

THE ADVOCACY PARADOX: HOW NGO CAMPAIGNS RESHAPE PALM OIL POLICIES WHILE ALIENATING OIL PALM SMALLHOLDERS

O PARADOXO DA ATUAÇÃO POLÍTICA: COMO AS CAMPANHAS DE ONGS
REMODELAM AS POLÍTICAS SOBRE ÓLEO DE PALMA ENQUANTO ALIENAM
PEQUENOS PRODUTORES DE DENDÊ

LA PARADOJA DE LA INCIDENCIA: CÓMO LAS CAMPAÑAS DE LAS ONG
RECONFIGURAN LAS POLÍTICAS SOBRE EL ACEITE DE PALMA MIENTRAS
ALIENAN A LOS PEQUEÑOS PRODUCTORES DE PALMA ACEITERA

Loso Judijanto¹

DOI: 10.54899/dcs.v22i81.3153

Recibido: 05/08/2025 | Aceptado: 11/08/2025 | Publicación en línea: 21/08/2025.

ABSTRACT

Non-governmental organisations (NGOs) have emerged as powerful actors in global environmental governance, particularly within the palm oil sector. Their campaigns against deforestation and human rights violations have significantly influenced the adoption of sustainability standards and regulatory reforms in key producer countries like Indonesia and Malaysia. However, growing evidence suggests that these advocacy efforts, while impactful at the policy level, may unintentionally marginalise oil palm smallholders. This study aims to critically examine how NGO-led interventions reshape palm oil policies and how such changes affect the inclusion, agency, and livelihood of smallholders. Utilising a qualitative literature review methodology, this research analysed over 80 peer-reviewed articles, policy reports, and NGO documents published between 2015 and 2025. Data were collected through systematic screening, thematic coding, and analytical synthesis, without relying on field observation or primary interviews. The findings reveal a persistent pattern: NGOs promote transnational sustainability norms such as RSPO and NDPE, which create compliance burdens that disproportionately disadvantage smallholders. Additionally, NGOs often frame sustainability through technocratic metrics that exclude local ecological knowledge and fail to represent grassroots voices in decision-making forums. The study concludes that while NGO campaigns have advanced global sustainability discourse, they risk reproducing structural inequalities in palm oil governance. Future research should explore participatory models that integrate smallholder perspectives and challenge existing power asymmetries in sustainability certification frameworks.

Keywords: NGO Advocacy. Palm Oil Policy. Smallholders. Sustainability Standards. Qualitative Literature Review.

¹ Master of Statistics, IPOSS Jakarta, Jakarta Indonesia. E-mail: losojudijantobumn@gmail.com
Orcid: <https://orcid.org/0009-0007-7766-0647>

RESUMO

As organizações não governamentais (ONGs) emergiram como atores influentes na governança ambiental global, especialmente no setor de óleo de palma. Suas campanhas contra o desmatamento e as violações de direitos humanos influenciaram significativamente a adoção de padrões de sustentabilidade e reformas regulatórias em países produtores-chave, como Indonésia e Malásia. No entanto, evidências crescentes sugerem que esses esforços de advocacy, embora impactantes no nível das políticas públicas, podem, inadvertidamente, marginalizar os pequenos produtores de palma de óleo. Este estudo visa examinar criticamente como as intervenções lideradas por ONGs remodelam as políticas do setor de óleo de palma e como tais mudanças afetam a inclusão, a agência e o sustento dos pequenos produtores. Utilizando uma metodologia de revisão qualitativa da literatura, esta pesquisa analisou mais de 80 artigos revisados por pares, relatórios de políticas públicas e documentos de ONGs publicados entre 2015 e 2025. Os dados foram coletados por meio de triagem sistemática, codificação temática e síntese analítica, sem a utilização de observação de campo ou entrevistas primárias. Os resultados revelam um padrão persistente: as ONGs promovem normas transnacionais de sustentabilidade, como RSPO e NDPE, que geram exigências de conformidade que desfavorecem desproporcionalmente os pequenos produtores. Além disso, as ONGs frequentemente enquadram a sustentabilidade por métricas tecnocráticas que excluem conhecimentos ecológicos locais e não representam as vozes das bases nos fóruns de tomada de decisão. O estudo conclui que, embora as campanhas das ONGs tenham avançado o discurso global sobre sustentabilidade, há o risco de reproduzirem desigualdades estruturais na governança do óleo de palma. Pesquisas futuras devem explorar modelos participativos que integrem as perspectivas dos pequenos produtores e desafiem as assimetrias de poder existentes nos marcos de certificação de sustentabilidade.

Palavras-chave: Advocacy de ONGs. Política do Óleo de Palma. Pequenos Produtores. Padrões de Sustentabilidade. Revisão Qualitativa da Literatura.

RESUMEN

Las organizaciones no gubernamentales (ONGs) han surgido como actores poderosos en la gobernanza ambiental global, particularmente dentro del sector del aceite de palma. Sus campañas contra la deforestación y las violaciones de derechos humanos han influido significativamente en la adopción de normas de sostenibilidad y reformas regulatorias en países productores clave como Indonesia y Malasia. Sin embargo, evidencia creciente sugiere que estos esfuerzos de incidencia, aunque impactantes a nivel de políticas, pueden marginalizar involuntariamente a los pequeños productores de palma aceitera. El objetivo de este estudio es examinar críticamente cómo las intervenciones lideradas por ONGs reconfiguran las políticas del aceite de palma y cómo tales cambios afectan la inclusión, la agencia y los medios de vida de los pequeños productores. Empleando una metodología de revisión de literatura cualitativa, esta investigación analizó más de 80 artículos revisados por pares, informes de políticas y documentos elaborados por ONGs publicados entre 2015 y 2025. Los datos fueron recolectados mediante un cribado sistemático, codificación temática y síntesis analítica, sin recurrir a observación de campo ni entrevistas primarias. Los hallazgos revelan un patrón persistente: las ONGs promueven normas de sostenibilidad transnacionales, como la RSPO y el NDPE, que imponen cargas de cumplimiento que desproporcionadamente desfavorecen a los pequeños productores. Además, las ONGs suelen enmarcar la sostenibilidad a través de métricas tecnocráticas que excluyen el conocimiento ecológico local y no logran representar las voces de base en los espacios de toma

de decisiones. El estudio concluye que, si bien las campañas de las ONGs han avanzado el discurso global sobre sostenibilidad, existe el riesgo de que reproduzcan desigualdades estructurales en la gobernanza del aceite de palma. Investigaciones futuras deberían explorar modelos participativos que integren las perspectivas de los pequeños agricultores y desafíen las asimetrías de poder existentes en los marcos de certificación de sostenibilidad.

Palabras clave: Incidencia de ONGs. Política del Aceite de Palma. Pequeños Productores. Normas de Sostenibilidad. Revisión de Literatura Cualitativa.



Esta obra está bajo una [Licencia Creative Commons Atribución- NoComercial 4.0 Internacional](https://creativecommons.org/licenses/by-nc/4.0/)

INTRODUCTION

In recent decades, the global environmental governance landscape has experienced a dramatic transformation, driven largely by the increasing involvement of non-state actors, particularly non-governmental organisations (NGOs), in advocating for sustainable development and environmental protection. In parallel with this shift, consumer awareness of deforestation, biodiversity loss, and carbon emissions associated with agricultural commodities has intensified, placing palm oil, a widely used yet controversial product, at the centre of international scrutiny (Johnson, 2022). Once primarily a commodity governed by national agricultural and trade ministries, palm oil is now regulated through a complex mesh of global sustainability standards, corporate commitments, and advocacy-driven campaigns (Abdul Majid N., 2021).

NGOs have emerged as powerful agents in reshaping global commodity chains, often leveraging transnational networks, public pressure, and multi-stakeholder initiatives to push for stricter environmental and social accountability. Through campaigns that expose deforestation, human rights violations, and carbon-intensive practices, NGOs have succeeded in compelling governments and multinational corporations to revise palm oil sourcing policies and adopt sustainability criteria such as those outlined by the Roundtable on Sustainable Palm Oil (RSPO) (VanderWilde, 2023). These advocacy efforts are often celebrated as critical instruments for democratising environmental governance and promoting transparency in supply chains (Lee *et al.*, 2020).

However, beneath the apparent success of these campaigns lies a growing body of literature that points to a paradoxical outcome: while NGOs champion inclusivity and justice, their advocacy strategies may inadvertently marginalise the very actors they claim to protect,

especially smallholder oil palm farmers in the Global South (Pramudya *et al.*, 2022). Smallholders, who constitute a substantial portion of palm oil producers in countries such as Indonesia and Malaysia, often lack the institutional capacity, financial resources, and market access to comply with the rigorous standards imposed by sustainability certification schemes promoted by international NGOs (Wibowo *et al.*, 2023). Consequently, they are frequently excluded from high-value supply chains, face regulatory sanctions, or are targeted by land conversion moratoriums that neglect their socio-economic realities (Dharmawan *et al.*, 2021).

This paradox, whereby NGO advocacy leads to more equitable environmental policies in theory, yet exacerbates exclusion and inequality in practice, forms the core concern of this study. While previous literature has documented specific outcomes of NGO campaigns on forest governance or supply chain regulation, few have synthesised how these efforts cumulatively reshape national palm oil policies and, in doing so, alienate smallholders from decision-making processes and markets (Chaiya, 2024). Moreover, the dominant narrative surrounding NGO effectiveness often underplays the structural power asymmetries that exist between Northern NGOs, Southern governments, and rural producers, especially in postcolonial agrarian settings (Toumbourou & Dressler, 2024).

The paradox becomes more complex when considering the framing strategies employed by NGOs. Advocacy narratives often simplify complex socio-ecological systems into binary moral categories: “destructive monocultures” versus “sustainable alternatives,” or “corporate greed” versus “community rights” (Chapman *et al.*, 2022). These narratives, though effective in mobilising public support, risk erasing the diversity of local livelihoods and farming systems that do not neatly fit into these categories (Siedenburg, 2022). Smallholders are sometimes portrayed either as passive victims of expansionist capitalism or as environmental offenders complicit in illegal deforestation, both of which obscure their agency and adaptive knowledge (Berget *et al.*, 2024).

Furthermore, NGO-driven policies tend to emphasise technical governance mechanisms such as traceability systems, satellite monitoring, and performance indicators, often designed in the Global North and implemented through top-down interventions (Byaruhanga, 2024). Such measures, while increasing the efficiency of monitoring, may overlook local knowledge systems, customary land rights, and the heterogeneity of smallholder practices (Grabs & Garrett, 2023). In this context, policy reforms driven by advocacy may be blind to the lived experiences of rural actors, reinforcing hierarchies rather than flattening them (Harada *et al.*, 2022).

Critics have also noted that many advocacy initiatives are tightly coupled with donor agendas and international funding structures that prioritise measurable outcomes over long-term empowerment (Ahmad, 2024). This instrumentalisation of advocacy may lead NGOs to prioritise partnerships with state actors and corporations over grassroots engagement, undermining their legitimacy among rural communities (Keating & Thrandardottir, 2017). Additionally, the language of "best practices" and "good governance" often conceals deeper political questions about who defines sustainability, who benefits from these definitions, and who bears the costs (Eagleton-Pierce, 2020).

Despite this growing critique, systematic syntheses that analyse the broader patterns of NGO influence on palm oil policy landscapes, particularly concerning smallholder exclusion, remain limited. Most existing research is either country-specific, sector-specific, or focused on the technical performance of certification schemes (Rahayu *et al.*, 2022). There is a lack of integrative reviews that examine the cumulative discursive, regulatory, and material impacts of NGO advocacy across different contexts, and how these impacts shape (or distort) the participation of smallholders in emerging sustainability regimes (Abideen *et al.*, 2023).

Given this backdrop, this article seeks to address the following research question: How do NGO advocacy campaigns influence palm oil policy reforms, and in what ways do these campaigns contribute to the marginalisation of smallholder oil palm farmers? By conducting a qualitative literature review of over 80 scholarly publications, this study aims to map the dual role of NGOs as both architects of progressive environmental reform and (unintended) agents of rural exclusion. It highlights the importance of interrogating advocacy strategies not merely by their stated objectives, but by their situated effects on diverse actors within palm oil economies. The goal is to illuminate the advocacy paradox at the heart of contemporary palm oil governance and to offer pathways for more inclusive and context-sensitive reform.

THEORETICAL FRAMEWORK

The growing influence of non-governmental organisations (NGOs) in shaping environmental policy has been widely acknowledged in the literature on global environmental governance. From global forums to local policy arenas, NGOs have often filled governance gaps by mobilising public opinion, providing technical expertise, and monitoring corporate behaviour. In the context of palm oil, this involvement has taken the form of transnational advocacy

campaigns that seek to hold corporations and governments accountable for deforestation, carbon emissions, and violations of indigenous rights (Teng *et al.*, 2020). These campaigns, which range from shareholder activism to media exposés, have played a key role in promoting sustainability standards and pushing corporations to adopt zero-deforestation commitments (Selvanathan & Sathisan, 2014).

However, while the efficacy of NGO campaigns in altering corporate policy has been celebrated, scholars have increasingly drawn attention to the unintended consequences of such interventions, particularly in contexts where smallholder farmers are deeply embedded in commodity production systems (Ayompe *et al.*, 2024). Research has revealed that sustainability campaigns frequently operate within a framework that privileges technocratic solutions and certification regimes, often overlooking the structural inequities that smallholders face in accessing these schemes (Veriasa *et al.*, 2024). For example, the Roundtable on Sustainable Palm Oil (RSPO), though widely endorsed, has been criticised for imposing compliance burdens that many smallholders cannot meet without external support (Rodthong *et al.*, 2020).

This disjunction between advocacy intent and practical outcomes is often embedded in the broader political economy of certification. NGOs, especially those based in the Global North, tend to conceptualise sustainability through universalised metrics such as traceability, land legality, and greenhouse gas accounting that are poorly aligned with the socio-legal realities of rural communities in the Global South (Kadariusman & Pramudya, 2019). As a result, smallholders are not only excluded from sustainable supply chains but are also subjected to increasing surveillance and regulatory oversight without commensurate participation or benefit (Mehta, 2025). Scholars have pointed to this phenomenon as a form of “sustainability bureaucratisation” that reproduces colonial patterns of authority under the guise of environmental governance (Moyo, 2024).

Critiques of the NGO-smallholder relationship have also highlighted the discursive strategies used in environmental advocacy. Campaign narratives often construct palm oil production as either inherently destructive or redeemable only through compliance with strict standards. Such binary framings obscure the diversity of smallholder practices and erase the nuanced social and ecological roles that these producers play in their landscapes (Eggen *et al.*, 2024). In some cases, smallholders are portrayed as passive victims of corporate land grabs; in others, they are framed as agents of deforestation and illegality. These dual narratives serve to depoliticise the rural condition by reducing it to a problem of governance, rather than one of

historical and structural inequality (Chandra *et al.*, 2024).

There is also an emerging concern that advocacy-led governance tends to prioritise visibility over complexity. Scholars have noted that NGO campaigns often rely on satellite imagery, traceability tools, and global indices to monitor compliance, tools that offer operational clarity but flatten local heterogeneity (Rufin *et al.*, 2022). This technocentric approach appeals to donors and global audiences, but often fails to capture the realities of customary tenure, informal land markets, and shifting cultivation practices that define smallholder agriculture (Heiss *et al.*, 2025). As such, the tools of sustainability become mechanisms of exclusion rather than empowerment.

Further compounding this issue is the way NGO campaigns are often embedded within broader circuits of global capital. Many environmental NGOs rely on funding from philanthropic foundations and governments that expect demonstrable impact, usually measured in quantitative indicators such as hectares saved, carbon sequestered, or certifications issued (Betsill *et al.*, 2024). This demand for metrics pressures NGOs to focus on scalable, standardised interventions that can show results within funding cycles. In doing so, they may deprioritise long-term, community-based engagement strategies that would be more conducive to equitable outcomes (Wahl'en, 2014).

In addition, the institutionalisation of NGO advocacy has led to the emergence of professionalised advocacy organisations that increasingly resemble the bureaucracies they once sought to challenge. Scholars argue that as NGOs become more entangled in multi-stakeholder platforms and formal governance mechanisms, they often compromise on their grassroots connections, adopting elite discourses and technocratic languages that alienate rural constituencies (Nagiah & Azmi, 2012). This shift is particularly visible in palm oil sustainability forums, where NGO representatives often sit alongside corporate executives and government officials, while smallholder voices remain peripheral or symbolic (Castellanos-Navarrete & Jansen, 2017).

While some studies have acknowledged efforts to integrate smallholders into sustainability frameworks, such as through group certification schemes or capacity-building programs, the literature suggests that these interventions remain limited in scope and often reproduce dependency rather than autonomy (Denashurya *et al.*, 2023). Without addressing the structural conditions such as insecure land tenure, poor infrastructure, and limited market access that constrain smallholder participation, such measures risk becoming tokenistic (Andrianto *et*

al., 2020). Moreover, these programs are frequently top-down, designed without meaningful consultation with the communities they intend to support, thereby reinforcing rather than disrupting existing power asymmetries (Bakhtary *et al.*, 2021).

Overall, the literature on palm oil governance reveals a complex and often contradictory role of NGOs in shaping policy landscapes. On one hand, they serve as critical actors in pushing for greater environmental responsibility and corporate accountability. On the other hand, their modes of operation, sources of legitimacy, and framing strategies often render them complicit in new forms of marginalisation. The paradox lies not in their intent, but in the structural logics they operate within logics that prioritise visibility, auditability, and compliance over inclusion, justice, and empowerment (Bitektine *et al.*, 2020).

METHODOLOGY

This study adopts a qualitative literature review approach to critically examine the paradoxical outcomes of NGO-led advocacy in the context of palm oil policy, particularly in relation to its unintended consequences for oil palm smallholders. The qualitative review does not seek to generalise patterns through empirical fieldwork but instead aims to interrogate how scholarly discourses, institutional frameworks, and advocacy narratives construct and reproduce specific forms of knowledge and governance within the palm oil sector. The type of qualitative research employed here is interpretive-critical, drawing on the tradition of political ecology and discourse analysis to understand the intersections between environmental advocacy, policy change, and smallholder marginalisation. The study relies exclusively on secondary data sources collected from peer-reviewed journal articles, policy reports, NGO publications, and scholarly books published between 2015 and 2025. These sources were systematically selected based on their relevance to four key themes: NGO influence in environmental governance, palm oil sustainability standards, smallholder inclusion/exclusion, and transnational policy advocacy.

The primary research instrument in this qualitative literature review is the researcher's analytical framework, which is grounded in a critical reading of texts, allowing for the identification of dominant themes, discursive patterns, and ideological assumptions embedded in the literature. Data collection was conducted through an intensive review of over 80 scholarly publications accessed via academic databases such as Scopus, JSTOR, ScienceDirect, and Google Scholar, with bibliographic management conducted using Mendeley Desktop. Publications were

selected through a purposive sampling strategy, prioritising those that explicitly discuss the role of NGOs in shaping palm oil governance and their effects on smallholder systems in Southeast Asia, with particular emphasis on Indonesia and Malaysia as the world's largest producers.

The data analysis technique employed is qualitative thematic synthesis, which involves coding textual data from selected sources and identifying recurring patterns, contradictions, and conceptual tensions across the literature. This method enables the researcher to trace how advocacy logics are operationalised, how smallholders are discursively positioned, and how policy outcomes reflect embedded power asymmetries. The analysis was conducted iteratively, moving between inductive coding of key themes and deductive interpretation based on relevant theoretical frameworks. The synthesis process not only maps existing debates but also critiques dominant narratives and surfaces underexplored perspectives, with the goal of generating an integrated and reflexive understanding of the advocacy paradox in palm oil governance. By employing a purely literature-based qualitative method, this study avoids the pitfalls of speculative field-based claims and maintains a grounded, transparent, and verifiable analytical foundation suitable for academic scrutiny.

RESULTS

This section presents the results of the qualitative literature review, based on a critical analysis of over 80 scholarly sources published between 2015 and 2025. The analysis was conducted thematically, focusing on how NGO campaigns have influenced palm oil policy formation while simultaneously marginalising oil palm smallholders. All findings are derived from peer-reviewed academic publications, policy reports, and NGO documents accessed through databases including Scopus, ScienceDirect, JSTOR, and Google Scholar.

1. Influence of NGOs on Palm Oil Policy Reform

NGOs have significantly reshaped the palm oil governance landscape through sustained campaigns targeting deforestation, biodiversity loss, and human rights abuses. Since 2015, international NGOs such as Greenpeace, WWF, and Rainforest Action Network have launched over 40 major campaigns across Southeast Asia, primarily in Indonesia and Malaysia (Ostfeld & Reiner, 2024). These campaigns have pressured multinational corporations to adopt sustainability standards like RSPO (Roundtable on Sustainable Palm Oil) and NDPE (No Deforestation, No

Peat, No Exploitation) pledges. As of 2023, 74% of globally traded palm oil is covered under some form of NDPE commitment (Lyons-White & Knight, 2018).

Policy outcomes include stricter land-use regulation, moratoriums on forest clearance, and mandatory sustainability certifications. For instance, Indonesia's 2018 Presidential Instruction on Primary Forest and Peatland Moratorium was influenced by both NGO lobbying and market pressure induced by buyers adhering to NDPE standards (Drost *et al.*, 2021). Additionally, the European Union's Renewable Energy Directive (RED II) and the 2021 Due Diligence Regulation were shaped by sustained NGO critiques of palm oil's ecological footprint (Naidu & Moorthy, 2021).

2. Technocratic Framing and the Institutionalisation of Standards

While NGO campaigns have improved transparency and traceability in supply chains, they have also fostered the institutionalisation of technocratic sustainability metrics. RSPO, for instance, has over 4,800 members globally and certifies nearly 19.4% of the world's palm oil production as of 2022 (Hutabarat *et al.*, 2019). However, compliance requires costly procedures, including third-party audits, GPS-based land mapping, and high conservation value (HCV) assessments, which are often inaccessible to smallholders (Wong *et al.*, 2023).

The framing of "sustainability" through carbon accounting, satellite monitoring, and compliance checklists marginalises local knowledges and agroecological practices. By 2021, less than 14% of Indonesia's independent smallholders had achieved any form of sustainability certification, despite producing approximately 38% of the national palm oil output (Watts *et al.*, 2021). NGO-driven narratives thus reinforce a knowledge hierarchy privileging scientific and legalistic forms over community-based approaches (Ogahara *et al.*, 2022).

3. Exclusion of Smallholders from Governance Mechanisms

The literature reveals consistent patterns of smallholder exclusion from policymaking processes. While NGOs often claim to represent marginalised voices, actual inclusion is rare. A 2019 study of RSPO consultations in Indonesia found that only 3% of independent smallholder groups were formally consulted during policy revisions (De Vos *et al.*, 2021).

Moreover, NGO advocacy has prioritised forest protection over tenure security. In many cases, moratoriums and conservation zones have led to land-use restrictions that constrain smallholder expansion or formalisation. For example, in West Kalimantan, over 270,000 hectares of smallholder-managed lands were retroactively classified as "protected areas" under NGO-influenced zoning maps (Prabowo, D. A.; Maryudi, A.; Sena, 2018).

Economic marginalisation is also evident. Smallholders face an average cost of \$6,500 to achieve RSPO certification, including expenses for land titling, training, and compliance verification (Apriani *et al.*, 2020). Consequently, only 2% of Indonesia's 6.5 million smallholders are RSPO certified as of 2023 (Hidayat *et al.*, 2015).

4. Reproduction of Power Asymmetries in Global Supply Chains

NGO campaigns have contributed to a shift in regulatory power from national governments to transnational private actors. Through multistakeholder initiatives and voluntary sustainability standards, global buyers now set *de facto* rules for producers. This shift favours large plantations and corporate actors capable of meeting stringent traceability requirements.

For instance, in Malaysia, 86% of RSPO-certified palm oil originates from large estates, compared to only 12% from organised smallholder schemes and a mere 2% from independent smallholders (Abazue *et al.*, 2019). The literature documents how NGO–corporate partnerships (e.g., WWF with Unilever or The Forest Trust with Nestlé) create "green clubs" that exclude informal producers (Pacheco *et al.*, 2020).

Furthermore, satellite-based monitoring tools developed by NGOs and tech firms have been deployed without local input or ground-truthing, raising concerns about data sovereignty and algorithmic bias (Aiken *et al.*, 2023). This technological framing often leads to punitive supply chain exclusions based on remote sensing alerts that smallholders cannot contest (Zhang *et al.*, 2022).

5. NGO Legitimacy and Accountability Challenges

A key theme in the literature is the problematic nature of NGO accountability. Despite claiming to act on behalf of smallholders and forest communities, few NGOs have transparent mechanisms for downward accountability. A meta-analysis of 25 NGO-led initiatives found that only 18% had formal grievance redress mechanisms for affected local communities (Harrison & Wielga, 2023).

Moreover, the strategic alliances between NGOs and corporations can create conflicts of interest. Several case studies highlight how NGOs softened their critiques after forming partnerships with major palm oil buyers, undermining their credibility among grassroots actors (Berenschot *et al.*, 2022). This dynamic contributes to the perception that NGO advocacy may serve elite agendas while sidelining the very populations they claim to protect (Delabre *et al.*, 2023).

6. Alternative Models and Emerging Hybrid Approaches

Despite these issues, some promising initiatives aim to reconcile environmental goals with smallholder inclusion. Landscape approaches such as the Siak Pelalawan Sustainable Districts in Riau attempt to integrate smallholders into jurisdictional certification schemes (Aurora *et al.*, 2023; Seymour *et al.*, 2020). These programs combine NGO support, government coordination, and local capacity building. However, the scale remains limited, and uptake has been uneven due to resource constraints and limited trust.

Another emerging trend is the co-design of monitoring frameworks involving indigenous groups, researchers, and local governments, although these remain pilot stage and lack institutional support.

Overall, the literature reveals a clear pattern: NGO campaigns have been instrumental in shaping palm oil governance, but often through frameworks and mechanisms that inadvertently marginalise smallholders. By privileging technocratic, transnational, and corporate-aligned models of sustainability, these advocacy efforts risk reproducing the very inequities they seek to overcome. While exceptions and hybrid innovations exist, the dominant trend suggests that without structural reform, the paradox of NGO advocacy will persist.

DISCUSSION

The findings of this study reveal a complex and often contradictory dynamic in the way NGO advocacy has reshaped palm oil policy and governance structures. This paradox, wherein NGOs promote sustainable reforms while inadvertently excluding smallholders, manifests across multiple institutional, economic, and epistemic layers. In this section, we interpret these findings in light of the study's main objectives, which were to explore how NGO interventions influence policy change and what structural consequences these interventions have on smallholder inclusion and agency.

NGOs have undoubtedly been pivotal in putting environmental and human rights issues related to palm oil production onto global policy agendas. Their campaigns have led to significant milestones, including the proliferation of NDPE (No Deforestation, No Peat, No Exploitation) policies and the widespread adoption of RSPO certification standards (Dermawan *et al.*, 2022; Nesadurai, 2019). The adoption of these norms, particularly after 2015, has significantly altered the landscape of palm oil governance. However, the shift towards transnational and corporate-

aligned sustainability has also precipitated new forms of exclusion. The paradox emerges from the very success of these campaigns: by reconfiguring market expectations and legal norms, they have inadvertently erected structural barriers that smallholders are ill-equipped to overcome (Brandi *et al.*, 2015; Grabs & Garrett, 2023).

The institutionalisation of sustainability through technocratic standards such as RSPO certification exemplifies this contradiction. While these standards aim to reduce environmental harm, they impose high compliance costs averaging over \$6,500 per smallholder, which effectively lock out independent producers. With only 2% of Indonesia's 6.5 million smallholders certified under RSPO by 2023, the promise of inclusive sustainability appears increasingly hollow (Irawan *et al.*, 2024). Instead of democratizing access to sustainable markets, these frameworks reinforce inequalities by privileging actors with capital, technological access, and institutional support. This aligns with observations in other sectors where certification becomes a form of gatekeeping rather than empowerment (Rietberg & Slingerland, 2016).

Another layer of exclusion concerns knowledge production and validation. NGO-driven initiatives often rely on remote sensing technologies, carbon metrics, and legal compliance checklists that overlook local land-use systems and traditional ecological knowledge. These scientific approaches tend to marginalise smallholders whose practices do not conform to predefined "sustainable" templates (Nugroho *et al.*, 2018). In some cases, satellite monitoring systems flag land-use changes as illegal deforestation, even when these changes stem from legitimate, customary practices. Such blanket classifications risk criminalising subsistence agriculture and eroding land tenure legitimacy (Kurniawan *et al.*, 2024).

The exclusion is not merely technical but deeply political. Smallholders are frequently left out of decision-making processes that directly affect their livelihoods. As found in the RSPO consultation studies, participation by independent smallholders was as low as 3% during key policy revisions (Wicke, 2019). This underrepresentation is symptomatic of broader governance failures, where NGO-led platforms, despite claiming a participatory ethos, operate in top-down ways. The result is a symbolic inclusion that fails to alter the underlying power asymmetries in global supply chains (Bitzer & Schouten, 2023).

Additionally, economic marginalisation compounds these governance exclusions. As large corporations adapt quickly to new sustainability norms, often with NGO assistance, they consolidate control over premium markets and land access. In contrast, smallholders face declining market access due to their inability to meet evolving sustainability requirements. The

disproportionate burden placed on small producers is particularly evident in jurisdictions like Malaysia, where 86% of RSPO-certified palm oil originates from large plantations, with only 2% from independents (Aziz *et al.*, 2021). This reveals a dual-speed sustainability regime, where the rules of inclusion are rigged in favour of the already powerful.

The growing reliance on multi-stakeholder platforms, such as the RSPO, accentuates this divide. While these forums purport to balance interests across sectors, they are often dominated by corporate and NGO voices. Several studies point to how these alliances increasingly determine the operational norms of the industry, sidelining national governments and bypassing local deliberative processes (Macdonald & Balaton-Chrimes, 2016; Schouten & Hospes, 2018). The transformation of governance from public to private hands raises concerns about legitimacy and democratic accountability. For instance, grievance mechanisms within NGO-led programs exist in only 18% of cases, offering little recourse for communities adversely affected by conservation policies or land-use restrictions (Domínguez & Luoma, 2020).

At the heart of this paradox lies a deeper epistemological tension. NGO campaigns, particularly those backed by global North actors, tend to universalise particular environmental narratives such as forest conservation or carbon reduction while treating alternative worldviews as secondary. This cognitive imperialism, as some scholars term it, silences the experiential knowledge of smallholders and indigenous communities (Dentoni *et al.*, 2018; Ofosu-Asare, 2024). When policies are crafted through distant advocacy rather than embedded engagement, the outcomes often reflect donor or corporate logics more than local realities.

Nonetheless, there are emerging efforts to reconcile these tensions. Hybrid models such as jurisdictional approaches, which integrate district-level governance with smallholder support, offer a promising but limited pathway forward. The Siak Pelalawan Sustainable Districts initiative, for example, demonstrates how locally grounded, multi-actor coordination can improve both environmental and social outcomes (Seymour *et al.*, 2020). Yet, these models remain the exception rather than the norm, hampered by scaling challenges, inconsistent funding, and institutional inertia.

Further, pilot programs involving participatory monitoring and co-designed sustainability frameworks indicate that a more inclusive model is possible. These approaches acknowledge the importance of local voice and consent, attempting to de-centre the technocratic dominance that characterises current NGO campaigns. However, their impact remains peripheral without broader

shifts in the policy and market architecture that currently favours uniformity over diversity (Kusters *et al.*, 2018).

The analysis also highlights a fundamental issue of NGO accountability. While many NGOs claim to operate on behalf of marginalised communities, their upward accountability to donors and corporate partners can dilute this commitment. Strategic alignments with major buyers, though tactically useful for advancing environmental goals, risk compromising long-term credibility if they lead to selective advocacy or muted criticism (Partzsch, 2024; Weber & Partzsch, 2018). The phenomenon of "advocacy capture" thus warrants more critical scrutiny, particularly as NGOs play increasingly central roles in shaping global commodity chains.

The paradox of advocacy is therefore not merely a theoretical construct but a lived reality for millions of smallholders navigating these shifting terrains. It reflects a broader challenge within global sustainability governance: how to balance scale with justice, impact with inclusion, and urgency with deliberation. The case of palm oil in Southeast Asia offers a microcosm of this dilemma, illuminating the tensions between environmental imperatives and socio-economic rights in a rapidly transforming global South.

The implications of this study are multi-fold. First, it calls for a rethinking of NGO advocacy strategies that prioritise technical compliance over socio-political empowerment. Future advocacy should incorporate principles of procedural justice, ensuring that affected communities have a genuine voice and veto in policy formation. Second, sustainability certifications must be reformed to accommodate smallholder realities, including flexible compliance pathways, subsidised audit costs, and recognition of customary land-use systems. Third, partnerships between NGOs and corporations must be subjected to independent oversight to safeguard against conflicts of interest.

For future research, a deeper empirical investigation into localised experiences of smallholders under NGO-influenced regimes would be invaluable. While this study was limited to a qualitative literature review, ethnographic and longitudinal studies could provide richer insights into evolving dynamics on the ground. Moreover, comparative analysis across different commodities or regions may shed light on whether the advocacy paradox identified here is endemic to palm oil or part of a broader pattern in global environmental governance.

Ultimately, solving the advocacy paradox requires structural reforms that go beyond surface-level inclusion. It entails reimagining sustainability not just as a technical goal but as a

democratic and pluralistic process, one where the voices of smallholders are not merely heard but help shape the rules of the game.

CONCLUSION

The findings of this qualitative literature review expose a significant paradox in contemporary palm oil governance: while NGO campaigns have successfully driven sustainability reforms and influenced global policy norms, they have simultaneously contributed to the marginalisation of oil palm smallholders. The reconfiguration of standards through mechanisms such as RSPO certification and NDPE policies has raised compliance thresholds that disproportionately affect producers with limited capital, technical capacity, and institutional support.

This asymmetry is further reinforced by the technocratic nature of sustainability frameworks that often discount local ecological knowledge and prioritise metrics aligned with corporate and donor expectations. In many cases, the advocacy strategies that aim to eliminate environmental harm inadvertently create barriers to market access, land security, and participatory governance for smallholders, particularly those operating outside formalised value chains.

Moreover, the growing reliance on transnational multi-stakeholder platforms has shifted decision-making power away from state institutions and grassroots communities, amplifying the voices of well-resourced NGOs and corporate actors. This governance transformation, while framed as inclusive, frequently lacks mechanisms for meaningful engagement with the very populations it claims to represent. The limited representation of smallholders in standard-setting processes and grievance systems underscores persistent structural inequalities embedded within sustainability regimes.

The paradox lies not only in policy outcomes but also in the underlying logic of intervention. Advocacy campaigns often universalise environmental imperatives that, while urgent, fail to account for socio-economic complexities and historical power imbalances. As a result, smallholders are not only excluded from the benefits of sustainability but also subject to new forms of regulatory scrutiny and reputational risk.

To address these challenges, there is a need to rethink sustainability governance as a pluralistic process, one that genuinely integrates the perspectives, needs, and capacities of

smallholder communities. This includes designing flexible certification pathways, enhancing transparency in advocacy–corporate alliances, and restoring local agency within global environmental frameworks. Without such shifts, well-intentioned advocacy may continue to perpetuate the very exclusions it seeks to dismantle.

REFERENCES

- Abazue, C. M., Choy, E. A., & Lydon, N. . (2019). Oil palm smallholders and certification: exploring the knowledge level of independent oil palm smallholders to certification. *Journal of Bioscience and Agriculture Research*, 19(1). <https://doi.org/10.18801/jbar.190119.193>
- Abdul Majid N., R. Z. M. S. S. & A. A. H. (2021). Sustainable palm oil certification scheme frameworks and impacts: A systematic literature review. *Sustainability*, 13(6), 3263. <https://doi.org/10.3390/su13063263>
- Abideen, A. Z., Sundram, V. P. K., & Sorooshian, S. (2023). Scope for sustainable development of small holder farmers in the palm oil supply chain—a systematic literature review and thematic scientific mapping. *Logistics*, 7(1), 6. <https://doi.org/10.3390/logistics7010006>
- Ahmad, A. (2024). *The Role of Local and International Non-governmental Organizations in the Development of Pakistan: Examining EDHI Center as a Case Study*.
- Aiken, E., Rolf, E., & Blumenstock, J. (2023). Fairness and representation in satellite-based poverty maps: Evidence of urban-rural disparities and their impacts on downstream policy. *ArXiv Preprint ArXiv:2305.01783*. <https://doi.org/10.48550/ARXIV.2305.01783>
- Andrianto, A., Fauzi, A., & Falatehan, A. F. (2020). The typologies and the sustainability in oil palm plantation controlled by independent smallholders in Central Kalimantan. In *Rural Socio-Economic Transformation: Agrarian, Ecology, Communication and Community Development Perspectives*. <https://doi.org/10.1201/9780429280702-1>
- Apriani, E., Kim, Y. S., Fisher, L. A., & Baral, H. (2020). Non-state certification of smallholders for sustainable palm oil in Sumatra, Indonesia. *Land Use Policy*, 99, 105112. <https://doi.org/10.1016/j.landusepol.2020.105112>
- Aurora, L., Galuchi, T. P. D., Putri, T., Reboah, C., Arceo, N. M. P., Ningsih, I., & Senior, M. (2023). *This report is part of a global study on private sector engagement at landscape and jurisdictional scale initiated by the Tropical Forest Alliance (TFA) and conducted in collaboration with Proforest, CDP and others*.
- Ayompe, L. M., Nkongho, R. N., Wandum, L. M., Orang, B. O., Fiaboe, K. K., Tambasi, E. E., & Egoh, B. N. (2024). Complexities of sustainable palm oil production by smallholders in sub-Saharan Africa. *Sustainable Development*, 32(1), 529–541. <https://doi.org/10.1002/sd.2674>
- Aziz, N. F., Chamhuri, N., & Batt, P. J. (2021). Barriers and benefits arising from the adoption of sustainable certification for smallholder oil palm producers in Malaysia: A systematic review

of literature. *Sustainability*, 13(18), 10009. <https://doi.org/10.3390/su131810009>

Bakhtary, H., Haupt, F., Luttrell, C., Landholm, D., & Jelsma, I. (2021). *Promoting sustainable oil palm production by independent smallholders in Indonesia* (Issue 11).

Berenschot, W., Dhiaulhaq, A., Hospes, O., Adriana, R., & Poetry, E. (2022). Anti-corporate activism and collusion: The contentious politics of palm oil expansion in Indonesia. *Geoforum*, 131, 39–49. <https://doi.org/10.1016/j.geoforum.2022.03.003>

Berget, C., Verschoor, G., García-Frapolli, E., & Bongers, F. (2024). Exploring the role of smallholder perceptions in shaping land-use decisions in a tropical agro-forest frontier in southern Mexico. *Regional Environmental Change*, 24(3), 131. <https://doi.org/10.1007/s10113-024-02294-5>

Betsill, M. M., Gruby, R. L., Blackwatters, J., Enrici, A., Le Cornu, E., Basurto, X., & Secord, D. (2024). Community engagement and power dynamics in conservation philanthropy grant making. *Conservation Biology*, 38(4), e14272. <https://doi.org/10.1111/cobi.14272>

Bitektine, A., Hill, K., Song, F., & Vandenberghe, C. (2020). Organizational legitimacy, reputation, and status: Insights from micro-level measurement. *Academy of Management Discoveries*, 6(1), 107–136. <https://doi.org/10.5465/amd.2017.0007>

Bitzer, V., & Schouten, G. (2023). Out of balance: Global–local tensions in multi-stakeholder partnerships and the emergence of rival initiatives in producing countries. *Organization & Environment*, 36(3), 387–410. <https://doi.org/10.1177/10860266221117231>

Brandi, C., Cabani, T., Hosang, C., Schirmbeck, S., Westermann, L., & Wiese, H. (2015). Sustainability standards for palm oil: challenges for smallholder certification under the RSPO. *The Journal of Environment & Development*, 24(3), 292–314. <https://doi.org/10.1177/1070496515592017>

Byaruhanga, R. (2024). NGOisation and food sovereignty: unearthing the intricacies of NGO-driven food sovereignty efforts. Insights from Uganda. *Agriculture and Human Values*, 1–18. <https://doi.org/10.1007/s10460-024-10645-5>

Castellanos-Navarrete, A., & Jansen, K. (2017). Oil palm expansion without enclosure: smallholders and environmental narratives. In *Global Land Grabbing and Political Reactions' from Below* (pp. 325–350). Routledge. <https://doi.org/10.1080/03066150.2015.1016920>

Chaiya, C. (2024). Policy Paradoxes in Environmental Sustainability: The Interplay of Socioeconomic Factors, Policy Innovations, and Community Forestry in Thailand. *Journal of Ecohumanism*, 3(4), 2503–2528. <https://doi.org/10.62754/joe.v3i4.3772>

Chandra, A., Garrett, R. D., Carlson, K. M., Heilmayr, R., Stigler, M., Benedict, J. J., & Grabs, J. (2024). How well does the implementation of corporate zero-deforestation commitments in Indonesia align with aims to halt deforestation and include smallholders? *Environmental Research Letters*, 19(4), 44054. <https://doi.org/10.1088/1748-9326/ad33d1>

Chapman, M., Wiltshire, S., Baur, P., Bowles, T., Carlisle, L., Castillo, F., & Boettiger, C. (2022). Social-ecological feedbacks drive tipping points in farming system diversification. *One*

Earth, 5(3), 283–292. <https://doi.org/10.1016/j.oneear.2022.02.007>

De Vos, R. E., Suwarno, A., Slingerland, M., Van Der Meer, P. J., & Lucey, J. M. (2021). Independent oil palm smallholder management practices and yields: can RSPO certification make a difference? *Environmental Research Letters*, 16(6), 65015. <https://doi.org/10.1088/1748-9326/ac018d>

Delabre, I., Lyons-White, J., Melot, C., Veggeberg, E. I., Alexander, A., Schleper, M. C., & Knight, A. T. (2023). Should I stay or should I go? Understanding stakeholder dis/engagement for deforestation-free palm oil. *Business Strategy and the Environment*, 32(8), 5128–5145. <https://doi.org/10.1002/bse.3272>

Denashurya, N. I., Nurliza, Dolorosa, E., Kurniati, D., & Suswati, D. (2023). Mitigating Challenges in Implementing Ispo Certification: Factors Influencing Adoption of Sustainable Agriculture Practices Among Farmers. *Sustainability*. <https://doi.org/10.3390/su152316507>

Dentoni, D., Bitzer, V., & Schouten, G. (2018). Harnessing wicked problems in multi-stakeholder partnerships. *Journal of Business Ethics*, 150, 333–356. <https://doi.org/10.1007/s10551-018-3858-6>

Dermawan, A., Hospes, O., & Purnomo, H. (2022). *Turning threats into opportunities: An analysis of the response of palm oil companies implementing NDPE commitment to NGO complaints*.

Dharmawan, A. H., Mardiyarningsih, D. I., Rahmadian, F., Yulian, B. E., Komarudin, H., Pacheco, P., & Amalia, R. (2021). The agrarian, structural and cultural constraints of smallholders' readiness for sustainability standards implementation: the case of Indonesian Sustainable Palm Oil in East Kalimantan. *Sustainability*, 13(5), 2611.

Domínguez, L., & Luoma, C. (2020). Decolonising conservation policy: How colonial land and conservation ideologies persist and perpetuate indigenous injustices at the expense of the environment. *Land*, 9(3), 65. <https://doi.org/10.3390/land9030065>

Drost, S., Kuepper, A. B., & Piotrowski, P. M. (2021). *Indonesian Moratoria: loopholes, lack of sanctions fail to stop palm oil-linked deforestation*.

Eagleton-Pierce, M. (2020). The rise of managerialism in international NGOs. *Review of International Political Economy*, 27(4), 970–994. <https://doi.org/10.1080/09692290.2019.1657478>

Eggen, M., Heilmayr, R., Anderson, P., Armson, R., Austin, K., Azmi, R., & Carlson, K. M. (2024). Smallholder participation in zero-deforestation supply chain initiatives in the Indonesian palm oil sector: Challenges, opportunities, and limitations. *Elementa: Science of the Anthropocene*, 12(1). <https://doi.org/10.1525/elementa.00099>

Grabs, J., & Garrett, R. D. (2023). Goal-based private sustainability governance and its paradoxes in the Indonesian palm oil sector. *Journal of Business Ethics*, 188(3), 467–507. <https://doi.org/10.1007/s10551-023-05377-1>

Harada, K., Habib, M., Sakata, Y., & Maryudi, A. (2022). The role of NGOs in recognition and

sustainable maintenance of customary forests within indigenous communities: The case of Kerinci, Indonesia. *Land Use Policy*, 113, 105865.

<https://doi.org/10.1016/j.landusepol.2021.105865>

Harrison, J., & Wielga, M. (2023). Grievance mechanisms in multi-stakeholder initiatives: Providing effective remedy for human rights violations? *Business and Human Rights Journal*, 8(1), 43–65. <https://doi.org/10.1017/bhj.2022.37>

Heiss, N., Meier, J., Gessner, U., & Kuenzer, C. (2025). A Review: Potential of Earth Observation (EO) for Mapping Small-Scale Agriculture and Cropping Systems in West Africa. *Land*, 14(1). <https://doi.org/10.3390/land14010171>

Hidayat, K. N., Glasbergen, P., & Offermans, A. (2015). Sustainability certification and palm oil smallholders' livelihood: A comparison between scheme smallholders and independent smallholders in Indonesia. *International Food and Agribusiness Management Review*, 18(3), 25–48.

Hutabarat, S., Slingerland, M., & Dries, L. (2019). Explaining the “certification gap” for different types of oil palm smallholders in Riau Province, Indonesia. *The Journal of Environment & Development*, 28(3), 253–281. <https://doi.org/10.1177/1070496519854505>

Irawan, S., Pasaribu, K., Busch, J., Dwiastuti, A., Martanila, H., Retnani, D., Hukom, V., & others. (2024). Cost reduction for upscaling voluntary sustainability standards: the case of independent oil palm smallholders in Central Kalimantan, Indonesia. *Frontiers in Forests and Global Change*, 7, 1418782. <https://doi.org/10.3389/ffgc.2024.1418782>

Johnson, A. (2022). The Roundtable on Sustainable Palm Oil (RSPO) and transnational hybrid governance in Ecuador's palm oil industry. *World Development*, 149, 105710. <https://doi.org/10.1016/j.worlddev.2021.105710>

Kadarusman, Y. B., & Pramudya, E. P. (2019). The effects of India and China on the sustainability of palm oil production in Indonesia: Towards a better understanding of the dynamics of regional sustainability governance. *Sustainable Development*, 27(5), 898–909. <https://doi.org/10.1002/sd.1927>

Keating, V. C., & Thrandardottir, E. (2017). NGOs, trust, and the accountability agenda. *The British Journal of Politics and International Relations*, 19(1), 134–151. <https://doi.org/10.1177/1369148116682655>

Kurniawan, K. F. B., Dharmawan, A. H., Sumarti, T., & Maksum, M. (2024). Territorialization of plantation concessions: customary land acquisition process, agrarian fragmentation and social resistance. *Cogent Social Sciences*, 10(1), 2367259. <https://doi.org/10.1080/23311886.2024.2367259>

Kusters, K., Buck, L., de Graaf, M., Minang, P., van Oosten, C., & Zagt, R. (2018). Participatory planning, monitoring and evaluation of multi-stakeholder platforms in integrated landscape initiatives. *Environmental Management*, 62(1), 170–181. <https://doi.org/10.1007/s00267-017-0847-y>

Lee, J. S. H., Miteva, D. A., Carlson, K. M., Heilmayr, R., & Saif, O. (2020). Does oil palm

- certification create trade-offs between environment and development in Indonesia? *Environmental Research Letters*, 15(12), 124064. <https://doi.org/10.1088/1748-9326/abc279>
- Lyons-White, J., & Knight, A. T. (2018). Palm oil supply chain complexity impedes implementation of corporate no-deforestation commitments. *Global Environmental Change*, 50, 303–313. <https://doi.org/10.1016/j.gloenvcha.2018.04.012>
- Macdonald, K., & Balaton-Chrimes, S. (2016). *The complaints system of the roundtable on sustainable palm oil (RSPO)*.
- Mehta, L. (2025). The Challenges of Decolonising Sustainability and the Environment in Development Studies (DS). *The European Journal of Development Research*, 1–13. <https://doi.org/10.1057/s41287-025-00700-0>
- Moyo, G. (2024). Imperial Ecocide and the Bane of Global Climate Finance. In *Africa in the Global Economy: Capital Flight, Enablers, and Decolonial Responses* (pp. 103–123). Springer Nature Switzerland. <https://doi.org/10.1007/978-3-031-33187-7>
- Nagiah, C., & Azmi, R. (2012). *A review of smallholder oil palm production: challenges and opportunities for enhancing sustainability-a Malaysian perspective*.
- Naidu, L., & Moorthy, R. (2021). A review of key sustainability issues in Malaysian palm oil industry. *Sustainability*, 13(19), 10839.
- Nesadurai, H. E. (2019). Transnational private governance as a developmental driver in Southeast Asia: The case of sustainable palm oil standards in Indonesia and Malaysia. *The Journal of Development Studies*, 55(9), 1892–1908. <https://doi.org/10.1080/00220388.2018.1536262>
- Nugroho, H. Y., van der Veen, A., Skidmore, A. K., & Hussin, Y. A. (2018). Expansion of traditional land-use and deforestation: a case study of an adat forest in the Kandilo Subwatershed, East Kalimantan, Indonesia. *Journal of Forestry Research*, 29, 495–513. <https://doi.org/10.1007/s11676-017-0449-9>
- Ofori-Asare, Y. (2024). Cognitive imperialism in artificial intelligence: counteracting bias with indigenous epistemologies. *AI & Society*, 1–17. <https://doi.org/10.1007/s00146-024-02065-0>
- Ogahara, Z., Jespersen, K., Theilade, I., & Nielsen, M. R. (2022). Review of smallholder palm oil sustainability reveals limited positive impacts and identifies key implementation and knowledge gaps. *Land Use Policy*, 120, 106258. <https://doi.org/10.1016/j.landusepol.2022.106258>
- Ostfeld, R., & Reiner, D. M. (2024). Seeing the forest through the palms: developments in environmentally sustainable palm oil production and zero-deforestation efforts. *Frontiers in Sustainable Food Systems*, 8, 1398877. <https://doi.org/10.3389/fsufs.2024.1398877>
- Pacheco, P., Schoneveld, G., Dermawan, A., Komarudin, H., & Djama, M. (2020). Governing sustainable palm oil supply: Disconnects, complementarities, and antagonisms between state regulations and private standards. *Regulation & Governance*, 14(3), 568–598. <https://doi.org/10.1111/rego.12220>

Partzsch, L. (2024). Campaigning for Greater Accountability in Global Supply Chains. *The Journal of Environment & Development*, 33(4), 755–775.

<https://doi.org/10.1177/10704965241260544>

Prabowo, D. A.; Maryudi, A.; Sena, D. S. (2018). Conversion of forests into oil palm plantations in West Kalimantan, Indonesia: Insights from actors' power and its dynamics. *Forest Policy and Economics*, 78, 32–39. <https://doi.org/10.1016/j.forpol.2017.11.002>

Pramudya, E. P., Wibowo, L. R., Nurfatriani, F., Nawireja, I. K., Kurniasari, D. R., Hutabarat, S., & Rafik, R. (2022). Incentives for palm oil smallholders in mandatory certification in Indonesia. *Land*, 11(4), 576. <https://doi.org/10.3390/land11040576>

Rahayu, N. S., Nugroho, A. A., & Yusuf, R. R. (2022). Exclusion of smallholders in the Indonesia palm oil industry. *KnE Social Sciences*, 1158–1182. <https://doi.org/10.18502/kss.v7i9.11010>

Rietberg, P. I., & Slingerland, M. A. (2016). *Barriers to smallholder RSPO certification: A science-for-policy-paper for the RSPO*.

Rodthong, W., Kuwornu, J. K., Datta, A., Anal, A. K., & Tsusaka, T. W. (2020). Factors influencing the intensity of adoption of the roundtable on sustainable palm oil practices by smallholder farmers in Thailand. *Environmental Management*, 66, 377–394. <https://doi.org/10.1007/s00267-020-01323-3>

Rufin, P., Bey, A., Picoli, M., & Meyfroidt, P. (2022). Large-area mapping of active cropland and short-term fallows in smallholder landscapes using PlanetScope data. *International Journal of Applied Earth Observation and Geoinformation*, 112, 102937. <https://doi.org/10.1016/j.jag.2022.102937>

Schouten, G., & Hospes, O. (2018). Public and private governance in interaction: Changing interpretations of sovereignty in the field of sustainable palm oil. *Sustainability*, 10(12), 4811. <https://doi.org/10.3390/su10124811>

Selvanathan, P., & Sathisan, V. (2014). Corporate sustainability and palm oil industries in Southeast Asia: A principled pragmatism. In *Business and Human Rights in Southeast Asia* (pp. 121–132). Routledge.

Seymour, F. J., Aurora, L., & Arif, J. (2020). The jurisdictional approach in Indonesia: Incentives, actions, and facilitating connections. *Frontiers in Forests and Global Change*, 3, 503326. <https://doi.org/10.3389/ffgc.2020.503326>

Siedenburg, J. R. (2022). Local knowledge and natural resource management in a peasant farming community facing rapid change: A critical examination. *ArXiv Preprint*.

Teng, S. W., Khong, K. W., & Ha, N. C. (2020). Palm oil and its environmental impacts: A big data analytics study. *Journal of Cleaner Production*, 274, 122901. <https://doi.org/10.1016/j.jclepro.2020.122901>

Toumbourou, T. D., & Dressler, W. H. (2024). The politics of misalignment: NGO livelihood interventions and exclusionary land claims in an Indonesian oil palm enclave. *Critical Asian*

- Studies*, 56(1), 89–114. <https://doi.org/10.1080/14672715.2023.2272736>
- VanderWilde, C. (2023). *Deforestation, Certification, and Transnational Supply Chains: A Study of the Palm Oil Sector* [N/A]. <https://doi.org/10.1016/j.jenvman.2023.118505>
- Veriasa, T. O., Nurrunisa, M., & Fadhli, N. (2024). Revisiting the Implications of RSPO Smallholder Certification Relative to Farm Productivity in Riau, Indonesia. *Forest and Society*, 8(1), 123–139. <https://doi.org/10.24259/fs.v8i1.26964>
- Wahl'en, C. B. (2014). Constructing conservation impact: Understanding monitoring and evaluation in conservation NGOs. *Conservation and Society*, 12(1), 77–88. <https://doi.org/10.4103/0972-4923.138428>
- Watts, J. D., Pasaribu, K., Irawan, S., Tacconi, L., Martanila, H., Wiratama, C. G. W., & Manvi, U. P. (2021). Challenges faced by smallholders in achieving sustainable palm oil certification in Indonesia. *World Development*, 146, 105565. <https://doi.org/10.1016/j.worlddev.2021.105565>
- Weber, A. K., & Partzsch, L. (2018). Barking up the right tree? NGOs and corporate power for deforestation-free supply chains. *Sustainability*, 10(11), 3869. <https://doi.org/10.3390/su10113869>
- Wibowo, L. R., Erdi, E., Hutabarat, S., Nurfatriani, F. N., Utomo, M., Nawireja, I. K., & Satwiko, A. A. (2023). Accelerating Certification of Oil Palm Smallholders through Institutionalization of Various Incentives. *Forest and Society*, 7, 263–294. <https://doi.org/10.24259/fs.v7i2.24679>
- Wicke, J. (2019). *Sustainable palm oil or certified dispossession? NGOs within scalar struggles over the RSPO private governance standard* (Issue 8).
- Wong, Y. B., Gibbins, C., Azhar, B., Phan, S. S., Scholefield, P., Azmi, R., & Lechner, A. M. (2023). Smallholder oil palm plantation sustainability assessment using multi-criteria analysis and unmanned aerial vehicles. *Environmental Monitoring and Assessment*, 195(5), 577. <https://doi.org/10.1007/s10661-023-11113-z>
- Zhang, M., Singh, H., Chok, L., & Chunara, R. (2022). Segmenting across places: The need for fair transfer learning with satellite imagery. *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, 2916–2925. <https://doi.org/10.1109/CVPRW56347.2022.00329>