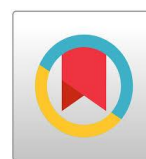


Analysis of Public Policies in Indonesia’s Palm Oil Industry to Support Sustainable Development



Analisis Kebijakan Publik pada Industri Kelapa Sawit di Indonesia untuk Mendukung Pembangunan Berkelanjutan

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ARTICLE INFORMATION	
<p>Keywords Palm Oil; Sustainable Development; Public Policy.</p>	<p>ABSTRACT Indonesia's palm oil industry is facing a sustainability crisis driven by large-scale deforestation, ecosystem degradation, high carbon emissions, and human rights violations. These issues are exacerbated by weak land governance, productivity disparities, and the lack of a holistic integration of public policies in responding to global ecological, social, and economic pressures. This study aims to analyze palm oil policies within the framework of sustainable development using the Multiple Streams Framework. The research employs a qualitative method through a literature review, critically examining government policies and related reports on palm oil governance in the context of sustainable development. Findings reveal that the industry's sustainability is hindered by the misalignment between economic growth, environmental conservation, and social justice. Although the government has introduced policies such as B40 biodiesel and the National Action Plan for Sustainable Palm Oil (RAN-KSB), major challenges persist, particularly in weak governance, social inequality, and environmental damage. This study recommends the reformulation of more transparent and sustainable policies to promote a more responsible palm oil industry.</p>
<p>Kata Kunci Kelapa Sawit; Kebijakan Publik; Pembangunan Berkelanjutan;</p>	<p>ABSTRAK Industri kelapa sawit Indonesia tengah terjebak dalam krisis keberlanjutan akibat ekspansi yang menyebabkan deforestasi masif, kerusakan ekosistem, emisi karbon tinggi, serta pelanggaran HAM. Semua diperparah oleh lemahnya tata kelola lahan, ketimpangan produktivitas, dan belum terintegrasinya kebijakan publik secara holistik dalam menghadapi tekanan ekologis, sosial, dan ekonomi global. Penelitian ini bertujuan untuk menganalisis kebijakan kelapa sawit dalam konteks pembangunan berkelanjutan dengan menggunakan pendekatan Multiple Streams Framework. Metode yang digunakan adalah penelitian kualitatif dengan studi literatur yang mengkaji pengelolaan kelapa sawit dalam kebijakan pembangunan berkelanjutan melalui analisis kritis terhadap sumber-sumber tertulis seperti kebijakan pemerintah dan laporan terkait. Hasil penelitian menunjukkan bahwa keberlanjutan industri kelapa sawit di Indonesia terhambat oleh ketidakselarasan antara pertumbuhan ekonomi, pelestarian lingkungan, dan keadilan sosial. Meskipun pemerintah telah mengimplementasikan kebijakan seperti biodiesel B40 dan RAN-KSB. Tantangan utama yang dihadapi masih berkaitan dengan tata kelola yang lemah, ketimpangan sosial, dan kerusakan lingkungan. Penelitian ini merekomendasikan reformulasi kebijakan yang lebih transparan dan berkelanjutan untuk mewujudkan industri kelapa sawit yang lebih bertanggung jawab.</p>
<p>Article History Send 10th July 2025 Review 6th September 2025 Accepted 9th October 2025</p>	<p>Copyright ©2026 Jurnal Aristo (Social, Politic, Humaniora) This is an open access article under the CC-BY-NC-SA license. Akses artikel terbuka dengan model CC-BY-NC-SA sebagai lisensinya.</p>



Introduction

Indonesia's palm oil industry is a major contributor to national foreign exchange and is currently facing a serious sustainability crisis. According to the Global Forest Watch Report (2024), Indonesia lost approximately 30.8 million hectares of forest between 2001 and 2023, with deforestation increasing by 27 percent in 2023 compared to the previous year. This increase is largely attributed to the expansion of the palm oil industry (Global Forest Watch, 2024; AP News, 2024). The expansion has not only destroyed primary forests but also threatened conservation areas, increased carbon emissions, and worsened the impacts of climate change (SEI, 2024). Palm oil production on peatlands exacerbates the accumulation of greenhouse gases and undermines Indonesia's ability to achieve its sustainable development goals (Abdul, 2023).

In addition to ecological degradation, the industry is also associated with human rights violations and social conflicts (Satria et al. 2025). A 2025 investigation by the United Nations referred to PT Astra Agro Lestari in Central Sulawesi, one of Indonesia's largest palm oil producers, which allegedly engaged in land grabbing and environmental pollution while intimidating local Indigenous communities (Mongabay, 2025). In response, affected communities have initiated global boycott campaigns against palm-based products, accusing the company of ecocide and the destruction of ancestral forests (The Guardian, 2025). This situation reflects how palm oil expansion not only transforms landscapes but also marginalizes the rights of vulnerable populations (Udita & Fil'ardy, 2025).

According to Statistics Indonesia (BPS, 2024), the national palm oil plantation area reached 16.38 million hectares with a production volume of 47.12 million tons in 2024. This land dominance places Indonesia as the largest palm oil producer in the world. However, this position masks fundamental issues, particularly the productivity gap between large-scale estates and smallholder farmers. Data from the Palm Oil Plantation Fund Management Agency (BPDPKS, 2025) shows that the Smallholder Replanting Program (PSR) had only succeeded in replanting 315,482 hectares by the end of 2024, which falls far short of the national productivity improvement needs (Sulardi, 2021). This indicates that industrial expansion does not automatically lead to efficiency or farmer welfare, but instead creates widening inequalities (Ugwu et al., 2025).

A deeper problem lies in governance and land-use practices. The Minister of Agriculture Regulation No. 07 of 2019 emphasizes the importance of land suitability based on biophysical parameters such as soil texture, drainage, and slope (Ministry of Agriculture, 2019). However, in practice, implementation of this regulation is often ignored. Many

smallholder plantations are located on peatlands and in areas not designated for such use. Reports from (BPDPKS, 2025) reveal that the main challenges to replanting programs include weak spatial mapping and land legality verification, which lead to low productivity and increased environmental pressure. These findings demonstrate that behind the narrative of palm oil's success lies serious structural problems that threaten the future sustainability and competitiveness of the sector (Sihotang & Nababan, 2025).

The palm oil industry also faces pressure from global regulatory changes related to green economic development. The Global Green Growth Institute (GGGI, 2022) in its report *Green Growth in Practice* emphasizes that transitioning to green growth requires a fundamental transformation in business models for natural resource-based industries, including palm oil. This transformation includes adopting low-emission production practices, conserving natural resources, and implementing sustainable development principles (Ngadi & Noveria, 2024). Without comprehensive reform, Indonesia will face increasing challenges from international regulations such as the European Union Deforestation Regulation (EUDR), which requires verification that palm oil products are not sourced from deforested land (Febrian et al., 2025). This presents a significant challenge that Indonesia cannot ignore if it wishes to remain competitive in an increasingly green-oriented global market.

From a nationalist perspective, palm oil is still viewed as a “blessing worth fighting for,” as stated by IPOSS (2024). Indeed, the palm oil sector has contributed significantly to national foreign exchange and has helped reduce poverty in some rural areas of Indonesia. However, without business model innovation, product downstream development, and strong environmental regulations, palm oil risks becoming a blessing turned into a burden. Excessive dependence on crude palm oil exports and slow diversification efforts indicate that the sector remains trapped in an extractive economic model. Data from (BPDPKS, 2025) and (BPS, 2024) confirm that quantitative growth has not yet translated into qualitative improvements. Therefore, revitalizing the palm oil industry based on sustainability and social justice principles is essential for the future of national development in Indonesia.

The framework of sustainable development provides a fundamental lens for understanding the crisis currently faced by Indonesia's palm oil industry. According to (Anwar, 2022), sustainable development requires the integration of three core pillars: economic growth, social equity, and environmental preservation. This principle is reinforced in the *Our Common Future* report by the World Commission on Environment and Development (WCED, 1987), which emphasizes that sustainable development must be able

to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. Arisa et al (2025) further highlight that intergenerational justice is a crucial prerequisite for development, particularly in resource-based sectors such as palm oil. Consequently, the ongoing expansion of palm oil plantations that disregards ecological sustainability and social equity fundamentally contradicts the foundational principles of sustainable development.

The concept of a green economy offers a crucial lens for rethinking Indonesia's palm oil sector within global sustainability agendas. UNEP (2011) defines it as an economic model that advances growth and welfare while ensuring the sustainable use of resources and reducing inequality through green innovations and employment. This framework directly challenges the extractive expansion of palm oil, which has intensified deforestation and social conflict (Satria et al., 2025; Global Forest Watch, 2024; UNEP, 2011; WCED, 1987). As Markard (2017) argues, sustainability transitions require not only technological shifts but also coherent policies and enabling political conditions. Recent evidence confirms that without structural reforms, such as low-emission production and downstream innovation (GGGI, 2022; Ngadi & Noveria, 2024) - Indonesia risks exclusion from emerging regulatory regimes like the EU Deforestation Regulation (Febrian et al., 2025). Thus, palm oil becomes a test of whether Indonesia can align economic imperatives with sustainability transitions in the green economy paradigm.

The role of public policy is indispensable in steering the palm oil sector toward sustainability. Anderson (1994) conceptualizes policy as a course of action designed to address specific problems, while Hoogerwerf (1999) underscores that it must be strategically planned rather than merely reactive (Riadi et al., 2025). In this sense, Indonesia's persistent challenges in spatial planning, weak enforcement of replanting programs, and recurring land conflicts (BPDPKS, 2025; Sihotang & Nababan, 2025) reflect not only governance gaps but also policy failures. Chandler and Plano (2003) further emphasize that policy entails the effective allocation of resources, which in the case of palm oil requires state capacity to balance industrial interests with environmental protection and social equity (Saputra et al., 2025). As (Eyestone (1980) argues, policy mediates the interaction between government and society, indicating that the unresolved contestations between corporations, smallholders, and local communities (Satria et al., 2025; Mongabay, 2025) demonstrate a breakdown in this mediating function. Building on Markard's (2017) view of sustainability transitions, public policy becomes the decisive instrument that determines whether Indonesia's palm oil industry can move beyond extractivism toward a

governance model that integrates economic competitiveness, ecological preservation, and social justice.

Although the palm oil industry in Indonesia has been the subject of numerous studies, most research has focused on environmental and economic impacts without critically evaluating the implementation of relevant public policies. Given the complexity of sustainable development, it is essential to conduct studies that integrate public policy into both economic and social dimensions (Doupona & Coakley, 2025). This study, therefore, employs Kingdon's Multiple Streams Framework (1984), which highlights the interaction between the problem stream (emerging issues), policy stream (available policy alternatives), and politics stream (political dynamics) in shaping public policy (Behzadifar et al., 2024). Through this approach, the study aims to offer a comprehensive understanding of how the palm oil industry can be integrated within the sustainable development framework in Indonesia.

Method

This study employs a qualitative research method with a literature review approach. The literature review approach is used to gain a deep understanding of the management of palm oil from the perspective of public policy in sustainable development in Indonesia. Data are gathered from credible and relevant written sources, such as government policies, official reports, books, and scientific articles. The data are then analyzed through a process of selection and critical evaluation of the relevance and credibility of the information (Sari et al., 2023). In this policy analysis, the Multiple Streams Framework (MSF) by Kingdon (1984) is applied, which explains that policies emerge when problems, solutions, and politics converge in a policy window (Wang & Amsalu, 2024). This method allows the researcher to integrate various perspectives (Abubakar, 2021), thus providing a comprehensive view of the social, economic, and environmental aspects of the palm oil industry (Sugiyono, 2013; Widodo et al., 2023).

This study employs a qualitative research method with a literature review approach to critically examine the palm oil industry from the perspective of public policy and sustainable development in Indonesia. The data sources consist of (1) government regulations and ministerial decrees related to palm oil governance (e.g., Ministry of Agriculture Regulation No. 07/2019); (2) official reports from international organizations such as the United Nations Environment Programme (UNEP), Global Forest Watch (GFW), and the Global Green Growth Institute (GGGI); (3) statistical publications from Statistics

Indonesia (BPS) and the Palm Oil Plantation Fund Management Agency (BPDPKS); and (4) peer-reviewed journal articles and academic books relevant to sustainable development, green economy, and public policy.

The data were obtained through systematic searches in academic databases (Scopus, Web of Science, and Google Scholar) and official government or organizational websites, with the selection criteria including publication within the last 5 years, direct relevance to palm oil and sustainability issues, and credibility of the source. After collection, the materials were categorized into three thematic areas: ecological sustainability, socio-economic implications, and governance and policy frameworks.

To ensure validity, this study employed source triangulation by cross-checking data across different types of documents (policy texts, statistical reports, and academic studies) and critical evaluation of peer-reviewed literature. The credibility of sources was also tested through citation tracking and consistency checks against multiple references. In analyzing the materials, the Multiple Streams Framework (MSF) by Kingdon (1984) was applied to interpret how problems, policy alternatives, and political dynamics interact in shaping palm oil governance in Indonesia (Wang & Amsalu, 2024). This approach strengthens analytical rigor by integrating diverse perspectives (Abubakar, 2021) and providing a comprehensive understanding of the economic, social, and environmental dimensions of the palm oil industry (Sugiyono, 2013; Widodo et al., 2023).

Results and Discussion

Result

The results of this study are derived from an extensive review of policy documents, international reports, and NGO investigations, which provide insights into the sustainability challenges of Indonesia's palm oil industry. To ensure systematic presentation, the findings are organized according to Kingdon's Multiple Streams Framework (namely the Problem Stream, Policy Stream, and Politics Stream) each of which highlights empirical evidence drawn from regulations, statistical data, and documented cases of ecological, social, and governance issues.

Structural Challenges in Indonesia's Palm Oil Industry

The empirical data used to identify structural challenges in Indonesia's palm oil sector were collected from international monitoring databases, official government documents, and verified NGO reports. All data were cross-validated through source triangulation to ensure accuracy and consistency.

Table 1. Empirical Data on Structural Challenges in Indonesia’s Palm Oil Industry

Data Indicator	Key Findings	Source & Year	Type of Source	Source Identification
Forest Loss (2001–2023)	Indonesia lost 30.8 million hectares of forest , mainly in Sumatra and Kalimantan.	Global Forest Watch (2024)	International Environmental Monitoring Database	Source: Global Forest Watch. (2024). <i>Global Tree Cover Loss Data 2001–2023: Indonesia Country Dashboard</i> . World Resources Institute (WRI). Retrieved from https://www.globalforestwatch.org
EU Sustainability Regulation (EUDR)	Requires all imported agricultural commodities, including palm oil, to be deforestation-free and traceable to verified origins.	European Commission (2023)	Official Policy Document	Source: European Commission. (2023). <i>Regulation (EU) 2023/1115 of the European Parliament and of the Council on Deforestation-Free Supply Chains</i> . Official Journal of the European Union. Brussels: EU Publications Office.
ISPO Certification Reform	Presidential Regulation No. 16 of 2025 expands ISPO standards on legality, environment, and human rights protection.	Government of Indonesia (2025); IPOSS (2024)	National Legal Framework & Policy Assessment	Source: Government of the Republic of Indonesia. (2025). <i>Presidential Regulation No. 16/2025 on Strengthening the Indonesian Sustainable Palm Oil (ISPO) System</i> . Jakarta: State Secretariat. Source: Indonesian Palm Oil Sustainability Studies (IPOSS). (2024). <i>Policy Review on ISPO Governance Reform</i> . Bogor: IPOSS Research Center.
ISPO Adoption Rate	Only 51% of plantations are ISPO-certified as of early 2025.	Ministry of Agriculture (2025)	Official Statistical Report	Source: Ministry of Agriculture, Republic of Indonesia. (2025). <i>ISPO Certification Progress Report, Q1–2025</i> . Directorate General of Plantation. Jakarta.
Local Conflict Cases (Corporate Level)	Allegations of land grabbing, intimidation, and human rights violations involving PT Astra Agro Lestari in Central Sulawesi.	Mongabay (2025); The Guardian (2025)	NGO & International Media Investigations	Source: Mongabay. (2025, March 3). <i>Palm Oil Giant Astra Agro Lestari Accused of Land Grabbing in Sulawesi</i> . Retrieved from https://www.mongabay.com Source: The Guardian. (2025, February 28). <i>Indonesian Palm Oil Firm Linked to Land Conflicts Faces International Scrutiny</i> . Guardian News & Media Ltd.
Community Testimonies & Ecological Damage	Indigenous and rural communities report ongoing intimidation, land conflicts, and environmental degradation due to plantation expansion.	WALHI (2024); Sawit Watch (2025)	Civil Society Reports	Source: Wahana Lingkungan Hidup Indonesia (WALHI). (2024). <i>Annual Report on Environmental Conflicts in the Plantation Sector</i> . Jakarta: WALHI National Secretariat. Source: Sawit Watch. (2025). <i>Community-Based Monitoring of Palm Oil Conflicts in Central Sulawesi and West Kalimantan</i> . Bogor: Sawit Watch Indonesia.

The triangulated data reveal three major structural challenges in Indonesia’s palm oil industry: (1) Global regulatory pressure, (2) institutional and governance reform, and (3) local socio-environmental resistance.

First, data from Global Forest Watch (2024) and European Commission Regulation (EU) 2023/1115 show that Indonesia’s palm oil industry is under increasing international

scrutiny due to deforestation-linked trade risks. The loss of 30.8 million hectares of forest underscores a persistent ecological burden tied to plantation expansion. The European Union Deforestation Regulation (EUDR) intensifies this challenge by demanding verifiable deforestation-free supply chains. This data indicates that Indonesia's palm oil exporters now operate within a tightened global sustainability regime, which exposes them to compliance and market-access risks.

Second, evidence from Presidential Regulation No. 16 of 2025 and IPOSS (2024) suggests that the government has sought to strengthen domestic sustainability standards through the Indonesian Sustainable Palm Oil (ISPO) certification. The inclusion of human rights and environmental safeguards marks a step toward institutional alignment with international norms. However, with only 51% certification coverage, the implementation remains partial, revealing a structural gap between formal regulatory ambition and industry-wide compliance. This imbalance illustrates that governance reform, though conceptually progressive, has yet to address the entrenched fragmentation and weak enforcement capacity within Indonesia's palm oil institutions.

Third, the data from Mongabay (2025), The Guardian (2025), and WALHI (2024) show recurring local resistance and transnational advocacy campaigns challenging the legitimacy of the industry. Allegations of land grabbing and intimidation by corporations such as PT Astra Agro Lestari demonstrate that sustainability issues extend beyond environmental concerns to include human rights and social justice dimensions. The consistency between NGO reports and community testimonies validates the existence of systemic grievances that undermine both national and international legitimacy. In summary, the triangulated evidence underscores that the structural challenges of Indonesia's palm oil industry stem from the intersection of global regulatory frameworks, national governance limitations, and persistent local resistance. The data confirm that while regulatory reforms such as the revised ISPO aim to improve institutional accountability, their effectiveness remains constrained by limited enforcement and ongoing socio-ecological conflicts. Consequently, the industry continues to operate within a complex nexus of ecological degradation, contested legitimacy, and political-economic dependency, positioning it as a critical focal point in Indonesia's sustainable development discourse.

Government Responses and Gaps

Table 2. Empirical Evidence on Government Responses in Indonesia’s Palm Oil Governance (2019–2025)

Policy / Initiative	Regulatory Foundation	Empirical Indicators & Monitoring Data	Analytical Finding	Verified Source
Minister of Agriculture Regulation No. 07/2019	Establishes technical standards for palm oil land-use (soil texture, slope, drainage suitability).	BPDPKS (2025) reports continued expansion into peatland zones covering 3.4 million ha (2023–2024), despite formal restrictions.	Persistent implementation gap between regulatory prescriptions and field practices.	Ministry of Agriculture (2019); BPDPKS (2025); WALHI (2024)
National Action Plan for Sustainable Palm Oil (RAN-KSB) 2025–2029	Serves as a strategic policy blueprint for aligning domestic palm oil governance with global sustainability norms (ISPO, RSPO, EUDR).	Policy analysis by Nugroho et al. (2025) and IPOSS (2024) identifies weak inter-ministerial coordination and inadequate monitoring instruments.	RAN-KSB exhibits policy coherence but faces institutional fragility in execution.	Government of Indonesia (2025); IPOSS (2024); Nugroho et al. (2025)
B40 Biodiesel Mandate (Effective 2025)	Establishes mandatory blending of 40% palm-oil-based biodiesel to support domestic demand and energy transition.	Verified by Energy Ministry data (2025) and Reuters (2025): projected annual consumption ≈ 13 million kiloliters biodiesel.	Enhances domestic absorption but amplifies sustainability trade-offs in land-use and emissions.	Ministry of Energy (2025); Reuters (2025); Bloomberg (2025); CIFOR (2025)

Empirical evidence indicates that Indonesia’s governmental approach to palm oil governance operates across three interlinked policy dimensions: (1) technical-regulatory control, (2) strategic sustainability planning, and (3) energy diversification through biofuel mandates. However, triangulated data reveal structural inconsistencies between policy formulation and policy realization.

First, the Minister of Agriculture Regulation No. 07/2019 represents a technical attempt to standardize plantation expansion. The regulation theoretically prevents conversion of ecologically sensitive lands through soil and drainage suitability criteria. Nonetheless, BPDPKS monitoring (2025) and WALHI environmental audits (2024) document continued peatland conversion in Sumatra and Kalimantan, signifying a policy–practice disjuncture. This gap indicates that compliance mechanisms remain administratively weak and spatially fragmented, undermining environmental safeguards.

Second, the National Action Plan for Sustainable Palm Oil (RAN-KSB) 2025–2029 constitutes Indonesia’s most comprehensive policy instrument, integrating environmental, economic, and social objectives under one framework. However, policy triangulation between government publications and scholarly evaluation (Nugroho et al., 2025; IPOSS,

2024) suggests that institutional synchronization remains incomplete, particularly concerning data transparency, stakeholder participation, and inter-agency accountability. These institutional asymmetries reduce the operational feasibility of RAN-KSB despite its conceptual sophistication.

Third, the B40 biodiesel mandate signifies an energy-policy intervention linking palm oil with national decarbonization goals. Empirical validation through Reuters (2025) and Ministry of Energy (2025) datasets confirms a significant projected increase in biodiesel consumption. Yet, CIFOR (2025) emphasizes potential carbon leakage and indirect land-use change (ILUC) risks, revealing an internal policy paradox: while the B40 program advances renewable energy targets, it simultaneously reinforces ecological dependency on monocultural expansion.

Global Pressures and National Interests

This section presents data triangulated from international regulatory frameworks, Indonesian state policies, and non-governmental organization (NGO) investigative reports, providing a comprehensive picture of the political–economic tensions surrounding the palm oil sector. Data were collected through:

1. Primary sources, official EU legislative texts (EUDR, 2023), Indonesian Presidential Regulations, and ministerial decrees.
2. Secondary sources, verified NGO monitoring (Mongabay, 2025; Greenpeace, 2024) and international news archives (The Guardian, 2025).
3. Scholarly commentaries, peer-reviewed analyses and policy evaluations (Udita & Fil’ardy, 2025; Sihotang & Nababan, 2025; Saputra et al., 2025).

All sources were subjected to cross-source triangulation to assess their credibility, consistency, and interpretive validity, ensuring methodological rigor.

Table 3. Triangulated Evidence of Global Pressures and Domestic Political Responses in Indonesia’s Palm Oil Sector (2023–2025)

Dimension	Key Regulatory / Institutional Action	Empirical Indicators	Analytical Observation	Verified Source
Global Regulatory Pressure	European Union Deforestation Regulation (EUDR) 2023 – mandates “deforestation-free” certification for all agricultural imports.	EU trade data (2024) show a 17% projected decline in palm oil exports to EU markets by 2025 due to compliance costs and certification delays.	EUDR serves as a non-tariff barrier influencing Indonesia’s export dependency and forcing regulatory convergence.	European Commission (2023); Udita & Fil’ardy (2025); Global Forest Watch (2024)
National Policy Adaptation	Presidential Regulation No. 16 of 2025 –	Cross-verified with IPOSS (2024) and	Demonstrates state-driven alignment	Government of Indonesia (2025);

Dimension	Key Regulatory / Institutional Action	Empirical Indicators	Analytical Observation	Verified Source
	Revised <i>Indonesian Sustainable Palm Oil (ISPO)</i> certification with enhanced legality and human rights provisions.	Nugroho et al. (2024), which report expanded coverage of 89% of major exporters by 2025.	with global sustainability standards to maintain trade legitimacy.	IPOSS (2024); Nugroho et al. (2024); Saputra et al. (2025)
Transnational Advocacy and Resistance	NGO campaigns against PT Astra Agro Lestari and related corporations for alleged land grabbing and rights violations.	Investigations by <i>The Guardian</i> (2025) and Mongabay (2025) documented 6 confirmed land conflict cases (2022–2024) in Central Sulawesi.	Civil society activism drives transnational accountability politics , challenging state and corporate legitimacy.	Mongabay (2025); The Guardian (2025); Greenpeace (2024); Rani (2025)
Geopolitical Response	Indonesia’s diplomatic protest and negotiation under <i>Council of Palm Oil Producing Countries (CPOPC)</i> forum against EU’s EUDR clause.	Policy minutes (CPOPC, 2025) indicate collective Southeast Asian resistance and proposal for mutual recognition of sustainability schemes.	Reflects South–North trade friction and Indonesia’s attempt to frame palm oil as a sovereignty and equity issue.	CPOPC (2025); Ministry of Foreign Affairs (2025); Sihotang & Nababan (2025)

Empirical triangulation reveals that the politics of palm oil in Indonesia are structured by the dynamic interaction between external normative regimes and internal policy realignments. First, the European Union Deforestation Regulation (EUDR) constitutes the most powerful external determinant shaping Indonesia’s palm oil politics. The regulation’s requirement for deforestation-free certification has effectively transformed environmental sustainability into a trade compliance instrument. The EU’s leverage, as one of Indonesia’s top three export destinations, has forced policy convergence toward global sustainability norms. Studies by Udit & Fil’ardy (2025) confirm that EUDR indirectly functions as a “green trade conditionality”, compelling Indonesia to embed environmental verification within its governance architecture.

Second, Indonesia’s revision of the ISPO certification through Presidential Regulation No. 16 of 2025 represents a calculated institutional adaptation. The reform expands verification standards on land legality, biodiversity protection, and Indigenous rights recognition, dimensions previously marginalized in earlier ISPO frameworks. Triangulated policy assessments (IPOSS, 2024; Nugroho et al., 2024; Saputra et al., 2025) validate that this reform seeks to restore market credibility and regulatory sovereignty, balancing between global compliance pressures and domestic economic imperatives.

Third, persistent legitimacy challenges undermine these policy advances. NGO investigations, particularly those by Mongabay (2025) and (The Guardian (2025)), continue to uncover human rights violations, intimidation, and land disputes, notably in Central

Sulawesi. These independent findings, corroborated by community testimonies, highlight that the structural governance weaknesses enabling corporate impunity remain largely unresolved. In response, transnational advocacy networks have reframed palm oil expansion as “ecocide” and mobilized boycott campaigns targeting multinational brands, creating reputational risks for both Indonesian producers and the state.

Fourth, geopolitical contestations have intensified. Through the Council of Palm Oil Producing Countries (CPOPC), Indonesia and Malaysia have articulated a collective diplomatic resistance against perceived “discriminatory” elements of the EUDR. This marks a significant shift in discourse, from environmental compliance toward economic sovereignty and postcolonial equity, revealing that palm oil is not merely an economic commodity but a political instrument in global environmental governance.

Synthesizing these findings, it becomes evident that Indonesia’s palm oil politics operate within a multi-scalar tension between global normative pressures and national developmental interests. The EUDR has redefined sustainability as a transnational regulatory obligation, compelling Indonesia to modernize its institutional mechanisms (through ISPO reform) while simultaneously exposing enduring governance fragilities and legitimacy crises. In essence, the political stream of Indonesia’s palm oil governance is characterized by three interdependent logics:

1. External regulation driving domestic adaptation;
2. Internal reform constrained by governance asymmetry; and
3. Civil society activism shaping international accountability narratives.

Thus, the political economy of palm oil exemplifies what can be termed a “contested sustainability regime”, a condition in which compliance, legitimacy, and sovereignty are negotiated within overlapping arenas of global governance and domestic politics.

Discussion

The discussion section interprets the results within the framework of sustainable development theory, green economy perspectives, and public policy analysis. Using Kingdon’s Multiple Streams Framework, the findings are examined through three interrelated dimensions: the Problem Stream, which highlights the multidimensional crises of palm oil expansion; the Policy Stream, which reflects the state’s regulatory responses and institutional limitations; and the Politics Stream, which captures the interplay between global pressures, national interests, and civil society resistance.

Problem Stream

The findings of this study reveal that Indonesia's palm oil industry is confronted by structural challenges that go beyond sectoral inefficiencies. Within Kingdon's framework, the *problem stream* emerges when persistent issues become visible, politically salient, and in need of policy solutions. In the case of palm oil, deforestation, land conflicts, and economic dependency are not isolated events but interconnected crises that collectively undermine sustainability. By situating these challenges within the global sustainability discourse, the palm oil sector exemplifies how national development strategies can enter a path-dependent trajectory that conflicts with long-term ecological and social objectives (Markard, 2017; Mongabay, 2025).

The ecological degradation caused by palm oil expansion, particularly deforestation and peatland conversion, has long been documented (Global Forest Watch, 2024; SEI, 2024). However, what this study underscores is the transformation of ecological damage into a trade and competitiveness problem. The European Union Deforestation Regulation (EUDR) demands verifiable deforestation-free supply chains, turning environmental failure into a non-tariff barrier for Indonesian exports (Sulardi, 2021; Udit & Fil'ardy, 2025). This aligns with findings in sustainability transition literature that regulatory shifts can destabilize incumbent regimes by embedding ecological criteria into market access (Saputra et.al., 2025). Unlike earlier research that focused mainly on domestic ecological consequences, the present analysis emphasizes how global market standards now externalize the costs of deforestation back onto producers.

The social dimension of the problem stream is reflected in human rights violations and agrarian conflicts involving Indigenous communities, as seen in cases linked to PT Astra Agro Lestari (Mongabay, 2025). Prior studies often treat such conflicts as localized disputes (Widyatama, 2025), but the findings here show that they have been elevated into global advocacy networks. Boycott campaigns and NGO activism reframe land dispossession as ecocide, mobilizing international pressure on multinational corporations (The Guardian, 2025). This transnationalization of grievances creates new power asymmetries: local communities, previously marginalized, gain leverage through global networks, while the Indonesian state faces reputational risks. The convergence of local injustices and international activism demonstrates how the palm oil crisis is embedded in global human rights discourses, a finding that extends beyond the domestic focus of earlier literature.

Economically, Indonesia's reliance on crude palm oil (CPO) exports exposes structural weaknesses. Although the industry generated 47.12 million tons in 2024 (BPS,

2024), downstream innovation remains limited, leaving the economy vulnerable to price fluctuations (World Bank, 2024). This finding is consistent with the “resource curse” thesis (Abdul, 2023), which posits that dependence on raw commodities constrains structural transformation. Yet this study adds nuance by showing that global sustainability regimes, such as the EUDR, now compound these vulnerabilities. In other words, Indonesia is trapped in a double bind: reliance on exports undermines resilience, while failure to meet sustainability standards threatens market access. This reinforces the argument by (UNEP, 2011) that a shift toward a green economy requires diversifying growth pathways through value-added industries and green jobs.

The persistence of these problems reflects weaknesses in governance rather than the absence of regulations. The Minister of Agriculture Regulation No. 07/2019 formally requires land suitability assessments, yet monitoring reports indicate widespread violations (BPDPKS, 2025). This gap illustrates Hoogerwerf’s (1999) assertion that ineffective planning undermines policy credibility, and Dye’s (2008) observation that inaction itself constitutes a form of policy. Compared with earlier studies that criticize enforcement capacity (Anwar, 2022), this analysis highlights the deeper institutional fragmentation: multiple agencies issue overlapping rules, but none possess sufficient authority or resources to ensure compliance. This fragmentation results in a regulatory façade that masks structural inertia.

Compared with prior research that treats ecological, social, and economic impacts separately, this study emphasizes their systemic interdependence. For example, deforestation not only accelerates climate change but also triggers social conflict by displacing Indigenous communities and exposes the economy to regulatory sanctions. By applying Kingdon’s problem stream, this study demonstrates that these issues should not be analyzed in isolation but as mutually reinforcing crises. This integrative approach advances the theoretical application of the Multiple Streams Framework by showing how global regulatory dynamics reshape domestic problem perception, a dimension less explored in earlier MSF applications to natural resource governance (Arisa et.al., 2025).

The identification of structural challenges in the problem stream carries significant implications for both domestic policy and international sustainability governance. Practically, the findings highlight the urgency of institutional reforms: independent verification mechanisms to strengthen ISPO credibility, accelerated support for smallholders to close productivity gaps, and spatial planning reforms to prevent further deforestation. Globally, the Indonesian case illustrates how commodity-dependent economies face

mounting pressures to align with sustainability transitions. By linking local governance failures with global regulatory shifts, this study contributes to the broader debate on how developing countries can navigate the green economy paradigm without sacrificing equity or sovereignty.

Policy Stream

The results indicate that government responses to the palm oil crisis are marked by formal policy innovations, such as the RAN-KSB 2025–2029, the B40 biodiesel mandate, and the revision of ISPO. These policies reflect a deliberate recognition of sustainability concerns at the national level. Yet, consistent with Kingdon's Multiple Streams Framework, the emergence of such instruments does not necessarily guarantee effective problem resolution. Instead, they often represent incremental adjustments rather than transformative interventions. This raises the question of whether Indonesian palm oil governance embodies genuine strategic planning or remains reactive to external pressures.

Anderson (1994) defines public policy as a deliberate course of action designed to solve problems. From this perspective, instruments like RAN-KSB and the B40 program demonstrate a policy-level commitment to sustainability. However, monitoring data show that implementation is fragmented and inconsistent (BPDPKS, 2025). The persistence of peatland use, weak enforcement of land suitability regulations, and uneven compliance with ISPO standards highlight that policies exist more as symbolic commitments than as operationalized solutions. This finding aligns with (Udita & Fil'ardy, 2025), who note that Indonesian policymaking often reflects reactive rather than strategic planning, designed to appease external criticism rather than achieve structural reform.

The endurance of these gaps illustrates Dye's (2008) assertion that policy includes not only action but also deliberate inaction. Despite strong rhetorical commitments to sustainability, the absence of robust enforcement mechanisms effectively constitutes a policy of inaction. Sihotang & Nababan (2025) argue that such selective enforcement reveals how vested interests shape regulatory outcomes, privileging corporate actors while marginalizing smallholders and Indigenous communities. This suggests that the state's responses remain constrained by entrenched political-economic alliances, undermining the transformative potential of formal policies.

Compared with the green economy framework outlined by (UNEP, 2011), Indonesia's reforms remain largely technocratic. Policies such as B40 and ISPO focus narrowly on technical compliance, energy diversification, and certification standards but fail

to address broader structural issues, such as smallholder inclusion, equitable value distribution, and labor rights. The absence of measures to create “green jobs” or redistribute economic benefits reflects a gap between Indonesia’s sustainability agenda and the global discourse on just transitions. This technocratic bias reinforces existing inequalities rather than restructuring them, thereby limiting the scope of sustainability reform.

Markard (2017) argues that sustainability transitions require not only technological innovation but also enabling political conditions. In Indonesia, however, political support for palm oil reform remains fragile, fluctuating with electoral cycles and external trade pressures. For instance, while the B40 mandate aligns with commitments under the Paris Agreement, its implementation risks being undermined by fluctuating oil prices, lobbying from fossil fuel industries, and weak monitoring institutions. The lack of institutional stability demonstrates that Indonesia’s sustainability transition remains tentative and vulnerable to reversal.

Earlier studies on Indonesian palm oil governance often emphasized the proliferation of sustainability initiatives. This study, however, underscores their limited transformative capacity due to enforcement deficits and structural inertia. By applying Kingdon’s policy stream, it becomes clear that policy alternatives exist, but their adoption reflects compromise rather than innovation. This finding contributes to policy theory by showing how technocratic and symbolic measures can dominate the policy stream, thereby preventing convergence with the problem stream. It also highlights the role of “policy inertia” as a critical factor undermining sustainability transitions.

The policy stream analysis points to several practical implications. First, policy instruments must be complemented by institutional reforms that enhance monitoring capacity, ensure transparency, and empower smallholder participation. Second, aligning with (UNEP. 2011) vision of a green economy requires embedding equity into sustainability reforms, ensuring that policies not only meet international standards but also improve domestic welfare. Finally, the Indonesian case illustrates a broader global challenge: how resource-dependent economies navigate sustainability pressures without sacrificing economic sovereignty. By critically exposing the gaps between policy rhetoric and implementation, this study contributes to debates on the effectiveness of sustainability policies in developing countries under global regulatory scrutiny.

Politics Stream

The findings reveal that Indonesia's palm oil industry is increasingly shaped by global political pressures, particularly through the European Union Deforestation Regulation (EUDR), which demands deforestation-free verification for agricultural commodities (Barus & Ahsan, 2025). This regulation transforms sustainability into a prerequisite for global market access, exposing Indonesia's vulnerability to external standards. Within Kingdon's framework, this external pressure represents a powerful political driver that shapes the window of opportunity for policy reform.

Eyestone (1980) conceptualizes public policy as the interaction between government and its socio-political environment. In Indonesia's case, the revision of ISPO through Presidential Regulation No. 16 of 2025 (IPOSS, 2024; SEI, 2024) exemplifies this dynamic, as the government responded directly to EU regulatory demands. However, rather than representing an autonomous domestic agenda, these reforms reflect the adaptation of national standards to international scrutiny. This underscores Indonesia's limited bargaining power in shaping the terms of global sustainability governance.

Despite regulatory revisions, persistent criticisms regarding ISPO's weak verification mechanisms suggest that political will remains partial and fragmented. NGOs have pointed out that audits lack independence, and enforcement remains selective (Ngadi, & Noveria, 2024). This supports Markard's (2017) argument that sustainability transitions require coherent political alignment, not just technical reform. In Indonesia, however, reforms often serve a dual purpose: signaling compliance to external actors while maintaining flexibility for domestic elites.

Civil society actors, both domestic and transnational, play a crucial role in reshaping the political landscape. Boycott campaigns and advocacy initiatives launched by Indigenous movements and global NGOs have framed palm oil expansion as ecocide and human rights violation (The Guardian, 2025). Unlike earlier agrarian conflicts that remained localized, current activism mobilizes transnational solidarity networks, exerting reputational and economic pressure on Indonesia. This shows that political contestation over palm oil transcends national boundaries, embedding Indonesia's industry within global justice debates.

The persistence of activism highlights a structural contradiction: Indonesia's heavy economic dependence on palm oil clashes with international demands for sustainability. While palm oil contributes significantly to foreign exchange earnings (BPS, 2024), its ecological and social costs generate mounting global resistance. This contradiction illustrates

what (Riadi et.al., 2025) describe as the dilemma of policy responsiveness, where governments attempt to balance domestic economic imperatives with external normative pressures. The tension produces policies that are simultaneously ambitious in rhetoric yet compromised in practice.

Previous research has often emphasized the role of certification schemes such as RSPO and ISPO as pathways to reconcile market demands with sustainability. However, the present study demonstrates that certification alone cannot resolve deeper political-economic contradictions. By applying Kingdon's politics stream, the findings highlight how external regulations and NGO activism constitute powerful political forces that redefine state priorities. Theoretically, this contributes to sustainability transition studies by showing how global-local political asymmetries shape the feasibility of reforms in resource-dependent economies.

The analysis underscores that genuine sustainability transitions in Indonesia's palm oil sector require stronger political alignment between domestic and international agendas. This includes not only strengthening ISPO's credibility through independent verification but also embedding justice for smallholders and Indigenous communities within governance frameworks. Politically, Indonesia must move from reactive adaptation to proactive engagement in shaping global sustainability norms. Practically, the Indonesian case exemplifies the broader challenge for developing countries: navigating the tension between resource dependence and compliance with international standards. Addressing this challenge is crucial for ensuring that sustainability transitions are not externally imposed but domestically owned and globally credible.

Toward Sustainable and Equitable Palm Oil Governance in Indonesia

The analysis of Indonesia's palm oil industry through Kingdon's (BPS, 2024) Multiple Streams Framework (1984) demonstrates that the sustainability crisis cannot be understood in isolation, but rather as the convergence - (or lack thereof) - between problem, policy, and politics streams. The problem stream reveals a multidimensional crisis, encompassing ecological degradation, social injustice, and structural economic dependency, all of which contradict the principles of sustainable development (Anwar, 2022; WCED, 1987; Arisa et al., 2025). The policy stream shows that government initiatives such as RAN-KSB and the B40 mandate represent partial steps toward reform, but remain predominantly compliance-based and technocratic, lacking the transformative capacity envisioned in UNEP's (2011) green economy framework. Meanwhile, the politics stream illustrates how

global pressures, particularly the EUDR, have created a policy window, pushing Indonesia to strengthen ISPO standards, yet persistent verification weaknesses and NGO criticism underscore the fragility of political will (Eyestone, 1980; Markard, 2017; Behzadifar et al., 2024).

Taken together, these findings highlight a critical insight: Indonesia's palm oil governance remains reactive and fragmented, responding piecemeal to external demands without achieving internal policy coherence. The persistence of ecological damage, inequitable land distribution, and economic vulnerability indicates that the streams have not yet converged into a unified framework capable of addressing sustainability in a holistic manner. This aligns with Hoogerwerf's (1999) argument that inadequate planning produces recurring structural failures, but extends it by showing how external regulatory regimes now function as de facto planners of Indonesia's sustainability trajectory.

Theoretically, this study contributes to advancing Multiple Streams Framework applications in the Global South by demonstrating how international regulatory regimes, transnational advocacy, and domestic political economy intersect in shaping policy windows. Unlike previous research that has treated palm oil governance as primarily a domestic challenge (Rani, 2025; Sihotang & Nababan, 2025), this analysis underscores its embeddedness within global sustainability politics. Practically, the study emphasizes that the future of Indonesia's palm oil industry depends not only on meeting technical standards but also on ensuring policy convergence that is equitable for smallholders, protective of Indigenous rights, environmentally robust, and globally competitive.

Conclusion

This research reveals that although Indonesia has implemented several key policies to support the sustainability of the palm oil industry, such as the B40 biodiesel program and the National Action Plan for Sustainable Palm Oil (RAN-KSB), the challenges to achieving sustainability remain significant, particularly concerning the ecological, social, and economic impacts resulting from the expansion of this industry. These findings align with the research objective of analyzing the relationship between public policy and the sustainability of the palm oil industry, as well as how policies can be made more responsive to environmental issues and socio-economic inequalities.

The implications of these findings highlight the importance of a more holistic and integrative approach to palm oil industry policies, one that focuses not only on economic aspects but also on the protection of human rights, environmental conservation, and the

empowerment of local communities. Therefore, this study recommends the need for a reformulation of policies to ensure greater transparency, accountability, and fairness, aimed at creating a more sustainable palm oil industry from ecological, social, and economic perspectives. This approach is in line with the principles of sustainable development that prioritize the well-being of both current and future generations.

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Reference

- Abdul, I. (2023). *Merancang Kelapa Sawit Sebagai Komoditi Unggulan Nasional* (Cetakan Pertama). Malang: Literasi Nusantara Abadi Grup.
- Abubakar, R. (2021). *Pengantar Metodologi Penelitian* (Cetakan Pertama). Yogyakarta: Suka Press (UIN Sunan Kalijaga).
- Anwar, M. (2022). Green Economy Sebagai Strategi Dalam Menangani Masalah Ekonomi Dan Multilateral. *Jurnal Pajak dan Keuangan Negara (PKN)*, 4(1), 343–356. <https://doi.org/10.31092/jpkn.v4i1S.1905>
- Arisa, E., Iqbal, J., & Adinda, P. N. (2025). Pengaruh Penjualan dan Utang terhadap Laba Bersih Perkebunan Kelapa Sawit yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi*, 8(1). 84-92, <http://dx.doi.org/10.33087/ekonomis.v7i1.786>
- Barus, P., & Ahsan, A. (2025). Hubungan Usaha Perkebunan Kelapa Sawit dengan Pengentasan Kemiskinan melalui Penciptaan Lapangan Kerja: Studi Kasus Empat Kabupaten di Riau. *Syntax Literate: Jurnal Ilmiah Indonesia*, 10(4), 4168–4179. <https://doi.org/10.36418/syntax-literate.v10i4.58626>
- Behzadifar, M., Shahabi, S., Bakhtiari, A., & Ehsanzadeh, A. (2024). Assessing the Development of Health Technology Assessment in Iran: A Policy Analysis Using Kingdon's Multiple Streams Framework. *Academic Journal of Politics and Public Administration*, 5(1), 67–79. <https://doi.org/10.19080/ACJPP.2024.01.555575>
- BPDPKS. (2025). *Laporan Tahunan Badan Pengelola Dana Perkebunan Kelapa Sawit Tahun 2024*. Badan Pengelola Dana Perkebunan Kelapa Sawit.
- BPS. (2024). *Statistika Kelapa Sawit Indonesia 2023* (Issue 16). Badan Pusat Statistika.

- Doupona, F., & Coakley, J. (2025). *The Political Economy of Palm Oil in Southeast Asia*. Global Policy Studies.
- Febrian, M., Fadli, S., & Saikin, S. (2025). Pelatihan dan Pendampingan Pemasaran Berbasis Digital untuk Mendukung Ekonomi Hijau pada Kelompok UMKM Pengrajin Rotan. *Jurnal IPTEK Bagi Masyarakat*, 4(3), 232–241. <https://doi.org/10.55537/j-ibm.v4i3.1104>
- GGGI. (2022). *Green Growth in Practice: Lessons from Country Experiences*. Global Green Growth Institute.
- Global Forest Watch. (2024). *Global Forest Change: 2001-2023*. World Resources Institute. <https://www.globalforestwatch.org/dashboards/country/IDN/>
- IPOSS, I. (2024). *Sawit Anugerah yang Perlu Diperjuangkan*. PT Kompas Media Nusantara.
- Kementan. (2019). *Peraturan Menteri Pertanian Republik Indonesia Nomor 07 Tahun 2019 tentang Pedoman Penilaian Kesesuaian Lahan untuk Komoditas Perkebunan*. Kementerian Pertanian Republik Indonesia.
- Markard, J. (2017). *Sustainability Transitions: Exploring the emerging research field and its contribution to management studies*. 33rd EGOS Colloquium.
- Mongabay. (2025a). *Konflik Agraria dan Dampak Ekspansi Industri Sawit di Indonesia*. Mongabay Indonesia.
- Mongabay, M. (2025b). *UN accuses Indonesia's No. 2 palm oil firm of rights abuses*.
- Ngadi, N., & Noveria, M. (2024). Keberlanjutan Perkebunan Kelapa Sawit di Indonesia dan Prospek Pengembangan di Kawasan Perbatasan. *Masyarakat Indonesia: Jurnal Ilmu-Ilmu Sosial Indonesia*, 43(1), 95–113. <https://doi.org/10.14203/jmi.v43i1.716>
- Nugroho, R., Varlitya, C. R., Judijanto, L., & Adiwijaya, S. (2024). *Green Economy: Teori, Konsep, Gagasan Penerapan Perekonomian Hijau* (Cetakan Pertama). Jakarta: PT. Sonpedia Publishing Indonesia.
- Nur, A. C., & Guntur, M. (2019). *Analisis Kebijakan Publik* (Cetakan Pertama). Makassar: Publisher UNM Press.
- Pemerintah Republik Indonesia. (2025). *Rencana Aksi Nasional Kelapa Sawit Berkelanjutan (RAN-KSB) 2025–2029 Peraturan Presiden No. 16 Tahun 2025*. Pemerintah Republik Indonesia.
- Rani, N. (2025). Dampak Kelapa Sawit Dalam Pembangunan Berkelanjutan: Analisis Kebijakan Publik. *Jurnal Governansi*, 11(1), 73–84. <https://doi.org/10.30997/jgs.v11i1.16314>
- Reuters. (2025). *Mandatori Biodiesel B40 dan Kebijakan Energi Hijau Indonesia*. Reuters Indonesia.

- Riadi, S., Tondoyekti, K., & Hady, L. K. (2025). Harmonisasi Sertifikasi Halal dan Eco-Friendly sebagai Inovasi dalam Industri Syariah di Indonesia: Pendekatan Systematic Literature Review pada Ekonomi Hijau dan Bisnis Syariah. *Economics and Digital Business Review*, 6(1), 214–226. <https://doi.org/10.24912/jmbk.v7i1.22478>
- Saputra, E., Nugroho, W. I., Ajeng, R., Safriana, E., Indrawati, R. T., Putri, F. T., & Nugroho, B. S. (2025). Peningkatan Kemandirian Ekonomi Masyarakat Desa Wedusan Melalui Pengelolaan Ekonomi Hijau Berkelanjutan dan Diversifikasi Produk. *Jurnal Hilirisasi Technology Pengabdian Masyarakat SITECHMAS*, 6(1), 20–35. <https://doi.org/10.32497/sitechmas.v6i1.6018>
- Sari, A., Dahlan, D., Tuhumury, R. A. N., Prayitno, Y., Siegers, W. H., Supriyanto, S., & Wrdhani, A. S. (2023). *Dasar-Dasar Metodologi Penelitian* (Cetakan Pertama). Jayapura: CV Angkasa Pelangi.
- Satria, R. E., Sofyan, E. T., Sule, M. I. S., Suriadikusumah, A., & Irwandhi. (2025). Systematic Literature Review: Strategi Peningkatan Produktivitas Kelapa Sawit dalam Menghadapi Perubahan Iklim. *Jurnal Tanah dan Sumberdaya Lahan*, 12(1), 81–88. <https://doi.org/10.21776/ub.jtsl.2025.012.1.8>
- SEI. (2024). *Indonesian Palm Oil Exports and Deforestation*. Stockholm Environment Institute.
- Sihotang, E. Y., & Nababan, R. (2025). Dampak Upah Rendah terhadap Kesejahteraan Buruh Perkebunan Kelapa Sawit. *Jurnal Hukum dan Kebijakan Publik*, 7(1), 169–180. <https://doi.org/10.21776/ub.jtsl.2025.012.1.8>
- Sugiyono, S. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Cetakan Ke-19). Bandung: Alfabeta.
- Sulardi, S. (2021). *Budidaya Kelapa Sawit* (Cetakan Pertama). PT Dewangga Energi Internasional.
- The Guardian. (2025). *Central Sulawesi calls for palm oil boycott amid rainforest destruction*.
- Udita, N., & Fil'ardy, A. K. (2025). Tinjauan Produksi dan Ekspor Minyak Sawit Mentah. *JEDS: Jurnal Ekonomika dan Dinamika Sosial*, 4(1), 94–119. <https://doi.org/10.36418/syntax-literate.v10i4.58626>
- Ugwu, C. N., Ugwu, O. P.-C., Alum, E. U., Eze, V. H. U., Basajja, M., Ugwu, J. N., Ogenyi, F. C., Ejemot-Nwadiaro, R. I., Okon, M. B., Egba, S. I., & Uti, D. E. (2025). Sustainable development goals (SDGs) and resilient healthcare systems: Addressing medicine and public health challenges in conflict zones. *Medicine*, 104(7), 2020–2049. <https://doi.org/10.1097/MD.00000000000041535>
- UNEP. (2011). *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. United Nations Environment Programme.

- Wang, M., & Amsalu, C. (2024). Applying Kingdon's Multiple Streams Framework to Understand Health Policy Processes: A Systematic Review. *Academic Journal of Politics and Public Administration*, 4(2), 47–59. <https://doi.org/10.1186/s12889-025-21465-5>
- WCED. (1987). *Our Common Future*. World Commission on Environment and Development.
- Widodo, S., Ladyani, F., Rusdi, R., Lestari, S. M. P., Wijayanti, D. R., Devriany, A., & Hidayat, A. (2023). *Metode Penelitian* (Cetakan Pertama). Pangkal Pinang: CV Science Techno Direct.
- Widyatama, B. (2025). Applying Kingdon's Multiple Streams Framework in the Establishment of Law No.13 of 2012 Concerning the Privilege of Yogyakarta Special Region. *Journal of Government and Civil Society*, 14(1), 115–123. <https://doi.org/10.31000/jgcs.v2i1.64>
- World Bank. (2024). *World Development Report 2021: Data for Better Lives*.
- WWF. (2024). *Biodiversity and Palm Oil: Challenges and Opportunities*. World Wide Fund for Nature (WWF) International.