



THE UNIVERSITY OF CHICAGO

**HARRIS SCHOOL
OF PUBLIC POLICY**

ROADBLOCKS TO SUSTAINABLE PALM OIL PRODUCTION IN INDONESIA

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I. Palm Oil and Indonesia

Food, detergents, cosmetics, biofuel, and manufacturing all use palm oil and we unwittingly consume it every day. By June 2022, a ton of oil cost \$1,550 up from \$522¹. The global palm oil market is projected to grow from \$54.79 billion in 2020 to \$105.97 billion in 2026², making for an agricultural goldrush. Two of our teammates saw firsthand how this pressure affected their communities. Simeon's home island, Sumatra, is at the heart of the palm oil industry while Kevin's home island of Java is the center of palm oil politics, where limited media coverage of the palm oil industry is mainly influenced by powerful players. Simeon remembers vividly looking out at the appealing sight of hundreds of acres of palm trees, a land mass the size of the UK, only to be confronted with the horrific stories of farmers that suffer from financial woes. While Kevin was surprised to hear stories presented in Singaporean media³ of Zulkifli, a palm oil farmer in the 4th poorest region of Indonesia in the Pantai Cempa, Aceh Tamiang in the northern Sumatra. Zulkifli harvests palm every 15 days, a task that is highly labor-intensive and dangerous when a 20 -meter tree requires poles and ladders to reach the harvest.

Palm oil production has negative societal and environmental impacts in Indonesia and on our planet - yet production and expansion are common. We mapped the puzzle behind palm oil production, the agenda in Indonesia, the root causes of why sustainability is not achievable, and what we can learn by mapping the system.

II. Objective and Methodology

a. Methodology

We used academic literature to scope the landscape, solutions, and scope of the issue. The academic literature is composed of social research, agricultural research practices, and economic effects. To ensure the validity of the literatures, we did several interviews first with Fransiskus Lema Indonesia's House of Representative with fields of duties in Agriculture, Environment, Forestry, and Marine Affairs, second with Gersen Sumardi as a sustainability analyst in Wilmar (one of the world's largest palm oil plantation owners), third with Mansuetos Darto as a secretary general of Indonesian

¹ Markets Insider. "Palm Oil Commodity Price". Taken from <https://markets.businessinsider.com/commodities/palm-oil-price>

² Globe Newswire. "Global Palm Oil Markets & Volumes 2020-2026 by Top Consuming, Producing, Importing, Exporting Country, Company Analysis". Taken from <https://www.globenewswire.com/news-release/2021/06/11/2245689/28124/en/Global-Palm-Oil-Markets-Volumes-2020-2026-by-Top-Consuming-Producing-Importing-Exporting-Country-Company-Analysis.html>

³ VICE Asia. "Poverty and Palm Oil are Driving Deforestation in Indonesia". Taken from <https://www.youtube.com/watch?v=HrSQXW60IUc>

Palm Oil Farmers' Union and lastly informal guidance from specialists at the University of Chicago, Anup Malani.

b. Objectives

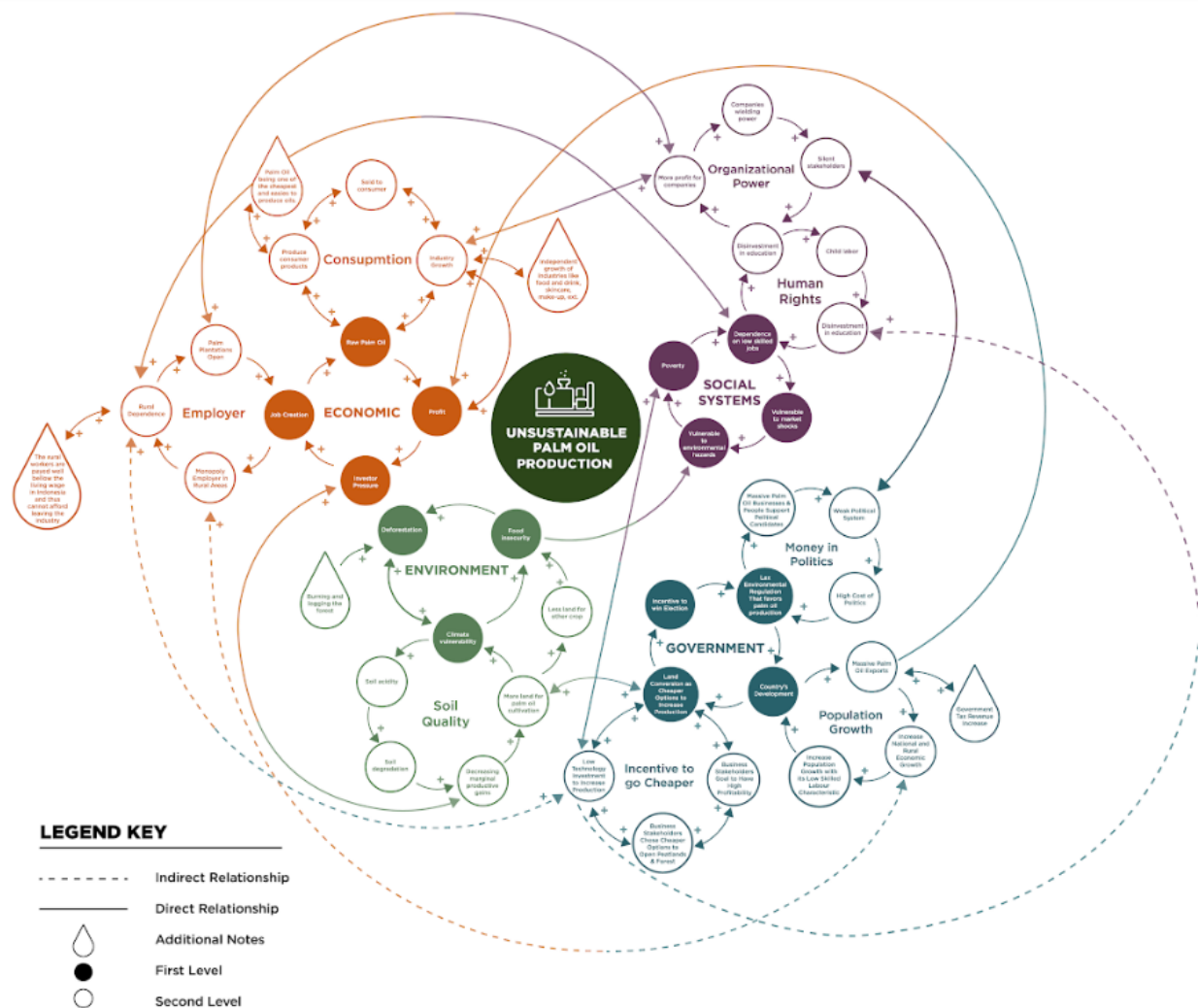
We define sustainability by using the UN's Sustainability goals⁴ definition, that economic development that meets the needs of the present without compromising the ability of future generations to meet their own needs.⁵ By using the definition throughout our mapping, we focus on these questions: Why has the issue of palm oil and its threats to the environment not been resolved for so long? What has already been done to combat unsustainable palm oil and the gaps to these solutions? Who are the stakeholders that most hold the levers to change the system?

III. The Challenge Landscape

To first understand why unsustainable palm oil practices have not been addressed, we must ask the causes and effects of its production. It was assumed that the causes and effects were related to lack of education from farming communities, the lack of resources to invest in sustainable infrastructure, or the lack of overseeing governmental bodies. What was found, however, was a complicated web of causes that influenced one another, forcing a cycle of dependency, and a lack of power on communities most affected by environmental degradation. We separated the pressures into 4 sectors: economic, governmental, social, and environmental. Each sector had incentives that lowered the urgency to apply sustainable practices and cut deforestation rates as well as increase the financial dependance on the crop's current rate of yield.

⁴ United Nations. "The Sustainable Development Agenda". Taken from <https://www.un.org/sustainabledevelopment/development-agenda/>

⁵ United Nations. "Sustainability". Taken from <https://www.un.org/en/academic-impact/sustainability#:~:text=In%201987%2C%20the%20United%20Nations,development%20needs%2C%20but%20with%20the>



A. Root Causes

1. Economic: Interests and Unsustainability.

The increase in global population and consumption of a larger middle class is changing our buying patterns. Palm, the world's highest yielding oil crop, is incredibly cheap. It becomes desirable for consumers and producers. Indonesia produces 59% of the world's supply⁶ at 44.5 million metric tonnes annually. 53% of palm oil plantations are owned and operated by the private sector, where the top 10 of these companies

⁶ Statista. "Leading producers of palm oil worldwide from 2021/2022". Taken from <https://www.statista.com/statistics/856231/palm-oil-top-global-producers/>

earn \$6.4 billion⁷ of revenue in 2020. The pandemic has slowed down production, but only temporarily. In 2022, the industry was worth \$65 billion and is projected to reach \$92 billion by 2027. With these profits, corporations have incentives to influence the media and lobby the government for their benefits.

Every year between 5,000 to 6,000⁸ people are newly employed in the palm oil industry with a total of 4.2 million farmers⁹. The government sees palm oil as a viable way of pushing rural communities out of poverty and meeting the UN SDGs. This idea holds merit as villages are highly forested areas with communities equipped for agriculture and they have changed rapidly in the last two decades due to palm monoculture. Towns dominated by palm infrastructure have had an overall increase in well-being and better access to living necessities such as sanitation, and primary schools¹⁰. However, despite these improvements, palm production doesn't inherently pay enough to become less dependent on this monoculture. Zulkifli, for example, only receives a monthly salary of \$21, below the 2021 living wage of \$131.

2. **Social:** Inequality & Human Rights

In 2016, Amnesty International published the results of an investigation into Wilmar, the world's largest palm oil producer, finding serious human rights abuses in the plantations of Wilmar and its suppliers. These included forced labour and child labour, gender discrimination, exploitative and dangerous working practices that put the health of workers at risk. Women are most often burdened with some of the industry's most dangerous jobs. These jobs entail spending hours waist-deep in water tainted by chemical runoff and carrying loads so heavy that, over time, their wombs can collapse and protrude. Many are hired by subcontractors on a day-to-day basis without benefits, performing the same jobs for the same companies for years – even decades.

3. **Political:** Political Cost & Influence.

High cost of politics in Indonesia might be at the root of the problem. It is marked with the practice of political dowry to be nominated by political parties and money

⁷ Rizaty, M. (2022). "Indonesia's 10 Biggest Palm Oil Companies in 2020, SMART is on top of the list". Taken from <https://databoks.katadata.co.id/datapublish/2022/03/14/10-perusahaan-sawit-terbesar-di-indonesia-tahun-2020-smart-di-posisi-puncak>

⁸ Asian Agri. "How Asian Agri is Supporting The SDGs". Taken from <https://www.asianagri.com/page/media-publications/articles/how-asian-agri-is-supporting-the-sdgs/>

⁹ Indonesia's Palm Oil Plantation Fund Agency. (2018). "Indonesia's Palm Oil Industry employed 16.2 million workers". Taken from <https://www.bpdg.or.id/Industri-Kelapa-Sawit-Indonesia-Serap-16-2-Juta-Pekerja>

¹⁰ Santika, T., et al. (2019). "Does oil palm agriculture help alleviate poverty? A multidimensional counterfactual assessment of oil palm development in Indonesia". Taken from https://www.researchgate.net/publication/332655945_Does_oil_palm_agriculture_help_alleviate_poverty_A_multidimensional_counterfactual_assessment_of_oil_palm_development_in_Indonesia

politics to gain votes. Setara Institute found that rearrangement of political costs in Indonesia should be a priority agenda.¹¹ It further explained that the expensive cost of politics forces politicians to cling deeply with business stakeholders and form a symbiotic mutualism with political funding being less regulated.

Elias Cisneros¹² suggests that the political incentive for converting lands to palm oil plantations is higher when there are elections, proving that local politicians expect to receive short-term electoral benefits from promoting agricultural development. However, it turns out that the political incentive not only exists at the local political playbook but also at the national level. In 2019, two presidential candidates campaigned to increase palm oil production, without addressing the negative externalities of increasing the plantations¹³. This is because of the inherent profitability of the palm oil industry and its effect on investment and local employment. Politicians seek to earn public favor, especially in local communities that see the industry as a way of developing and increasing their prosperity. In response, politicians loosen the laws and regulations around forest protection and environmental checks and balances, allowing for more land to be either given to or bought up by firms.

4. **Environmental: Deforestation and Palm Oil**

Deforestation, forest fires and changes in land use, account for the most of Indonesia's greenhouse gas emission. Indonesia is facing deforestation, though it has been cut back recently. In 2020 alone, Indonesia lost 115,459 hectares of forest, an area the size of Los Angeles.¹⁴ This situation is urgent, considering 921,332 km² of Indonesia is covered by forest and it has decreased in the past 30 years from 1,185,450 km² in 1990.¹⁵ With this massive change in land use, deforestation will result in climate change and affect the ecosystem in the forest.

Demand is fueling deforestation. This includes declining palm oil prices and an economic downturn, which slowed forest-clearing activities such as plantation expansion and logging. Hence, it is clear that burning and logging more land for palm oil cultivation would lead to the forest cover and eventually we need more land for palm oil cultivation. More ironically, the most recent research indicates that the conversion of

¹¹ Rizal, J. G., (2020). "High Political Fee, Is this the reason why government officials corrupt?". Taken from <https://www.kompas.com/tren/read/2020/12/11/070200265/ongkos-politik-mahal-inikah-penyebab-pejabat-korupsi?page=all>

¹² Cisneros, T., et al. (2020). "Palm oil and the politics of deforestation in Indonesia". Taken from <https://www.econstor.eu/bitstream/10419/217204/1/1696460697.pdf>

¹³ Gokkon, B. (2019). "Indonesian candidates find common ground in support for palm oil". Taken from <https://news.mongabay.com/2019/02/indonesian-candidates-find-common-ground-in-support-for-palm-oil/>

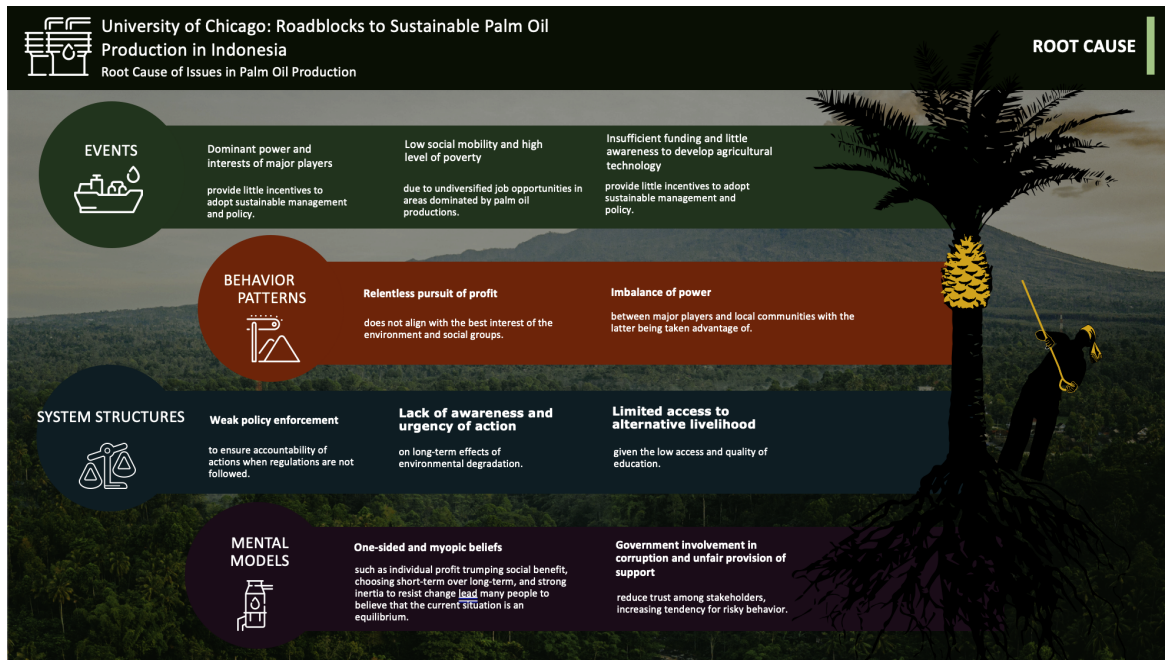
¹⁴ <https://www.un-redd.org/post/record-low-deforestation-rates-indonesia-despite-ongoing-pandemic>

¹⁵ <https://data.worldbank.org/indicator/AG.LND.FRST.K2?locations=ID>

forests into palm oil plantations results in a great loss of biodiversity, killing over half of the birds and insects. No proper ecosystem can survive this amount of devastation.

B. Palm-berg Model

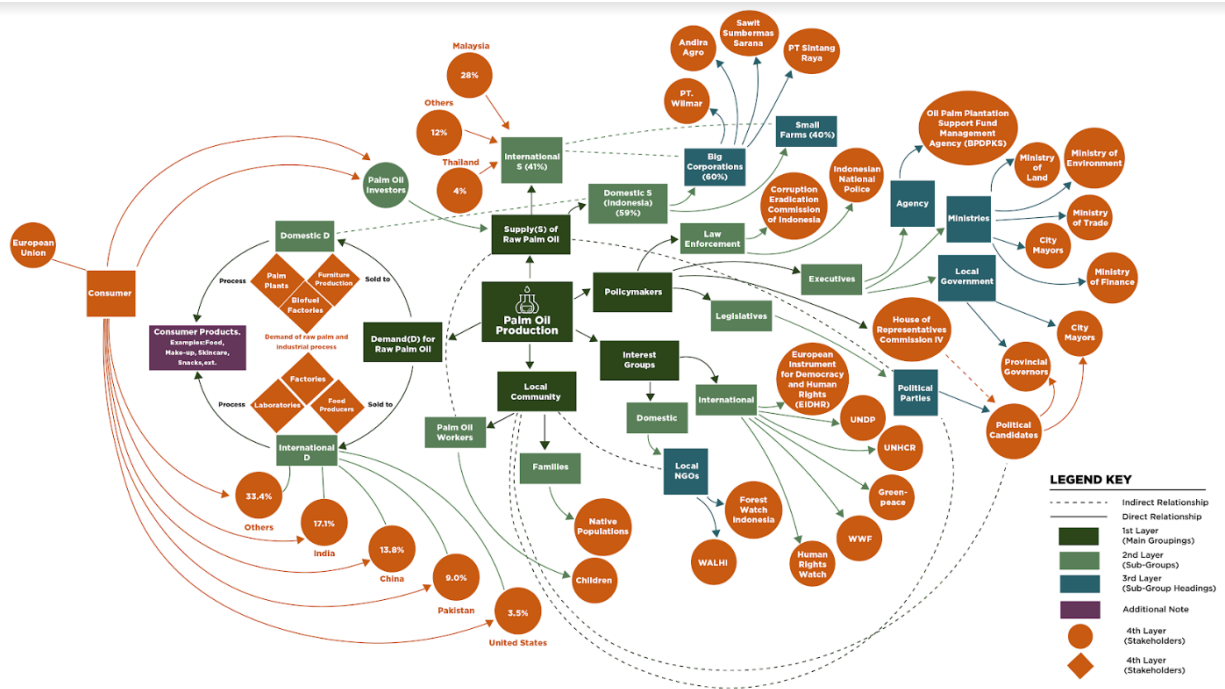
Using the Iceberg model we try to map out root causes and illustrate the most difficult issues to solve. We use the palm tree and call it the “*Palm-berg Model*”.



IV. Stakeholders Analysis

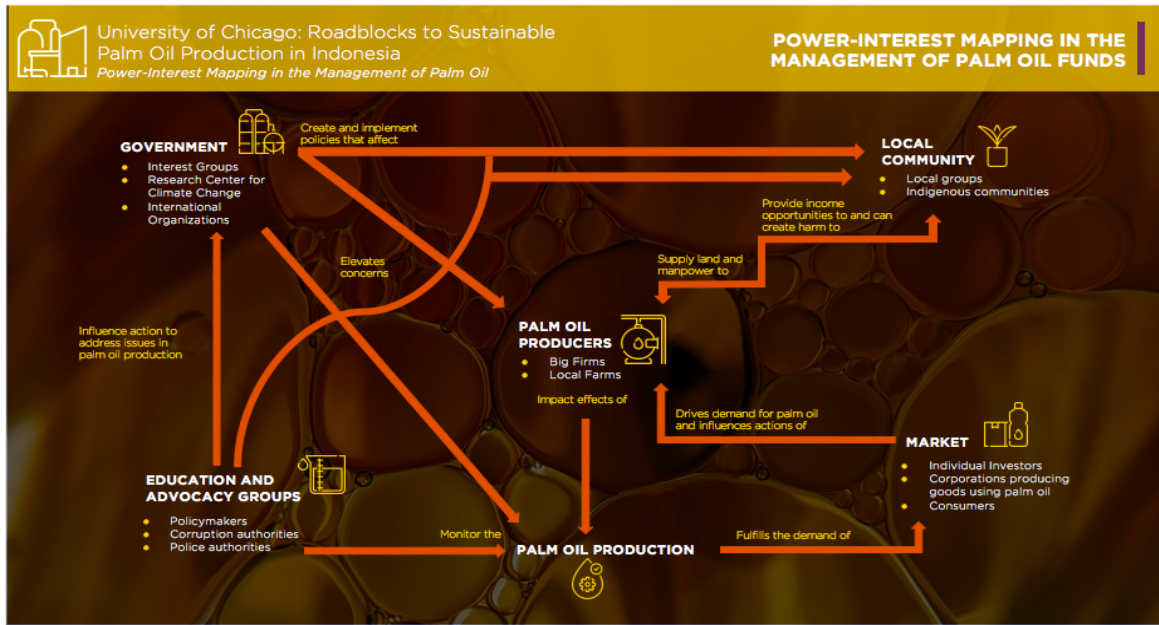
1. Mapping

Our mapping uses the four-layers approach. We categorize the stakeholders into the main and sub-groups. The main groups are the policymakers, interest groups, local community, and the market. We define key stakeholders which we discussed in this submission whose powers are determinant enough to influence the growth of palm oil production. We also define the market side to show clearly how palm oil products are essential to all markets, which emphasize and illustrate the reasons why they cannot be cut off from Indonesians' life.



2. Interactions

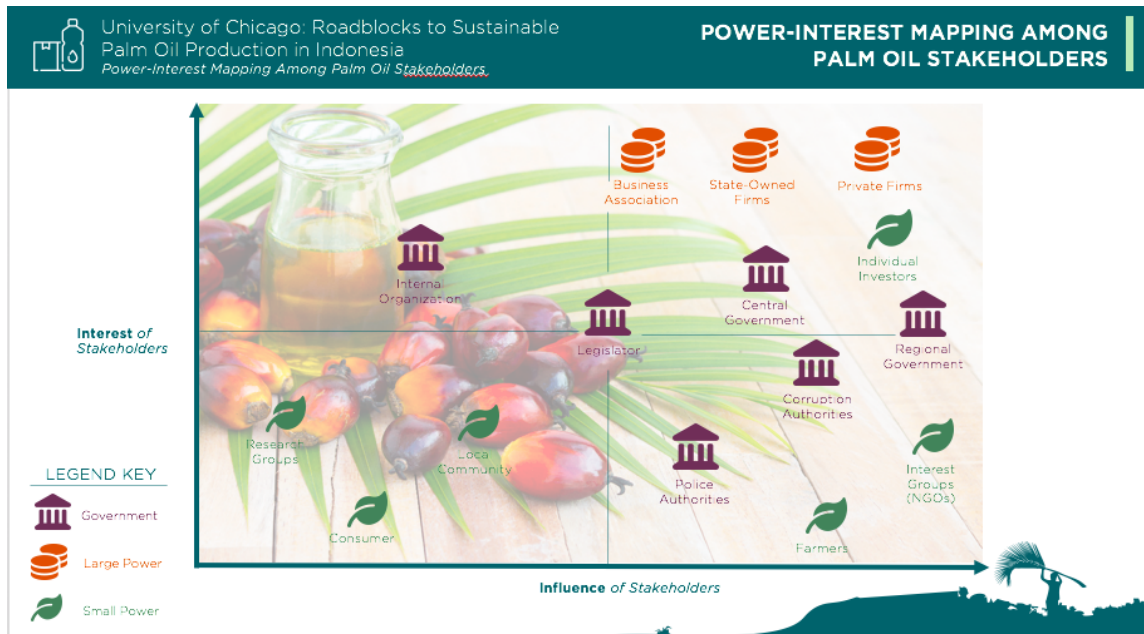
We noticed that key stakeholders in the supply chains are interrelated, therefore we mapped the relationship and roles in producing palm oil. Two stakeholders are dominant; first the government and second major palm oil companies. The government set up regulations and compliance of all the players in the supply and demand chain. It makes the government have significant roles in shaping the supplies and regulating the demand in the domestic market. While the major companies, due to the resources owned and interest they have, possess more power to lobby the government for more lenient regulation that will benefit them.



3. Power-Interest Map

All stakeholders have respective interests which drive them to influence each other. Here, we can understand how private firms dominate the power-interest on the right side. The other sectors, state-owned firms, and business associations remain at the same level with lower interests than the private ones. While the government as the regulator is also in the same quadrant as the firms, the farmers and other interest groups are in the bottom-right along with the police and corruption authorities. Positive change can start to happen if most Indonesians realize that these two stakeholders are at the root of palm oil issues. We found that the components in the cycle are connected

and reinforcing to one another.



V. Current Solutions Landscape

A. Institutional Solution

Through a 2014 Act about Plantation, the government is allowed to collect funding from palm oil corporations and farmers to finance the development of sustainable palm oil independent from private interests. The government further established a non-echelon agency, called the Palm Oil Plantation Fund Management Agency or BDPDKS ("Agency"). The Agency consisted of members of the board of directors, supervisors, and the advisory committee. Each director/supervisor is appointed directly by the Minister of Finance, while the committee consists of several ministries handling the palm oil affairs. Their responsibility is to manage the allocation and collection of funding to several activities, including research and development, marketing, development of biodiesel, replanting, education, and training, and providing facilities and equipment to develop a sustainable palm oil industry. From 2014 to 2020, the Agency has successfully raised as much as \$3.5 million in 5 years¹⁶, according to the Agency's incumbent Chairman before the parliament, and in 2020 raised \$1.6 million as indicated by Indonesia's 2020 Financial Statement¹⁷.

¹⁶ Indonesia's Palm Oil Plantation Fund Agency. (2020). "Palm Oil Plantation Fund Agency fundraised Rp 51 Billion between 2015 until 2019". Taken from <https://www.bdpd.or.id/bdpdps-himpun-dana-rp51-triliun-dalam-periode-2015-2019>

¹⁷ Indonesia's Palm Oil Plantation Fund Agency. (2021). "Palm Oil Plantation Fund Agency 2020 Annual Report". Taken from <http://www.bdpd.or.id/uploads/files/AR%20BDPKS%202020%20-%2002-12-2021%20Hi.pdf>

B. Regulation Reforms and Sustainability Certification: ISPO

In response to the deforestation, the central authority halted land conversion to open new palm oil plantations and reviewed the compliance of existing businesses. After a decade, the regulation was revoked last September, without any explicit reasons. Moreover, to address the issue of sustainability, the government has been issuing the above-mentioned Indonesian Sustainable Palm Oil (ISPO). Indonesia has been issuing the ISPO certificate since 2011 to 750 companies as of June 2021¹⁸. Adopting the “No Deforestation, no Peat, no Exploitation,” the government wants to address issues around palm oil industries such as the prohibition of hiring child laborers, environmental impact assessments, and transparency. To this date, existing companies and individuals having palm oil plantations must acquire the ISPO before conducting their business operations.

VI. Gaps and Levers

a. Gaps

1. Conflict of Interests.

“How come three big companies can sit in the Advisory Committee? No people’s representation in BPD PKS? For whom this agency is established?” said Congressman Lema during our interview. This comment was also previously voiced by a farmer’s union, Indonesia’s Association of Palm Oil Farmers. Throughout their investigation¹⁹, they found that the 2015-2020 management of this Agency consisted of people whose interests conflicted with public interests. Those companies are PT Triputra Argo Lestari which recorded 2021 sales of as much as \$500 million²⁰. PT Astra International, a leading palm oil producer which owns around 290,000 hectares plantations²¹; and PT. Surya Dumai Group recorded many lands dispute cases

¹⁸ Bisnis News. (2021). “Ministry of Agriculture reported 755 ISPO certificates were issued”. Taken from <https://ekonomi.bisnis.com/read/20210607/99/1402274/kementan-sudah-ada-755-sertifikat-ispo-kelapa-sawit-tahun-lalu>

¹⁹ Palm Oil Farmers Union. (2020). “Bad Governance of Indonesia’s Palm Oil Plantation Fund Agency is Detrimental to Palm Oil Farmers”. Taken from <https://spks.or.id/file/publikasi/Kajian-Good-Governance-BPD-SAWIT.pdf>

²⁰ Pahlevi, R. (2022). “Palm Oil Company Triputra Agro Recorded Profit Increase of 27%”. Taken from <https://databoks.katadata.co.id/datapublish/2022/03/28/perusahaan-sawit-triputra-agro-catat-kenaikan-laba-27>

²¹ Indonesia Investments. “Astra Agro Lestari Company Profile”. Taken from <https://www.indonesia-investments.com/id/business/indonesian-companies/agro-astari-lestari/item196>

recently (2018²² and 2021²³) and environmental cases in Riau province²⁴. Those companies owned large shares of palm oil production and have a bad reputation in so many cases, which thus raises questions about their presence in the Agency.

Congressman Lema said the allocation of funding of the Agency tends to be proportionally heavy on developing biodiesel which benefits companies more, compared to the disbursed money allotted to improve the sustainability of people-owned plantations, enhance the quality of facilities and equipment and to educate people. Their presence makes the Agency, a tool created for the sole purpose of allocating funds to sustainable production, less effective and finding solutions that do not directly benefit the interest of big private stakeholders. This problem is the proof of how the negative interaction of two powerful stakeholders, government and private sectors, can cause issues regardless of the solutions.

2. Deficiencies in ISPO Certification

The ISPO has not accommodated the human rights problem raised which particularly affects the traditional community.²⁵ Although the ISPO briefly refers to Indonesian law, there is no stricter requirement about the “Free, Prior and Informed Concern” principle which is adopted under the RSPO certification.²⁶ Under the principle, the applicant for certification must prove the approval from the local/traditional communities. The latest ISPO does not specifically adopt protection of biodiversity based on High Conservation Value which considers global conditions and is adopted mostly by international communities.²⁷

In 2020, the Indonesian President updated the regulation in issuing the ISPO since its establishment. Under the new regulation²⁸, the government tries to address the certificate’s deficiencies. For years, many NGOs have questioned some principles

²² INHU. (2018). “Surya Dumai Co. Ltd. is protested by activists after land takeover”. Taken from <https://www.okeline.com/berita-3819-lahan-ditake-over-pt-surya-dumai-didemo>

²³ Kurniawansyah, R. (2021). “Surya Dumai Co. Ltd is sued after grabbing 26 lands owned by the Ministry of Environment’s civil servants retirees”. Taken from <https://mediaindonesia.com/nusantara/382332/serobot-tanah-26-pensiunan-klhk-surya-dumai-group-digugat>

²⁴ Yugo, O. (2018). “Legal officers investigate damage to canal blocks by Surya Dumai Co. Ltd. in Buruk Bakul Village”. Taken from <https://jikalahari.or.id/kabar/rilis/aparat-hukum-usut-tuntas-pengrusakan-sekat-kanal-oleh-pt-surya-dumai-agrindo-di-desa-buruk-bakul/>

²⁵ Environmental Investigation Agency and Kaoem Telapak. 2020. “Fake Hope? An Analysis on the Newest Draft of the ISPO”. accessed through https://eia-international.org/wp-content/uploads/ISPO_Brief_Indonesian.pdf

²⁶ Courtney L Morgans, et al. 2018. “The impact of ISPO certification on economic, social and environmental aspect in the palm oil plantation”

²⁷ UNDP. 2015. “Joint Study on the Similarities and Differences of the ISPO and the RSPO Certification Systems”, published by the Ministry of Agriculture of the Republic of Indonesia

²⁸ Indonesia’s Financial Audit Agency. (2020). “Presidential Regulation on Indonesia’s Sustainable Palm Oil Plantation Certification System”. Taken from <https://peraturan.bpk.go.id/Home/Details/134802/perpres-no-44-tahun-2020>

and criteria which support the private sector more than the low-income communities. Researchers²⁹ also put doubt³⁰ about the independence of the institution responsible for issuing the certificates, although it was eventually answered by the recent update.³¹ Our source, Mr. Sumardi, mentioned that although certification plays a role, *“the requirements need to be strict enough.”* The government has its own standard of conservation, which is inadequate to protect all forests and are not strictly tied to companies.

3. A lack of Urgency and Reward for Locals and Farms

The government should realize the costs in obtaining the ISPO, particularly for individual farmers.³² The obligation of individual farmers, while warmly accepted under the new regulation, has added another cost for them to acquire certificates. Oppositely, small firms are rewarded in terms of profit for the rapid expansion of production. However, not every producer is obligated to acquire the certifications. ISPO certificate is required for companies that have integrated plantations, plantations without factories, and factories without plantations. As for the people-owned plantations, the ISPO certificate is voluntary. Many small scale firms lack the structure necessary to meet these government quotas unless they sell their products at higher prices and lower the quality of working conditions³³.

b. Levers

The gaps identified are the low standards, cumbersome process, a lack of support for local communities, and lack of enforcement. Corresponding levers are the promotion of collaboration between ISPO and RSPO through joint audits, allocating funds to individuals and indigenous groups, improving monitoring of firms and transparency within the Agency meant to protect public interests, and strengthening local authority against big palm. Another important lever is the Ministry of Finance's restructuring of the Palm Oil Plantation Agency such that farmer associations and

²⁹ Choiruzzad, S. A. B. , et al. (2021). "The ambiguities of Indonesian Sustainable Palm Oil certification: internal incoherence, governance rescaling and state transformation". Taken from <https://link.springer.com/article/10.1007/s10308-020-00593-0>

³⁰ Pramudya, E. P., et al. (2018). "Friend or foe? The various responses of the Indonesian state to sustainable non-state palm oil initiatives". Taken from <https://ajssr.springeropen.com/articles/10.1186/s41180-018-0018-y>

³¹ WWF. 2020. " Official Statatement on the WWF's Position in regard to the Presidential Regulation No. 44 of 2020", accessed through <https://www.wwf.id/publikasi/pernyataan-resmi-posisi-wwf-indonesia-terhadap-perpres-nomor-44-tahun-2020>

³² Hutabarat, Sakti et. Al. 2018. Cost and Benefits of Certification of Independent Oil Palm Smallholders in Indonesia. International Food and Agribusiness Management Review: 21 (6)- Pages: 681 - 700

³³ Morgans, C. L., (2018). "Evaluating the effectiveness of palm oil certification in delivering multiple sustainability objectives". Taken from <https://iopscience.iop.org/article/10.1088/1748-9326/aac6f4/pdf>

interest groups are involved in the decision-making process. By making local farmers and indigenous people key stakeholders, it weakens the influence of individuals or individual corporations with more landshare and gives more power to groups that have high interest in the region's economic and environmental health. This balancing of power would also make it difficult for farms to hide human rights abuses and labor issues. In summary, the biggest lever of change is divorcing the conflict of interests found within the system.

Gap	Lever	Intervention
ISPO certification has lower standards and usage than RSPO	Collaboration of ISPO and RSPO in joint audits and adopting several principles, particularly on HCV.	Government should engage the RSPO in conducting collaborations for the joint audits.
The lack of law enforcement in monitoring regional government and land authority's transparency in issuing permit	Strengthening the law enforcement by streamlining authority and coordination for the enforcement from national to regional level.	President should establish a task force, along with an independent body of investigators, that reviews permits
The Palm Oil Plantation Agency is not independent from private sectors' powerful influence.	The Ministry of Finance restructuring the Agency, so composition can include farmers as the key stakeholders.	The involvement of interest groups and farmers associations to oversee the Agency's activities.

Gap	Lever	Intervention
ISPO is costly and the requirements are difficult for individual farmers to obtain.	The government already allocate fund to help the individual farmers satisfy the sustainability requirements.	The Palm Oil Plantation Agency should increase their budget on financing the individual farmers in satisfying the requirements and allow NGO to assist them.
Lack of monitoring and evaluation for the protection of low-income workers and child labors.	Improve data collection and monitoring of low-income workers and child labors.	Adapt international standards on these indicators to country context. Government shall create appropriate data collection and monitoring systems.

VII. What do we learn?

The harmful effects of palm oil are well known and documented. What is less known is the disparities in power between the stakeholders and how the profitability of palm oil weakens Indonesian institutions meant to protect the public interest. It is often businesses and big associations that hold the most power and interest over legislation and government, giving little incentive for law enforcement to oversee or effectively punish firms when they violate environmental and labor rights that would create sustainable palm oil. There is also the perspective of dependence. The economic benefits provided to rural communities, while not ideal conditions, often outweigh the costs of unfair business practices. In short, there are no mechanisms in place to create sustainable palm oil. In fact, we see the opposite represented in our mapping. There are reinforcing positive cycles that reward the destructive business practices in palm production.

We hope that this system analysis will give Indonesians, and other nations in similar monoculture systems, the ability to see their own negative cycles and a tool to identify the players that hold the most institutional power. Only by eliminating these conflicts of interest will we see results in the fight for an economy and forest that will be there for the next generation.