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Carbon Trading and environmental Injustice: Indigenous People, Human Right, and Religious Critiques of Green Capitalism

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ABSTRACT: This study examines the ethical implications of carbon trading in relation to capitalism, religion, and human rights, with a particular focus on indigenous peoples. Worsening climate change has triggered carbon trading policies as a primary solution to reduce greenhouse gas emissions; however, these mechanisms often exacerbate social welfare issues and localized environmental degradation. This research investigates how carbon trading can inadvertently intensify social injustice, particularly for indigenous communities who are routinely marginalized in mainstream environmental policies. Using a literature review approach, the study analyzes scholarly works, global reports, and empirical case studies to explore how carbon markets, despite being framed as climate solutions, may aggravate environmental inequality. Findings suggest that the carbon trading system disproportionately benefits capitalist interests, resulting in the commodification of natural resources and the systemic marginalization of indigenous peoples. The study also highlights how religious perspectives on environmental stewardship and justice fundamentally challenge the ethical foundations of carbon markets, revealing the inherent contradictions between ecological sustainability and profit-driven motives. Furthermore, this research underscores the urgent need for equitable, inclusive environmental frameworks that prioritize indigenous rights and align with the ethical principles of justice, intergenerational responsibility, and ecological respect. While this literature review provides valuable conceptual insights, it acknowledges the limitations of relying on secondary sources, which may not fully capture the lived experiences and nuanced local dynamics of affected communities. Ultimately, this research contributes to the ongoing debate on climate justice and urges a structural reconsideration of current global carbon trading mechanisms.

KEYWORDS: Carbon Trading, Capitalism, Injustice, Human Rights, Religion.

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I. INTRODUCTION

Climate Climate change refers to long-term alterations in global temperatures and weather patterns, which have accelerated significantly, particularly since the nineteenth century. Scientists predict that the Earth's temperature will increase between 1.1 and 5.4 °C warmer than current levels if no serious mitigation efforts are undertaken.[1] The primary catalyst of this phenomenon is anthropogenic activity, specifically industrial expansion and the burning of fossil fuels such as oil, coal, and natural gas.[2] These activities release greenhouse gases (GHGs), which become trapped in the atmosphere and drive global warming.[3]

The ramifications of climate change are not merely ecological, but also deeply encompass social, economic, and political dimensions. The increasing frequency of natural disasters—such as droughts, severe storms, and forest fires—has threatened human survival and exacerbated

[1]D Herring, "Climate change: Global temperature projecti
ons" (6 March 2012), online: *Climate.gov* <https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature-projections>.
[2]Nur MJ, Akbar Putra & Bernard Sipahutar, "Perdagangan Karbon: Mendorong Mitigasi Perubahan Iklim Diantara Mekanisme Pasar Dan Prosedur Hukum" (2023) 10:2 Jurnal Selat 91–107 at 92.
[3]United Nations, "What Is Climate Change?", online: *United Nations* <https://www.un.org/en/climatechange/what-is-climate-change>.

social inequalities across various global regions.[4] The most vulnerable groups, particularly indigenous peoples and low-income communities within developing nations, are often the most severely affected, despite contributing the least to global carbon emissions.[5] This systemic disparity demonstrates that climate change is fundamentally an issue of global justice involving industrialized nations.[6]

In an effort to address this crisis, various countries and international institutions have introduced carbon trading as a policy instrument to curb greenhouse gas emissions.[7] This market-based mechanism permits states or corporations to buy and sell carbon emission allowances based on market principles. Parties capable of reducing emissions more efficiently can sell their surplus emission reduction capacity to other entities struggling to meet their mandatory emission targets.[8] Consequently, carbon trading is widely promoted as a flexible and economically efficient solution to mitigate global climate change.

Normatively, carbon trading offers a variety of conceptual benefits: first, it provides economic incentives for innovation, encouraging corporations to develop cleaner, more efficient technologies while lowering the aggregate cost of emission reductions in the market. Second, carbon trading provides sovereign nations with regulatory

[4]Sammy Zahran et al, "Social vulnerability and the natural and built environment: a model of flood casualties in Texas" (2008) 32:4 Disasters 537–560 at 538.
[5]Paul Kimani, "Leveraging Carbon Trading for a Just Energy Transition in Kenya" (2025) 21:1 Law, Environment and Development Journal 42–61 at 44.
[6]Rohini Majumdar & Elke U Weber, "Multilevel intergroup conflict at the core of climate (in)justice: Psychological challenges and ways forward" (2023) 14:5 WIREs Climate Change 1–19 at 1.
[7] *Emissions Trading Worldwide: 2024 ICAP Status Report* (10 April 2024) at 10 online: <https://icapcarbonaction.com/en/publications/emissions-trading-worldwide-2024-icap-status-report> [*Emissions Trading Worldwide*].
[8] Daya Shankar Tiwari, "Carbon trading: A tool to control global warming" (2022) 6:S1 International journal of health sciences 5713–5722 at 5717.

flexibility in determining the most effective pathways to achieve their emission targets, either through direct domestic reductions or carbon credit trading mechanisms. Third, it facilitates the reduction of total global mitigation costs by allowing emissions to be offset in the most economically efficient geographic locations. Finally, carbon trading supports sustainable economic growth by fostering collaboration between developed and developing countries, thereby supporting economic development while ostensibly minimizing environmental impacts.[9] Thus, carbon trading operates as a strategic tool in global climate mitigation frameworks while facilitating environmental sustainability goals.

However, beneath the rhetoric of the "green economy" and sustainability, carbon trading raises profound dilemmas related to social justice, human rights, and environmental ethics. The foundational criticism of this mechanism is that carbon trading fails to restructure the extractive economic architectures at the root of the climate crisis, opting instead to merely manage pollution through market dynamics.[10] Wealthy nations and transnational corporations can sustain high production and consumption patterns simply by purchasing carbon credits to offset their emissions. Within this context, carbon trading risks becoming an instrument for legalizing pollution because it allows powerful actors to generate emissions while avoiding structural

[9] Hail Jung, "A comparative analysis of the EU and Korea Emission Trading Scheme: origins, design and trajectories" in *Handbook on Economic Growth and the Environment* (Edward Elgar Publishing, 2026) 62 at 65; Bagaskara, "Dampak Perdagangan Karbon Bagi Lingkungan" (21 August 2023), online: <https://mutucertification.com/dampak-perdagangan-karbon-bagi-lingkungan/>.
[10] Jane C Gross et al, "Perceived equity dimensions of agricultural carbon markets in the US Midwest" (2026) 121 Journal of Rural Studies 103940 at 8.

transformation away from unsustainable development models.[11]

Furthermore, the operational orientation of this policy exposes critical problems. Tensions between carbon trading architectures, social ethics, human rights, and religious perspectives manifest across several dimensions that warrant serious scrutiny. Within the realm of social ethics, there are deep concerns that this market mechanism exacerbates socio-economic disparities.[12] Affluent countries or corporations can perpetuate polluting activities without implementing substantive rectifications for the localized environmental impacts they cause.

This dynamic creates an injustice wherein the communities most vulnerable to the impacts of climate change do not derive tangible benefits from a system theoretically designed to assist them.[13] Furthermore, from a human rights standpoint, numerous emission-reduction projects funded through carbon trading schemes require the acquisition of local community lands, thereby disrupting access to the natural resources that sustain their livelihoods.[14] Indigenous communities are routinely

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[11] Yuxuan Wang & Chan Lyu, "The Dark Side of the Carbon Emissions Trading System and Digital Transformation: Corporate Carbon Washing" (2025) 13:8 Systems 1–23 at 23.

[12] note 7 at 12–13; Samuel Randalls, "Broadening debates on climate change ethics: beyond carbon calculation" (2011) 177:2 The Geographical Journal 127–137 at 129–130.

[13] Ademola Oluborode Jegede & Jean-Claude N Ashukem, "REDDs+ and the Right of Local Populations to Carbon Payments in Africa" in Ademola Oluborode Jegede, ed, *Implementing REDD+ in Africa: A Human Rights Perspective* (Cham: Springer International Publishing, 2023) 97 at 98–99; Patrick Bottazzi et al, "Carbon Sequestration in Community Forests: Trade-offs, Multiple Outcomes and Institutional Diversity in the Bolivian Amazon" (2014) 45:1 Development and Change 105–131 at 130; Mercedes Asamani & Chelsea Schelly, "Assessing Climate Vulnerabilities in Rural and Low-Income Regions: A Case Study of the Western Upper Peninsula" (2025) 17:2 The International Journal of Climate Change: Impacts and Responses 93–124 at 25–26.

[14] Bottazzi et al, "Carbon Sequestration in Community Forests", *supra* note 13 at 107.

excluded from institutional decision-making processes, and their sovereign interests are frequently marginalized in favor of macroeconomic gains.[15] This trend underscores that global climate policy continues to be dominated by top-down approaches that invalidate the lived experiences and traditional knowledge of local populations.

Critiques of carbon trading also emanate strongly from religious and spiritual perspectives. Various religious traditions mandate human moral responsibility toward the Earth and all living creation. Within these theological teachings, nature is conceptualized not merely as an economic asset, but as a divine creation holding intrinsic value that must be safeguarded for collective long-term survival.[16] Therefore, carbon trading practices that permit polluters to exchange emission rights without enacting fundamental behavioral modifications are viewed as antithetical to the principles of justice and moral accountability. In this framework, religion offers a vital ethical critique against the logic of green capitalism that reduces the biosphere to a market commodity.

This series of structural conflicts demands a more comprehensive approach capable of integrating ethical dimensions, human rights protections, and religious perspectives into the design and implementation of carbon trading policies. Consequently, fostering inclusive and participatory dialogues that engage all stakeholders—including local communities and civil society

[15] AMAN, "AMAN Tolak Skema Perdagangan Karbon di COP28" (Desember 2023), online: <https://aman.or.id/news/read/AMAN%20Tolak%20Skema%20Perdagangan%20Karbon%20di%20COP28>.

[16] Abdulrasheed Zakari & Felix Orole, "Do Islamic principles matter for green development?" (2025) 0:0 Local Environment 1–16 at 1–2; Menno R Kamminga, "The Protestant Dimension of the Ethical Critique of Carbon Commodification" (2015) 80:1 Philosophia Reformata 57–77 at 59.

organizations—is paramount. This inclusion ensures that carbon trading can be executed fairly and sustainably without harming the most vulnerable populations. Therefore, it is unsurprising that environmental activists and grassroots organizations argue that carbon trading is an inadequate solution to mitigate global warming.[17]

Spurred by these systemic issues, this study aims to explore the forms of injustice that surface within the context of carbon trading by analyzing the intersectional relationships between capitalism, religion, and human rights. In this analysis, the study highlights how carbon trading mechanisms deepens socio-economic injustices, particularly for marginalized communities. From the perspective of capitalism, this study analyzes how market logic and economic interests consolidate the dominance of wealthy countries and corporations within the carbon trading system, turning it into a tool for legalizing pollution without enacting structural reforms at the emission sources. Next, a religious perspective is deployed to explore how moral and ethical values within spiritual traditions influence understandings of climate justice, highlighting how exploitative carbon markets contradict spiritual mandates to protect the Earth. Finally, this study analyzes carbon trading policies through a human rights lens, highlighting structural violations of land rights, resource access, and democratic participation.

While extensive scholarship has examined carbon trading through legal, economic, and environmental perspectives, limited attention has been paid to the intersections of capitalism, religion, human rights, and the collective

[17] James K Boyce, Michael Ash & Brent Ranalli, "Environmental Justice and Carbon Pricing: Can They Be Reconciled?" (2023) 7:4 Global Challenges 2200204 at 4–5; Tiwari, "Carbon trading", *supra* note 8 at 5713.

experiences of indigenous peoples. This article addresses this gap by examining carbon trading through an environmental justice framework while incorporating religious and ethical critiques of the commodification of nature. Consequently, this research is guided by the following research questions: (1) How does carbon trading influence environmental and human rights injustices for indigenous peoples? (2) How do religious perspectives and spiritual challenges address the logic of carbon commodification? And (3) What policy principles are needed to foster environmental governance that is just and beneficial to indigenous peoples? To support this analysis, this study employs a descriptive qualitative approach utilizing secondary data analyzed thematically. Finally, the author adopts David Schlosberg's theory of justice,[18] which emphasizes three core pillars of environmental justice: distribution, recognition, and participation, to evaluate the integration of ethical values within contemporary carbon trading policies.

II. METHODS

This study employs a descriptive qualitative research design, relying primarily on secondary data to explore the ethical implications of carbon trading, with a specific focus on its intersection with capitalism, religion, and human rights. Data were systematically gathered through an extensive literature review comprising peer-reviewed scholarly articles, institutional reports, and empirical case studies to investigate the socio-economic and environmental impacts of carbon trading policies, particularly on indigenous communities. Data analysis was

[18] David Schlosberg, *Defining Environmental Justice: Theories, Movements, and Nature* (Oxford University Press, 2007) at 238–239.

conducted thematically utilizing Microsoft Word software to facilitate qualitative coding and matrix mapping.

The analysis involved sorting relevant textual sections, tabulating empirical findings, and generating conceptual annotations for further theoretical interpretation. This systematic approach allows for a structured evaluation of the ethical dilemmas associated with carbon trading and its subsequent impacts on vulnerable demographics. The foundational theoretical framework utilized in this study is David Schlosberg's (2009) theory of environmental justice, which emphasizes the critical dimensions of distribution, recognition, and participation.

To critically analyze the structural injustices emerging within contemporary climate change governance, this study operationalizes several key concepts: carbon trading, carbon colonialism, green colonialism, and ecological colonialism. Carbon trading operates as a market-based mechanism allowing the exchange of carbon credits to offset greenhouse gas emissions. Although framed as a viable climate solution, a growing body of scholarship demonstrates that this mechanism frequently exacerbates systemic inequalities. Within this context, "carbon colonialism" refers to the reproduction of asymmetrical power relations through climate mitigation projects, wherein indigenous peoples disproportionately bear the socio-ecological burdens while the macroeconomic benefits are largely appropriated by developed nations and transnational corporations. This dynamic is intrinsically linked to "green colonialism," which manifests as the territorial encapsulation and control of local living spaces under the rhetoric of conservation and sustainable development.

This phenomenon is ultimately understood as a form of "ecological colonialism" that conceptually reduces nature to an economic commodity to be dominated and traded, while simultaneously invalidating the worldview of indigenous peoples who perceive the ecosystem as an inseparable extension of their social, cultural, and spiritual lives. By deploying Schlosberg's environmental justice framework, this study evaluates how carbon trading mechanisms alter the equitable distribution of environmental benefits and burdens, the institutional recognition of indigenous rights and traditional knowledge, and their democratic participation in decision-making processes. This integrated approach serves to assess the degree to which carbon trading aligns with normative principles of justice and social equity. Because this research relies exclusively on existing literature, it does not incorporate primary data, thereby acknowledging the inherent limitations of secondary sources in fully capturing the unmediated lived experiences of affected communities. Nevertheless, this study aims to contribute to the broader discourse on climate justice and the ethical frameworks necessary for future environmental governance.

III. DISCUSSION

A. Carbon Trading, Capitalization of Nature, and Inequality of Indigenous Peoples' Rights

Global climate change is a catastrophic consequence of the dominant, unsustainable development model pioneered by developed nations. These industrialized countries have expanded their production and consumption patterns to the extreme, driving the accumulation of wealth and power into the hands of a select few actors while systematically

disregarding the severe ecological degradation they cause.[19] This dynamic has allowed environmentally destructive human activities—such as rampant deforestation, widespread water and air pollution, and the excessive consumption of fossil fuels—to become increasingly uncontrolled and pervasive. Over the last 170 years, the United States (US) and Europe have released nearly half of the cumulative historical emissions driving global climate change. However, the most severe consequences of this crisis are disproportionately borne by indigenous peoples and local communities, whose historical contribution to global carbon emissions remains relatively negligible.

Ironically, the localized impacts of the climate crisis are felt most acutely by these indigenous populations—the very demographic that contributes the least to global emissions yet remains uniquely vulnerable to the resulting environmental and socio-economic devastation. Numerous empirical studies confirm that these communities are historically the most capable actors in protecting and conserving forest ecosystems.[20] This stark disparity underscores a profound structural and ecological inequality. Indigenous communities are not only the most vulnerable to the climate crisis, but they are also routinely treated as passive objects within global climate change mitigation frameworks.[21] Yet, various scholarly works demonstrate that indigenous peoples serve as critical agents in maintaining the long-term sustainability of forests and biodiversity

[19] Mairam Ruzieva & Umar Ruziev, "Assessing environmental problems: Primary indicators and their role in ecosystem management" (2024) 587 E3S Web Conf 02012 at 1; Colin G Scanes, "Chapter 19 - Human Activity and Habitat Loss: Destruction, Fragmentation, and Degradation" in Colin G Scanes & Samia R Toukhsati, eds, *Animals and Human Society* (Academic Press, 2018) 451 at 97.
[20] Hari Prasad Pandey et al, "Navigating climate change: Impacts on indigenous practices concerning agrifood systems in Nepal's socio-ecological landscape" (2025) 14 Sustainable Horizons 100143 at 2.
[21] *Ibid* at 8–10.

through ancestral knowledge, customary law, and environmental stewardship practices transmitted across generations.[22]

Consequently, the core irony of climate change lies in the fact that the groups least responsible for ecological degradation bear the heaviest environmental and social burdens. This systemic imbalance demonstrates that the climate crisis cannot be decoupled from issues of environmental justice and asymmetric global power relations. To mitigate this crisis, international legal mechanisms such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol introduced carbon market schemes as economically efficient solutions to curtail greenhouse gas emissions.[23] Through market-based instruments such as the Clean Development Mechanism (CDM), Emissions Trading (ET), and Joint Implementation (JI), industrialized nations (Annex I parties) are permitted to manage and transfer their emission reduction obligations by investing in mitigation projects hosted by developing countries.[24] Normatively, this framework is promoted as a highly efficient solution due to its purported capacity to synthesize macroeconomic market interests with environmental conservation objectives.

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[22] Damian Carrington, "Indigenous Peoples by Far the Best Guardians of Forests UN Reports" (25 March 2021), online: *The Guardian* <https://www.theguardian.com/environment/2021/mar/25/indigenous-peoples-by-far-the-best-guardians-of-forests-un-report>.

[23] E M Naibaho, *Tinjauan Hukum dalam Perdagangan Karbon Kredit* Universitas Indonesia, 2011) at 20; Agatha Sevilla Maharani, Muhamad Muhdar & Rahmawati Alhidayah, "Penggunaan Certified Emission Reductions Sebagai Bukti Objek Transaksi Carbon Crediting" (2020) 12:2 Jurnal de jure, online: <https://jurnal.law.uniba-bpn.ac.id/index.php/jurnaldejure/article/view/467> at 20.

[24] Maharani, Muhdar & Alhidayah, *supra* note 23 at 20; MJ, Putra & Sipahutar, *supra* note 2 at 164; *Konvensi Kerangka Kerja PBB tentang Perubahan Iklim*, by United Nations Framework Convention on Climate Change (UNFCCC) at 12–13.

However, the real-world implications of this mechanism manifest severe disruptions within the indigenous communities whose ancestral territories are repurposed as carbon offset projects. Forests and natural resources, which were historically understood by these communities as sacred living spaces and the foundational source of their cultural and spiritual identities, are reduced to mere economic commodities traded as carbon credits. This transformation illustrates how nature is capitalized through global market instruments. Consequently, local traditional knowledge, customary laws, and the spiritual relationship between communities and their lands are systematically marginalized by technocratic and corporatist approaches.[25] As a result, indigenous communities are not only disenfranchised from accessing their customary territories, but they also lose the institutional authority to determine their own livelihoods and manage their ecosystems based on their indigenous cosmologies.[26]

Carbon offset projects executed without adhering to the foundational principle of Free, Prior, and Informed Consent (FPIC) reinforce a contemporary iteration of ecological colonialism. In this dynamic, the state frequently acts as an intermediary for global capital, executing binding contracts with transnational corporations devoid of transparency and without the meaningful involvement of indigenous communities as the legitimate custodians of the territory.[27] In many instances, sovereign states exploit their

[25]Anaam Hashmi, *Carbon Credits and Other Market Based Mechanisms* (Berlin, Heidelberg: Springer, 2009) at 2926.
[26] *Making REDD Work for the Poor*, by Peskett, Leo et al (London: Overseas Development Institute (ODI) and IUCN) at 4.
[27] Alexander Dunlap, ""A Bureaucratic Trap:" Free, Prior and Informed Consent (FPIC) and Wind Energy Development in Juchitán, Mexico" (2018) 29:4 Capitalism Nature Socialism 88–108 at 4–7; Lidwina Hana, *Perdagangan Emisi: Solusi Kapitalis atas Global Warming* (An1mage) at 129.

legal authority to mediate the interests of global capital, signing carbon project agreements with private enterprises or international institutions while bypassing the ancestral claims of indigenous populations. This systemic practice underscores that carbon trading risks functioning as a novel instrument of ecological imperialism, wherein external control over indigenous territories is institutionalized under the rhetoric of environmental conservation and climate mitigation.[28]

Understood through this lens, carbon trading must be conceptualized not merely as a technical instrument for emissions reduction, but as a highly politicized arena that actively reproduces global inequalities. This mechanism illustrates how the climate crisis is exploited to expand the frontiers of green capitalism via the commodification of forests and the vital living spaces of marginalized communities. Thus, rather than serving as an instrument for cultivating environmental justice, carbon trading risks entrenching the marginalization of vulnerable populations while consolidating the hegemony of industrialized nations within global climate governance. Therefore, a structural critique of carbon trading is imperative to demonstrate that international climate solutions must shift their focus away from mere market efficiency toward the substantive recognition of indigenous rights, democratic participation, and the structural overhaul of the exploitative economic systems driving ecological collapse.

Although the Kyoto Protocol is frequently celebrated as a historic milestone in international climate governance, its

[28]Meita Debi Riyanti et al, "Carbon Colonialism in the Paris Agreement Era Toward Environmental Advocacy and Ecological Justice in Indonesia" (2025) 673 E3S Web Conf 02004 at 3; Andrew Kalani Carlson, "AlterNatives to Blue Carbon Coloniality: An ʻŌiwi Perspective on Redirecting Funding to Indigenous Stewardship" in *Confronting Climate Coloniality* (Routledge, 2024) at 127–128.

practical execution has exposed deep structural inequalities inherent in the global carbon trading architecture. The operational mechanisms of the protocol provided severely restricted opportunities for Non-Annex I developing nations to actively influence global carbon markets.[29]In practice, the Global South has been consistently positioned as a passive geographic site for mitigation projects rather than an empowered actor capable of shaping the design of international climate policy. This historical trajectory demonstrates that global carbon governance was built from its inception upon an unequal distribution of power between industrialized and developing nations.

This structural imbalance represents a primary catalyst for the eventual failure of the Kyoto Protocol as a legally binding climate treaty to achieve substantive reductions in global greenhouse gas emissions.[30] This failure stems fundamentally from the reluctance of industrialized nations to shift away from their carbon-intensive production and consumption models. In other words, carbon trading has functioned primarily as a mechanism of economic flexibility and offset convenience for developed states, rather than an instrument for genuine ecological transformation.[31] Ultimately, market-based frameworks prove fundamentally inadequate to resolve the structural roots of the climate crisis, which remain deeply intertwined with global economic disparities and exploitative development paradigms.

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[29] SK Kansal, "Carbon trading and clean development mechanism in india- An introduction" (2012) 31 Pollution Research 383–386 at 383.
[30] MJ, Putra & Sipahutar, *supra* note 2 at 99.
[31] Kathleen McAfee, "Green economy and carbon markets for conservation and development: a critical view" (2016) 16:3 Int Environ Agreements 333–353 at 345–346.

The Paris Agreement of 2015 was subsequently championed as an institutional effort to rectify the structural deficiencies of the Kyoto Protocol and foster a more inclusive model of global climate governance.[32] However, one specific mechanism that has drawn intense condemnation from indigenous rights advocates is the REDD/REDD+ framework. REDD+ initiatives present severe socio-legal risks rooted in centralized and exclusionary governance structures. State apparatuses, international donor agencies, and transnational organizations tend to dominate the decision-making processes, effectively shutting out the indigenous communities residing within the targeted forest zones. In numerous instances, the institutional zoning of forest conservation areas is executed without local community consent and with complete disregard for their historical or spiritual ties to the land. Governments and non-governmental organizations frequently demarcate and partition forest territories without the participation or prior notification of the traditional forest dwellers. This state-backed conservation model tends to prioritize carbon sequestration through exclusionary, anti-people practices, including forced evictions and green land grabbing.

Furthermore, carbon offset contracts are frequently structured within highly asymmetrical power dynamics involving corporations, state entities, and indigenous communities. Severe inequalities regarding legal information and economic leverage leave indigenous populations in an inherently weak negotiating position. This power imbalance fuels predatory land speculation, exacerbates protracted agrarian conflicts, and causes

[32] Fadhlan Hakiem, "Kekuasaan Produktif Amerika Serikat Dan Konvensi Perubahan Iklim Pasca Paris Agreement" (2018) 3 Dauliyah Journal of Islamic and International Affairs 147 at 148; Meinhard Doelle, "The Paris Agreement: Historic Breakthrough or High Stakes Experiment?" (2016) 6 Climate Law 1–20 at 2–3.

profound inequities in the domestic distribution of carbon project revenues. Within this context, the principle of Free, Prior, and Informed Consent (FPIC)—which should serve as the cornerstone for protecting indigenous rights under international law—is frequently reduced to a mere administrative formality devoid of substantive enforcement. The superficial implementation of FPIC demonstrates that REDD+ governance continues to operate within a paternalistic and exploitative developmental paradigm.

Additionally, pervasive corruption and the misappropriation of conservation funds by local political elites exacerbate the vulnerability of marginalized forest communities. This reality highlights that carbon trading does not occur within a politically neutral space, but rather operates within a complex, pre-existing web of political and macroeconomic power. In fact, empirical scholarship indicates that REDD+ interventions can trigger severe internal fractions and horizontal conflicts within indigenous communities due to divide-and-rule strategies deployed by state actors, private companies, and project brokers. Consequently, REDD+ mechanisms risk undermining organic social solidarity at the grassroots level.

Although certain indigenous groups initially viewed REDD+ as a strategic opportunity to secure formal state recognition and expedite the legal certification of their customary lands, long-term uncertainty regarding tangible benefits remains a critical issue. This deep ambivalence places indigenous peoples in an acute dilemma: while they urgently require formal legal protection for their ancestral territories, the available institutional mechanisms for securing such recognition are inherently bound to the market logic of global carbon capitalization. In this framework, carbon

trading can be understood as a mutation of ecological colonialism, utilizing narratives of sustainability and biodiversity preservation to assert control over the living spaces of indigenous populations.[33]

Criticisms of REDD+ have also intensified due to the highly inequitable distribution of its economic yields. Furthermore, REDD+ financing is frequently misallocated; large-scale drivers of deforestation, such as industrial loggers and expansive agribusiness corporations, are often economically incentivized, while the indigenous populations who have traditionally preserved the forest ecosystems receive no structural rewards.[34] In certain adversarial contexts, indigenous communities are even falsely criminalized as agents of deforestation and subjected to state-enforced restrictions on their traditional subsistence lifestyles. This dynamic demonstrates how indigenous peoples are conceptually constructed as an environmental problem within contemporary climate governance, despite being the primary guardians of global ecosystem sustainability. The convergence of REDD+ with voluntary carbon markets further underscores the expanding hegemony of the private financial sector in global climate governance. This heavy reliance on market forces creates fertile ground for speculative financial asset creation and the commodification of nature, while the actual scientific efficacy of these emission offsets remains intensely contested. Industrialized nations can sustain their high-emission consumption patterns simply by purchasing carbon offsets from the Global South, thereby disproportionately shifting the mitigation burden onto

[33] Hana, *supra* note 27 at 128–129.
[34] *Potret Keadaan Hutan Indonesia Periode 2009–2013*, by Forest Watch Indonesia (Bogor: Forest Watch Indonesia) at 25.

vulnerable forest-dwelling populations and reproducing global climate injustice.

For indigenous peoples, forests cannot be reductionistically conceptualized as mere carbon sinks or economic assets; they embody intrinsic ecological, social, cultural, and spiritual values that have sustained their collective existence for centuries. Therefore, indigenous resistance to REDD+ does not signify a wholesale rejection of climate mitigation, but rather a rejection of top-down climate interventions that structurally erase their rights. At the 2009 Global Indigenous Peoples' Summit on Climate Change in Anchorage, indigenous delegates asserted that absolute respect for indigenous rights must serve as the non-negotiable foundation for any REDD+ implementation. They demanded sweeping legal reforms to recognize customary land tenure and strengthen community-based forest management models. These collective demands represent an ongoing struggle to preserve human dignity, cultural identity, and an ethical, relational coexistence with the natural world.

Within this critical framework, Joan Martinez-Alier's conceptual model of the "environmentalism of the poor"[35] is highly relevant for deciphering indigenous resistance to the carbon market. This grassroots resistance emanates from profound ideological convictions as well as the existential necessity to safeguard their immediate living spaces and the long-term survival of their communities. Thus, environmental sustainability and social justice are inherently inseparable.

[35] Juan Martínez Alier, *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation* (Edward Elgar Publishing, 2002) at 252.

Amidst these market-driven mitigation efforts, the concept of Nationally Appropriate Mitigation Actions (NAMAs) emerged as a voluntary framework for developing nations; however, it has similarly evolved into a tool exploited by developed states and global corporations to advance their economic interests in developing territories. NAMAs frequently operate without respecting the political and socio-spatial sovereignty of indigenous peoples, thereby instigating acute tenure conflicts and socio-economic marginalization. A prominent empirical example illustrating the structural failure of this approach is the Kalimantan Forest Carbon Partnership (KFCP) project in Indonesia, which suffered from severe funding deficits, a lack of meaningful indigenous participation, and ultimately triggered intense social friction and unresolved land tenure disputes. This project encapsulates the global operational failures of the REDD+ mechanism, which routinely fails to safeguard indigenous land rights or achieve sustainable deforestation reductions.

The operational collapse of the Kalimantan Forest Carbon Partnership (KFCP) serves as a concrete, empirical manifestation of these systemic flaws. For more than fifteen years, an extensive body of independent research and institutional reports has demonstrated that REDD+ mechanisms consistently fail to provide robust legal protections for indigenous land tenure or facilitate genuine grassroots participation from the most affected forest communities.[36] The failure of the KFCP demonstrates that environmental projects cannot succeed when implemented through technocratic lenses that ignore the socio-cultural, historical, and political dimensions of local communities. In

[36] *Annual Report 2022*, by Forest Peoples Programme (London: Forest Peoples Programme, 2023) at 10–11.

other words, international climate solutions cannot be arbitrarily imposed via top-down interventions that invalidate the lived experiences of localized populations.[37]

Moreover, the deficiencies observed in the KFCP reflect the broader structural failures characterizing the REDD+ paradigm on a global scale. For over a decade, diverse international studies have confirmed that REDD+ has been incapable of guaranteeing the security of indigenous rights or generating a statistically significant decline in global deforestation rates.[38] Within the international carbon market, developing nations like Indonesia are routinely relegated to providing cheap environmental offset services, while the primary macroeconomic advantages continue to be captured by industrialized Western nations.[39] This reality indicates that carbon trading is intrinsically bound to asymmetric power dynamics and the reproduction of global inequalities under the polished rhetoric of the green economy.

Instructive cases across Kenya, Papua New Guinea, Brazil, and numerous other jurisdictions confirm that REDD+ initiatives are frequently intertwined with exclusionary practices such as "forest fencing," the militarization of

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[37]Zulkifli B Lubis et al, "The complex interplay of local communities and global initiatives in Peatland management: An ethnography of frictional environmentality" (2026) 7 Research Journal in Advanced Humanities at 11; Wendy B Miles, "The invisible commodity: Local experiences with forest carbon offsetting in Indonesia" (2021) 4:2 Environment and Planning E: Nature and Space 499–524 at 506; M Mulyani & P Jepson, "Social learning through a REDD+ "village agreement": Insights from the KFCP in Indonesia" (2015) 56:1 Asia Pacific Viewpoint 79–95 at 501–503.

[38] W A P et al Thales, "Action needed to make carbon offsets from forest conservation work for climate change mitigation" (2023) 381:6660 Science 873–877 at 873–877.

[39] Lubis et al, "The complex interplay of local communities and global initiatives in Peatland management", *supra* note 37 at 501–504; Miles, "The invisible commodity", *supra* note 37 at 12–13.

conservation enclaves, forced displacements, and state-sanctioned land grabbing.[40] This phenomenon reveals that ecological modernization is often constructed directly upon the spatial control and subjugation of indigenous territories and bodies. From Bruno Latour's philosophical perspective, modernity has never truly succeeded in separating human agency from power dynamics and the violent exploitation of nature. Instead, the "green" vocabulary deployed in carbon trading demonstrates how global capitalism continually adapts to preserve its structural dominance through contemporary environmental instruments.

Ultimately, carbon trading reproduces global inequality under the guise of a benevolent sustainability narrative. Climate change mitigation strategies that rely exclusively on market dynamics exhibit severe systemic limitations and inherently entrench socio-ecological injustices. Therefore, a genuine resolution to the global climate crisis cannot be achieved via carbon markets; it requires a foundational transformation of global production, consumption, and environmental governance models. This paradigm shift must be firmly grounded in the principles of social justice, the absolute legal recognition of indigenous rights, democratic grassroots participation, and the re-conceptualization of nature as a relational subject rather than a commodified economic object. Without these structural changes, carbon trading will simply function as a mutated variation of ecological colonialism, threatening the survival of indigenous peoples and the future of the biosphere as a whole.

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[40] Carbon Trade Watch, "REDD+" (29 July 2014), online: <http://www.carbontradewatch.org/issues/redd.html>.

B. Human Rights Implications of Carbon Trading for Indigenous Communities

The contemporary debate surrounding carbon trading highlights not only its technical efficacy in emission reductions, but also its direct, adverse impacts on the fulfillment of fundamental human rights, particularly for indigenous peoples. Concealed behind the neutral, universalist narrative of global climate mitigation, carbon trading is framed as a technocratic instrument capable of seamlessly reconciling macroeconomic interests with environmental preservation. However, this clinical approach tends to obscure the coercive power relations operating beneath the surface. By conceptually transforming forests, territories, and complex ecosystems into tradable, quantified carbon units, the carbon market forcibly absorbs the ancestral living spaces of indigenous peoples into a global market logic that is fundamentally antithetical to their rights.

From an international human rights law perspective, the foundational issue is not the existence of climate policies themselves, but rather the highly inequitable distribution of who reaps the economic benefits and who bears the structural burdens of their implementation. Various REDD+ and carbon offset projects reveal that indigenous peoples are routinely positioned as passive objects of state conservation rather than as autonomous legal subjects possessing the right to self-determination over their ancestral lands, as guaranteed under Article 3 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). In these exclusionary settings, the right to self-determination recognized across numerous international covenants is diluted, while the strategic interests of states, international donor agencies, and highly resourced

corporations dictate the terms of environmental management.[41]

Furthermore, carbon trading fosters a systemic phenomenon known as "green grabbing," executed under the banner of environmental stewardship. While historic colonial expansions seized territories for the overt extraction of physical natural resources, the contemporary green economy regime justifies land acquisition through the non-extractive rhetoric of forest conservation and carbon sequestration. Consequently, indigenous peoples face the imminent risk of losing access to vital forests, traditional hunting grounds, agricultural lands, and sacred ancestral spaces that have long constituted the core of their cultural identity. In this context, human rights violations materialize through formal legal mechanisms, institutional policies, and state practices that gradually erode and restrict the capacity of indigenous peoples to maintain their historical and spiritual connections to their territories.[42]

This reality demonstrates that the international legal principle of Free, Prior, and Informed Consent (FPIC) is frequently applied in a superficial manner that fails to disrupt the deep-seated power imbalances underlying environmental decision-making. Institutional consultations conducted across various carbon initiatives often function merely as ex-post mechanisms to legitimize pre-determined corporate or state agendas. Consequently, indigenous participation is reductionistically minimized to a bureaucratic, administrative formality designed to project

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[41] Lubis et al, "The complex interplay of local communities and global initiatives in Peatland management", *supra* note 37 at 11; Miles, "The invisible commodity", *supra* note 37 at 506; Mulyani & Jepson, *supra* note 37 at 91–92.
[42] AMAN, *supra* note 15; *Smoke and mirrors: How carbon offsetting hurts Indigenous communities*, by Human Rights Watch, in *HRW* (Human Rights Watch, 2024) at 16–18.

a facade of inclusivity, while providing virtually zero leverage for genuine structural negotiation. In these settings, FPIC risks being co-opted as a technocratic instrument to validate carbon projects rather than serving as a robust defensive mechanism to protect indigenous rights.

More fundamentally, carbon markets expose a profound paradox at the heart of global climate governance. On one hand, these market schemes are internationally promoted as indispensable solutions to the global environmental crisis. On the other hand, they simultaneously permit affluent actors with immense economic leverage to perpetuate their emission-intensive activities by purchasing carbon offsets generated from territories primarily inhabited by marginalized indigenous communities in developing nations. Thus, the moral and physical burden of global environmental protection is shifted onto the very populations that have historically contributed the least to the anthropogenic climate crisis. This systemic displacement demonstrates that carbon trading cannot be understood merely as an environmental policy tool, but must be scrutinized as an urgent matter of international justice and human rights,[43] a stance explicitly aligned with UN General Assembly Resolution 76/300 (2022).

Within the domestic Indonesian context, the structural objections articulated by indigenous communities against expanding carbon trading frameworks reveal that the underlying conflict extends far beyond the mere distribution of economic dividends; it is fundamentally a

[43] Boyce, Ash & Ranalli, "Environmental Justice and Carbon Pricing", *supra* note 17 at 7–8; Victor D Cabezas Alban, "Why Climate Finance Cannot Afford to Ignore Human Rights? Lessons from the South" (2025) 17:3 Journal of Human Rights Practice, online: <https://doi.org/10.1093/jhuman/huaf020> at 1–2.

struggle for rights-based legal recognition. A genuine rights-based framework cannot merely relegate indigenous communities to the status of passive "stakeholders" who must be superficially consulted. Instead, it must legally recognize them as primary *rights-holders* endowed with the sovereign authority to determine the future of their ancestral territories. Without such an institutional transformation, carbon trading will inevitably function as a new variation of ecological colonialism, reproducing historical inequalities through mechanisms that merely appear greener and more progressive.

C. Religious Responses to Ecological Injustice and a Critique of Carbon Markets

The contemporary global ecological crisis is the direct structural manifestation of a dysfunctional relationship between humanity and the biosphere, built upon an anthropocentric paradigm and capitalist market logics. Within this dominant framework, nature is reductionistically positioned as a passive object to be exploited for macroeconomic gain and unbridled economic growth.[44] Consequently, the relationship between humans and non-human nature is degraded into a purely utilitarian transaction that measures environmental value solely through the prism of fiscal utility. Under these conditions, ecological degradation is misconceptualized merely as a technical problem of resource management efficiency, rather than as a profound ethical and relational crisis threatening the interconnectedness of all living organisms.[45]

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[44] Amirullah Amirullah, "Krisis Ekologi: Problematika Sains Modern" (2015) 17:1 Lentera 145017 at 1.

[45]Diana Marin, "Chapter 10 - Religion, spirituality, and climate change" in Marcalee Alexander, Alexandra E Fogarty & Carl Froilan D Leochico, eds, *Climate Change and Disability* (Academic Press, 2026) 63 at 63–64; Zakari & Orole, *supra* note 16 at 2; Kamminga, *supra* note 16 at 341–342.

To supposedly mitigate climate instability, contemporary global governance has introduced technocratic instruments such as carbon trading; however, these mechanisms inherently perpetuate the very exploitative logic that underpins the ecological crisis.[46] These market-based solutions are widely promoted as innovative pathways toward global climate stabilization. Nevertheless, this approach fails to restructure carbon-intensive production and consumption models, opting instead to merely commodify, transfer, and manage pollution allocations through financial markets.[47] In response to this hyper-financialization, localized religious traditions and spiritual paradigms emerge as potent normative forces capable of challenging the worldview that objectifies nature and strips environmental governance of its ethical-transcendental dimension.[48] From these spiritual standpoints, humanity's coexistence with the Earth must be grounded not in capital accumulation, but in moral, spiritual, and intergenerational accountability toward all creation.[49] Therefore, religious ontology possesses significant potential to cultivate an ecological consciousness that transcends modern anthropocentrism and market-driven imperatives.[50]

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[46] Wahana Lingkungan Hidup Indonesia (WALHI, "Stop Solusi Iklim Palsu, Utamakan Keselamatan Rakyat dari Dampak Krisis Iklim" (9 November 2022), online: *WALHI* <http://www.walhi.or.id/stop-solusi-iklim-palsu-utamakan-keselamatan-rakyat-dari-dampak-krisis-iklim?utm_source=chatgpt.com>.

[47] *Ibid*.

[48] Susan Power Bratton, "Eco-Dimensionality as a Religious Foundation for Sustainability" (2018) 10:4 Sustainability 1021 at 6; Willis Jenkins, "Whose Religion? Which Ecology?: Religious studies in the environmental humanities" in *Routledge Handbook of Religion and Ecology* (Routledge, 2016) at 37–38.

[49] Rodrigo Chacón Aguirre, "Rethinking Responsibility in a Planetary Age; or, Facing the Anthropocene with Hans Jonas and Bruno Latour" (2023) 59 Isonomía 67–103 at 103; Oran R Young & Will Steffen, "The Earth System: Sustaining Planetary Life-Support Systems" in Carl Folke, Gary P Kofinas & F Stuart Chapin, eds, *Principles of Ecosystem Stewardship: Resilience-Based Natural Resource Management in a Changing World* (New York, NY: Springer, 2009) 295 at 314.

[50] Marin, *supra* note 45 at 65–66; F A Zapata Muriel & M L M Trujillo, "Ecoteology:Contributions of theology and religion around the ecological problem

Furthermore, the epistemological intersection of religion and ecology operates through two primary dimensions: lived ritual practices and localized attachments to place.[51] Spiritual doctrines must be actualized within everyday material existence—such as through sacred agricultural practices and ecological pilgrimages—thereby establishing an immediate, localized religious response to environmental changes. Simultaneously, "place" signifies a spatial landscape imbued with dense spiritual, ancestral, and cultural meanings, rather than a mere geographical coordinate or a physical repository of natural resources. Consequently, analyzing the local context is paramount to understanding how specific religious frameworks actively shape, and are subsequently reshaped by, asymmetric human-nature interactions.

Within the theological doctrines of major global religions, the Earth is conceptualized not as a dead asset to be liquidated on financial exchanges, but as a divine creation endowed with intrinsic, non-negotiable value. Islam, for instance, explicitly designates humanity as vicegerents on Earth (*khalifah*) under the mandate of the Qur'an (2:30), imposing a strict moral obligation to preserve and protect the biosphere rather than exploit it. Similarly, Judeo-Christian theology mandates environmental responsibility through the covenant of just, compassionate earth-stewardship (Genesis 2:15; Psalm 24:1). In Hinduism and Buddhism, the ontological monism and codependency between humanity and cosmic ecosystems reside at the absolute center of spiritual jurisprudence (Chandogya

that the current world is experiencing [Ecoteología: Aportes de la teología y de la religión en torno al problema ecológico que vive el mundo actual]" (2018) 13:1 Produccion y Limpia 92–105 at 28–29.

[51] David Abram, "On the Origin of the Phrase 'More-Than-Human'" (2024) at 341–342.

Upanishad III.14). Moreover, within the diverse indigenous belief systems (*aliran kepercayaan*) across Indonesia and the Global South, nature is recognized as an animate, sentient entity possessing a spiritual essence—a sacred subject holding an inherent right to institutional respect and structural protection.

These diverse theological paradigms offer a foundational ethical critique against the operational logic of international carbon markets. If the biosphere is understood as a sacred creation possessing intrinsic value, reducing complex forest ecosystems to homogeneous, tradable carbon credits represents an ethically fraudulent and reductionistic abstraction.[52] Within this context, carbon markets expose the underlying mechanics of green capitalism, which systematically converts ancestral, spiritual, and social relationships with the land into transactional financial arrangements. Under this regime, the living forest is alienated from its traditional caretakers and re-engineered into a liquidity-producing financial asset designed to offset corporate carbon footprints.

However, in the contemporary global order, these transcendent spiritual values are directly subverted by market architectures that fractionate natural ecosystems into quantifiable carbon units traded on global commodity exchanges. The carbon market functions as a smoke-screen for market-based climate solutions: industrialized polluters can purchase the right to emit greenhouse gases under the pretext of financing conservation or reforestation initiatives in distant geographic regions. This offset scheme entrenches historical, neocolonial inequalities by positioning vulnerable tropical nations in the Global South

[52] Joel T Millward-Hopkins, "Natural capital, unnatural markets?" (2016) 7:1 WIREs Climate Change 13–22 at 13–14.

as passive "absorbers" of the Global North's carbon emissions. Consequently, international frameworks such as REDD+ have drawn severe condemnation for driving the structural dispossession of indigenous lands without generating statistically verifiable declines in aggregate global emissions (Human Rights Watch, 2024). This reality demonstrates that carbon trading functions primarily as a mechanism for capital flexibility and pollution displacement rather than genuine ecological transformation.

Empirical investigations, such as those published by Human Rights Watch regarding carbon offsets in Cambodia[53] and domestic reports in Indonesian Borneo (Kalimantan), expose a recurring, predatory pattern. Indigenous populations face forced displacements, access to customary forests is restricted, and collective rights to ancestral living spaces are dismantled in favor of corporate-state joint ventures. In Indonesia, the Meratus Dayak, Dayak Tomun, and Kajang indigenous communities have unified in their resistance against proposed carbon trading frameworks, arguing that these market schemes reduce their sacred, cosmological relationship with their ancestral lands to cold, binding corporate contracts that disproportionately enrich global investors.[54] This grassroots resistance underscores that carbon trading has evolved far beyond a technical environmental dispute; it has mutated into a fundamental cosmological conflict pitting the extractive tenets of green capitalism against the relational, ecocentric paradigms of indigenous societies.

[53] *Smoke and Mirrors: How Carbon Offsetting Hurts Indigenous Communities*, by Human Rights Watch (Human Rights Watch, 2024) at 25–26.
[54] AMAN, *supra* note 15.

Faced with this systemic co-optation, religious institutions and local spiritual movements have actively mobilized against these frameworks. Through theological doctrines, institutional sermons, collective grassroots actions, and faith-based declarations, an organized ethical movement has emerged to dismantle the rationale of green capitalism inherent in carbon markets. Within these spiritual frameworks, human accountability extends beyond contemporary legal parameters to encompass duties toward non-human organisms, ancestral lands, vital watersheds, and unborn human generations. This spiritual resistance manifests in the defensive legal strategies of indigenous peoples who ground their claims in the sacredness of their territories, as well as in formal declarations from major religious bodies condemning carbon markets as structural moral deceptions cloaked in environmental jargon.[55]

Amidst this crisis, ecological spirituality offers an alternative paradigm that rejects the monetized measurement of nature, resurrecting instead a way of life built upon cosmological connectivity, material limitations, and eco-sufficiency. This spiritual ethic fundamentally rejects the logic of carbon offsetting, conceptualizing it as a moral hazard that permits affluent actors to outsource their ethical responsibilities while allowing the structural drivers of environmental destruction to expand unchecked. Spiritual ecology asserts that genuine ecological healing cannot be engineered through technocratic market adjustments; it requires profound collective introspection and a structural transformation of global socio-economic models.

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[55]AMAN, "Masyarakat Adat Menolak Mekanisme Pasar Karbon" (8 November 2021), online: <https://aman.or.id/news/read/Masyarakat%20Adat%20Menolak%20Mekanisme%20Pasar%20Karbon>; AMAN, *supra* note 15.

Deploying the theoretical model of the "moral atmosphere," Gade[56] demonstrates that air can be conceptualized as an ethical medium that organically unifies the human body, physical space, and divine blessings (*barakah*). He illustrates how the ontological meaning of air serves as a direct reflection of the spiritual relationship between humanity and the Divine, while simultaneously dictating collective moral duties toward the ecosystem. Within this framework, environmental protection is rescued from the realm of dry technical policy and repositioned as an inseparable component of Islamic morality and religious devotion. Similarly, Abram[57] emphasizes that such paradigms create vital spaces for ecological spirituality—an acute awareness that the material world is fully alive, interconnected, and imbued with meaning, and that consciousness is not an exclusive property of human exceptionalism. Consequently, utilizing the term "more-than-human" is not a mere semantic exercise; it fundamentally alters how humanity conceptualizes, experiences, and relates to the biosphere.

However, the intersection of institutional religion and environmental governance warrants rigorous academic skepticism. Within the domestic Indonesian context, Nahdlatul Ulama's (NU) institutional endorsements of national carbon tax policies, for example, remain largely symbolic, abstract, and normative.[58] This high-level religious support has not been accompanied by robust institutional critiques regarding the potential for corporate

[56]Anna M Gade, *Muslim Environmentalisms: Religious and Social Foundations* (Columbia University Press, 2019) at 297–298.
[57]David Abram, *On the Origin of the Phrase "More-Than-Human* (2024) at 342–343.
[58] Dedik Priyanto, "Atasi Krisis Lingkungan, Para Ulama Dukung Penerapan Pajak Karbon" (26 September 2021), online: *Kompas.tv* <https://www.kompas.tv/nasional/215570/atasi-krisis-lingkungan-para-ulama-dukung-penerapan-pajak-karbon>.

emissions manipulation, nor has it addressed the adverse socio-economic impacts of regressive carbon taxation on impoverished, low-income communities. Furthermore, the abstract theological approaches deployed by such religious bodies remain structurally disconnected from concrete legal advocacy strategies, public oversight mechanisms, and cross-sectoral coalitions designed to defend marginalized populations.

This institutional disconnect reveals that religion can operate in an inherently ambiguous manner within global environmental governance. While it functions on one hand as a powerful discursive source for criticizing ecological exploitation, it simultaneously risks being co-opted on the other to provide moral legitimacy to green developmental projects that continue to operate within capitalistic paradigms. Therefore, genuine ecological decolonization requires the institutional courage to elevate the voices of subjugated communities and critically deconstruct how religious narratives are weaponized to validate dominant political-economic agendas (Tomalin, 2024).[59] Institutional religion must evolve beyond serving as a passive source of moral validation for technocratic policies; it must transform into an active, defensive legal and ethical force that champions environmental justice and secures the human rights of climate-vulnerable communities.

Ultimately, resolving the global climate crisis necessitates an analytical framework that rejects exclusive reliance on market forces and technocratic engineering, anchoring itself instead in relational ethics and transcendental values. The ecological crisis is, at its core, a systemic crisis of human

[59] Emma Tomalin, "Religion, Ecology and Hindu Nationalism in India" in *Religion and Ecology: Perspectives on Environment and Sustainability Across Religious Traditions* (2024) 133 at 466.

morality and perception. Therefore, sustainable climate solutions must be built upon the absolute legal recognition of indigenous rights, the restoration of relational coexistence with the non-human world, and the unyielding rejection of false market solutions that camouflage neo-colonial exploitation under the polished language of sustainability.

IV. FAIR AND INCLUSIVE ENVIRONMENTAL POLICY FOR INDIGENEOUS PEOPLE

Climate change and the global ecological crisis have raised fundamental questions about who is most affected and who is given space to shape the direction of environmental policy. In a policy stream that is often driven by state and market interests, indigenous peoples have emerged as important actors who have brought the dimensions of ecological justice and intergenerational ethics to the center of the debate. Through various official forums and grassroots initiatives—such as participation in the UNFCCC, submission of reports to the Committee on the Elimination of Racial Discrimination (CERD), and active involvement in FCPF and REDD+ consultations—indigenous peoples have emphasized the urgency of identifying and promoting more just, inclusive, and rights-based environmental policies.

The involvement of indigenous peoples in these forums demonstrates that environmental struggles involve the recognition of rights, knowledge, and ways of life that have been marginalized by the modern development paradigm. In the Indonesian context, for example, the Indigenous Peoples Alliance of the Archipelago (AMAN) actively utilizes international legal instruments and forums to promote customary rights, local knowledge, and the full participation

of indigenous peoples in historical decision-making that has long displaced them from their ancestral territories. Thus, demands for equitable policies relate to the distribution of economic benefits and also acknowledge alternative epistemologies for viewing forests, land, and the relationship between humans and nature.

This demonstrates that indigenous peoples' struggles transcend narrow concepts of distributive justice. Environmental justice, for which indigenous peoples are fighting, encompasses a deeper dimension than just access to resources; it includes respect for the Earth as a moral subject that has the right to be protected from unlimited exploitation. In declarations and recommendations emerging from various indigenous peoples' forums, such as the Global REDD Consultation and the Anchorage Declaration, the principle of intergenerational responsibility is affirmed as the ethical basis for formulating policies. This principle reminds us that every environmental decision today must consider the sustainability of the lives of future generations and the continuity of indigenous peoples' cosmologies that see nature as an integral part of social and spiritual life.

Thus, the indigenous peoples' critique of environmental policy challenges the development paradigm that separates humans from nature. Indigenous peoples offer an alternative approach that places reciprocity, moral responsibility, and sustainability as the primary foundations of environmental governance. In this context, environmental policy is not simply about economic efficiency and technical targets for emission reduction, but must also consider the ethical, social, cultural, and spiritual dimensions of humanity's relationship with the earth.

Moreover, indigenous peoples also propose alternative legal and institutional frameworks based on the principle of Free, Prior, and Informed Consent (FPIC), recognition of customary law, and a human rights-based approach.[60] The principle of FPIC affirms that indigenous peoples have the right to obtain adequate information, freely give consent, and be fully involved before environmental projects are implemented in their territories. From the perspective of indigenous peoples, participation means meaningful involvement in determining the direction of policies that affect their living space. The push for the recognition of customary law and FPIC also demonstrates a conceptual shift in environmental perspectives. Whereas nature has traditionally been positioned as an object of technocratic policy and an economic resource, indigenous peoples now view the earth as a living entity that must be respected.

According to Michel Serres,[61] nature has been considered as an inanimate object for too long, treated as property that can be exploited without responsibility, and it is time for nature to be recognized as a legal subject which has the right to exist and the right not to be destroyed. In this framework, humans are no longer the sole rulers, but equal partners within what he terms the "natural contract." Thus, the struggle of indigenous peoples is not only about distributive justice in climate projects, but also about a fundamental redefinition of the human-nature relationship that has been dominated by the extractive logic of global capitalism. In this framework, humans are no longer the sole rulers, but rather part of an interdependent ecological relationship.

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[60]Jeane Neltje Saly et al, "Akselerasi Hukum Adat: Penerapan Prinsip Free, Prior, Informed Consent (FPIC) bagi Masyarakat Adat." (2024) 10:1 Yustitiabelen 14–26 at 526.

[61] Michel Serres & Felicia McCarren, "The Natural Contract" (1992) 19:1 Critical Inquiry, online: <https://www.journals.uchicago.edu/doi/10.1086/448661> at 19–21.

This perspective demonstrates that the struggles of indigenous peoples are actually an effort to redefine the relationship between humans and nature, which has been dominated by the extractive logic of global capitalism. The climate crisis demonstrates the failure of the modern development paradigm, which only positions nature as a product of capital accumulation.[62] Therefore, there is growing global pressure to shift environmental policy from a technocratic approach to one based on social justice, human rights, and ecological ethics. In this context, indigenous communities offer important lessons on more sustainable ways of life. For thousands of years, indigenous communities have coexisted with nature through community-based resource management practices, customary laws, rituals, and local knowledge that maintain ecological balance.[63] Therefore, recognizing these communities is a strategic step in developing more effective and sustainable environmental policies.

Fair policies in this context must start from historical recognition of the contribution of local communities to protecting the environment and recognition of the structural injustices they experience. Schemes such as REDD+ and carbon markets, although wrapped in green rhetoric, in practice often repeat colonial logic by reclaiming indigenous peoples' living space in the name of conservation or emission absorption.[64] Indigenous lands

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[62] Sender Dovchin, Ulemj Dovchin & Graeme Gower, "The discourse of the Anthropocene and posthumanism: Indigenous peoples and local communities" (2024) 24:4 Ethnicities 521–535 at 525.

[63] Nidhi Tyagi & Radhey Jha, "Role of Indigenous Governance, Cultural Practices, and Ecological Knowledge in Promoting Community Resilience" in *Global Societal Resilience Through Political, Environmental, and Cultural Upheaval* (IGI Global, 2025) 145 at 25.

[64] Jens Koehrsen, Julia Blanc & Fabian Huber, "How "green" can religions be? Tensions about religious environmentalism" (2022) 6:1 Z Religion Ges Polit 43–64 at 47.

that have been managed based on spiritual principles and reciprocal relations with nature are instead used as objects of transaction and commodification.

Inclusive policies, therefore, must place indigenous peoples as equal partners in the process of policy making, implementation, and evaluation. The principle of Free, Prior, and Informed Consent (FPIC) must be the foundation, not just a formality. Participation does not mean an invitation to attend, but meaningful involvement that ensures indigenous peoples can maintain their vision of a good life (*buen vivir*), namely a life in balance between humans, nature, and spirituality. This approach demonstrates that well-being is measured not only through economic growth, but also through ecological harmony and the sustainability of communal life.

Furthermore, the ethics of justice fought for by indigenous peoples also go beyond the concept of modern distributive justice. It includes relations with ancestors and future generations, as well as respect for non-human beings as part of an ethical community.[65] Here, the concept of intergenerational responsibility becomes a central pillar: today's actions must consider their impact on the survival of children and grandchildren and the ecological integrity of the earth. This is a principle that has been instilled through rituals, customary law, and community-based resource management.

Ultimately, indigenous peoples' demands for just and inclusive environmental policies are not only related to land, but also to their own knowledge and way of life. Indigenous peoples demand recognition as sources of ecological knowledge, determinants of development

[65] *Ibid*.

direction, and guardians of a more harmonious life system. Therefore, the reformulation of global environmental policies must be based on the principles of ecological ethics, collective recognition, meaningful participation, and respect for epistemological diversity. Without such transformation, environmental policies will simply become new instruments for the reproduction of inequality and exploitation in the name of green development and sustainability.

V. CONCLUSION

Global climate change, driven primarily by the development models of industrialized nations, continues to inflict severe ecological degradation and structural social injustices, particularly upon vulnerable indigenous populations. Market-based mitigation mechanisms, such as REDD+, frequently marginalize the inherent rights of indigenous peoples, commodify their ancestral forests, and entrench deeply rooted global inequalities. Consequently, the formulation of contemporary environmental policies must be reoriented toward the core principles of social justice, the formal recognition of indigenous rights, and comprehensive ecological ethics to guarantee robust protection for both the biosphere and the most severely impacted communities. This research underscores the critical need for a more holistic approach to climate change mitigation—one that transcends exclusive reliance on market-driven solutions and instead respects human rights and transcendental spiritual values in maintaining environmental sustainability.

Furthermore, future environmental policies must legally recognize collective land tenure, customary jurisprudence, and the operational principle of Free, Prior, and Informed

Consent (FPIC) as the mandatory foundations for meaningful community participation. Therefore, the structural reformulation of environmental governance must remain firmly anchored in the principles of social justice, human rights, and ecological ethics. Ultimately, environmental frameworks must explicitly acknowledge the alternative epistemologies and pivotal roles of indigenous peoples, positioning them not as passive beneficiaries, but as active guardians of nature and pioneers of progressive ecological governance.

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