overlooking the unequal distribution of environmental risks and benefits across societies (Schlosberg & Collins, 2014). Rather than treating climate change as a purely technical or scientific challenge, climate justice emphasizes that environmental harms are experienced unevenly, with marginalized populations—including Indigenous Peoples, rural communities, and smallholder farmers—bearing disproportionate burdens despite contributing least to global greenhouse gas emissions (Newell et al., 2021; Sultana, 2022).

Climate justice scholarship commonly distinguishes three interrelated dimensions of justice: distributive justice, procedural justice, and recognitional justice (Schlosberg, 2007; Fraser, 2009). Distributive justice concerns the equitable allocation of environmental benefits and burdens, including access to natural resources and exposure to climate risks. Procedural justice emphasizes

meaningful participation in environmental decision-making processes, transparency, and accountability. Recognition justice extends beyond participation by requiring the legal and political recognition of diverse identities, knowledge systems, and customary institutions, particularly those of Indigenous Peoples whose environmental governance practices have historically been marginalized (Whyte, 2017). Together, these dimensions provide a comprehensive analytical framework for evaluating whether legal and policy instruments contribute to socially just climate governance.

Within this framework, land tenure occupies a central position because secure land rights influence both climate mitigation and community resilience. Indigenous territories frequently overlap with areas of high ecological value, including tropical forests, peatlands, and biodiversity hotspots that function as globally significant carbon sinks (Fa et al., 2020). Empirical evidence demonstrates that forests managed by Indigenous communities often exhibit lower deforestation rates and higher ecological integrity than comparable areas managed under centralized state or commercial regimes (Blackman & Veit, 2018). Consequently, the protection of Indigenous land rights has become increasingly recognized as a prerequisite for achieving effective climate mitigation while simultaneously advancing social justice objectives.

Parallel to the evolution of climate justice, critical environmental scholarship has introduced the concept of green colonialism to explain how contemporary environmental governance may reproduce historical patterns of dispossession under the guise of sustainability (Dunlap & Brock, 2021). Green colonialism refers to processes through which conservation initiatives, carbon offset projects, renewable energy development, or climate mitigation policies facilitate the appropriation of land and natural resources from Indigenous Peoples and local communities without their meaningful participation or consent (Voskoboynik & Andreucci, 2022). Although these interventions are often justified by global environmental objectives, they may perpetuate asymmetrical power relations that privilege state authorities, multinational corporations, and international investors while undermining customary land tenure systems and local livelihoods.

Recent debates further suggest that green colonialism extends beyond conservation and carbon markets to encompass agricultural commodity production linked to sustainability narratives. Plantation industries increasingly adopt environmental certification schemes, corporate sustainability commitments, and climate-oriented investment frameworks that seek to improve environmental performance while maintaining large-scale extractive production models (Leach et al., 2021). Critics argue that such initiatives may reinforce unequal governance structures when sustainability standards prioritize market access and investment security without adequately addressing structural inequalities in land ownership, Indigenous rights, and community participation

(Fairhead et al., 2012; Dunlap, 2024). Consequently, environmental discourse can become a mechanism through which economic expansion is legitimized despite continuing patterns of ecological degradation and social exclusion.

These debates are particularly relevant in plantation-dependent economies such as Indonesia, where economic development strategies increasingly integrate commitments to sustainable palm oil production, climate mitigation, and green economic transformation. While regulatory reforms frequently invoke sustainability principles, questions remain regarding whether existing legal frameworks adequately protect Indigenous communities from land dispossession and environmental exploitation. The coexistence of ambitious environmental commitments with persistent land conflicts raises important concerns regarding the extent to which plantation governance embodies the principles of climate justice or instead reproduces contemporary forms of green colonialism. Examining Indonesia's 2014 Plantation Law through these theoretical perspectives therefore enables a more critical understanding of how environmental governance simultaneously shapes ecological outcomes, legal rights, and socio-political power relations.

C. Legal Context: Indonesia's 2014 Plantation Law (Law No. 39 of 2014)

Indonesia's plantation sector is governed by a complex legal framework that intersects with land administration, environmental protection, forestry governance, investment regulation, and the constitutional recognition of Indigenous Peoples. Within this framework, Law Number 39 of 2014 concerning Plantations (hereinafter the 2014 Plantation Law) represents the principal legislation regulating plantation development, business licensing, land utilization, environmental management, and the rights and obligations of plantation enterprises. The enactment of the law replaced the earlier Plantation Law of 2004 with the stated objectives of improving legal certainty, enhancing national competitiveness, strengthening investment, increasing productivity, and promoting sustainable plantation development (Government of Indonesia, 2014).

The 2014 Plantation Law was introduced during a period of rapid expansion of Indonesia's agricultural commodity sector, particularly oil palm, rubber, cocoa, sugarcane, and other export-oriented plantations. As plantation investment accelerated, concerns simultaneously intensified regarding deforestation, land conflicts, environmental degradation, and the protection of customary land rights (McCarthy, 2010; Li, 2014). The law therefore sought to balance economic development with environmental sustainability by incorporating provisions relating to environmental management, conservation obligations, fire prevention, and corporate social responsibility. It also requires plantation companies to implement good agricultural practices, protect natural resources,

and comply with environmental legislation governing environmental impact assessments and pollution control.

Despite these sustainability-oriented provisions, the regulatory emphasis of the Plantation Law remains closely aligned with Indonesia's broader economic development agenda. The legislation facilitates plantation investment through licensing mechanisms, land-use regulation, and legal certainty for commercial enterprises while simultaneously reinforcing the state's authority over land allocation and plantation governance. Scholars have argued that this investment-oriented approach reflects the continuing prioritization of economic growth and agricultural modernization within Indonesia's development policy, often creating tensions between commercial expansion and the protection of local communities' land rights (Bedner, 2016; Butt, 2020). Consequently, although environmental sustainability is explicitly recognized as a regulatory objective, implementation frequently depends upon administrative discretion and coordination across multiple governmental institutions.

The legal operation of the 2014 Plantation Law cannot be understood in isolation from Indonesia's broader land governance regime. Plantation licensing intersects with several major statutes, including the Basic Agrarian Law of 1960 (Law No. 5 of 1960), which establishes the state's authority to regulate land allocation while acknowledging the existence of customary (adat) rights insofar as they remain compatible with national interests. Plantation activities are further subject to Law Number 32 of 2009 on Environmental Protection and Management, which requires environmental impact assessments (Analisis Mengenai Dampak Lingkungan—AMDAL), environmental permits, and the application of sustainable environmental management principles. Where plantation expansion overlaps with forest areas, the Forestry Law (Law No. 41 of 1999) and subsequent forestry regulations also become applicable, creating a multilayered governance structure characterized by overlapping institutional mandates and legal uncertainty.

An important constitutional development affecting plantation governance was the Constitutional Court Decision No. 35/PUU-X/2012, which clarified that customary forests (hutan adat) are not part of state forests but belong to Indigenous Peoples whose customary communities continue to exist under Indonesian law. This landmark decision substantially strengthened the legal recognition of Indigenous land tenure by distinguishing customary forests from state-controlled forest areas. Nevertheless, translating constitutional recognition into effective administrative protection has proven challenging because formal recognition of Indigenous communities often depends upon local government regulations, complex verification procedures, and overlapping sectoral laws governing forestry, plantations, and spatial planning (Bedner & Arizona, 2019). Consequently, many customary territories remain legally vulnerable despite constitutional guarantees.

The regulatory landscape has become even more complex following the enactment of Law Number 11 of 2020 on Job Creation, as amended by Law Number 6 of 2023, which introduced significant reforms to Indonesia's investment and licensing system. Through a risk-based licensing approach, these reforms sought to simplify business procedures and accelerate investment across strategic sectors, including plantations. While proponents argue that regulatory simplification enhances economic efficiency and reduces bureaucratic barriers, critics contend that the reforms may weaken environmental oversight, reduce public participation, and further marginalize Indigenous communities in land-related decision-making (Aspinall & Van Klinken, 2022). These developments underscore the continuing tension between investment liberalization and environmental governance within Indonesia's legal system.

From a climate governance perspective, Indonesia has simultaneously committed itself to ambitious international obligations under the Paris Agreement, the Kunming–Montreal Global Biodiversity Framework, and the Sustainable Development Goals. These commitments require the country to reduce greenhouse gas emissions, conserve biodiversity, and strengthen social inclusion in environmental governance. However, the extent to which domestic plantation legislation effectively operationalizes these international commitments remains contested. While the 2014 Plantation Law incorporates principles of sustainable plantation management, it contains relatively limited provisions explicitly addressing climate mitigation, Indigenous self-determination, or Free, Prior and Informed Consent (FPIC). Instead, many of these protections continue to rely upon fragmented regulations outside the Plantation Law itself, thereby creating legal inconsistencies and implementation gaps.

Accordingly, the 2014 Plantation Law occupies a pivotal yet contested position within Indonesia's environmental and land governance architecture. It functions simultaneously as an instrument for promoting agricultural investment, regulating commercial plantation activities, and supporting national economic development, while also serving as one of the principal legal mechanisms affecting forest conservation, climate mitigation, and Indigenous land rights. This dual function makes the law particularly suitable for critical examination through the analytical frameworks of climate justice and green colonialism, as it reveals how legal institutions may simultaneously pursue sustainability objectives while reproducing unequal power relations in the governance of land and natural resources.

D. Research Objectives and Questions

Although a substantial body of scholarship has examined Indonesia's plantation sector from the perspectives of political ecology, land governance, environmental sustainability, and Indigenous rights, relatively few studies have

investigated plantation legislation through an integrated climate justice framework. Existing research has primarily focused on the environmental consequences of oil palm expansion, including deforestation, greenhouse gas emissions, biodiversity loss, and agrarian conflicts (Carlson et al., 2018; Gaveau et al., 2022; Pendrill et al., 2022). Other studies have emphasized legal pluralism, customary land tenure, and the challenges associated with recognizing Indigenous rights within Indonesia's land administration system (Bedner, 2016; Li, 2014). While these contributions have significantly advanced understanding of plantation governance, they generally examine environmental regulation, Indigenous rights, and climate governance as separate analytical domains.

Moreover, emerging scholarship on green colonialism has largely concentrated on conservation initiatives, carbon markets, renewable energy projects, and international climate finance, with comparatively limited attention devoted to plantation governance as a contemporary mechanism through which environmentally justified development may reproduce unequal access to land and natural resources (Dunlap & Brock, 2021; Voskoboynik & Andreucci, 2022). Consequently, there remains insufficient understanding of how plantation legislation simultaneously shapes climate governance, Indigenous territorial rights, and environmental justice within resource-dependent economies of the Global South.

This study addresses these gaps by positioning Indonesia's 2014 Plantation Law at the intersection of climate justice, environmental governance, and Indigenous rights. Rather than evaluating the legislation solely in terms of regulatory effectiveness or economic performance, the study critically examines how legal norms distribute environmental responsibilities, allocate decision-making authority, and recognize—or fail to recognize—the rights and knowledge systems of Indigenous Peoples. In doing so, the research extends climate justice scholarship beyond conventional analyses of emissions reduction and environmental policy by demonstrating how domestic land and plantation laws function as central instruments of climate governance.

The study further contributes to the growing literature on green colonialism by investigating whether sustainability-oriented plantation governance can unintentionally legitimize extractive development practices through legal mechanisms that privilege investment, commercial agriculture, and state control over customary land tenure. This perspective enables a more comprehensive understanding of how legal institutions may reinforce structural inequalities despite adopting the language of sustainability, environmental protection, and climate responsibility.

Accordingly, the primary objective of this research is to critically evaluate whether Indonesia's 2014 Plantation Law advances the principles of climate justice or instead reproduces characteristics associated with green colonialism in the governance of plantation development. The study also seeks to assess the

extent to which the law protects Indigenous land rights, facilitates meaningful participation in environmental decision-making, and addresses environmental exploitation arising from large-scale plantation expansion.

To achieve these objectives, the research is guided by the following questions:

1. To what extent does Indonesia's 2014 Plantation Law promote the principles of climate justice in regulating plantation development?
2. How does the 2014 Plantation Law affect the recognition, protection, and realization of Indigenous land rights and customary territorial governance?
3. To what extent does the legal framework address environmental exploitation, deforestation, and climate-related impacts associated with plantation expansion?
4. Does the implementation of the 2014 Plantation Law mitigate or reinforce patterns of green colonialism through contemporary land governance and plantation regulation?

By addressing these questions, this study aims to contribute both theoretically and practically to ongoing debates concerning climate justice, environmental law, and Indigenous rights. Theoretically, it integrates climate justice and green colonialism into the analysis of plantation legislation—an area that remains comparatively underexplored within legal scholarship. Empirically, it provides a socio-legal assessment of Indonesia's plantation governance using legal analysis, qualitative evidence from land conflict case studies, and perspectives from Indigenous communities and environmental stakeholders. Normatively, the research offers policy recommendations for strengthening Indigenous land tenure, improving participatory environmental governance, and embedding climate justice principles more explicitly within Indonesia's plantation regulatory framework.

Literature Review

A. Climate Justice and Land Governance

Climate justice has emerged as one of the most influential normative frameworks in contemporary environmental governance, extending climate discourse beyond scientific assessments of greenhouse gas emissions to encompass questions of equity, power, human rights, and historical responsibility. While early climate governance primarily emphasized emission reduction targets and technological mitigation strategies, climate justice scholars argue that climate change should be understood as a fundamentally political issue shaped by unequal economic structures, colonial histories, and asymmetrical access to natural resources (Schlosberg, 2007; Schlosberg & Collins, 2014; Newell et al., 2021). Consequently, evaluating environmental policies requires examining not only their ecological effectiveness but also the ways in which they distribute

environmental benefits, burdens, and decision-making authority across different social groups.

The theoretical foundations of climate justice are commonly organized around three interconnected dimensions: distributive justice, procedural justice, and recognitional justice (Fraser, 2009; Schlosberg, 2007). Distributive justice concerns the equitable allocation of environmental resources, risks, and opportunities. Within the context of land governance, distributive justice requires equitable access to land, forests, ecosystem services, and the economic benefits derived from natural resource management. Conversely, unequal land distribution frequently exposes marginalized communities to disproportionate environmental degradation, climate vulnerability, and livelihood insecurity while concentrating economic gains among politically and economically powerful actors (Sikor et al., 2014).

Procedural justice emphasizes fairness in environmental decision-making processes, including transparency, accountability, access to information, and meaningful public participation (Newell et al., 2021). Environmental governance that excludes affected communities from decisions regarding land allocation, plantation licensing, or natural resource development undermines the legitimacy of climate policies regardless of their environmental objectives. This dimension is particularly significant in Indigenous territories where land-use decisions are frequently made through centralized administrative mechanisms that inadequately represent customary institutions and local governance systems (Whyte, 2017). Effective procedural justice therefore requires participatory mechanisms that enable Indigenous Peoples to influence decisions affecting their ancestral lands, cultural heritage, and environmental futures.

Recognitional justice extends beyond participation by addressing the structural marginalization of particular identities, knowledge systems, and governance institutions (Fraser, 2009). Rather than treating Indigenous Peoples merely as stakeholders within state-led governance processes, recognitional justice demands the acknowledgment of Indigenous legal traditions, customary tenure systems, and ecological knowledge as legitimate sources of environmental governance. Whyte (2017) argues that climate injustice frequently arises from the systematic exclusion of Indigenous worldviews from environmental policymaking, thereby reproducing historical patterns of colonial domination under contemporary climate governance. Recognition therefore becomes both a legal and political prerequisite for equitable climate adaptation and mitigation strategies.

These three dimensions of justice are closely intertwined with land governance because land constitutes the primary material basis through which climate mitigation, biodiversity conservation, and sustainable development policies are implemented. Secure land tenure enables communities to maintain sustainable livelihood systems, invest in long-term environmental stewardship,

and strengthen adaptive capacity in response to climate-related risks (Robinson et al., 2018). Conversely, insecure tenure encourages short-term resource exploitation, increases the likelihood of land conflicts, and weakens incentives for conservation. Numerous empirical studies demonstrate that legally recognized Indigenous territories frequently exhibit lower rates of deforestation, higher biodiversity conservation outcomes, and greater ecosystem resilience than comparable lands managed under alternative governance arrangements (Blackman & Veit, 2018; Fa et al., 2020).

The relationship between Indigenous land rights and climate governance has received increasing recognition within international environmental law and global policy frameworks. Instruments such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Paris Agreement, and the Kunming–Montreal Global Biodiversity Framework emphasize the importance of respecting Indigenous knowledge, participation, and territorial rights in achieving sustainable environmental outcomes. Although these instruments differ in their legal status, they collectively reinforce an emerging international norm that effective climate governance depends upon inclusive and rights-based land management rather than solely technical or market-based interventions (IPCC, 2022).

Recent scholarship has further challenged conventional assumptions that environmental sustainability can be achieved independently of social justice. Critics argue that climate mitigation initiatives focused exclusively on carbon accounting, conservation targets, or technological innovation risk reproducing existing inequalities when they fail to address structural disparities in land ownership, political representation, and access to natural resources (Sultana, 2022). Climate policies that overlook these distributive and institutional dimensions may inadvertently transfer environmental costs to marginalized populations while preserving existing patterns of economic and political privilege. Accordingly, climate justice requires the integration of environmental objectives with broader commitments to social equity, legal pluralism, and democratic governance.

Within Indonesia, these theoretical insights are particularly relevant because land governance operates within a legally pluralistic environment characterized by overlapping statutory law, customary tenure systems, forestry regulations, and sectoral licensing regimes. The coexistence of state claims over land with customary ownership claims has generated persistent legal uncertainty, particularly in regions experiencing rapid plantation expansion. Plantation development therefore provides an important empirical context for examining whether legal frameworks governing land allocation adequately reflect the principles of distributive, procedural, and recognitional justice or instead reinforce structural inequalities affecting Indigenous Peoples and other rural communities.

For the purposes of this study, climate justice serves not merely as a normative aspiration but as the principal analytical framework for evaluating Indonesia's 2014 Plantation Law. Specifically, the research assesses whether the law (1) distributes environmental benefits and burdens equitably, (2) provides meaningful opportunities for Indigenous participation in plantation governance, and (3) recognizes customary land rights and Indigenous governance institutions within the legal regulation of plantation development. These three dimensions collectively provide a systematic basis for assessing whether plantation governance contributes to equitable climate governance or perpetuates environmentally justified forms of social exclusion.

B. Green Colonialism and Environmental Governance

The concept of green colonialism has gained increasing prominence within critical environmental scholarship as researchers question whether contemporary sustainability initiatives genuinely promote environmental justice or instead reproduce historical patterns of colonial domination through new institutional and legal mechanisms. Although environmental governance is frequently presented as politically neutral and universally beneficial, an expanding body of literature argues that conservation policies, climate mitigation strategies, and green economic transitions may generate unequal social and territorial consequences when they prioritize global environmental objectives over the rights, livelihoods, and self-determination of local communities (Fairhead et al., 2012; Dunlap & Brock, 2021). Consequently, environmental governance has become an important site for examining how power, law, and resource control interact in the context of global climate politics.

The intellectual origins of green colonialism can be traced to political ecology, postcolonial studies, and critical legal scholarship, all of which emphasize that environmental policies are embedded within broader political and economic structures rather than operating independently of them (Robbins, 2012; Peluso & Lund, 2011). These perspectives challenge conventional assumptions that environmental protection necessarily benefits all actors equally. Instead, they demonstrate that the designation of protected areas, conservation zones, or climate mitigation projects frequently involves the reallocation of authority over land and natural resources from local communities to state institutions, private corporations, or international organizations. Such processes often transform environmental governance into a mechanism for territorial control rather than solely ecological protection.

Fairhead et al. (2012) describe these dynamics as forms of “green grabbing,” referring to the appropriation of land and natural resources for environmental purposes through legal, market-based, or policy instruments. Unlike conventional land grabbing driven primarily by agricultural expansion or extractive industries, green grabbing is legitimized through narratives of

biodiversity conservation, carbon sequestration, ecosystem restoration, or sustainable development. While environmental objectives may be genuine, the implementation of these initiatives frequently produces unintended consequences, including displacement, restrictions on customary resource use, and the erosion of Indigenous governance systems. As a result, environmental protection may paradoxically generate new forms of exclusion despite its sustainability objectives.

Building upon this literature, Dunlap and Brock (2021) conceptualize green colonialism as a broader political process through which climate policies, renewable energy development, conservation initiatives, and environmental investments reproduce colonial relations of power. Rather than relying on direct territorial conquest, contemporary green colonialism operates through legal reforms, regulatory institutions, financial mechanisms, and sustainability standards that facilitate the concentration of control over land and natural resources. These mechanisms often privilege governments, multinational corporations, development agencies, and international investors while reducing the capacity of Indigenous Peoples and local communities to exercise autonomous control over their territories. Consequently, environmental governance may function simultaneously as a strategy for ecological protection and as a mechanism for political and economic domination.

Recent scholarship has expanded the application of green colonialism beyond conservation and protected areas to include the governance of renewable energy, carbon markets, critical mineral extraction, and agricultural commodity production (Leach et al., 2021; Voskoboynik & Andreucci, 2022). This broader perspective recognizes that the transition toward low-carbon development increasingly depends upon large-scale land acquisition for bioenergy, carbon offset projects, reforestation initiatives, and environmentally certified agricultural commodities. Although these interventions contribute to climate mitigation objectives, they may also intensify competition over land, reinforce unequal tenure arrangements, and marginalize customary land users where legal protections remain weak. Accordingly, the sustainability of environmental policies cannot be evaluated solely through ecological indicators but must also consider their distributive and institutional consequences.

Within agricultural commodity sectors, sustainability certification schemes have become central instruments of environmental governance. Certification mechanisms, including those governing sustainable palm oil production, seek to reduce deforestation, improve environmental management, and strengthen corporate accountability through market-based incentives. Numerous studies acknowledge that certification has contributed to improvements in transparency, traceability, and environmental performance among participating producers (Meijaard et al., 2020). However, critics argue that voluntary sustainability standards frequently emphasize procedural compliance while inadequately

addressing structural inequalities in land ownership, historical dispossession, and Indigenous territorial rights (Pye, 2019). Consequently, environmental certification may enhance the legitimacy of plantation expansion without fundamentally transforming unequal governance structures that facilitate environmental exploitation.

These concerns are particularly relevant in Indonesia, where plantation expansion intersects with legally pluralistic systems of land tenure and overlapping claims between state authorities, plantation companies, and Indigenous communities. Government policies increasingly promote sustainable plantation development through environmental regulation, certification, and commitments to reducing deforestation while simultaneously encouraging investment in export-oriented agricultural commodities. This dual policy orientation reflects broader tensions within environmental governance: economic growth and sustainability are pursued concurrently, yet the institutional mechanisms designed to achieve these objectives often prioritize investment certainty over social justice and customary land rights (McCarthy, 2010; Cramb & McCarthy, 2016).

From a legal perspective, green colonialism does not necessarily imply explicit violations of environmental law. Rather, it highlights how legal systems themselves may institutionalize unequal power relations through licensing procedures, land classification systems, concession regimes, and administrative decision-making processes that disproportionately favor commercial actors. Environmental legislation may therefore incorporate sustainability principles while simultaneously limiting meaningful participation by Indigenous Peoples, narrowing opportunities for contesting land allocation, or subordinating customary tenure to statutory property regimes. Such dynamics are especially significant where legal recognition of Indigenous territories remains conditional upon complex administrative procedures that many communities are unable to satisfy.

Furthermore, critical scholars caution against interpreting climate mitigation and green economic transitions as inherently equitable. Market-driven environmental governance frequently assumes that economic growth, technological innovation, and private investment will generate mutually reinforcing environmental and social benefits. However, empirical evidence increasingly demonstrates that without robust legal safeguards, these approaches may externalize environmental costs onto marginalized populations while concentrating financial and ecological benefits among state and corporate actors (Sultana, 2022). Consequently, justice-oriented environmental governance requires more than the incorporation of sustainability language into legislation; it demands institutional arrangements capable of redistributing power, securing land tenure, recognizing Indigenous legal systems, and ensuring meaningful participation in environmental decision-making.

These theoretical debates provide a critical foundation for evaluating Indonesia's 2014 Plantation Law. Although the legislation explicitly promotes sustainable plantation management and environmental responsibility, its practical implications cannot be assessed solely through its environmental provisions. Instead, the law must also be examined in terms of how it allocates authority over land, structures participation in plantation governance, and mediates the relationship between commercial plantation expansion and Indigenous territorial rights. Applying the framework of green colonialism therefore enables a more comprehensive assessment of whether plantation regulation functions as an instrument of equitable environmental governance or perpetuates legally institutionalized forms of environmental dispossession under the discourse of sustainable development.

C. Plantation Economies, Deforestation, and Indigenous Rights

The expansion of plantation economies has become one of the defining features of land-use transformation across the tropical regions of the Global South. Driven by increasing global demand for agricultural commodities, biofuels, and industrial raw materials, large-scale plantation agriculture has significantly contributed to economic growth while simultaneously reshaping ecological systems and rural livelihoods (Byerlee et al., 2017; Cramb & McCarthy, 2016). Among plantation commodities, oil palm occupies a particularly prominent position due to its high productivity, commercial value, and strategic importance in international food, cosmetic, and bioenergy markets. Indonesia, as the world's largest producer of crude palm oil, has consequently become a focal point of international debates concerning sustainable agriculture, forest conservation, climate governance, and Indigenous rights.

The economic contribution of Indonesia's plantation sector is substantial. Palm oil exports generate significant foreign exchange earnings, provide employment opportunities, and support national development strategies aimed at increasing agricultural productivity and reducing rural poverty (Meijaard et al., 2020). Government policies have consistently promoted plantation expansion as a means of enhancing economic competitiveness and attracting domestic and foreign investment. Nevertheless, the developmental benefits associated with plantation growth have been accompanied by complex environmental and social externalities that increasingly challenge the long-term sustainability of Indonesia's land governance system.

One of the most extensively documented consequences of plantation expansion is tropical deforestation. Numerous studies demonstrate that the conversion of primary forests and peatlands into industrial plantations has contributed to extensive habitat fragmentation, biodiversity decline, and greenhouse gas emissions (Carlson et al., 2018; Gaveau et al., 2022; Pendrill et al., 2022). Although recent evidence suggests that the annual rate of deforestation

associated with oil palm expansion has declined in certain regions due to improved governance, corporate commitments, and market pressure, plantation development remains a significant driver of land-use change, particularly where governance institutions are weak or land tenure remains contested (Austin et al., 2019). Forest conversion also reduces ecosystem services, disrupts hydrological systems, and increases vulnerability to floods, droughts, and recurrent forest fires, thereby amplifying the impacts of climate change on rural communities.

The relationship between plantation development and climate change extends beyond deforestation alone. The drainage of peatlands for plantation cultivation releases substantial quantities of stored carbon into the atmosphere, while recurrent peat and forest fires contribute to regional haze, biodiversity loss, and severe public health impacts (Miettinen et al., 2017; IPCC, 2022). These environmental consequences illustrate the interconnected nature of land-use governance and global climate mitigation. As a result, international climate policy increasingly recognizes the protection of tropical forests and peatlands as essential components of achieving long-term emissions reduction targets.

However, the environmental impacts of plantation expansion cannot be understood independently from the social relations governing land access and resource control. Plantation development frequently occurs in areas characterized by overlapping statutory, customary, and informal tenure systems, creating legal uncertainty regarding ownership and land-use rights (Peluso & Lund, 2011). In Indonesia, these overlapping legal regimes have generated persistent conflicts between plantation companies, state authorities, and Indigenous communities, particularly where customary territories have not received formal legal recognition (Bedner & Arizona, 2019). Such conflicts are not merely disputes over property ownership but also involve competing claims concerning identity, cultural survival, political authority, and environmental stewardship.

Indigenous Peoples occupy a particularly significant position within these debates because their customary territories encompass substantial portions of Indonesia's remaining forests, peatlands, and ecologically important landscapes. A growing body of international research demonstrates that Indigenous-managed territories often achieve conservation outcomes comparable to, or exceeding, those of state-managed protected areas due to long-standing customary institutions regulating resource use and ecosystem management (Fa et al., 2020; Blackman & Veit, 2018). These findings challenge earlier assumptions that biodiversity conservation necessarily requires centralized state control and instead highlight the ecological value of Indigenous governance systems.

Despite increasing international recognition of Indigenous stewardship, legal protection of customary land rights in Indonesia remains fragmented. Although Article 18B(2) of the 1945 Constitution acknowledges the existence of

customary law communities, practical recognition of Indigenous territories depends upon complex administrative procedures involving local governments, sectoral ministries, and overlapping spatial planning regulations (Bedner, 2016). The Constitutional Court Decision No. 35/PUU-X/2012 represented an important legal milestone by affirming that customary forests are not part of state forests. Nevertheless, implementation has proceeded unevenly across regions, leaving many Indigenous communities without effective legal certainty over ancestral territories. This institutional gap continues to facilitate competing land claims and increases the vulnerability of customary lands to commercial plantation development.

Empirical studies consistently identify land conflicts as one of the most persistent governance challenges associated with plantation expansion. Myers et al. (2017) estimate that a substantial proportion of plantation concessions overlap with areas subject to competing claims by local communities and Indigenous Peoples. These conflicts often arise from inconsistencies between formal concession boundaries and customary territorial maps, inadequate consultation processes, and unequal access to legal remedies. In many cases, affected communities experience reduced access to forests, agricultural land, water resources, and culturally significant sites, undermining traditional livelihoods and food security (Colchester et al., 2020). Such outcomes illustrate that land conflicts are not isolated administrative disputes but manifestations of broader structural inequalities embedded within land governance institutions.

The principle of Free, Prior and Informed Consent (FPIC) has increasingly been promoted within international human rights and environmental governance frameworks as a mechanism for protecting Indigenous rights during resource development. FPIC requires that Indigenous Peoples receive adequate information, participate voluntarily, and provide consent before activities affecting their lands or resources are approved. Although FPIC has been incorporated into various international standards and voluntary sustainability certification schemes, its implementation within domestic plantation governance remains inconsistent (Colchester et al., 2020). Consultation processes are frequently procedural rather than deliberative, limiting Indigenous communities' capacity to influence substantive decisions concerning plantation licensing and land allocation.

Beyond questions of legal recognition, recent scholarship emphasizes that Indigenous knowledge systems contribute directly to climate resilience and sustainable environmental governance. Traditional ecological knowledge supports biodiversity conservation, adaptive resource management, and ecosystem restoration while strengthening community resilience to climate-related disturbances (Whyte, 2017; IPCC, 2022). Consequently, weakening Indigenous land tenure not only threatens cultural survival but may also undermine broader environmental objectives by displacing governance systems

that have historically maintained ecological integrity. This perspective reinforces the growing consensus that Indigenous rights and environmental sustainability should be understood as mutually reinforcing rather than competing policy objectives.

Taken together, the literature demonstrates that plantation expansion represents a multidimensional governance challenge encompassing economic development, environmental protection, land tenure, and human rights. While plantations contribute significantly to national economic growth, they also generate complex ecological and social consequences that cannot be addressed solely through technical environmental regulation. Instead, sustainable plantation governance requires legal institutions capable of reconciling commercial development with secure Indigenous land rights, meaningful participation, and effective environmental protection. These insights provide the empirical and conceptual foundation for examining whether Indonesia's 2014 Plantation Law successfully balances these competing objectives or instead reinforces the structural conditions associated with climate injustice and green colonialism.

D. Research Gap

The existing body of scholarship provides substantial evidence that plantation expansion has generated profound environmental, social, and legal consequences across Indonesia. Studies examining oil palm development have extensively documented its contributions to deforestation, biodiversity loss, greenhouse gas emissions, peatland degradation, and changing patterns of rural livelihoods (Carlson et al., 2018; Gaveau et al., 2022; Pendrill et al., 2022). Parallel research has explored agrarian conflicts, legal pluralism, customary land tenure, and the institutional challenges associated with recognizing Indigenous rights within Indonesia's complex land governance system (Li, 2014; Bedner, 2016; Bedner & Arizona, 2019). Collectively, these studies have significantly advanced understanding of the ecological and socio-economic implications of plantation development.

At the same time, a growing literature on climate justice has demonstrated that climate governance should be evaluated not only in terms of environmental effectiveness but also through principles of distributive, procedural, and recognitional justice (Schlosberg, 2007; Schlosberg & Collins, 2014; Sultana, 2022). Similarly, research on green colonialism has challenged assumptions that sustainability-oriented policies are inherently equitable by illustrating how environmental governance may reproduce historical patterns of dispossession through conservation initiatives, carbon markets, renewable energy projects, and other forms of green economic transition (Fairhead et al., 2012; Dunlap & Brock, 2021; Voskoboynik & Andreucci, 2022). These theoretical developments have

substantially enriched critical analyses of environmental governance and political ecology.

Despite these important contributions, the intersection between plantation law, climate justice, and green colonialism remains insufficiently explored. Existing studies generally treat plantation governance as either an environmental issue, an agrarian issue, or a human rights issue, with relatively limited integration of these perspectives into a single analytical framework. Legal scholarship concerning Indonesia's plantation sector has predominantly focused on statutory interpretation, investment regulation, land administration, or environmental compliance, while comparatively few studies have examined how plantation legislation itself structures the distribution of environmental burdens, political authority, and legal recognition among competing actors. Consequently, the justice implications of plantation law remain underdeveloped within both environmental law and climate governance literature.

Furthermore, although green colonialism has emerged as an influential framework for analysing contemporary environmental governance, empirical applications have concentrated primarily on protected areas, biodiversity conservation, carbon offset mechanisms, renewable energy infrastructure, and critical mineral extraction. Comparatively little attention has been devoted to commercial plantation governance despite the sector's extensive reliance on land acquisition, state licensing, sustainability certification, and global commodity markets. As a result, plantation economies remain an underexamined site through which contemporary forms of environmentally justified land dispossession and resource control may operate.

Another significant limitation concerns the treatment of Indigenous rights within climate governance research. Numerous studies acknowledge that secure Indigenous land tenure contributes to biodiversity conservation, forest protection, and climate resilience (Blackman & Veit, 2018; Fa et al., 2020). However, relatively few have systematically examined how domestic legislation governing plantation development either strengthens or constrains these contributions through specific legal institutions, administrative procedures, and regulatory mechanisms. In particular, the relationship between statutory plantation regulation and the practical realization of Indigenous territorial rights remains insufficiently analysed from a socio-legal perspective.

This gap is especially significant in Indonesia because the 2014 Plantation Law occupies a strategic position at the intersection of economic development, environmental regulation, and land governance. The legislation simultaneously promotes agricultural investment, regulates commercial plantation activities, and incorporates principles of sustainable environmental management. Nevertheless, it remains unclear whether these regulatory objectives translate into equitable governance outcomes for Indigenous communities and environmentally vulnerable populations. Existing scholarship has rarely

evaluated the Plantation Law using climate justice as the primary analytical framework while simultaneously considering the possibility that sustainability-oriented legal reforms may reinforce rather than reduce structural inequalities.

To address these limitations, this study adopts an interdisciplinary socio-legal approach that integrates climate justice theory, green colonialism, Indigenous rights scholarship, and environmental governance into the analysis of Indonesia's 2014 Plantation Law. Rather than evaluating the legislation solely through doctrinal legal interpretation or environmental performance indicators, the research investigates how legal norms allocate rights, responsibilities, and decision-making power in relation to plantation development. Specifically, the study assesses the law through the three dimensions of climate justice—distributive, procedural, and recognitional justice—while critically examining whether the implementation of plantation governance reproduces characteristics associated with green colonialism.

Accordingly, this research makes three principal contributions to the existing literature. First, it extends climate justice scholarship by demonstrating that domestic plantation legislation constitutes a critical yet underexplored dimension of climate governance. Second, it broadens the application of green colonialism beyond conservation and carbon governance by positioning plantation regulation as a contemporary legal mechanism through which unequal environmental relations may be institutionalized. Third, it contributes to socio-legal scholarship on Indonesia by providing an integrated analysis of plantation law, Indigenous land rights, and environmental governance that combines doctrinal legal analysis with empirical evidence from land conflict case studies and qualitative stakeholder perspectives. Through these contributions, the study seeks to advance a more comprehensive understanding of how plantation governance influences the pursuit of climate justice in resource-dependent economies of the Global South.

Methods

A. Research Design

This study employs a qualitative socio-legal research design to examine the relationship between Indonesia's 2014 Plantation Law, Indigenous land rights, and environmental governance through the analytical frameworks of climate justice and green colonialism. A socio-legal approach is particularly appropriate because plantation governance cannot be adequately understood through doctrinal legal interpretation alone. Instead, legal norms must be analysed within their broader institutional, political, environmental, and socio-economic contexts, recognizing that the implementation and effects of law are shaped by interactions between statutory regulation, administrative practice, customary institutions, and competing governance interests (Cotterrell, 2017; Banakar & Travers, 2020).

Unlike conventional doctrinal legal research, which primarily focuses on identifying legal rules and interpreting statutory provisions, socio-legal research examines how legal frameworks operate in practice and how they influence social relations, power structures, and environmental outcomes. This perspective is especially relevant for plantation governance, where legal regulation intersects with land tenure, Indigenous rights, environmental protection, investment policy, and climate governance. Accordingly, the study integrates legal analysis with insights from environmental governance, political ecology, and climate justice scholarship to evaluate the normative objectives and practical implications of the 2014 Plantation Law.

The research adopts a qualitative interpretive methodology because the principal objective is not to measure causal relationships statistically but to critically examine how legal institutions construct, distribute, and legitimize rights, obligations, and authority over land and natural resources. Qualitative inquiry enables a contextual understanding of the interaction between legislation, environmental governance, and Indigenous rights while facilitating a critical assessment of the justice implications embedded within plantation regulation. This approach is consistent with contemporary socio-legal scholarship, which emphasizes the importance of analysing legal texts alongside the institutional and political contexts in which they are interpreted and implemented.

The analytical framework guiding this research combines three complementary perspectives. First, climate justice provides the normative criteria through which the distributive, procedural, and recognitional dimensions of plantation governance are assessed (Schlosberg, 2007; Schlosberg & Collins, 2014). Second, the concept of green colonialism offers a critical lens for examining whether sustainability-oriented legal frameworks reproduce unequal power relations through contemporary environmental governance (Dunlap & Brock, 2021). Third, socio-legal analysis enables an evaluation of how statutory law interacts with customary land tenure, constitutional principles, environmental regulation, and administrative decision-making in Indonesia's plural legal system.

Accordingly, this research seeks to move beyond formal legal interpretation by critically evaluating whether the institutional design and implementation of Indonesia's plantation legislation contribute to equitable environmental governance or instead reinforce structural inequalities affecting Indigenous Peoples and local communities. The combination of doctrinal legal analysis and socio-legal inquiry therefore provides an appropriate methodological foundation for addressing the study's research questions concerning climate justice, Indigenous land rights, and environmental exploitation within plantation governance.

B. Data Collection

The study relies exclusively on documentary data obtained from authoritative legal and academic sources. Data collection follows a systematic qualitative document analysis designed to examine both the normative content of Indonesia's plantation legislation and the empirical evidence concerning its implementation. Using multiple categories of documentary evidence enhances analytical triangulation and strengthens the credibility of the study's findings by enabling comparisons across legal, institutional, and scholarly sources.

The primary legal materials consist of Indonesian legislation governing plantation development, land administration, forestry, environmental protection, and Indigenous rights. These materials include the 1945 Constitution of the Republic of Indonesia, Law Number 39 of 2014 concerning Plantations, Law Number 5 of 1960 concerning Basic Agrarian Principles, Law Number 41 of 1999 concerning Forestry, Law Number 32 of 2009 concerning Environmental Protection and Management, Law Number 6 of 2023 concerning Job Creation, implementing regulations, and Constitutional Court decisions relevant to customary land rights, particularly Constitutional Court Decision No. 35/PUU-X/2012. These legal sources provide the normative basis for assessing the regulatory framework governing plantation development and Indigenous land tenure.

Secondary legal materials comprise peer-reviewed international journal articles, academic books, legal commentaries, and scholarly publications addressing climate justice, green colonialism, environmental governance, land law, Indigenous rights, and socio-legal studies. Priority is given to publications indexed in Scopus or the Web of Science to ensure analytical reliability and engagement with internationally recognized scholarship. Particular attention is paid to literature published during the past decade while also incorporating seminal theoretical works that continue to shape contemporary debates.

To complement doctrinal legal analysis, the study also examines documented evidence concerning plantation expansion, land conflicts, deforestation, and Indigenous territorial claims derived from publicly available and verifiable sources. These include Constitutional Court judgments, judicial decisions where relevant, official government publications, reports issued by recognized international organizations, and empirical findings reported in peer-reviewed journals. Documentary evidence from reputable non-governmental organizations is used selectively to provide contextual information regarding documented land disputes and environmental governance, with such materials interpreted critically and corroborated against academic and legal sources wherever possible.

Document selection follows purposive sampling based on relevance to the research questions. Sources are included when they provide substantive information concerning (1) Indonesia's plantation legal framework, (2)

Indigenous land rights and customary tenure, (3) climate justice and environmental governance, (4) green colonialism and land dispossession, or (5) documented environmental and social impacts associated with plantation expansion. This systematic approach ensures that the analysis is grounded in credible, transparent, and academically verifiable documentary evidence while avoiding unsupported factual claims.

C. Data Analysis

The collected materials were analysed through a combination of doctrinal legal analysis and thematic analysis. This analytical strategy was selected because the research examines both the formal legal structure of Indonesia's plantation governance and the broader social, environmental, and political implications of legal regulation. By combining these approaches, the study is able to evaluate not only what the law formally establishes but also how legal arrangements influence patterns of authority, resource allocation, and environmental governance.

The first stage of analysis involved doctrinal legal analysis of Indonesia's plantation-related regulatory framework. This process examined the objectives, principles, institutional arrangements, rights provisions, obligations, and enforcement mechanisms contained within Law Number 39 of 2014 concerning Plantations and related legislation. Particular attention was given to provisions concerning environmental protection, community participation, land acquisition, plantation licensing, and the recognition of customary rights. The analysis also considered the relationship between the Plantation Law and other relevant legal instruments, including agrarian, forestry, environmental, and investment regulations, in order to identify areas of regulatory coherence, overlap, and contradiction.

The second stage involved thematic analysis of documentary evidence and academic literature. Following an inductive and deductive analytical process, relevant materials were coded according to themes derived from the research questions and theoretical framework. The principal analytical themes included: (1) environmental sustainability and climate governance, (2) Indigenous land recognition and customary tenure protection, (3) participation and decision-making processes, (4) plantation expansion and environmental exploitation, and (5) power relations within land governance institutions.

The thematic categories were subsequently evaluated through the conceptual frameworks of climate justice and green colonialism. From a climate justice perspective, the analysis examined whether plantation governance demonstrates distributive justice through equitable allocation of environmental benefits and burdens, procedural justice through meaningful participation mechanisms, and recognitional justice through acknowledgment of Indigenous identities, knowledge systems, and territorial rights. From a green colonialism perspective, the analysis investigated whether sustainability-oriented plantation

regulation potentially facilitates forms of environmental governance that maintain unequal relationships between state institutions, corporate actors, and local communities.

The study also applies a critical legal analysis approach to identify potential gaps between normative legal commitments and practical governance outcomes. This involves examining whether environmental and sustainability provisions within the Plantation Law are supported by adequate institutional mechanisms for enforcement and whether Indigenous rights recognized under constitutional and international frameworks are effectively incorporated into plantation governance. Such analysis does not assume that legal provisions automatically produce particular outcomes; rather, it investigates how legal structures enable, constrain, or redistribute power among different actors involved in land governance. Finally, findings from different categories of sources were compared through a process of analytical triangulation. Legal texts were examined alongside academic research and documented evidence concerning plantation-related environmental and social impacts. This triangulation strengthens the validity of the analysis by reducing reliance on a single type of evidence and allowing a more comprehensive assessment of the relationship between plantation regulation, environmental protection, and social justice.

D. Ethical Considerations

Although this study does not involve direct interaction with human participants, ethical considerations remain central to the research design, particularly because the research concerns Indigenous Peoples, contested land rights, and environmental conflicts. The study adopts an ethical approach based on responsible representation, respect for Indigenous perspectives, and careful interpretation of legal and empirical materials concerning vulnerable communities.

First, the research prioritizes accuracy and contextual sensitivity in representing Indigenous experiences and land-related conflicts. Indigenous communities are not treated merely as victims of environmental degradation but as rights-bearing actors with distinct legal traditions, governance systems, and ecological knowledge. Accordingly, the analysis avoids reducing Indigenous perspectives to simplified narratives and instead recognizes the complexity of relationships between customary institutions, state authority, and economic development processes. Second, the study applies critical source evaluation when using documentary materials related to Indigenous rights and plantation conflicts. Government publications, corporate documents, academic studies, judicial decisions, and civil society reports may reflect different institutional perspectives and interests. Therefore, documentary sources are examined comparatively rather than accepted uncritically. Particular attention is given to

identifying potential institutional biases, incomplete representations, or assumptions embedded within legal and policy documents.

Third, the research follows principles of academic integrity by ensuring that all legal materials, empirical claims, and theoretical arguments are supported by appropriate citations. The study does not claim direct knowledge of community experiences beyond what is documented in publicly available sources and peer-reviewed research. This limitation is explicitly acknowledged to prevent overgeneralization and to maintain transparency regarding the scope of the research. Fourth, because Indigenous land rights are closely connected with cultural identity, collective rights, and historical experiences of marginalization, the analysis adopts a rights-based perspective consistent with international principles concerning Indigenous Peoples, including the recognition of participation, self-determination, and respect for customary institutions. The study therefore approaches Indigenous rights not merely as policy considerations but as fundamental elements of equitable environmental governance.

By incorporating these ethical considerations, the research seeks to contribute to academic debates on plantation governance without reproducing the forms of exclusion or misrepresentation that critical environmental scholarship identifies as central features of environmental injustice. The methodological approach therefore aligns with the broader objective of examining whether legal frameworks governing plantation development support climate justice or reinforce unequal environmental relations.

Results and Findings

A. Environmental Protection Provisions in the Plantation Law

The analysis demonstrates that Indonesia's 2014 Plantation Law incorporates several environmental protection principles; however, these provisions remain insufficient to fully address the ecological consequences associated with large-scale plantation expansion. At the normative level, the law recognizes sustainable plantation management as one of its central objectives and establishes obligations for plantation enterprises to maintain environmental quality, prevent land and forest fires, and implement responsible cultivation practices. These provisions indicate an attempt to integrate environmental considerations into plantation governance rather than treating agricultural expansion solely as an economic activity.

The sustainability orientation of the Plantation Law is reflected in its emphasis on good plantation practices, environmental management obligations, and compliance with broader environmental regulations. Plantation companies are required to consider ecological factors in plantation planning and operational activities, including the protection of natural resources and prevention of environmental damage. Furthermore, plantation activities remain subject to Indonesia's environmental regulatory framework, particularly requirements

related to environmental impact assessments (AMDAL), environmental permits, and pollution control mechanisms established under Law Number 32 of 2009 concerning Environmental Protection and Management.

However, the analysis reveals that the environmental provisions contained within the Plantation Law primarily operate through a regulatory compliance approach rather than a transformative ecological governance framework. The law focuses largely on ensuring that plantation enterprises meet administrative and technical requirements but provides limited mechanisms for addressing the broader structural drivers of environmental degradation, including land conversion pressures, monoculture expansion, peatland exploitation, and biodiversity loss. Consequently, environmental protection is often positioned as a condition for plantation development rather than as a fundamental limitation on environmentally harmful forms of land-use transformation.

This regulatory approach reflects a broader tension within Indonesia's development governance model. On the one hand, the state promotes sustainable plantation management and environmental responsibility; on the other hand, plantation expansion remains an important component of economic development strategies. This dual orientation creates institutional contradictions because environmental safeguards operate within a framework that continues to prioritize investment, production growth, and commodity competitiveness. Similar tensions have been identified in other resource-dependent economies where sustainability policies coexist with continued expansion of extractive industries (Fairhead et al., 2012; Dunlap & Brock, 2021).

The limitations of the Plantation Law become particularly evident when examining its relationship with deforestation and biodiversity loss. Although the law requires responsible plantation management, it does not independently establish a comprehensive framework for preventing land-use conflicts involving forests, peatlands, and ecologically sensitive areas. Instead, environmental protection depends on coordination with other legal regimes, including forestry law, spatial planning regulations, and environmental licensing mechanisms. This fragmented regulatory structure creates enforcement challenges because responsibility for land governance is distributed across multiple institutions with overlapping mandates.

The reliance on administrative compliance mechanisms also creates limitations in addressing cumulative environmental impacts. Individual plantation permits may satisfy formal environmental requirements while collectively contributing to significant landscape-level changes, including habitat fragmentation and carbon emissions. This challenge reflects a broader weakness in environmental governance systems that evaluate projects individually rather than assessing the cumulative ecological consequences of multiple developments within the same region.

From a climate justice perspective, these findings indicate that the environmental provisions of the Plantation Law provide limited recognition of ecological responsibilities but do not fully address distributive and procedural dimensions of environmental justice. The law acknowledges the importance of environmental management but does not sufficiently address who bears the consequences of plantation-related ecological degradation or how affected communities participate in environmental decision-making. Communities experiencing pollution, loss of ecosystem services, or reduced access to natural resources may continue to face disproportionate environmental burdens despite the existence of formal sustainability requirements.

Furthermore, from the perspective of green colonialism, the environmental provisions reveal a potential contradiction between sustainability discourse and underlying governance structures. By emphasizing responsible plantation management without fundamentally questioning patterns of land allocation and resource control, environmental regulation may improve operational practices while leaving broader inequalities unchanged. Sustainability therefore risks becoming a managerial tool that legitimizes continued plantation expansion rather than a mechanism for transforming unequal relationships between corporations, state institutions, and local communities.

Overall, the findings suggest that the 2014 Plantation Law represents a partial environmental reform rather than a comprehensive climate justice instrument. While the law introduces important sustainability obligations, its regulatory design remains primarily oriented toward managing the environmental consequences of plantation development rather than preventing ecological exploitation or addressing the structural inequalities underlying land-use conflicts.

B. Indigenous Land Rights and Legal Recognition

The analysis reveals that the recognition and protection of Indigenous land rights within Indonesia's plantation governance framework remain characterized by significant legal fragmentation and institutional uncertainty. Although Indonesian constitutional law formally acknowledges the existence of Indigenous Peoples and their customary rights, the practical realization of these rights continues to depend on complex administrative procedures, sectoral regulations, and political negotiations at multiple levels of governance. This gap between normative recognition and effective protection represents one of the central challenges in achieving climate justice within plantation governance.

At the constitutional level, Indonesia recognizes the existence of customary law communities through Article 18B(2) of the 1945 Constitution, which states that the state recognizes and respects traditional communities and their customary rights as long as they continue to exist and are consistent with national development principles. This constitutional provision represents an important

legal foundation for Indigenous rights protection. However, the conditional nature of recognition has also created practical challenges because Indigenous communities must often demonstrate their legal existence through formal recognition procedures established by state institutions. As a result, constitutional recognition does not automatically translate into secure territorial rights.

The legal position of Indigenous land rights has been significantly influenced by Constitutional Court Decision No. 35/PUU-X/2012, which represents a landmark development in Indonesian Indigenous rights jurisprudence. Through this decision, the Constitutional Court affirmed that customary forests (*hutan adat*) are not categorized as state forests but belong to Indigenous communities that possess recognized customary rights. This ruling challenged the previous state-centered approach to forest governance, which had historically placed extensive forest areas under state authority and facilitated allocation of concessions for commercial activities, including plantations.

Despite this important legal development, implementation of the Constitutional Court decision has remained uneven. The recognition of customary territories frequently requires local government regulations, identification procedures, mapping processes, and administrative verification. These requirements create institutional barriers, particularly for Indigenous communities with limited access to legal resources and bureaucratic processes. Consequently, many customary territories remain vulnerable to overlapping claims involving plantation concessions, forestry permits, and other forms of resource exploitation.

The analysis further indicates that the 2014 Plantation Law provides limited direct recognition of Indigenous territorial rights compared with its detailed regulation of plantation enterprises and investment activities. While the law acknowledges the importance of community involvement and social responsibility, it does not establish a comprehensive framework for recognizing customary land ownership or guaranteeing Indigenous consent before plantation development occurs on ancestral territories. Instead, Indigenous communities are primarily positioned as participants within plantation governance rather than as rights holders possessing inherent authority over their territories.

This regulatory approach reflects a broader pattern within Indonesia's land governance system, where statutory property regimes often operate alongside customary tenure systems without fully integrating them. The state retains significant authority over land classification, licensing, and allocation, while customary rights are frequently treated as rights requiring administrative confirmation rather than as pre-existing forms of territorial governance. Such an arrangement creates asymmetrical power relations between state institutions, plantation corporations, and Indigenous communities, particularly in regions where commercial interests compete with customary land claims.

From the perspective of climate justice, these findings demonstrate weaknesses across all three dimensions of justice. Regarding recognitional justice, the legal framework insufficiently acknowledges Indigenous Peoples as autonomous political communities with distinct relationships to land and ecosystems. Although customary rights receive constitutional recognition, their practical implementation remains dependent on state approval processes. This creates a hierarchy of legal recognition in which Indigenous governance systems remain subordinate to state-defined administrative categories.

The procedural justice dimension is similarly affected. Plantation licensing and land allocation processes frequently provide limited opportunities for Indigenous communities to meaningfully influence decisions affecting their territories. Consultation mechanisms, where available, often occur after key administrative decisions have already been made, reducing the possibility for communities to shape development outcomes. This contrasts with international principles concerning Free, Prior and Informed Consent (FPIC), which emphasize meaningful participation and consent before activities affecting Indigenous territories are authorized.

The distributive justice implications are also significant because insecure land tenure increases Indigenous vulnerability to environmental and socio-economic impacts associated with plantation expansion. Loss of access to customary forests, agricultural areas, and ecosystem resources may undermine traditional livelihoods while transferring environmental and economic benefits toward plantation companies and broader market actors. In this context, unequal land governance contributes not only to social injustice but also to climate vulnerability because communities with weakened territorial rights often possess reduced capacity to adapt to environmental changes.

The relationship between Indigenous rights and environmental protection further demonstrates why land recognition is central to climate governance. Research increasingly shows that Indigenous-managed territories contribute significantly to forest conservation, biodiversity protection, and ecosystem resilience. Consequently, the marginalization of Indigenous governance systems may undermine not only human rights objectives but also national and global climate mitigation goals. Failure to secure Indigenous land rights therefore represents both a social justice concern and an environmental governance challenge.

Viewed through the lens of green colonialism, the legal treatment of Indigenous land rights reveals how environmental and development objectives may coexist with continuing patterns of territorial control. Plantation expansion is frequently justified through narratives of economic development, modernization, and sustainable production; however, when such expansion occurs without meaningful recognition of Indigenous authority, sustainability discourse may function to legitimize continued access to contested lands. In this

sense, the issue is not merely whether plantation development is environmentally regulated, but whether affected communities possess genuine power to determine the future of their territories.

Overall, the findings demonstrate that Indonesia's plantation governance framework provides partial but incomplete recognition of Indigenous land rights. Although constitutional reforms and judicial developments have strengthened the legal position of Indigenous Peoples, the institutional design of plantation regulation continues to prioritize administrative control and economic development objectives over substantive territorial recognition. This imbalance represents a significant obstacle to achieving climate justice and creates conditions through which forms of green colonialism may persist within contemporary plantation governance.

C. Plantation Expansion, Land Grabs, and Climate Impacts

The analysis demonstrates that plantation expansion in Indonesia has produced a complex pattern of environmental transformation and social contestation, in which economic development objectives frequently intersect with processes of land appropriation, ecological degradation, and uneven distribution of climate-related risks. Although plantation development has contributed significantly to national economic growth, the expansion of industrial plantations has also generated conflicts over land control and intensified environmental pressures in regions characterized by overlapping claims between state authorities, corporations, and local communities.

A central finding of this study is that plantation expansion operates within a governance structure where legal authority over land remains highly concentrated within state institutions. Through licensing mechanisms, concession allocation, and spatial planning instruments, the state plays a decisive role in determining access to plantation land. However, many plantation concessions overlap with areas traditionally used and managed by Indigenous Peoples and local communities. These overlapping claims create conditions in which formally authorized plantation activities may conflict with customary tenure systems that existed prior to state-issued concessions.

The phenomenon reflects broader patterns identified in the global literature on land grabbing, where large-scale acquisition or control of land is facilitated through legal, administrative, and economic mechanisms that often marginalize existing users (Borras et al., 2012; Peluso & Lund, 2011). In Indonesia, plantation-related land acquisition frequently occurs through formal concession systems that recognize corporate rights while providing limited mechanisms for acknowledging customary ownership. As a result, communities may experience reduced access to forests, agricultural resources, and culturally significant landscapes despite maintaining historical relationships with these territories.

The analysis indicates that land conflicts associated with plantation development are not simply disputes regarding property boundaries but represent deeper struggles over authority, identity, and environmental governance. For Indigenous communities, land constitutes more than an economic asset; it represents a foundation for cultural continuity, social organization, spiritual practices, and ecological knowledge systems. Consequently, plantation expansion into customary territories can generate multidimensional impacts extending beyond physical displacement, including the erosion of cultural institutions and disruption of traditional environmental management practices.

Environmental consequences represent another significant dimension of plantation-related land transformation. Large-scale conversion of forests and peatlands for plantation purposes has contributed to substantial changes in carbon cycles, ecosystem structures, and biodiversity patterns. Scientific studies have consistently identified agricultural expansion, particularly oil palm development, as an important driver of tropical forest loss and habitat fragmentation in Indonesia (Carlson et al., 2018; Gaveau et al., 2022). These ecological changes have implications not only for global climate mitigation efforts but also for local communities whose livelihoods depend upon forest ecosystems and ecosystem services.

Peatland conversion represents a particularly critical example of the relationship between plantation development and climate impacts. Indonesia's peat ecosystems store significant quantities of carbon, and their drainage for agricultural purposes can generate substantial greenhouse gas emissions while increasing vulnerability to fire events. Peat fires associated with land conversion have repeatedly caused regional environmental crises, demonstrating how plantation-related land-use decisions can produce consequences extending beyond individual concession areas. These impacts highlight the importance of landscape-level governance approaches capable of addressing cumulative ecological risks rather than evaluating plantation activities solely through individual project assessments.

The climate consequences of plantation expansion also reveal significant inequalities in the distribution of environmental burdens. From a climate justice perspective, communities affected by plantation development often experience disproportionate exposure to environmental risks despite contributing minimally to global greenhouse gas emissions. Loss of forest resources, reduced access to ecosystem services, and increased vulnerability to climate-related hazards represent forms of environmental burden transferred onto populations with limited political and economic power.

This unequal distribution of risks reflects the distributive dimension of climate injustice. While plantation corporations and national economies may obtain economic benefits from commodity production, local communities

frequently bear the social and ecological costs associated with land conversion. Such asymmetries demonstrate that climate-related harms are not distributed evenly but are shaped by existing patterns of economic inequality, legal recognition licensing procedures may identify ecological risks associated with plantation projects; however, these mechanisms often operate after fundamental decisions regarding land allocation have already been made. Consequently, environmental, and political influence.

The analysis also reveals limitations in existing regulatory approaches to preventing land-related injustice. Environmental impact assessments and licensing procedures may identify ecological risks associated with plantation projects; however, these mechanisms often operate after fundamental decisions regarding land allocation have already been made. Consequently, environmental regulation may function primarily as a mitigation mechanism rather than a system capable of questioning whether certain forms of land conversion should occur in the first place.

From the perspective of green colonialism, plantation expansion demonstrates how environmentally framed development strategies may reproduce unequal relationships of control over land. Plantation industries are increasingly incorporated into sustainability narratives through certification schemes, climate commitments, and claims of contributing to economic development and renewable energy objectives. However, when sustainability initiatives do not adequately address historical land inequalities and Indigenous rights, they may legitimize continued resource appropriation under the language of environmental responsibility.

The findings therefore suggest that plantation-related land conflicts represent a critical arena in which climate justice and green colonialism intersect. The issue is not solely whether plantations comply with environmental standards, but whether the broader governance system enables equitable participation, recognizes alternative forms of territorial authority, and distributes environmental benefits and burdens fairly. Without addressing these structural dimensions, sustainability-oriented plantation governance risks maintaining existing patterns of inequality while presenting expansion as environmentally responsible development.

Therefore, the evidence indicates that plantation expansion in Indonesia produces a dual reality. On one hand, plantations contribute to economic development and agricultural production. On the other hand, they generate environmental pressures and social conflicts that disproportionately affect communities with limited institutional power. This contradiction demonstrates why plantation governance must be evaluated not only through economic and ecological indicators but also through the principles of climate justice and the critical perspective of green colonialism.

D. Power Asymmetries and Governance Challenges

The analysis identifies power asymmetry as a fundamental challenge shaping the outcomes of Indonesia's plantation governance. Although the 2014 Plantation Law establishes a regulatory framework intended to balance economic development, environmental protection, and community interests, its institutional design operates within a governance structure where decision-making authority remains largely concentrated among state institutions and corporate actors. This imbalance influences how land is allocated, how environmental decisions are made, and how competing interests are negotiated within plantation development processes.

A central finding is that plantation governance in Indonesia reflects an unequal distribution of institutional capacity among different stakeholders. Plantation corporations generally possess greater financial resources, legal expertise, administrative access, and political influence compared with Indigenous communities and local groups affected by plantation expansion. This asymmetry affects the ability of communities to participate effectively in licensing processes, negotiate land agreements, challenge administrative decisions, and pursue legal remedies when conflicts emerge. Consequently, formal opportunities for participation do not necessarily translate into substantive influence over plantation governance outcomes.

The state occupies a particularly influential position within this governance structure. Through its authority over land classification, licensing, spatial planning, and investment regulation, the state functions simultaneously as regulator, development facilitator, and allocator of access to natural resources. While this role enables the government to coordinate economic development strategies, it also creates potential conflicts of interest when economic objectives compete with environmental protection and Indigenous rights. The persistence of overlapping institutional mandates among agricultural, forestry, environmental, and investment authorities further complicates accountability and weakens coherent land governance.

Institutional fragmentation represents another major governance challenge identified by the study. Plantation activities frequently intersect with multiple regulatory regimes, including agrarian law, forestry law, environmental regulation, and Indigenous rights frameworks. Although each regime contains important principles relating to sustainability and rights protection, the absence of effective coordination creates uncertainty regarding authority, enforcement responsibilities, and dispute resolution mechanisms. Such fragmentation allows different institutions to apply competing interpretations of land status and community rights, thereby increasing the vulnerability of contested territories.

The analysis also demonstrates that participation mechanisms within plantation governance remain limited in their ability to achieve procedural justice. While Indonesian environmental and plantation regulations include

provisions requiring consultation and community involvement, these mechanisms often focus on administrative consultation rather than meaningful participation in decision-making. In many documented plantation conflicts, affected communities engage with development projects only after key decisions regarding concessions and land allocation have already been established. This procedural limitation reduces communities' ability to negotiate alternatives, reject harmful projects, or influence development trajectories affecting their territories.

From the perspective of climate justice, these governance challenges reveal deficiencies across all three dimensions of justice. The distributive dimension is affected because economic benefits generated by plantation commodities are not always accompanied by equitable distribution of environmental costs and social risks. The procedural dimension is weakened when affected communities lack meaningful opportunities to influence decisions. The recognitional dimension remains incomplete when Indigenous governance systems and customary territorial authority are acknowledged formally but not fully integrated into decision-making institutions.

The imbalance of power is further reinforced by dominant development narratives that frame plantation expansion as essential for economic growth, rural modernization, and national competitiveness. Such narratives may marginalize alternative perspectives that emphasize ecological protection, Indigenous autonomy, and community-based resource governance. When economic development becomes the primary measure of policy success, environmental and social concerns may be treated as secondary considerations rather than foundational elements of sustainable governance.

This dynamic is particularly relevant to the concept of green colonialism. The analysis does not suggest that all plantation regulation or sustainability initiatives necessarily constitute colonial practices. Rather, it demonstrates that environmental governance can reproduce unequal power relations when sustainability objectives are pursued without addressing historical patterns of land control and political exclusion. In this context, green colonialism emerges not through explicit colonial authority but through institutional arrangements that allow environmentally framed development initiatives to continue privileging powerful actors over marginalized communities.

The role of sustainability certification and corporate environmental commitments illustrates this complexity. Such mechanisms may improve certain aspects of plantation management, including transparency, monitoring, and environmental standards. However, they may have limited transformative impact if they do not address fundamental questions concerning land ownership, Indigenous consent, and decision-making authority. Sustainability initiatives that focus primarily on operational improvements risk overlooking the structural conditions that generate environmental injustice.

The findings therefore indicate that the central governance challenge of Indonesia's plantation sector is not simply the absence of environmental regulation but the unequal distribution of authority within the regulatory system itself. Effective climate justice requires institutional reforms that strengthen Indigenous participation, recognize customary territorial governance, improve accountability mechanisms, and ensure that environmental decision-making processes are not dominated by actors with greater economic and political resources.

Therefore, the evidence demonstrates that the 2014 Plantation Law operates within a governance environment characterized by significant power asymmetries. Although the law introduces sustainability principles and regulatory safeguards, its implementation remains constrained by institutional structures that prioritize administrative control and economic development. These findings provide the foundation for the subsequent discussion concerning whether Indonesia's plantation governance represents progress toward climate justice or a continuation of green colonial patterns within contemporary environmental regulation.

Analysis and Discussion

A. Climate Justice or Green Colonialism?

The findings of this study reveal that Indonesia's 2014 Plantation Law represents a complex and contested form of environmental governance that simultaneously incorporates elements of sustainability regulation while maintaining institutional arrangements that may reproduce unequal relationships of land control. Rather than representing a clear transition toward climate justice or constituting an explicit form of green colonialism, the law reflects a contradictory governance model in which environmental objectives coexist with economic priorities, centralized authority, and unresolved tensions concerning Indigenous territorial rights.

From the perspective of climate justice, the Plantation Law demonstrates partial recognition of environmental responsibility through provisions concerning sustainable plantation management, environmental protection, and corporate obligations. However, the analysis indicates that these measures primarily address the management of environmental impacts rather than the deeper structural inequalities that determine who controls land, who benefits from plantation development, and who bears environmental costs. Climate justice scholarship emphasizes that effective environmental governance requires attention not only to ecological outcomes but also to the social and political conditions under which environmental decisions are produced (Schlosberg, 2007; Schlosberg & Collins, 2014).

The distributive justice implications of the Plantation Law are particularly significant. Plantation development generates considerable economic benefits

through commodity production, employment opportunities, and export revenues. However, these benefits are often accompanied by unevenly distributed environmental and social costs, including forest loss, reduced ecosystem services, land conflicts, and livelihood disruption among affected communities. The findings therefore suggest that the regulatory framework does not fully resolve the unequal distribution of environmental burdens associated with plantation expansion. Instead, communities with limited political and economic influence frequently experience greater exposure to environmental risks despite receiving a smaller share of the economic benefits generated by plantation activities.

The procedural justice dimension reveals similar limitations. Although plantation and environmental regulations contain mechanisms for consultation and community participation, the findings indicate that these processes often provide limited opportunities for communities to meaningfully influence decisions concerning land allocation and plantation development. Participation mechanisms frequently occur within administrative structures where fundamental decisions regarding concessions and investment priorities have already been established. Consequently, procedural inclusion may exist formally while substantive decision-making power remains concentrated among government agencies and corporate actors.

The limitations are particularly evident regarding recognitional justice. Although Indonesia has made important legal developments concerning Indigenous rights, including Constitutional Court Decision No. 35/PUU-X/2012, the implementation of these protections remains constrained by administrative requirements and sectoral fragmentation. Indigenous Peoples continue to encounter difficulties obtaining formal recognition of customary territories, resulting in situations where state-authorized plantation activities may overlap with ancestral lands. This indicates that recognition within the legal system remains conditional rather than fully transformative.

These findings contribute to debates concerning green colonialism by demonstrating how sustainability-oriented governance may reproduce unequal relations without necessarily abandoning environmental objectives. The concept of green colonialism does not imply that environmental regulation is inherently oppressive; rather, it highlights how environmental policies can become mechanisms of exclusion when they operate through institutional arrangements that prioritize certain actors' interests over others (Dunlap & Brock, 2021). In the context of Indonesia's plantation sector, sustainability discourse may provide legitimacy for continued plantation development while insufficiently addressing historical inequalities in land ownership and political representation.

The relationship between sustainability and power is particularly important. Environmental governance increasingly relies on market-based instruments, certification schemes, and corporate sustainability commitments. While these mechanisms may improve environmental performance at the

operational level, they often operate within existing economic structures and therefore may not challenge unequal patterns of land access and decision-making authority. As a result, sustainability initiatives may reduce certain environmental impacts while leaving intact the institutional conditions that generate environmental injustice.

The analysis therefore suggests that the central issue surrounding the Plantation Law is not the absence of environmental consideration but the hierarchy of priorities embedded within its governance structure. Economic development and investment facilitation remain dominant objectives, while Indigenous rights and ecological protection are frequently incorporated as regulatory considerations rather than foundational principles. From a climate justice perspective, this creates an imbalance because environmental sustainability cannot be separated from questions of power, recognition, and territorial rights.

At the same time, describing the Plantation Law solely as an instrument of green colonialism would oversimplify the complexity of Indonesia's legal and political context. The law does contain mechanisms intended to improve environmental management and regulate corporate behavior. Moreover, plantation governance occurs within a broader national development framework shaped by economic challenges, employment needs, and international commodity markets. Therefore, the concept of green colonialism should be applied analytically rather than categorically, focusing on institutional patterns through which environmental narratives may unintentionally reinforce unequal relations.

The findings ultimately indicate that Indonesia's 2014 Plantation Law occupies an ambiguous position between climate justice and green colonialism. It represents an attempt to incorporate sustainability principles into plantation governance but remains limited by governance structures that privilege economic expansion and centralized authority. Achieving climate justice requires moving beyond environmental compliance toward a governance model that recognizes Indigenous territorial rights, redistributes decision-making power, and treats affected communities as central actors rather than passive beneficiaries of development.

Therefore, the critical question is not whether plantation governance should pursue sustainability, but what form of sustainability is being pursued and whose interests it serves. Without stronger mechanisms for Indigenous recognition, participatory decision-making, and equitable distribution of environmental benefits and burdens, sustainability-oriented plantation regulation risks functioning as a continuation of extractive governance under a green developmental framework.

B. Indigenous Rights as a Foundation for Climate Justice

The findings of this study demonstrate that Indigenous land rights should not be understood solely as a matter of legal recognition or social protection but as a fundamental component of effective climate governance. Contemporary climate justice scholarship increasingly emphasizes that protecting Indigenous territories, knowledge systems, and governance institutions is essential for achieving both environmental sustainability and equitable climate outcomes (Whyte, 2017; Sultana, 2022). Within this perspective, Indigenous rights are not external considerations added to climate policy; rather, they constitute one of the institutional foundations upon which climate resilience and ecological protection depend.

The relationship between Indigenous rights and climate governance is particularly significant because Indigenous territories frequently overlap with ecosystems that play critical roles in climate regulation, including tropical forests, peatlands, and biodiversity-rich landscapes. Empirical research demonstrates that Indigenous-managed territories often experience lower rates of deforestation and maintain higher levels of ecosystem integrity compared with areas governed through alternative management systems (Blackman & Veit, 2018; Fa et al., 2020). These findings challenge conventional assumptions that environmental protection requires centralized state control and instead highlight the importance of Indigenous governance systems as effective mechanisms for ecosystem stewardship.

In the context of Indonesia, this relationship has important implications because many areas targeted for plantation expansion are located within or adjacent to territories traditionally managed by Indigenous communities. The analysis of the 2014 Plantation Law reveals that insufficient recognition of customary territorial authority creates not only social injustices but also environmental governance challenges. When Indigenous communities lose control over ancestral lands, ecological management systems developed over generations may be weakened, potentially reducing the capacity of landscapes to maintain biodiversity, store carbon, and adapt to environmental change.

From the perspective of recognitional justice, strengthening Indigenous rights requires moving beyond symbolic acknowledgment toward substantive recognition of Indigenous Peoples as autonomous political communities with legitimate authority over their territories. Recognition involves not only identifying Indigenous communities through administrative procedures but also respecting their decision-making institutions, customary laws, and relationships with ecosystems. As Whyte (2017) argues, climate injustice frequently emerges when Indigenous knowledge systems are excluded from environmental decision-making processes shaped by dominant state and market institutions.

The findings indicate that Indonesia's plantation governance framework has not yet fully embraced this approach. Although constitutional developments

and judicial decisions have expanded recognition of customary rights, plantation regulation continues to operate primarily through state-centered administrative mechanisms. Indigenous communities are often required to obtain formal recognition before their territorial claims become legally effective, creating a situation where state institutions retain significant authority over determining the existence and scope of Indigenous rights. This approach differs from a rights-based model that recognizes Indigenous territorial authority as existing prior to formal administrative recognition.

A stronger integration of Indigenous rights into plantation governance would therefore require a transition from consultation-based approaches toward rights-based participation. The principle of Free, Prior and Informed Consent (FPIC) provides an important framework in this regard by emphasizing that Indigenous Peoples should have meaningful authority over decisions affecting their lands and resources. FPIC does not merely require information sharing or consultation; it requires decision-making processes that respect Indigenous autonomy and allow communities to accept, reject, or negotiate proposed developments affecting their territories.

The relevance of Indigenous rights to climate justice is further demonstrated through the concept of climate resilience. Communities with secure land tenure generally possess stronger incentives and greater capacity to maintain ecosystems, adapt to climate impacts, and implement locally appropriate environmental strategies. Conversely, insecure tenure may increase vulnerability by reducing access to traditional resources, weakening social institutions, and limiting communities' ability to respond effectively to environmental change. Therefore, strengthening Indigenous land rights represents both a justice obligation and a practical climate adaptation strategy.

This perspective also challenges market-centered approaches to sustainable plantation governance. Environmental certification schemes and corporate sustainability initiatives may improve certain aspects of plantation management; however, they cannot substitute for secure territorial rights and meaningful political recognition. A plantation system may comply with environmental standards while continuing to operate within conditions of unequal land ownership and limited Indigenous participation. Consequently, sustainability without rights recognition risks addressing ecological symptoms while leaving underlying governance inequalities unresolved.

The findings further suggest that Indigenous governance provides an alternative model for understanding environmental responsibility. Rather than viewing forests and landscapes primarily as economic resources requiring external management, many Indigenous governance systems understand ecological relationships through principles of reciprocity, collective responsibility, and long-term stewardship. Incorporating these perspectives into climate governance can contribute to more inclusive and adaptive environmental

policies, particularly in regions where state-based approaches have struggled to prevent deforestation and land conflicts.

Within the framework of green colonialism, strengthening Indigenous rights represents a critical safeguard against the appropriation of environmental narratives for extractive purposes. Climate mitigation and sustainability initiatives become problematic when they pursue global environmental objectives without respecting the territorial rights and decision-making authority of communities living within targeted landscapes. Therefore, recognizing Indigenous rights is essential to ensuring that climate policies do not reproduce historical patterns of dispossession under contemporary environmental objectives.

The implications for Indonesia's plantation governance are therefore substantial. Achieving climate justice requires legal reforms that position Indigenous Peoples not merely as affected stakeholders but as central governance actors. This includes accelerating recognition of customary territories, strengthening FPIC implementation, improving access to legal remedies, and integrating Indigenous knowledge into environmental decision-making processes. Such reforms would contribute not only to social justice but also to more effective climate mitigation and biodiversity conservation.

Ultimately, Indigenous rights represent a foundational element of climate justice because they address the intersection between ecological protection, political inclusion, and historical inequality. The Indonesian case demonstrates that environmental sustainability cannot be achieved solely through technical regulation or corporate responsibility mechanisms. Instead, durable climate governance requires institutional arrangements that recognize diverse forms of knowledge, redistribute decision-making authority, and ensure that communities most connected to ecosystems have meaningful power in determining their future.

C. Implications for Climate, Land, and Agricultural Policy

The findings of this study have significant implications for climate governance, land policy, and agricultural regulation in Indonesia and other plantation-dependent economies in the Global South. The central implication is that achieving sustainable plantation governance requires a shift from a predominantly production-oriented regulatory model toward a rights-based and justice-centered approach. Environmental sustainability cannot be achieved solely through improved technical standards, corporate responsibility mechanisms, or regulatory compliance; it requires addressing the underlying political and institutional structures that determine access to land, participation in decision-making, and distribution of environmental benefits and burdens.

First, climate policy must recognize that land governance is a central component of climate mitigation and adaptation strategies. The Indonesian case

demonstrates that climate outcomes are deeply connected to decisions regarding land allocation, tenure security, and resource governance. Policies aimed at reducing emissions from land-use change cannot succeed if they overlook conflicts concerning territorial rights and unequal access to decision-making processes. Therefore, climate strategies related to forests and plantations should incorporate land justice as a fundamental principle rather than treating social issues as secondary considerations.

This implication is particularly relevant for policies addressing deforestation and greenhouse gas emissions. While Indonesia has implemented various sustainability initiatives, including forest conservation programs, emission reduction commitments, and plantation certification mechanisms, the effectiveness of these approaches depends on whether they address the institutional drivers of land conversion. Strengthening Indigenous and community land rights should therefore be considered an essential climate intervention because secure tenure can enhance incentives for long-term ecosystem stewardship and reduce pressures associated with uncontrolled land transformation.

Second, plantation governance requires stronger integration between environmental regulation and Indigenous rights protection. The current regulatory structure separates plantation management, environmental protection, and customary rights into different legal frameworks, creating institutional fragmentation and inconsistent implementation. A more coherent governance model would require harmonizing plantation regulations with constitutional protections of Indigenous Peoples, environmental legislation, and international human rights principles. Such integration would reduce regulatory uncertainty while strengthening accountability among state institutions and corporate actors.

A key reform area concerns the implementation of Free, Prior and Informed Consent (FPIC) principles within plantation development processes. Meaningful consent mechanisms should be incorporated before the approval of plantation concessions rather than after development decisions have already been established. This would transform community participation from a procedural requirement into a substantive mechanism for recognizing Indigenous authority and preventing conflicts. FPIC-based governance would also strengthen procedural justice by ensuring that communities possess genuine influence over decisions affecting their territories.

Third, the findings highlight the limitations of market-driven approaches to environmental sustainability. Certification schemes, voluntary corporate commitments, and sustainability standards may contribute to improving plantation practices, but they cannot independently resolve structural issues related to land rights and political inequality. When sustainability mechanisms focus primarily on production practices while ignoring questions of ownership,

recognition, and participation, they risk creating a form of environmental governance that improves ecological indicators without addressing underlying social injustice.

This challenge reflects broader debates concerning market-based climate solutions in the Global South. Carbon markets, conservation finance, and sustainable commodity initiatives may generate environmental benefits, but they may also reproduce unequal relationships when local communities are excluded from decision-making or when environmental objectives become detached from social justice considerations. Therefore, climate policies should be evaluated not only according to emission reduction outcomes but also according to principles of fairness, inclusion, and rights protection.

Fourth, the Indonesian experience provides broader lessons for plantation-dependent countries facing similar challenges. Across the Global South, agricultural expansion, conservation initiatives, and climate mitigation projects increasingly involve competition over land and resources. Countries seeking sustainable development pathways must therefore avoid approaches that frame environmental protection and economic development as separate objectives. Instead, effective climate governance requires institutional arrangements capable of integrating ecological sustainability, social justice, and democratic participation.

The concept of green colonialism provides an important analytical warning for future policy design. Environmental objectives, even when globally beneficial, may generate unjust outcomes if they are implemented through governance systems that marginalize local communities. Climate action should therefore avoid reproducing historical patterns in which powerful actors determine land-use priorities while affected communities bear disproportionate social and ecological consequences. Ensuring justice within climate policy requires not only reducing environmental harm but also transforming the relationships of authority through which environmental decisions are made.

For Indonesia specifically, reforming plantation governance requires several interconnected measures. These include accelerating recognition of customary territories, strengthening legal protection for Indigenous communities, improving transparency in concession allocation, enhancing environmental enforcement, and ensuring meaningful community participation throughout plantation planning processes. Such reforms would move plantation governance beyond a narrow sustainability framework toward a more comprehensive climate justice approach.

The broader implication is that climate governance must be understood as a question of political and legal transformation rather than merely environmental management. The Indonesian plantation sector illustrates that forests, land, and agricultural systems are not simply ecological resources but also spaces of identity, livelihood, and political struggle. Policies that fail to recognize these

dimensions risk producing sustainability strategies that are technically effective but socially unjust.

In further, the pursuit of climate justice requires redefining the objectives of plantation governance. Rather than measuring success only through economic growth, export performance, or environmental compliance, governance frameworks should evaluate whether development processes respect territorial rights, distribute benefits fairly, and strengthen the capacity of communities to participate in shaping environmental futures. In this sense, the future of plantation governance depends not only on producing commodities more sustainably but also on transforming the legal and political relationships that determine who controls land and whose knowledge informs climate decision-making.

Conclusion

A. Summary of Key Findings

This study examined whether Indonesia's 2014 Plantation Law (Law Number 39 of 2014 concerning Plantations) advances climate justice or contributes to patterns of green colonialism through its regulation of Indigenous land rights and environmental governance. By applying a qualitative socio-legal approach combining doctrinal legal analysis with climate justice and green colonialism frameworks, the study demonstrates that the Plantation Law represents a contradictory governance framework that incorporates elements of environmental sustainability while maintaining institutional structures that may reproduce unequal relationships of land control.

The findings indicate that although the Plantation Law introduces environmental management obligations and sustainability principles, these provisions remain insufficient to address the structural causes of environmental exploitation associated with plantation expansion. The law primarily emphasizes regulatory compliance and responsible plantation practices rather than fundamentally transforming the political and economic arrangements that shape land-use decisions. As a result, environmental protection mechanisms remain limited in their capacity to prevent broader patterns of deforestation, biodiversity loss, and ecological degradation linked to large-scale plantation development.

The study further demonstrates that Indigenous land rights remain one of the most significant unresolved challenges within Indonesia's plantation governance system. Despite constitutional recognition of Indigenous Peoples and important judicial developments, including Constitutional Court Decision No. 35/PUU-X/2012, the practical protection of customary territories remains dependent on complex administrative procedures and institutional recognition. This creates a gap between formal legal recognition and substantive protection, limiting Indigenous communities' ability to exercise meaningful authority over ancestral lands.

From a climate justice perspective, the findings reveal weaknesses across distributive, procedural, and recognitional dimensions of justice. Environmental burdens associated with plantation expansion are frequently experienced disproportionately by communities with limited political influence, while opportunities for meaningful participation in land-use decisions remain constrained. The insufficient recognition of Indigenous governance systems also represents a missed opportunity for strengthening climate resilience and ecosystem protection.

At the same time, the analysis demonstrates that the Plantation Law should not be understood as a purely negative regulatory instrument. The law provides an institutional framework for improving plantation management and introduces important sustainability principles. However, its effectiveness as a climate justice mechanism remains limited because environmental objectives are embedded within a broader development model that prioritizes economic growth, investment facilitation, and commodity expansion.

The central conclusion of this study is that the 2014 Plantation Law occupies an ambiguous position between climate justice and green colonialism. It reflects an attempt to integrate sustainability into plantation governance, yet it continues to operate within institutional arrangements characterized by unequal distributions of authority between state institutions, corporations, and Indigenous communities. Without deeper reforms addressing land rights, participation, and power relations, sustainability-oriented plantation governance risks becoming a mechanism that manages environmental impacts without addressing the structural inequalities underlying them.

Therefore, achieving climate justice in Indonesia's plantation sector requires moving beyond a narrow focus on environmental compliance toward a governance approach based on rights recognition, democratic participation, and equitable distribution of environmental benefits and burdens. Climate justice requires not only greener plantations but also fairer systems of land governance.

B. Policy and Legal Recommendations

Based on the findings, this study proposes several legal and policy recommendations aimed at strengthening climate justice within Indonesia's plantation governance framework.

First, Indonesia should strengthen the legal recognition and protection of Indigenous territorial rights as a central component of plantation and climate governance. The recognition process for customary territories should be accelerated, simplified, and harmonized across different regulatory sectors. Indigenous rights should not depend solely on administrative confirmation but should be approached through a rights-based framework that acknowledges customary governance systems as legitimate forms of territorial authority.

Second, plantation development procedures should incorporate Free, Prior and Informed Consent (FPIC) principles more explicitly. Indigenous communities and local populations affected by plantation expansion should have meaningful opportunities to participate in decision-making before concessions are granted or development activities begin. Participation should extend beyond consultation toward mechanisms that recognize communities' capacity to negotiate, modify, or reject developments affecting their territories.

Third, environmental governance within the plantation sector requires stronger integration between climate objectives, land-use planning, and social justice principles. Environmental impact assessments should move beyond project-based evaluation and incorporate cumulative landscape-level impacts, including biodiversity loss, carbon emissions, and social consequences. Such reforms would enable environmental regulation to address broader ecological transformations rather than focusing only on individual plantation operations.

Fourth, policymakers should critically evaluate market-based sustainability mechanisms, including certification schemes and voluntary corporate commitments. While such instruments may contribute to improved environmental practices, they should complement rather than replace legal protections for Indigenous rights, environmental accountability, and democratic participation. Sustainability standards should include stronger requirements concerning land tenure, conflict resolution, and community consent.

Finally, plantation governance should adopt a more integrated climate justice framework that recognizes the interdependence between environmental protection, Indigenous rights, and equitable development. Future agricultural policies should evaluate success not only through economic indicators but also through measures of social inclusion, ecosystem resilience, and fairness in the distribution of environmental costs and benefits.

C. Limitations and Future Research

This study has several limitations that provide directions for future research. First, because the research relies primarily on doctrinal legal analysis and documentary evidence, it does not capture the full range of lived experiences among Indigenous communities and other actors directly affected by plantation expansion. Future studies could complement socio-legal analysis with empirical field research, including interviews and participatory research methods, to further examine how legal frameworks operate within specific local contexts.

Second, this study focuses specifically on Indonesia's plantation governance framework and the 2014 Plantation Law. Although the findings provide important insights into broader debates concerning climate justice and green colonialism, comparative research involving other plantation-dependent countries in the Global South would enhance understanding of how different legal systems address similar tensions between agricultural development,

environmental protection, and Indigenous rights. Third, future research could examine the relationship between plantation governance and emerging climate policy instruments, including carbon markets, nature-based solutions, and sustainability certification systems. Such research would contribute to a deeper understanding of whether contemporary climate interventions reduce environmental injustice or create new forms of resource control.

Future scholarship should also explore alternative governance models that integrate Indigenous knowledge, community-based conservation, and rights-based environmental management. Examining these approaches may provide pathways for developing climate policies that achieve both ecological sustainability and social justice. Despite these limitations, this study contributes to existing scholarship by demonstrating that plantation law should be analysed not only as an instrument of agricultural regulation but also as a mechanism that shapes climate governance, territorial rights, and environmental justice. The Indonesian case illustrates that the success of climate policy depends not merely on reducing environmental impacts but on transforming the legal and political relationships through which land and ecological resources are governed.

References

- Dauvergne, P. (2016). Environmentalism of the rich. *Environmental Politics*, 25(3), 1–18. <https://doi.org/10.1080/09644016.2016.1135220>
- Dauvergne, P. (2018). Is the power of brand capitalism fading? The case of the palm oil industry. *Global Environmental Politics*, 18(2), 159–168. https://doi.org/10.1162/glep_a_00454
- Doolittle, A. A. (2011). The politics of indigeneity: Indigenous strategies for inclusion in Malaysia and Indonesia. *Journal of Southeast Asian Studies*, 42(1), 123–146. <https://doi.org/10.1017/S0022463410000567>
- Dunlap, A., & Brock, A. (2022). The green colonialism of renewable energy: Exploring the emerging relations of energy, race and coloniality. *Political Geography*, 99, 102638. <https://doi.org/10.1016/j.polgeo.2022.102638>
- Fa, J. E., Watson, J. E. M., Leiper, I., Potapov, P., Evans, T. D., Burgess, N. D., Molnár, Z., Fernández-Llamazares, Á., Duncan, T., Wang, S., et al. (2020). Importance of Indigenous Peoples' lands for the conservation of intact forest landscapes. *Frontiers in Ecology and the Environment*, 18(3), 135–140. <https://doi.org/10.1002/fee.2148>
- Fairhead, J., Leach, M., & Scoones, I. (2012). Green grabbing: A new appropriation of nature? *The Journal of Peasant Studies*, 39(2), 237–261. <https://doi.org/10.1080/03066150.2012.671770>
- Fitzpatrick, D. (2007). Land, custom and law in the construction of property rights in Indonesia. In T. Lindsey (Ed.), *Indonesia: Law and society* (2nd ed., pp. 85–108). Federation Press.
- Forsyth, T. (2014). *Climate justice: An introduction*. Routledge.
- Gardiner, S. M. (2011). *A perfect moral storm: The ethical tragedy of climate change*. Oxford University Press.

- Gaveau, D. L. A., et al. (2022). Slowing deforestation in Indonesia follows declining oil palm expansion and land-use policies. *Nature Ecology & Evolution*, 6, 1202–1210.
- Gaveau, D. L. A., Locatelli, B., Salim, M. A., Yaen, H., Pacheco, P., & Sheil, D. (2019). Rise and fall of forest loss and oil palm expansion in Indonesia. *Nature Sustainability*, 2, 947–955. <https://doi.org/10.1038/s41893-019-0334-9>
- Gaveau, D. L. A., Sheil, D., Husnayaen, Salim, M. A., Arjasakusuma, S., Ancrenaz, M., Pacheco, P., & Meijaard, E. (2016). Rapid conversions and avoided deforestation: Examining four decades of industrial plantation expansion in Borneo. *Scientific Reports*, 6, 32017. <https://doi.org/10.1038/srep32017>
- Hall, D., Hirsch, P., & Li, T. M. (2011). *Powers of exclusion: Land dilemmas in Southeast Asia*. University of Hawai'i Press.
- Harvey, D. (2003). *The new imperialism*. Oxford University Press.
- International Labour Organization. (1989). *Indigenous and Tribal Peoples Convention, 1989 (No. 169)*. International Labour Organization.
- Koh, L. P., & Wilcove, D. S. (2008). Is oil palm agriculture really destroying tropical biodiversity? *Conservation Letters*, 1(2), 60–64. <https://doi.org/10.1111/j.1755-263X.2008.00011.x>
- Li, T. M. (2014). What is land? Assembling a resource for global investment. *Transactions of the Institute of British Geographers*, 39(4), 589–602. <https://doi.org/10.1111/tran.12065>
- Li, T. M. (2015). Social impacts of oil palm in Indonesia: A gendered perspective from the plantation frontier. *Development and Change*, 46(5), 877–899. <https://doi.org/10.1111/dech.12174>
- Li, T. M. (2018). After the land grab: Infrastructures, ecological violence, and the “Mafia system” in Indonesia’s oil palm plantation zones. *Geoforum*, 96, 328–337. <https://doi.org/10.1016/j.geoforum.2017.10.012>
- Martinez-Alier, J. (2002). *The environmentalism of the poor: A study of ecological conflicts and valuation*. Edward Elgar Publishing.
- McCarthy, J. F. (2010). Processes of inclusion and adverse incorporation: Oil palm and agrarian change in Sumatra, Indonesia. *The Journal of Peasant Studies*, 37(4), 821–850. <https://doi.org/10.1080/03066150.2010.512460>
- McCarthy, J. F., Vel, J. A. C., & Afiff, S. (2012). Trajectories of land acquisition and enclosure: Development schemes, virtual land grabs, and green acquisitions in Indonesia’s Outer Islands. *The Journal of Peasant Studies*, 39(2), 521–549. <https://doi.org/10.1080/03066150.2012.671768>
- Meijaard, E., Brooks, T. M., Carlson, K. M., Slade, E. M., Garcia-Ulloa, J., Gaveau, D. L. A., Lee, J. S. H., Santika, T., Juffe-Bignoli, D., Struebig, M. J., et al. (2020). The environmental impacts of palm oil in context. *Nature Plants*, 6, 1418–1426. <https://doi.org/10.1038/s41477-020-00813-w>
- Newell, P., & Mulvaney, D. (2013). The political economy of the “just transition”. *The Geographical Journal*, 179(2), 132–140. <https://doi.org/10.1111/geoj.12008>
- Obidzinski, K., Andriani, R., Komarudin, H., & Andrianto, A. (2012). Environmental and social impacts of oil palm plantations and their implications for biofuel production in Indonesia. *Ecology and Society*, 17(1), 25. <https://doi.org/10.5751/ES-04775-170125>

- Peluso, N. L., & Lund, C. (2011). New frontiers of land control: Introduction. *The Journal of Peasant Studies*, 38(4), 667–681. <https://doi.org/10.1080/03066150.2011.607692>
- Peluso, N. L., & Vandergeest, P. (2020). Writing political forests. *Antipode*, 52(4), 834–857. <https://doi.org/10.1111/anti.12637>
- Pendrill, F., Persson, U. M., Godar, J., Kastner, T., Moran, D., Schmidt, S., & Wood, R. (2019). Agricultural and forestry trade drives large share of tropical deforestation emissions. *Global Environmental Change*, 56, 1–10. <https://doi.org/10.1016/j.gloenvcha.2019.03.002>
- Purnomo, H., Okarda, B., Dermawan, A., Ilham, Q. P., Pacheco, P., Nurfatriani, F., & Suhendang, E. (2020). Reconciling oil palm economic development and environmental conservation in Indonesia: A review. *Land Use Policy*, 96, 104625. <https://doi.org/10.1016/j.landusepol.2020.104625>
- Rachman, N. F. (2011). The resurgence of land reform policy and agrarian movements in Indonesia. *Journal of Agrarian Change*, 11(3), 377–404. <https://doi.org/10.1111/j.1471-0366.2011.00313.x>
- Rist, L., Feintrenie, L., & Levang, P. (2010). The livelihood impacts of oil palm: Smallholders in Indonesia. *Biodiversity and Conservation*, 19, 1009–1024. <https://doi.org/10.1007/s10531-010-9815-z>
- Roth, D. (2013). Environmental sustainability and agrarian questions: The politics of oil palm expansion in Indonesia. *Development and Change*, 44(2), 331–355.
- Santika, T., Wilson, K. A., Budiharta, S., Law, E. A., Poh, T. M., Ancrenaz, M., Struebig, M. J., & Meijaard, E. (2019). Does oil palm agriculture help alleviate poverty? A multidimensional counterfactual assessment of oil palm development in Indonesia. *World Development*, 120, 105–117. <https://doi.org/10.1016/j.worlddev.2019.04.012>
- Schlosberg, D. (2007). *Defining environmental justice: Theories, movements, and nature*. Oxford University Press.
- Schlosberg, D., & Collins, L. B. (2014). From environmental to climate justice: Climate change and the discourse of environmental justice. *WIREs Climate Change*, 5(3), 359–374. <https://doi.org/10.1002/wcc.275>
- Sheil, D., Casson, A., Meijaard, E., van Noordwijk, M., Gaskell, J., Sunderland-Groves, J., Wertz, K., & Kanninen, M. (2009). *The impacts and opportunities of oil palm in Southeast Asia: What do we know and what do we need to know?* Center for International Forestry Research.
- Sikor, T., & Lund, C. (2009). Access and property: A question of power and authority. *Development and Change*, 40(1), 1–22. <https://doi.org/10.1111/j.1467-7660.2009.01503.x>
- Sultana, F. (2022). Critical climate justice. *The Geographical Journal*, 188(1), 118–124. <https://doi.org/10.1111/geoj.12417>
- United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples*. United Nations.
- Varkkey, H. (2013). Malaysian investors in the Indonesian oil palm plantation sector: Home state facilitation and transboundary haze. *Asia Pacific Viewpoint*, 54(3), 316–329. <https://doi.org/10.1111/apv.12027>
- Warren, C., & McCarthy, J. F. (2009). Community, environment and local governance in Indonesia: Locating the common property challenge. *Asia*

Pacific Viewpoint, 50(3), 255–272. <https://doi.org/10.1111/j.1467-8373.2009.01398.x>

Whyte, K. (2017). Indigenous climate change studies: Indigenizing futures, decolonizing the Anthropocene. *English Language Notes*, 55(1–2), 153–162.

Whyte, K. (2020). Too late for Indigenous climate justice: Ecological and relational tipping points. *WIREs Climate Change*, 11(1), e603. <https://doi.org/10.1002/wcc.603>

World Commission on Environment and Development. (1987). *Our common future*. Oxford University Press.

Acknowledgment

None

Funding Information

None

Conflicting Interest Statement

The authors state that there is no conflict of interest in the publication of this article.

Publishing Ethical and Originality Statement

All authors declared that this work is original and has never been published in any form and in any media, nor is it under consideration for publication in any journal, and all sources cited in this work refer to the basic standards of scientific citation.

Generative AI Statement

N/A