Palm Oil Toolkit
Briefing Note 02A

Understand the Supply Chain: Main Environmental and Social Risks

Understanding the palm oil supply chain and the environmental and social risks at production level.

Version 1.0

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Introduction to the Palm Oil Toolkit

"Responsible Sourcing: A Palm Oil Toolkit" aims to support companies in the responsible sourcing of palm oil, and its by-products and derivatives. The toolkit is designed for all companies – refineries, traders and manufacturers in all consuming countries, particularly in Asian markets such as China and India – that are beginning to implement responsible sourcing. This guide provides a clear and accessible overview of the many initiatives that aim to address key environmental and social issues in the palm supply chain, namely deforestation, development on peat and human rights violations.

The Palm Oil Toolkit is structured around five key elements of a company's responsible sourcing process (see Figure 1). Each element is the subject of a separate Briefing Note:

- **Element 1: Assess and plan implementation**
- **Element 2A: Understand the supply chain: main environmental and social risks**
- **Element 2B: Understand the supply chain: traceability and risk analysis**
- **Element 3: Engage within and beyond supply chains**
- **Element 4: Monitor, verify and report**
- **Element 5: Monitor emerging issues and responses**

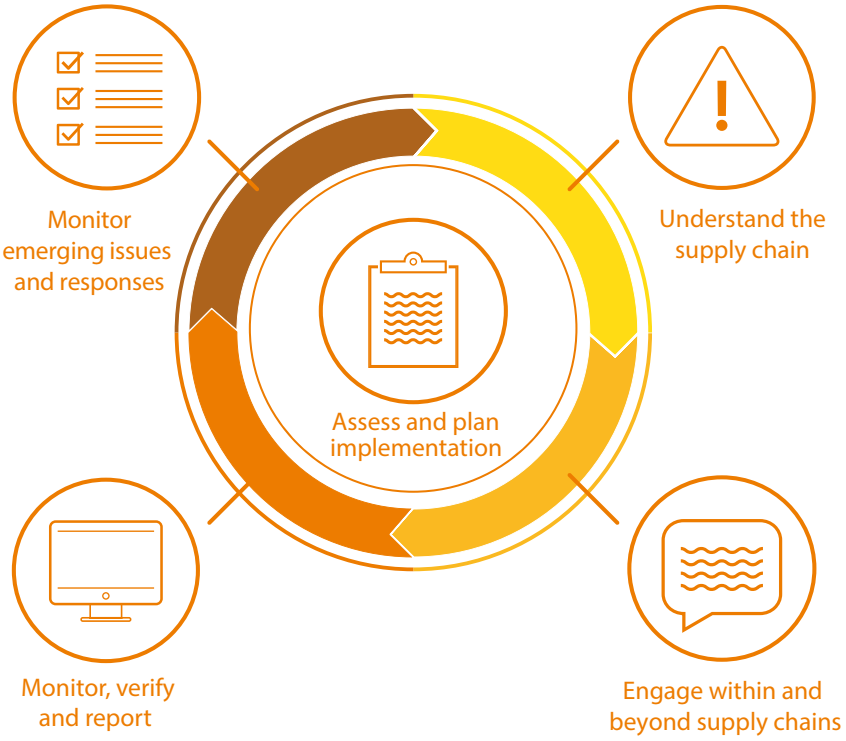

Figure 1:
The 5-element approach for sourcing palm oil responsibly

This briefing note provides guidance on understanding the inherent environmental and social risks and their impacts in oil palm production, especially those associated with cultivation in producing countries. It is important for companies to be aware of the negative environmental and social risks and impacts happening within their supply chains, as this allows companies to identify non-compliances with their policies and plan for further engagement to address and mitigate these risks. There are emerging risks that have had less scrutiny and are now coming to the forefront. This briefing note expands on the current threats, their impacts and how they exacerbate and lead to the emerging risks, which will be covered in detail in **Briefing Note 05: Monitor emerging issues and responses**. Another **Briefing Note 02B: Understand the supply chain: traceability and risk analysis** will expand on implementing traceability in the supply chain and carrying out assessments to identify the risks specific to the supply chain.

01 Oil palm production regions

Global palm oil production is concentrated in Southeast Asia, with Malaysia and Indonesia accounting for 85% of the world's total production. The other main producing countries are Thailand, Colombia, and Nigeria. As shown in Figure 2 and 3, the producing countries are mostly located within the tropical region that offers the optimal conditions to cultivate oil palm.

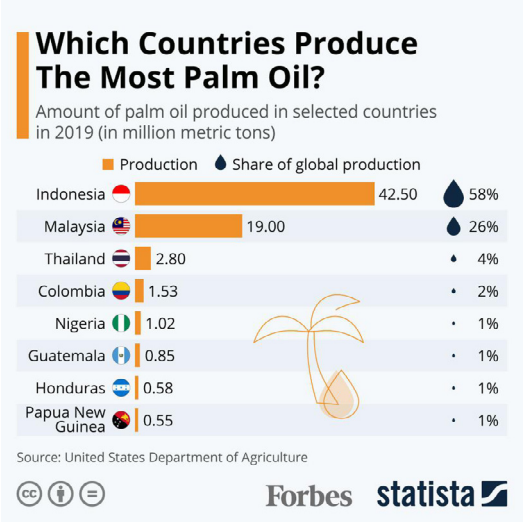

Figure 2:
Amount of palm oil produced in selected countries in 2019
(Graph source: Statista)[1]

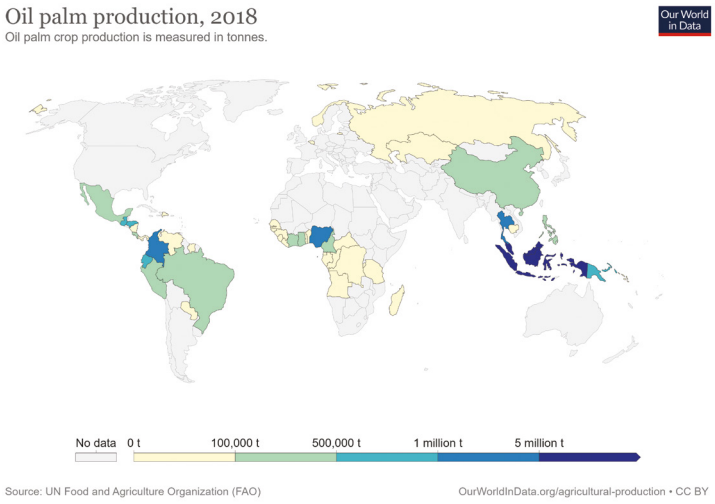

Figure 3:
Map showing global oil palm production in 2018 (Image source: Our World in Data)[2]

02 Environmental threats at production level

The main environmental threats and impacts, such as **land use change resulting in deforestation, biodiversity loss, peat conversion, and ongoing production impacts such as chemical use, carbon emissions, air pollution and water pollution**, are some of the driving factors to address in oil palm production.

2.1 Land use change

Increasing demand for palm oil and its corresponding growth in production has led to increasing land use change in the equatorial belt, from old growth tropical forests to palm plantations. About half of oil palm development between 1972 and 2015 expanded into tropical forests and peatlands while the remaining development has replaced croplands, pasturelands, shrublands and other land uses.[3]

Deforestation

Oil palm expansion accounted for about 50% of deforestation in Malaysia, more than 15% in Indonesia, about 10% in other parts of Southeast Asia, and about 4 – 5 % in West Africa.[3]

From 2001 to 2019, 95% of forest loss in Malaysia was due to commodity-driven deforestation which coincided with a doubling in oil palm planted area to 5.87 million hectares in 2020 (see Figure 4).[4] Similarly, in Indonesia, the main oil palm regions are Sumatra and Kalimantan, with recent expansions into Sulawesi and Papua. In the same timeframe, the cultivated area for large concessions grew to 10.4 million hectares and to 5.96 million hectares for smallholder production.[5]

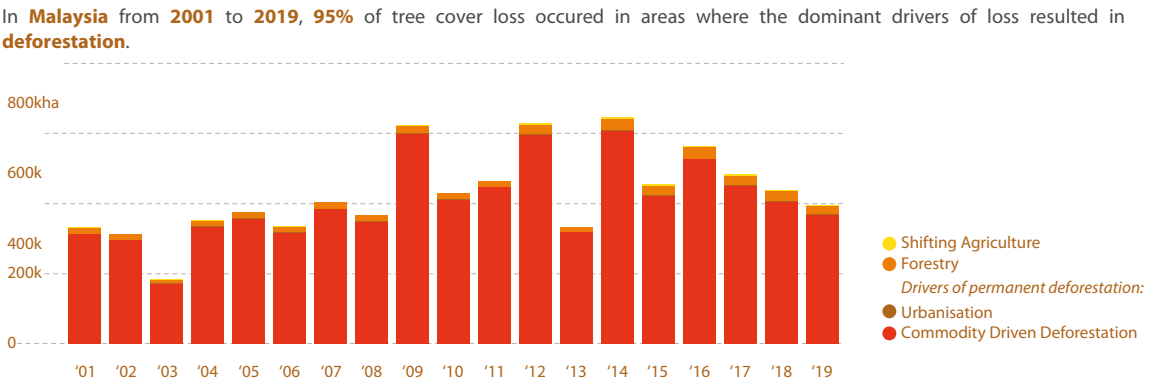

Figure 4:
Annual tree cover loss by dominant driver in Malaysia (Graph source: Global Forest Watch; retrieved in November 2021).[6]

The tropical forests of Malaysia and Indonesia contain some of the richest and most threatened rainforests in the world. These forests have several important functions such as regulating ecosystem services and providing habitats and resources for animals and local communities by synchronising with the ocean-atmosphere phenomenon El Niño – Southern Oscillation (ENSO),[7] carbon capture and storage to mitigate the level of greenhouse gases in the atmosphere, soil protection and water regulation. If the current trend of deforestation continues, communities in these areas will lose such ecosystem services. Hence there is an urgent need to collectively stop deforestation, especially for the expansion of commodities.

As scrutiny from global stakeholders has grown, palm oil companies have been under increasing pressure to ensure that the land used to cultivate oil palm is not converted from forests. Supporting this effort, Indonesia has implemented a three-year moratorium on new oil palm plantation expansion, limiting development to degraded land and existing agricultural land[8] while Malaysia has pledged to cap the country's total oil palm planted area to 6.5 million hectares.[9] Oil palm industry leaders in the private sector such as Wilmar, Musim Mas, Golden Agri-Resources, and others have also committed to No Deforestation, No Peat and No Exploitation policies (NDPE), which has contributed to reduced oil palm-related deforestation rates.[10]

While a reduction in large oil palm concessions-related deforestation has been observed, a worrying trend of increased deforestation linked to smallholders' farms has been observed in other growing regions, for example as seen in Africa.[11] The challenge the industry is facing is how to address these increasing levels of deforestation linked to smallholders, as it concerns balancing lives and livelihoods.

Conversion of peatlands

Peatlands are biodiverse, carbon-rich wetland ecosystems with cumulative layers of organic matter that are important carbon sinks. Frequent flooding prevents the full decomposition of organic matter, resulting in a dome that rises above flood levels. This process of peat composition takes thousands of years as organic matter accumulates very slowly,[12] as shown in Figure 5, and if undisturbed, can lock in at least 20 times more carbon than other forest types. Draining and clearing peat swamps releases a huge amount of carbon in a short period of time and threatens unique endemic species, such as the orangutan in the tropical peatlands of Southeast Asia.[13]

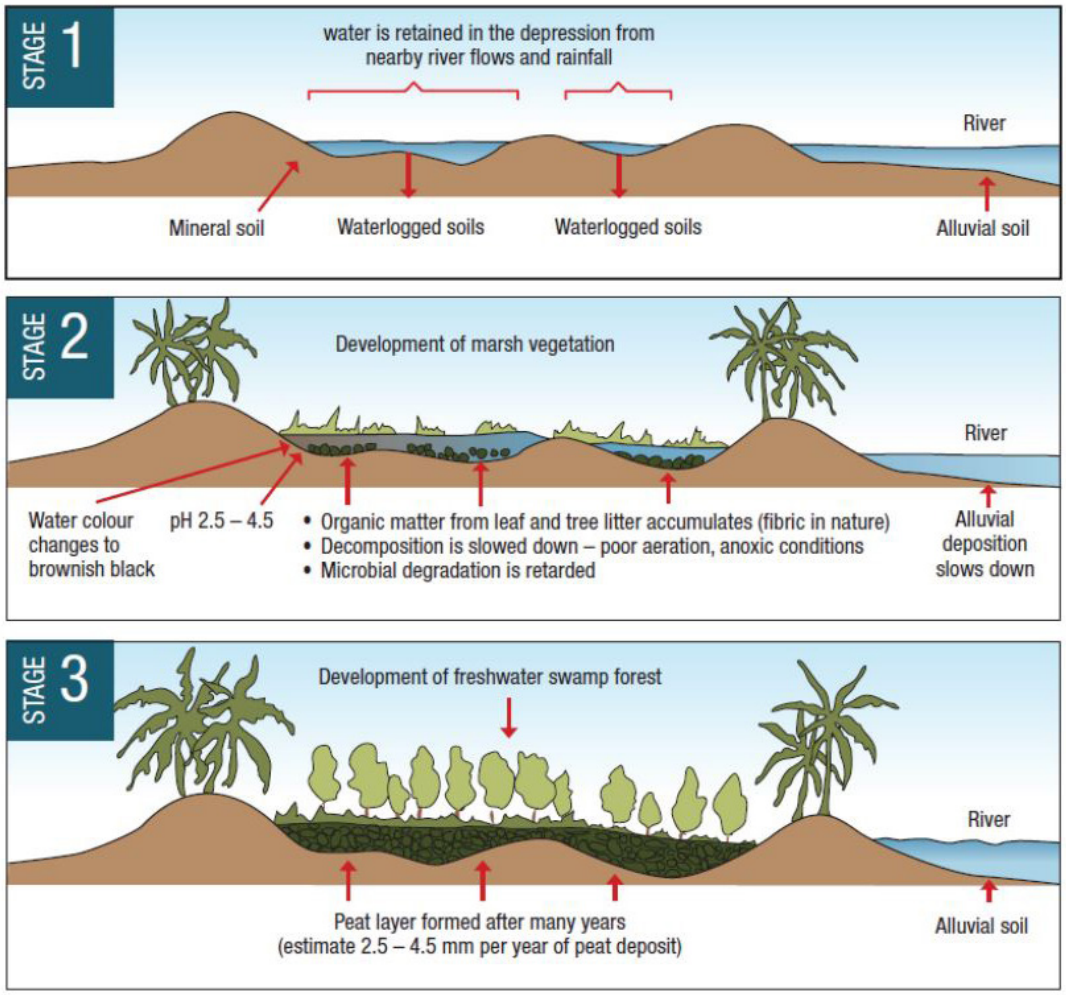

Figure 5:
Stages in the development of tropical peat swamp forest (UNDP 2006) (Image source: Prentice, R.C., 2011).[14]

Fire use for land clearing

The rapid expansion of oil palm growing areas has led to an increase in destructive land clearing practices such as slash and burn, mainly by smallholders. This is despite the ASEAN Agreement in 1999 by environment ministers in the region to adopt the policy of zero burning in various commodity crops.[15]

The reasons for continued fire use for crop planting in places like Indonesia[16] and other producing regions outside of Southeast Asia such as Honduras[17] are because smallholders may not have access to more acceptable resources. Burning to clear the land is a cheaper and faster land clearing method than manual methods such as machetes or sickles, which can take several months.[18]

2.2 Oil palm cultivation impacts

Production practices in oil palm cultivation and processing, such as chemical use or mill effluent discharge, also pose threats to the surrounding environment.

Chemical use and scheduled waste management

Prolific agricultural development such as to produce palm oil is associated with the excessive use of chemical fertilisers, pesticides, and herbicides. Producers have become deeply reliant on chemical fertilisers to increase yields. The impacts of excessive application range from nutrient inhibition to poisoning. Two chemicals used as pesticides that have garnered a notorious reputation for their weed killing effectiveness and high levels of toxicity are Paraquat and Glyphosate. Paraquat has been banned in 32 countries,[19] while Glyphosate is banned or restricted in 20 countries.[20]

The heavy reliance on such chemicals leads to the accumulation of scheduled waste that producers find difficult to dispose of safely due to remote locations and limited access to disposal facilities. Scheduled waste possesses hazardous characteristics and disposal can have harmful effects on public health and the environment.

Mill effluent discharge

Mills that process oil palm fruits into crude palm oil (CPO) produce waste products such as Palm Oil Mill Effluent (POME). An estimated 2.5 – 3.5 tonnes of POME are generated for every tonne of CPO produced.[21] Untreated and improperly treated POME released into water bodies can reduce aquatic biodiversity and harm aquatic ecosystems as it has a high biochemical oxygen demand (BOD) and chemical oxygen demand (COD). The easiest ways to dispose of these waste products is to burn them and to release the effluents into a nearby stream as proper treatment can be costly. This method of disposal is detrimental to the surrounding community and environment. While most mills at present treat POME prior to discharging it, treated POME has been noted to affect the environment adversely as it still contains a significant amount of organic matter.[22]

2.3 Environmental impacts

Land use change from oil palm expansion has created a cascading effect on the environment and the communities surrounding these plantations in the region. Furthermore, there are more impacts from ongoing palm oil production, some of which are exacerbated by the impacts of land use change.

Figure 6: Forests cleared for oil palm plantations in Malaysia in 2015 (image source: Rich Carey / Shutterstock.com).

Deforestation has fragmented forested landscapes by isolating forests into patches, impacting their usability as a refuge for already threatened species (see Figure 6). These include reduced habitats for species such as tigers, orangutans, elephants and sun bears, negatively impacting their populations. As these species play vital roles in the forest ecosystem these impacts can exacerbate disturbances in trophic regulation, nutrient cycling, seed dispersal and ultimately, the maintenance of the forest itself.[23]

The decrease in habitat for wildlife comes with a cost. When animals are unable to acquire sufficient resources, they will move into areas populated by humans as well as interact more with the influx of humans in the areas converted for agriculture. This may cause human-wildlife conflicts such as killing of threatened species, poaching and unregulated hunting that may lead to the spread of diseases such as coronaviruses, rabies, avian flu, and zika.[24]

Soil erosion and water pollution

As land is cleared and prepared for cultivation, soil will be left exposed, thereby causing erosion and landslides, especially on slopes or riverbanks. Bare soil could also reduce soil fertility because nutrients are not absorbed due to soil compaction by heavy machinery used in land preparation. Water flows on these bare soils are increased due to the lack of plant roots to absorb water that leads to floods in surrounding areas.

Figure 7:
A river with sedimentary runoff in a palm oil plantation in Malaysia. (Image source: Proforest)

This would lead to chemicals such as fertilisers and pesticides washing into waterways, especially when applied in excess (see Figure 7). Such pollutants compounded by the addition of waste products like POME from mills and other agricultural waste products will cause issues such as algal blooms, acidification, nitrification, and others, which will negatively affect riverine and marine ecosystems downstream and the communities along these water bodies who depend on them.

Greenhouse gas (GHG) emissions

Land clearing also affects air quality. More notably, the clearing and burning of peat and forests has resulted in extensive, repeated transboundary haze pollution events of thick smog covering Southeast Asia for several months a year as winds carry the smoke from the fires burning for days on end across borders.

These haze events have resulted in deaths, long-term detrimental health effects, economic losses, and biodiversity losses. The transboundary haze events of 1997 and 2015 have been recorded as the most impactful haze events of recent times. In 1997 – 1998, it was estimated that the fires and subsequent haze in Southeast Asia released an estimated 1.45 Gt of CO_2, equivalent to almost half the annual global atmospheric CO_2 growth,[25] and caused at least $8.5 billion in damages.[26] In 2015, the fires in Indonesia were estimated to have cost at least $16.1 billion.[26] The continued annual release of large amounts of carbon for extended periods of time, compounded with untreated mill effluents releasing methane into the atmosphere, will also contribute to global warming and climate change. Figure 8 shows a satellite image of fire hotspot detections in Malaysia, Indonesia, Singapore and Brunei during the height of the 2019 haze event.

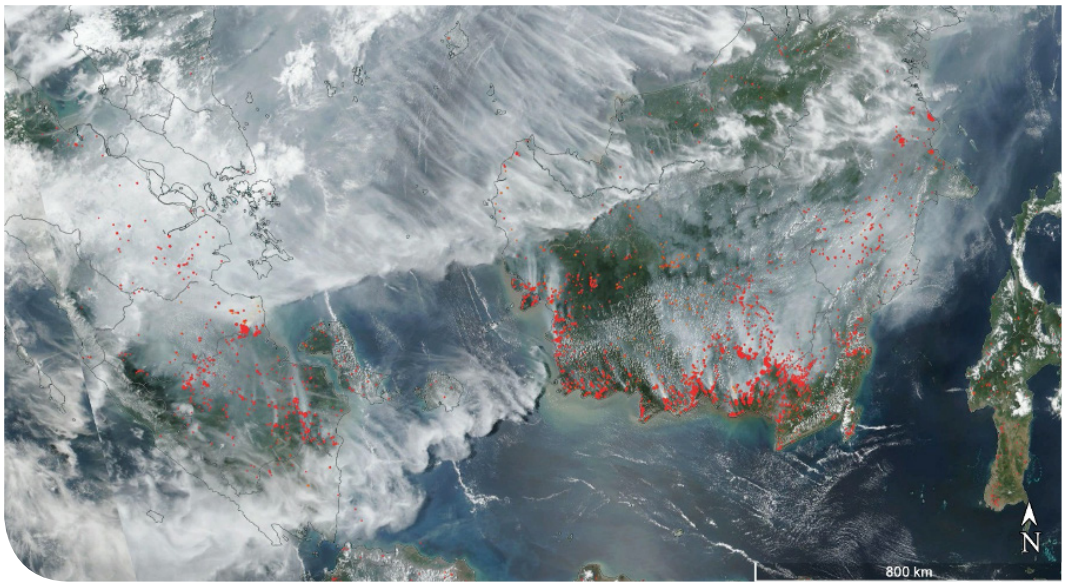

Figure 8:
A true colour satellite image with fire hotspot detections (red) over parts of Malaysia, Indonesia, Singapore and Brunei during the height of the 2019 haze, 14 September 2019 (NASA Terra MODIS). Visible plumes of smoke shroud much of Kalimantan, while plumes from fires on Sumatra are driven by the wind northwards towards Singapore and the Malay Peninsula (Image Source: NASA).[27]

The emissions generated from indiscriminate oil palm expansion will not help in meeting the target of limiting global warming to 1.5°C that countries have adopted under the Paris Agreement in 2016. The synthesis report on the Nationally Determined Contributions (NDCs) of country Parties prior to the Conference of Parties in 2021 (COP26) has indicated that the current reduction in emissions fall far short of what is required to attain this goal and deep reductions will be necessary.[28]

Failure could have devastating effects around the world. In 2021 alone there has been extreme flooding in Henan province, China, with 200,00 evacuations; wildfires in southern Europe, where Greece's second largest island, Evia, had to be evacuated; and a devastating cyclone in Indonesia that displaced at least 22,000 people. These are just a few of the many incidences of loss and suffering endured by communities globally due to the unprecedented effects of climate change.

2.4 Emerging environmental risks

The existing environmental threats and impacts will lead to further threats and exacerbated impacts, such as the increasing effects of climate change, including those affecting oil palm cultivation itself. Other issues such as water pollution, water scarcity and waste management are emerging. With water already polluted and streams drying up due to deforestation and climate change, many areas are starting to experience water scarcity as well. While the oil palm industry may not be the sole source of all these issues, it should be acknowledged that the activities from palm oil development at such a massive scale across the tropics have contributed to these effects at a local, national, and regional scale. These issues will be further expanded in **Briefing Note 05**.

03 Social issues at production level

The palm oil sector, specifically in the upstream production sector in plantations and farms, is mired with various human rights challenges, including risks in labour (child labour included) as well as land rights (i.e. rights of indigenous peoples and local communities) and threats to human rights defenders. These are due to many underlying root causes such as poor governance and enforcement by the state, and lack of compliance with good labour practices by businesses. Figure 9 below provides an overview of human rights issues that are prevalent in the palm oil supply chain as well as the groups of people most at risk.

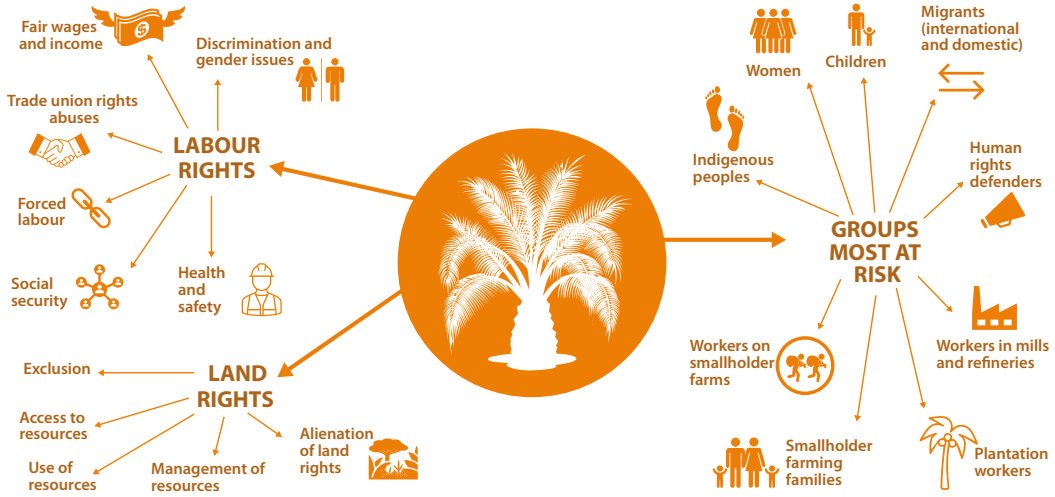

Figure 9:
An overview of human rights issues in the palm oil supply chain.
(Image source: Proforest infographic of the findings of the **Dutch Banking Agreement (DBA) analysis of severe human rights issues in the palm oil value chain (2019)**)

There are growing trends by importing countries to impose trade sanctions for the violation of human rights at the port of entry on palm oil and its related products, for example, the U.S. Customs and Border Protection (CBP) Withhold Release Orders (WRO) imposed on Malaysian companies: Felda Global Ventures[29] and Sime Darby Plantations.[30] These sanctions can potentially lead to increased transparency and disclosure on social issues by palm companies.

This section will cover the existing challenges and provide insight into the drivers and consequences at the production regions where these violations are most prevalent. The following subsections will provide information on whose rights are being challenged, which rightsholders are most affected, and examples of how those rights are adversely impacted. Mapping these risks to specific regions will support the identification of risk areas in the supply chain with the implementation of traceability.

As per Figure 9, the subsections covered in this section are **labour rights (i.e. forced labour; workers' living conditions; fair wages and income; trade union rights abuses; discrimination, gender issues and social security; and health and safety), land rights, and groups most at risk**

(which includes children and human rights defenders). The subsection 'groups most at risk' will highlight risks associated with children and human rights defenders only, as the risks associated with other vulnerable groups will be covered in the preceding subsections. Issues and risks related to smallholders will be covered in **Briefing Note 05**.

3.1 Labour rights

Forced labour

The International Labour Organization (ILO) Forced Labour Convention, 1930 (No. 29), defined forced or compulsory labour as "all work of service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily."[31] It refers to situations where persons are either directly coerced into working through use of violence or intimidation, or by more subtle ways, such as manipulated debt, retention of identity documents or threats of denunciation to immigration authorities.[32]

Assessing forced labour risks in the palm oil sector in Indonesia and Malaysia[32]

A report released in 2018 by the Fair Labour Association (FLA) that was commissioned by the Consumer Goods Forum showed the risks of forced labour in the palm oil sector in Indonesia and Malaysia. The desktop study found that the groups most vulnerable to forced labour are casual workers and internal migrants in Indonesia, and foreign migrant workers in Malaysia. The rate of each of the forced labour indicators identified in each country through stakeholders and interviews are summarised in Figure 10 below:

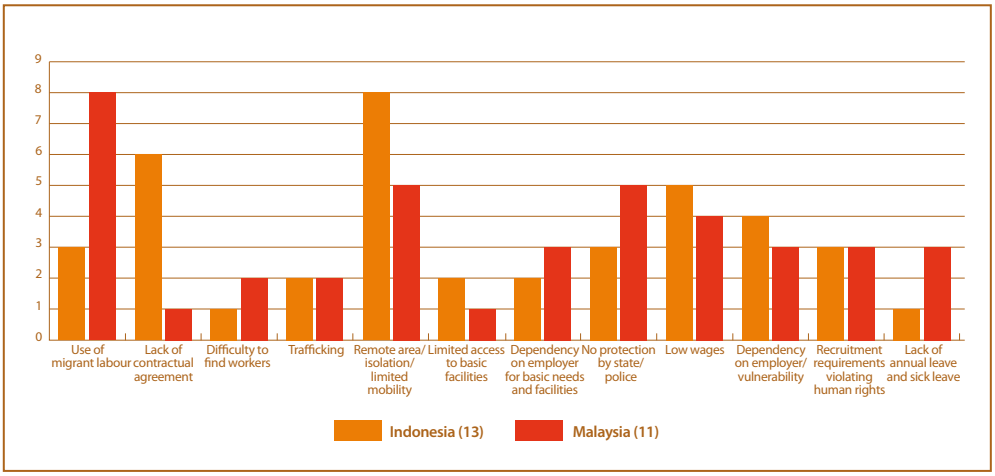

Figure 10:
Forced labour indicators mentioned in the reviewed literature and stakeholder surveys that can be elaborated under the CGF's three priority industry principles (Graph source: Fair Labour Association, 2018).

There are 11 main ILO forced labour indicators[33] with a few main indicators prevalent in palm oil production namely retention of identity documents, withholding of wages, debt bondage and abusive living conditions, which is even more relevant in light of the Covid-19 pandemic. The root causes of forced labour are poverty, poor law enforcement, corruption and poor adherence to good labour practices.[34] Specifically, forced labour in Indonesia is linked to poverty, intra-regional discriminaton and unrealistic productivity targets, the latter of which can subsequently enable child labour as workers' families try to substantiate the piece-rated income.

In Malaysia, forced labour is due to the inadequacy of recruitment processes and practices in both the countries of origin and destination. As the Malaysian oil palm cultivation sector relies heavily on migrant labour from regional countries,[35] the common issues faced are excessive recruitment

fees and related costs imposed on workers, which can enable an abusive environment for workers by employers, debt bondage and restricted freedom of movement at the country of destination. This may be further compounded by the unethical business conduct of agencies and informal brokers along the labour supply chain. Other issues relating to unethical business conduct include deceptive communication on terms and conditions of employment and the practice of contract substitution. Furthermore, the hiring of undocumented migrant workers is not an uncommon practice in the Malaysian palm sector to fill labour shortages. It has been reported that over 123,575 undocumented Indonesian and Filipino plantation workers were registered in Sabah in 2019.[36]

Workers' living conditions

The Covid-19 pandemic has highlighted the need for the provision of decent living conditions for workers in the palm sector, to control the increased exposure to and risk of virus transmission due to poor living conditions. Poor living conditions include sharing of beds; living in overcrowded spaces; and a lack of water supply, electricity, and sanitary requirements. Accommodation provided by the employer must be fit for human habitation with proper spacing, ventilation, and individual beds, and equipped with amenities such as water and power to ensure the health and well-being of these workers.

Malaysian law dictates that if an employer is to provide accommodation and amenities then they must be in a good condition.[37] In contrast, a 2021 case study conducted by Finnwatch in Pahang, Malaysia, highlights the poor living conditions in oil palm plantations, whereby the workers were not provided with mattresses or beds in their living quarters and the houses provided were deteriorating.[38] Figures 11 and 12 show examples of worker accommodation provided in poor conditions and in good conditions.

Figures 11 and 12:
Worker accommodation that was formerly provided in poor conditions (left) and then improved to good conditions (right) by a palm oil company in Malaysia. (Image source: Proforest)

Fair wages and income

Other adverse employment conditions faced by plantation workers are to do with their wages and long working hours.[39] Employers are paying minimum wages to workers in compliance with national laws and not fair wages that meet their basic needs with some disposable income.[40] For instance, a worker's wages should cover elements of a decent standard of living including "food, water, housing, education, health care, transportation, clothing and other essential needs including provision for unexpected events."[41] Along with receiving wages, workers should also be provided with:

1. Written information on the payment made (i.e. payslip), when to expect payments, and the mode and frequency of payment;
2. Reimbursement for overtime (where it is applicable); and
3. Permissible deductions under the law.

In Indonesia and Malaysia, it is common for plantation workers to be remunerated based on piece-rate pay or a productivity-linked wage (see box below).[42, 43, 44]

Case study in Indonesia and Malaysia: piece-rate remuneration system

In Indonesia, it is reported that the remuneration system used for plantation workers is piece-rate pay or a productivity-linked wage, in which workers are paid for their productivity rather than their time. As a result, workers must often work extra hard to achieve their targets and in some cases are compelled to seek help from their family members, including their children, to work with them in the plantations.

Similarly, in Malaysia, plantation workers receive wages based on piece rates as opposed to fixed wages, resulting in fluctuating monthly incomes ranging from RM500-RM2000 per month (where statutory minimum wage is RM1200). Furthermore, worker income varies depending on whether it is high-crop or low-crop season.

Casual workers make up a large part of the workforce and are defined as "workers who have an explicit or implicit contract of employment which is not expected to continue for more than a short period, whose duration is to be determined by national circumstances."[45] Even though casual work is mandated by law, these workers are often not provided employment contracts or access to employment benefits.[46] As such, some common issues faced by casual workers related to wages and working hours include: working over legal hours, not earning daily minimum wage, and termination of employment of pregnant workers.[46]

For example, in Africa it is common for temporary hired labour and seasonal workers to be hired based on verbal agreements and not written contracts. These workers may receive wages for their work or services but are without other conditions such as paid leave, sick leave, holidays and overtime. As such, due to the prevalence of the casual nature of such employment, social issues are easily exacerbated within the palm oil sector.

Trade union rights abuses

Freedom of association and collective bargaining is a fundamental human right for decent work and establishment of good industrial relationships.[47] These rights allow for workers (including migrant workers) to form associations such as unions of their own choosing and to collectively discuss and negotiate on work related terms, wages and working conditions.

Trade or labour unions provide platforms for workers to effectively engage in dialogue with their employers and the government to address social issues related to labour contracts, gender, migration and occupational health and safety.[48, 49] Most oil palm workers in Malaysia and Indonesia, despite legal permissibility, do not benefit from collective bargaining as they are not represented by independent unions or labour organisations.[39] Even when such unions are available, they are usually not sufficiently equipped to represent all types of workers, let alone negotiate with the plantation owners. In some cases, company-backed unions even undermine workers' freedom of association (see box above).[50]

Case study in Indonesia: company-backed unions undermine freedom of association

In this scenario, participating in a state-controlled union was mandatory for permanent plantation workers as membership fees were automatically deducted from their salaries. These workers were enlisted in the union without their consent and/or proper registration, and the state-controlled union did not advocate for their labour rights. Furthermore, in other cases, employers undertook anti-union actions, for example, disallowing workers to form unions and refusing to negotiate collective labour agreements.

As casual workers are excluded from union activity and hence lack representation as well as the ability to organise themselves, this further creates a more vulnerable class of workers that could potentially exacerbate labour abuses. The increasing prevalence of hiring casual or contract

workers in Indonesia results in an absence of these workers engaging and being represented in worker unions, causing in the reduction of scope for collective bargaining to materialise at the enterprise level.[51] Casual workers are then not able to propose any appropriate employment terms and conditions.

Discrimination, gender issues and social security

Discrimination at work, especially towards different demographics of vulnerable people, is common in the palm sector. A few factors that drive discrimination at work are the types of workers, where they are from, their education levels, the nature of the work and the remoteness of the sites. Female workers, casual workers and migrant workers are most vulnerable.

Gender discrimination in various forms is also common in the plantation sector particularly when the plantation sites are remote, isolated and hidden from scrutiny. Companies are less likely to hire women due to additional required safeguards, especially for pregnant women and nursing mothers. Women are usually paid less compared to men for similar jobs, or they are hired for more menial tasks, such as to pick up loose fruits. It has been reported that women in Indonesia are often casual workers who are hired by the day, with no long-term guarantee for their job security or pay.[50] In extreme cases in Indonesia, women workers in various palm oil companies have been ordered to hide in the jungle or encouraged to smile when sustainability auditors were present.[52] Gender issues will be covered in detail in **Discussion Paper 01: Gender equality in palm oil production and sourcing**.

In Indonesia, national regulations state that casual workers can be hired for 21 days a month or less, for a maximum of three consecutive months and paid a daily minimum wage; if a person's work extends beyond these limits, then the contract is then deemed permanent by default.[46] Despite such legal requirement, employment of casual workers contradicts such regulations and mandated procedures in practice. Casual workers (or contract workers/day labourers) are often employed on the basis of verbal agreements with ever changing characteristic on time, volume and attendance-based wages.[46] This is because they are mainly employed for maintenance roles such as spraying, fertilising and cleaning work, which are not considered core activities. It has been reported that casual workers (who are mainly women) are not provided the mandated social security benefits, and health and employment insurance.[46] Their undocumented employment status leaves them vulnerable as they are not provided rights to maternity leave, routine health check-ups, and proper sanitation facilities. They also face increased health risks due to direct contact with chemical substances as they are not provided with personal protective equipment (PPE).[53]

Harassment, intimidation, use of violence and sexual abuses

Besides facing discriminatory work conditions, female workers may also be vulnerable to other forms of sexual harassment, intimidation and, in the worst cases, physical and sexual abuse at work, especially by their supervisors due to site isolation and pre-existing social norms, as reported in both Malaysia and Indonesia.[52] These forms of sexual abuse can also be attributed to the lack of awareness by female workers of what constitutes sexual harassment or intimidation. Additionally, there is a lack of assurances on available safeguards such as grievance mechanisms that can protect the rights and interests of these women.

Health and safety

Plantation workers are subjected to unsafe working conditions due to exposure to dangerous pesticides, herbicides and other environmental pollution, such as air pollution from forest fires.[54] The effects of exposure to agrochemicals are often not mitigated by employers due to inadequate training, lack of compliance to occupational safety and health administration (OSHA) standard operating procedure or policy, lack of provision of PPE, no access to sanitation facilities and no scheduled access to medical care. The pesticides mentioned earlier, namely Paraquat and Glyphosate, can cause a wide range of health issues such as destroyed nails,

milky or red eyes, dizzy spells, trouble breathing and blurry vision.[52] These negative impacts are further exacerbated when pesticides are handled inadequately and with lack of PPE. Figure 13 depicts a good example of plantation workers that are adequately equipped with PPE (i.e. long sleeved shirts, aprons, rubber boots, gloves, face masks and protective goggles) to carry out activities such as agrochemical spraying. Recognising these detrimental health concerns, these pesticides are being phased out to varying degrees, for example, RSPO standards have banned the use of Paraquat.[55]

Figure 13:
Plantation workers equipped witih adequate PPE to carry out agrochemical spraying.
(Image source: Proforest)

3.2 Land rights

Land rights can be defined as "the rights of people (as individuals and groups) to occupy, use, access, control, and transfer land," [56] which should also include the rights of indigenous peoples and local communities. Land in this context covers both physical plots of land and access to natural resources for livelihood purposes. These rights often overlap and can be acquired in different ways and held by different people or groups.

Exclusion

There is a distinction between customary rights and formal land rights. Customary land rights are often informal and unwritten, accumulated over a long period of time with social and cultural legitimacy, whilst formal land rights are captured in official documents accompanied by a map of land boundaries.[56] Customary land rights, due to their nature of oral history and judicial pronouncements, are more challenging in terms of presenting proof of evidence. Formal land rights have gained due recognition, especially in a legal context, and hence are better enabled to be considered and respected by companies who are investing in existing or new operations. As such, in situations where indigenous peoples and local communities lack formal land rights, they might be excluded from or denied their right to determine who has access to land because they are not recognised in the formal land registration process.

Access to and management of resources

The global expansion of palm oil plantations has adversely impacted indigenous peoples' rights and local communities' land rights: access to, usage of, and management of the natural resources on which their livelihoods can depend. Such reliance on forests and their natural resources are primarily for satisfying their basic needs such as livelihoods, health, nutrition, and water, as well as retention of cultural identity.[57] As many indigenous peoples and local communities rely on these

resources as their socio-economic or livelihood options, these options will become restricted or eliminated through the loss of forest. As indigenous peoples and local communities' customary rights systems are often ignored and undermined, this subsequently results in loss of cultural sites.

Alienation of land rights

Documented violations include seizure of community lands without their Free, Prior and Informed Consent (FPIC) or fair compensation leading to involuntary displacement, denial of fundamental environmental rights, harassment and other forms of violence including criminalisation, and even killings of indigenous peoples and local communities in the course of defending the rights over their lands.[58] A few driving factors that have led to this rising issue of land conflicts are weak governmental regulations and law enforcement, and the lack of human rights due diligence performed by companies. In short, these communities are often negatively impacted due to lack of consultation and fair compensation by companies for their losses suffered through the destruction of forests, lands and natural resources.[57]

3.3 Groups most at risk

Children

The ILO defines child labour as "work that deprives children of their childhood, their potential and dignity, and that is harmful to physical and mental development."[59] Which particular forms of work are considered "child labour" depend on the child's age, and as determined by the socio-economic considerations of each country, type and hours of work performed, and work conditions.

The ILO definition of a child is any person below the age of 18. The child's age is a key reference to determine if any of the works or services carried out constitute child labour. In general, unacceptable child labour includes children that are working under the minimum age (this age is determined by the national government and lodged in the **ILO Ratifications of Convention No. 138 on Minimum Age Convention**).

For those over the minimum age but under the age of 18, they are referred to as "young workers" and are permitted to perform certain categories of work or services subject to appropriate terms and conditions set by the law on employment. For instance, in Malaysia[60,61] and Indonesia,[62] individuals of 15-18 years are considered young workers and are legally allowed to be involved in light work. **Worst forms of Child labour** is defined by the ILO as all forms of slavery, child prostitution, drug trafficking, and work that is likely to harm the health, safety or morals of children.[63] Child labour is prevalent when there are high poverty rates at the social level coupled with unfair employment terms in a sector. The piece-rated quota of Fresh Fruit Bunches (FFB) collection at production has forced many rural children to support their fathers, who are usually the primary breadwinners. This may be further exacerbated when there is a lack of schooling, education and leisure opportunities in rural and remote plantation settings. Additionally, children of plantation workers are also susceptible to child trafficking and other forms of exploitation.

Human rights defenders

Human rights defenders are "individuals or groups who act to promote, protect or strive for the protection and realisation of human rights and fundamental freedom through peaceful means." [64] Land, environmental and social defenders oppose unjust, discriminatory, corrupt or damaging exploitation of natural resources, the environment and human rights and often face potential violent repercussions for their work.[65] Some actions taken by the private sector, governments and other organisations may include criminalisation and arbitrary detention, violation of the right to freedom of opinion and expression, the right to peaceful assembly and freedom of association,

and sometimes even the violation of the right to safety and life.[66] As such, the state, businesses and the general public are expected to protect human rights defenders to safeguard democracy and its institution.

Conflicts related to human rights defenders have been reported in countries in Latin America, Africa and Southeast Asia. Specifically for the palm oil sector, plantations in Indonesia and Malaysia have come under scrutiny from environmental and social activists and consumer companies, addressing environmental concerns such as deforestation; however, labour and human rights abuses are still an emerging issue.[67] In 2020, international NGO Global Witness reported that nearly 40% of sampled palm oil mills within the supply chains of two major global brands have been accused of criminalising or attacking land and environmental defenders.[68] A case in Indonesia is highlighted here.[69]

Case study in Indonesia: murder of journalists

In Indonesia, two journalists were killed after being involved in a land dispute between residents of Panai Hilir in North Sumatra and a palm oil company which operated the nearby plantation. The report stated that in the police statement, the suspects arrested for the murder of the journalists admitted that the killings were an act of revenge "linked to palm oil plantation land".

The Declaration on Human Rights Defenders by the Office of the High Commissioner for Human Rights (OHCHR) provides specific rights and protections for human rights defenders.[70] For more information on how your company can start protecting and respecting human rights defenders, please refer to the guidance on **Human Rights Defenders: Guidance for Companies** published by Proforest.

3.4 Emerging social risks

Emerging social risks, such as the breach of human rights due to environmental degradation leading to negative impacts on the livelihoods of indigenous peoples and local communities, lack of opportunities for better smallholder or worker livelihoods, food security issues, political instability, pandemic-related issues and others will be discussed further in **Briefing Note 05**.

Learn more and help us improve

More information is provided in the references below and at **www.palmoiltoolkit.net**

Please also share with us information that will improve this Briefing Note (via **palmoiltoolkit@proforest.net**).

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