

Palm Oil Risk Assessment Malaysia - Sarawak

Version 1.2 | November 2017



COUNTRY RISK
ASSESSMENTS



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A. Introduction

The world demand for palm oil is rapidly growing and is driving deforestation and other negative Corporate Social Responsibility (CSR) related impacts e.g., biodiversity loss, greenhouse gas emissions, corrupt and illegal behaviour, and violation of civil rights including workers' rights, traditional and indigenous peoples' rights.

Each of the CSR categories are considered minimum legal, environmental and social responsible criteria that should met for palm oil plantation establishment and management. The criteria are in line with key CSR International Guidelines Content Areas as identified, analysed and published by the Danish Business Authority: A comparison of 4 international guidelines for CSR OECD Guidelines for Multinational Enterprises, ISO 26000 Guidance on Social Responsibility, UN Global Compact and UN Guiding Principles on Business and Human Rights, January 2015. This risk assessment used the methodology detailed in the Corporate Social Responsibility (CSR) Palm Oil Risk Assessment Framework Guidelines (November 2015).



Figure 1. Countries for which NEPCon have developed a risk assessment for palm oil

B. Overview of sourcing risks for palm oil from Malaysia - Sarawak

Palm oil Risk Score: 15 / 100 in 2017

This report contains an evaluation of the CSR risks in Sarawak, Malaysia for five categories and 21 sub-categories of law. We found:

- Specified risk in 17 sub-categories.
- Low risk for 3 sub-categories.
- Not-applicable for 1 sub-category.

Palm oil source types and risks

There are four palm oil source types found in Sarawak. Knowing the “source type” that palm oil originates from is useful because different source types can be subject to different applicable legislation and have attributes that affect the risks. We have analysed the risks for all source types and found the risks do not differ between the four source types.

Government land development schemes	Palm oil from large state estates where smallholders are leased small plots (4.0 – 5.7 hectares (ha)) then awarded them after a 10-15 repayment period. The mono-crop plots are managed for subsistence and/or commercial purposes.
State mediated private development scheme	Palm oil from private commercial plantations (minimum size of 5,000 hectares). Native Customary Rights (NCR) participants lease land to a private company for a 60-year period through a Joint Venture Company. Though legally owned by smallholders, private companies hold a 60% majority in the JVC and thus exercise control of the plantation development.
Large-scale private plantation	<p>Palm oil from large-scale private mono-crop commercial plantations from 40 ha to more than 100,000 ha on alienated land under:</p> <ul style="list-style-type: none">• a country land title (CL) under a 99-year lease• a freehold land title. <p>These plantations are often integrated with a production mill and processing facilities.</p>
Small-scale private plantation	<p>Palm oil from small-scale private commercial/subsistence plantations (less than 40 ha) on alienated land under:</p> <ul style="list-style-type: none">• a country land title (CL) under a 99-year lease• a freehold land title• native title (NT) alienated for perpetuity.

These scattered smallholdings are managed by farmers who work their own plantation with minimal government assistance. They sell their FFB directly to local mills and traders.

The CSR risks identified in this report concern business issues, social issues, environmental issues and conversion.

Regarding **business issues**, there is a risk of:

- land rights violation primarily relates to disputes about land categorisation, particularly related to native customary laws and native rights over land (1.1). Corruption is reportedly a significant factor in the granting of land concessions.
- Corruption in the awarding of licenses, allegedly the political elite to exercise political patronage, cronyism and nepotism (1.2). In addition to the risk of preferential treatment, there have been cases in Sarawak of palm oil producers selling unlicensed Fresh Fruit Bunches and seedlings.
- There is a risk of tax evasion (fees and royalties and income and profit taxes) due to corruption. There are several complaints from the palm oil industry about the heavy taxation and this is considered a prime motivation for tax evasion which is commonly linked to businesses with family, government and foreign ownerships.

Regarding **social issues**, there is risk that:

- producers are engaging illegal labour practices mainly linked to the employment and working conditions of migrant workers (2.1). Malaysia's legal framework is currently insufficient to protect foreign workers, because the law imposes several processing fees and levies on the employer and consequently allows these fees to be deducted from the workers' wages, thus incentivizing forced labour and debt bondage. Other common treatment of foreign workers includes passport retention, contract violations, restricted movement, wage fraud, poor housing conditions and lack of H&S training. These risks are especially pertinent in Sarawak as the state currently faces a significant shortage of labour in the oil palm industry.
- Malaysia's Occupational Health and Safety (OSH) requirements are breached by palm oil producers (2.2). There is evidence that shows several instances of alleged breaches of OSH requirements which is exposing workers to injuries falling fruit bunches, tool usage, heavy lifting and health hazards connected oil palm pest bites, over exposure of the sun and herbicides etc.
- Malaysian's legal employment laws do not cover what the ILO considers universal fundamental principles and rights at work (2.3). Malaysia currently has only ratified 5/8 ILO fundamental conventions. There also have been several reports of forced labour, workers under the minimum age, child labour and discrimination including of foreign and migrant labourers.
- the legal and customary rights of indigenous or traditional peoples are violated (2.4) and 3.3: 3.3.5 – 3.3.6). In 2013, it was reported that over 200 cases of breaches of Native Customary Rights were pending in Sarawak and 70 cases were related to plantation development with a majority related to oil palm plantations. Apart from loss of land, many community witnesses have complained that the opening of

plantations has resulted in destruction of graveyards and crops, and pollution of rivers and loss of livelihoods and traditional ways of life. While the Sarawak legal system constitutionally upholds and protects the native custom of its indigenous there is evidence of systematic violations of legal and customary rights of indigenous or traditional peoples.

Regarding **environmental issues**, there is a risk that:

- oil palm plantations are causing a host of environmental problems such as deforestation, biodiversity loss, water pollution, soil erosion, carbon emissions resulting from land use change and forest fires, and pesticide use (3.1 and 3.3.4). Vetting and monitoring compliance of the Environmental Impact Assessment (EIA) process is lacking due to lack of personnel and/or sufficient expertise by the relevant authorities. There are also loopholes whereby an EIA is required based on the size of the project where plantation companies can easily break the project into smaller lots to avoid the EIA requirement.
- oil palm plantations encroaching into the boundaries of protected areas and forest reserves (3.2 and 3.3: 3.3.1 – 3.3.3). There is also a risk of a lack of adequate identification and conservation measures for protected, rare, threatened and endangered species within and adjacent oil palm plantations and even where EIAs are required and conducted, the requirements and level of enforcement are not sufficient to ensure the protection of legally protected species. There is also a risk of removal of the forest/ecosystem containing the HCV for the establishment of oil palm plantation, and encroachment of plantations in areas containing indigenous values.

Regarding **conversion**, there is a risk of natural forest or ecosystem conversion are cleared for the establishment of palm oil plantations (4.1). It is not illegal to convert forest or other natural ecosystems to oil palm in Sarawak. There is also a risk of illegal land conversion in the state involving land clearance for oil palm plantations; with this activity also occurring within National Parks, peat swamps etc.

This matrix summarises the findings of the CSR risk assessment set out in this report.

Legal Category	Sub-category	Risk Conclusion	
Business Issues	1.1. Land tenure	Specified	
	1.2. Plantation registration & management rights	Specified	
	1.3. Payment of royalties & required fees	Specified	
	1.4. Value Added taxes & other sales taxes	Low	
	1.5. Income and profit taxes	Specified	
	1.6. Disclosure of Information	Low	
Social issues	2.1. Legal employment	Specified	
	2.2. Health and safety	Specified	
	2.3. ILO Fundamental Conventions are upheld.	Specified	
	2.4. IP and TP rights are upheld.	Specified	
Environmental issues	3.1. Environment	Specified	
	3.2. Protected sites and species	Specified	
	3.3. HCV	3.1.1. Species diversity.	Specified
		3.1.2. Landscape-level ecosystems & mosaics.	Specified
		3.1.3. Ecosystems and habitats	Specified
		3.1.4. Critical ecosystem services.	Specified
		3.1.5. Community needs	Specified
3.1.6. Cultural values.	Specified		
Conversion	4.1. New plantations since November 2005 have not replaced natural forest or ecosystems.	Specified	
	4.2. Fire avoidance is being practiced	Low	
GMOs	5.1. No GMO's	Low	

C. Overview of the palm oil sector in Malaysia - Sarawak

Malaysia is one of the world's largest producers of palm oil. Surpassed only by Indonesia, Malaysia currently possesses the second largest area of plantations worldwide, covering 5.64 million hectares (ha) of land (Gunarso, Hartoyo, Agus, & Killeen, 2013, p. 45). Of this, 2.66 million hectares (47%) is found in Peninsular Malaysia, while 1.54 million hectares (27%), and is found in Sabah and 1.44 million hectares (26%) in Sarawak (MPOB, 2016, p. 1). In 2015, production of Crude Palm Oil (CPO) was 19.96 million tonnes. Total export of palm oil products in the same year was 25.37 million tonnes, which generated 60,169 billion Malaysian Ringgit (RM) – approx. 14,322 billion USD - in export revenue (MPOB, 2016, p. 6).

Oil palm was first planted commercially in Malaysia in 1917. Cultivation accelerated during the 1960s under the government's agricultural diversification programme, as well as land settlement schemes for landless farmers and smallholders (MPOC, 2012). Most of the British controlled palm oil companies were nationalized in the 1970s and 1980s, and in the 1990s the strategy shifted towards transnational expansion. This transnational expansion is reflected in the current export scheme, where the Malaysian Palm Oil Board (MPOB) (2016) reports that the markets in India, the European Union, China, Pakistan, USA, Philippines and Vietnam together imported 11.16 million tonnes (64.0%) of palm oil from Malaysia (MPOB, 2016, p. 1).

From 2014 to 2015, production of Malaysian palm oil increased slightly by 1.5% to 19.96 million tonnes, while the area planted with oil palm increased by 4.6%, to 5.64 million ha. In the same period, Crude Palm Oil (CPO) production increased marginally, and exports increased 1.2%, from 25.07 to 25.37 million tonnes. Most this increase was in Sarawak with an increase of 7.6% in CPO production and a 13.9% increase in planted area. Peninsular Malaysia experienced a growth of 3.6% in CPO production, but Sabah faced a decline of 5.5%. (MPOB, 2016, p. 1).

Ownership

There are a number of different oil palm farm types in Malaysia. In broad terms, these fall within one of two categories: private, and smallholder.

Private plantations occupy 3.1 million ha (61.6%) of the oil palm planted area in Malaysia. For the sake of simplicity and overview, private plantations can be broken down to the following subcategories:

- Government-linked public listed firms (GLCs, e.g. Sime Darby, FGV, TH Plantations)
- Large publicly-owned firms, e.g. Hap Seng, IOI, KLK
- Medium-sized firms with 3-8 mills, and a production area less than 100,000 ha
- Small companies with 1-2 mills and a production area less than 10,000 ha

Smallholders are legally defined by the Malaysian government as aggregate land of less than 40.46 ha. The RSPO definition states that smallholders usually mix commodity and subsistence crops, while the family comprise the bulk of the workforce and revenue the principal source of income (RSPO, n.d.). Smallholders fall into one of two categories:

- Independent smallholders that operate without external assistance (and who sell crops directly to mills or traders).

- Supported smallholders – land owners supported by a company or a government State Agency in a joint venture. The land owner provides land in exchange for management assistance and guarantee that the relevant partner will buy the produce.
- Collective smallholders participating in joint venture schemes with other landowners with customary land rights, or with a plantation company. In the latter case, the company leases land use rights and the owner receives a share of the profit based on equity and the government often act as a mediator and trustee.

Governance

Palm oil production is regulated at both the state and federal levels. Importantly, land tenure/rights is a state matter, while at the national level, licensing takes place under purview of the Malaysian Palm Oil Board (MPOB) and the Department of Environment (DOE). Taxes, levies and cesses are paid to the MPOB and the Ministry of Finance.

Major forest types in Malaysia are lowland dipterocarp forest (LDF), hill dipterocarp forest (HDF), upper hill dipterocarp forest, oak-laurel forest, montane ericaceous forest, peat swamp forest and mangrove forest. There are also smaller areas of freshwater swamp forest, heath forest, forest on limestone and forest on quartz ridges. While most of the country was covered with LDF in the past, today the majority has been cleared for other land uses, including oil palm. The few remaining pockets are under intense development pressure and are shrinking rapidly (WWF-Malaysia, 2016).

Impacts

Forest conversion statistics show that between 1990 and 2010, approximately 48% of all plantations in Sarawak, or 471,000 ha, have been established following forest conversion (Gunarso, Hartoyo, Agus, & Killeen, 2014). The percentage of oil palm plantation area on peat soils stayed relatively constant throughout those 20 years: 8.1% in 1990 and 7.9% in 2010 (Gunarso, Hartoyo, Agus, & Killeen, 2014). The direct conversion of forest to oil palm was more common in Sabah and Sarawak, but the conversion of other types of land use, such as rubber was more important in Peninsular Malaysia (Gunarso, Hartoyo, Agus, & Killeen, 2014).

Major environmental threats from oil palm plantations are deforestation, biodiversity loss, water pollution, soil erosion, carbon emissions resulting from land use change and forest fires, and pesticide use (Chin, 2011). There are also human-wildlife conflicts fueled by forest conversion for oil palm (Persey, Imanuddin, & Sadikin, 2011).

The biggest underlying threats are corruption and weak enforcement of the law. Comprehensive legislation exists to regulate business, labour, human rights, indigenous rights, and the environment, however, the effectiveness of enforcement is hampered by insufficient numbers of enforcement officers, lack of cohesion between government monitoring agencies, and corruption. Indigenous rights is an area of high concern as the palm oil sector continue to encroach on indigenous land in a political environment that marginalizes indigenous communities from the benefits of development.

RSPO is a voluntary certification scheme that offers a comprehensive set of safeguards in the palm oil sector, but critics have said that the certification bodies and RSPO itself need to undergo credible reform for the safeguards to become effective. Until then, critics have said that buyers must exercise due diligence to determine the source of their palm oil – or risk the many products on supermarket shelves being tainted with human trafficking, human

rights abuses and species extinction (Environmental Investigation Agency UK Ltd and Grassroots, 2015).

Information Sources:

- Chin, M. (2011). Biofuels in Malaysia: An Analysis of the Legal and Institutional Framework. Bogor, Indonesia: CIFOR.
- Environmental Investigation Agency UK Ltd and Grassroots, 2015. Who Watches the Watchmen? Auditors and the breakdown of oversight in the RSPO. Environmental Investigation Agency. <https://eia-international.org/wp-content/uploads/EIA-Who-Watches-the-Watchmen-FINAL.pdf>
- Gunarso, P; Hartoyo, ME; Agus, F & Killeen, TJ. (2013). Oil Palm and Land Use Change in Indonesia, Malaysia and Papua New Guinea. Reports from the Technical Panels of the 2nd Greenhouse Gas Working Group of the Roundtable on Sustainable Palm Oil (RSPO). <http://www.tropenbos.org/publications/oil+palm+and+land+use+change+in+indonesia,+malaysia+and+papua+new+guinea>
- MPOB. (2016). Overview of the Malaysian Oil Palm Industry 2015. Malaysian Palm Oil Board. Retrieved from: http://bepi.mpob.gov.my/images/overview/Overview_of_Industry_2015.pdf
- Persey, S., Imanuddin, & Sadikin, L. (2011). A Practical Handbook for Conserving High Conservation Value Species and Habitats within oil palm landscapes. Zoological Society of London. Retrieved from <http://www.sustainablepalmoil.org/wp-content/uploads/sites/2/2015/11/A-Practical-Handbook-for-Conserving-High-Conservation-Value-species-and-Habitats-within-Oil-Palm-Landscapes-Indonesia-focus.pdf>
- WWF. (2016). The Malaysian Rainforest. Retrieved from: http://www.wwf.org.my/about_wwf/what_we_do/forests_main/the_malaysian_rainforests/

D. CSR Risk Assessment

BUSINESS ISSUES

1.1. Land Tenure

Legislation covering land tenure rights that includes the use of legal methods to obtain tenure rights. Risk may be encountered where land rights have not been issued according to prevailing regulations and where corruption has been involved in the process of issuing land tenure rights. The intent of this indicator is to ensure that any land tenure rights have been issued according to the legislation.

1.1.1. Applicable laws and regulations

- Malaysia Federal Constitution - [link](#)
- Sarawak Land Code 1958 - [link](#)
- Sarawak Natural Resources and Environment Ordinance 1997 - [link](#)
- Forests Ordinance of 1958 - [link](#)
- Natural Resources and Environment Ordinance 1993 - [link](#)
- Native Court Ordinance 1992 - [link](#)
- Native Court Rules 1993 - [link](#)

1.1.2. Legal authority

- Federal Government: Referent to the National Land Code 1965, the Federal government can intervene in land matters to promote uniformity of law and policy and thus plays an important coordinating role across law, administration and policy <http://aseanvaluer.org/>
 - Department of Environment Malaysia (DOE): Responsible for the implementation and regulation of environmental legislation
 - Key activities: environmental assessment, monitoring, review and enforcement of environmental regulations and orders as prescribed under the Environmental Quality Act - http://www.rspo.org/files/resource_centre/OP_Chain_Part%20A_new.pdf
 - The Ministry of Plantation Industries and Commodities (MPIC): <http://www.kppk.gov.my/mpic/index.php/en/>
 - The main functions of MPIC are policy and strategy development in the plantation and commodity sector, as well as supervision of relevant government department and agencies in regards to finance and implementation – e.g. MPOB
 - Malaysian Palm Oil Board (MPOB) - <http://www.mpob.gov.my/en/about-us/about> - Government agency charged with overseeing, regulating and developing the Malaysian Palm Oil sector.

- State Government: All land belongs to the State; land that has not been alienated, declared as reserved land or mining land is considered State land - http://www.fao.org/gender-landrights-database/country-profiles/countries-list/land-tenure-and-related-institutions/en/?country_iso3=MYS. Because land is a State matter, each State has its own responsible entity. In Sarawak, such entities are:
 - Ministry of Resource Planning and Environment – Main function is “To provide outline on the government's policies concerning forestry, development of land and natural resources as well as physical planning development of the state” (http://www.kpps.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=45&menu_id=0&sub_id=67)
 - Land and Survey Department, Sarawak – in charge of the administration and management of land in Sarawak (http://www.landsurvey.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=610&menu_id=0&sub_id=78)
 - Land Custody and Development Authority (PELITA): Statutory body, which acts as an intermediary between landowners and corporations in joint venture development schemes. Develops both NCR- and State land (http://www.pelita.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=65&menu_id=0&sub_id=87)
 - Natural Resources and Environment Board (Sarawak) – Responsible for enforcement of the Natural Resources and Environment Ordinance 1993

1.1.3. Legally required documents or records

An important note on the situation in Sarawak is that the issuance of a license, lease, permit or the like by the State is not in itself sufficient to develop an oil palm plantation without the risk of conflict. This is due to the fact that there may be other claims to the land by the native communities of Sarawak (Colchester et al., 2007).

However, if the land is not encumbered by NCR claims, the following documents are needed:

- Proof of ownership is provided by two documents: Issue Document of Title and Register Document of Title.
 - If the buyer of land is a foreign person or company, the transfer needs to be sanctioned by the State Authority
- In addition, establishment and management of a palm oil plantation in Sarawak requires the following licenses:
 - If the proposed agricultural plantation is of more than 500 ha derived from secondary- or primary forests (or from modification of present land use) it requires project proponents to submit an Environmental Impact Assessment (EIA) and obtain approval from DOE (http://www.rspo.org/files/resource_centre/OP_Chain_Part%20A_new.pdf).
 - MPOB License (MPOB L1):

- All persons wanting to be involved in the palm oil business needs to be licensed the MPOB according to the MPOB Regulations of 2005.
- This includes the production, sale, purchase, movement, storage, commence construction of oil palm mill, milling, commence construction of bulking facilities, survey, test, export and import of oil palm products
(<http://161.142.157.2/pnp/bi/pelesenan.html>)
- Palm Oil Mills: Referent to the Environmental Quality Act 1974, all treatment and disposal facilities (e.g. crude palm oil mill) must obtain prior written permission from the Director-General of Environmental Quality (RSPO, 2014)

1.1.4. Sources of information

Non-Government sources

- Colchester, M., Pang, W. A., Chuo, W. M., & Jalong, T. (2007). Land is Life: Land Rights and Oil Palm Development in Sarawak. Forest Peoples Programme and Perkumpulan Sawit Watch.
- Global Witness. (2013). Inside Malaysia's Shadow State: Backroom deals driving the destruction of Sarawak. Global Witness.
- Ngidang, D. (2005). Deconstruction and Reconstruction of Native Customary Land Tenure in Sarawak. Southeast Asian Studies, 47-75.
- Raj, T. (2013). Who is King of Sarawak's Rainforest? An Insight to Sarawak's Land Corruption Led by its Chief Minister and His Family. Earth Common Journal.
- Transparency International. (2016, August 2). Corruption Index. Retrieved from transparency.org: <https://www.transparency.org/country/#MYS>

1.1.5. Risk determination

Overview of Legal Requirements

Land ownership is legally prescribed under the Land Code for Native Customary Land on state land and alienated land. Following the Sarawak Land Code 1958, there exist six categories of land in Sarawak:

- Mixed Zone Lands – located along the coast line. Privately held land. Land markets can freely operate and land can be owned by Malaysians as well as foreigners.
- Native Land Areas – close to the coast, restrained land markets where individual titling is encouraged. Available to indigenous Sarawakians (natives or Dayak) only.
- Native Communal Reserves (NCR) – declared by the government, regulated by customary law
- Native Customary Lands – Ruled by local customary practices (adat), but subject to the legal interpretation of Native Customary Rights.
- Interior Area Lands – Designated over areas where rights/uses are yet to be defined

- Reserved Lands – Gazetted land for special purposes (Colchester et al, 2007, pp. 12-13)

All registry numbers for alienated land is recorded in a publicly available land registry under the survey department.

It is evident that the land tenure system in Sarawak encompasses both formal titles and informal titles, the latter derived from customary laws. Consequently, one system is based on adat, subsistence land use and traditional farming systems, while the other allows for commercial large-scale agriculture (Ngidang, 2005).

The dualism of the land tenure system in Sarawak has brought about a collision of interests of the two systems.

Description of risk

There is a risk regarding land rights and oil palm in Malaysia primarily related to disputes about land categorization, particularly related to native customary laws and native rights over land, use by indigenous peoples, and a high level of corruption related to the granting of land concessions.

- Sarawak and its former Chief Minister and current governor, Abdul Taib Mahmud, are notorious for a high level of corruption in the logging- and palm oil industry (Global Witness, 2013).
- Malaysia has an overall score of 50 out of 100 on Transparency International's Corruption Index (on a scale from 0 to 100 where 100 is lowest level of corruption and ranked 54 out of 167 countries) and Sarawak is perhaps the state with most media-attention in relation to corruption (Global Witness, 2013; Raj, 2013; Transparency International, 2016). Corruption in the country is especially related to the granting of land concessions by state governments (Lim, 2013).
- The complex nature of land tenure in Sarawak and the high level of corruption has made NCR breaches one of the most prominent issues in Malaysia for many years. The apparently wide gap between customary rights as conceived by the native peoples and the 'Native Customary Rights' as interpreted by the Government regarding the Land Code, has led to numerous land disputes many of which have been referred to the courts (Colchester et al., 2007).
- Lim (2013) has reported that over 200 cases of breaches of NCR rights were pending in Sarawak alone (p. 25). New cases are being filed faster than current cases are resolved. Of the 200 cases, 70 were related to plantation development and a vast majority of these were related to palm oil (Lim, 2013). While the current trend is to rule in favour of the plaintiffs, some cases are currently more than a decade old and as such time intensive. Hence, there is a wide array of risks related to land tenure, mainly caused by the complex nature of the tenure system, NCR claims, the amendments to the SCL and the notorious high-level corruption surrounding the Chief Minister and his family.

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

1.1.6. Risk designation and specification

Elevated risk

1.1.7. Control measures and verifiers

Verifiers:

Review updated information and news on land tenure issues via:

- NGO investigations and reports (Forest Peoples Programme <http://www.forestpeoples.org>, Rainforest Action Network www.ran.org, <http://www.schusterinstituteinvestigations.org>, Friends of the Earth [foe.org](http://www.foe.org), The Human Rights Commission of Malaysia (SUHAKAM) (<http://www.suhakam.org.my/>), Pusat Komang (komang.org), Cultural Survival ([culturalsurvival.org](http://www.culturalsurvival.org)))
- Media reports ([Mongabay.com](http://www.mongabay.com), [greenomics.org](http://www.greenomics.org), [red-monitor.org](http://www.red-monitor.org), [eyesontheforest.org](http://www.eyesontheforest.org), [sarawakreport.org](http://www.sarawakreport.org), [malaysiakini.com](http://www.malaysiakini.com))
- Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations.

For land tenure issues check palm oil producers' 'Landbank' scores:

<http://www.sustainablepalmoil.org/companies/>

This data can support SPOTT users in conducting further research to verify whether company commitments are being implemented on the ground.

Under Map of Concessions found here: <http://www.sustainablepalmoil.org/about/> use the map search bar to find specific company concessions or locations. Click the concession sites marked by pins to zoom in for more information, then go to the company pages of featured concessions to view their assessments and for legality particularly pay attention to the layer called 'government allocated areas' to ensure the palm oil producer is operating in a legal area. For more on how to use the SPOTT map see the ZSL FAQs page.

Control Measures:

- Obtain and verify the following documents:
 - Issue Document of Title and Register Document of Title - proof of land ownership (freehold (land held in perpetuity) or leasehold (leased land not exceeding a 99-year term))
 - Malaysian Palm Oil Board (MPOB L1) License - required for the establishment and management of a palm oil plantation
 - A business license and a completed a Business Registration Form (Form A) to the SSM (The Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia or SSM) - required for operating a palm oil plantation
 - Written Permission to Construct a Palm Oil Mill from the Director-General of Environmental Quality
 - License to occupy and operate a crude palm oil mill from the Department of Environment Malaysia (DOE)

- Records Free Prior Informed Consent and/or a participatory social impact assessment and/or was conducted and copies of negotiated agreements are available
- Evidence a dispute resolution mechanism is in place
- Palm Oil Plantations >500 hectares or palm oil plantations clearing more than >50 hectares of land: evidence an approved Environmental Impact Assessment (EIA) from the Department of Environment Malaysia (DOE).
- Confirm land ownership with the State land registry.

1.2. Plantation registration and management rights

Legislation covering land management rights including customary rights and any legal requirements for management planning. It also covers legal business registration and tax registration, including relevant legal required licenses. Risk may be encountered where land rights have not been issued according to prevailing regulations and where corruption has been involved in the process of issuing land tenure and management rights. The intent of this indicator is to ensure that any land management rights have been issued according to the legislation. Low quality of the management plan resulting in illegal activities may be a risk factor for this indicator as well.

1.2.1. Applicable laws and regulations

- Malaysia Federal Constitution - [link](#)
- Malaysian Palm Oil Board (Licensing) Regulations 2005 - [link](#)
- Environmental Quality Act 1974 - [link](#)
- Natural Resources and Environment Ordinance 1993 - [link](#)
- Forests Ordinance of 1958 - [link](#)
- Companies Act 1965 (Act 125); [link](#)
- Registration of Businesses Act 1956 (Act 197) - [link](#)
- Trust Companies Act 1949 (Act 100) - [link](#)
- Kootu Funds (Prohibition) Act 1971 (Act 28) - [link](#)
- Limited Liability Partnerships Act 2012 (Act 743) - [link](#)
- Subsidiary legislation:
 - Companies Regulations 1966 - [link](#)
 - Registration of Businesses Rules 1957 - (URL not found)

1.2.2. Legal authority

- State Government: All land belongs to the State; land that has not been alienated, declared as reserved land or mining land is considered State land (http://www.fao.org/gender-landrights-database/country-profiles/countries-list/land-tenure-and-related-institutions/en/?country_iso3=MYS). Because land is a State matter, each State has its own responsible entity. Central actors in Sarawak are:

- Ministry of Resource Planning and Environment – Main function is “To provide outline on the government's policies concerning forestry, development of land and natural resources as well as physical planning development of the state” (http://www.kpps.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=45&menu_id=0&sub_id=67)
 - Land and Survey Department, Sarawak – in charge of the administration and management of land in Sarawak (http://www.landsurvey.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=610&menu_id=0&sub_id=78)
- Land Custody and Development Authority (PELITA): Statutory body, which acts as an intermediary between landowners and corporations in joint venture development schemes. Develops both NCR- and State land (http://www.pelita.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=65&menu_id=0&sub_id=87)
- Natural Resources and Environment Board (Sarawak) – Responsible for enforcement of the Natural Resources and Environment Ordinance 1993
- Federal Government: Referent to the National Land Code 1965, the Federal government can intervene in land matters to promote uniformity of law and policy and thus plays an important coordinating role across law, administration and policy (<http://aseanvaluer.org>)
 - Department of Environment Malaysia (DOE): Responsible for the implementation and regulation of environmental legislation
 - Key activities: environmental assessment, monitoring, review and enforcement of environmental regulations and orders as prescribed under the Environmental Quality Act (http://www.rspo.org/files/resource_centre/OP_Chain_Part%20A_new.pdf)
 - The Ministry of Plantation Industries and Commodities (MPIC): <http://www.kppk.gov.my/mpic/index.php/en/>
 - The main functions of MPIC are policy and strategy development in the plantation and commodity sector, as well as supervision of relevant government department and agencies in regards to finance and implementation – e.g. MPOB
 - Malaysian Palm Oil Board (MPOB): <http://www.mpob.gov.my/en/about-us/about>
 - Government agency charged with overseeing, regulating and developing the Malaysian Palm Oil sector.
 - Licensing and taxation authority in the palm oil sector
- The Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia or SSM): <http://www.ssm.com.my/en/about-ssm>
 - Statutory body charged with regulation of companies and businesses in Malaysia. Serves as an agency to incorporate and regulate businesses as well as provide information to the public. Ensures compliance with business- and corporate legislation.

- SSM is responsible for the administration and enforcement of the following legislation
 - Companies Act 1965 (Act 125);
 - Registration of Businesses Act 1956 (Act 197);
 - Trust Companies Act 1949 (Act 100);
 - Kootu Funds (Prohibition) Act 1971 (Act 28);
 - Limited Liability Partnerships Act 2012 (Act 743);
 - any subsidiary legislation made under the Acts specified above such as:
 - Companies Regulations 1966; and
 - Registration of Businesses Rules 1957

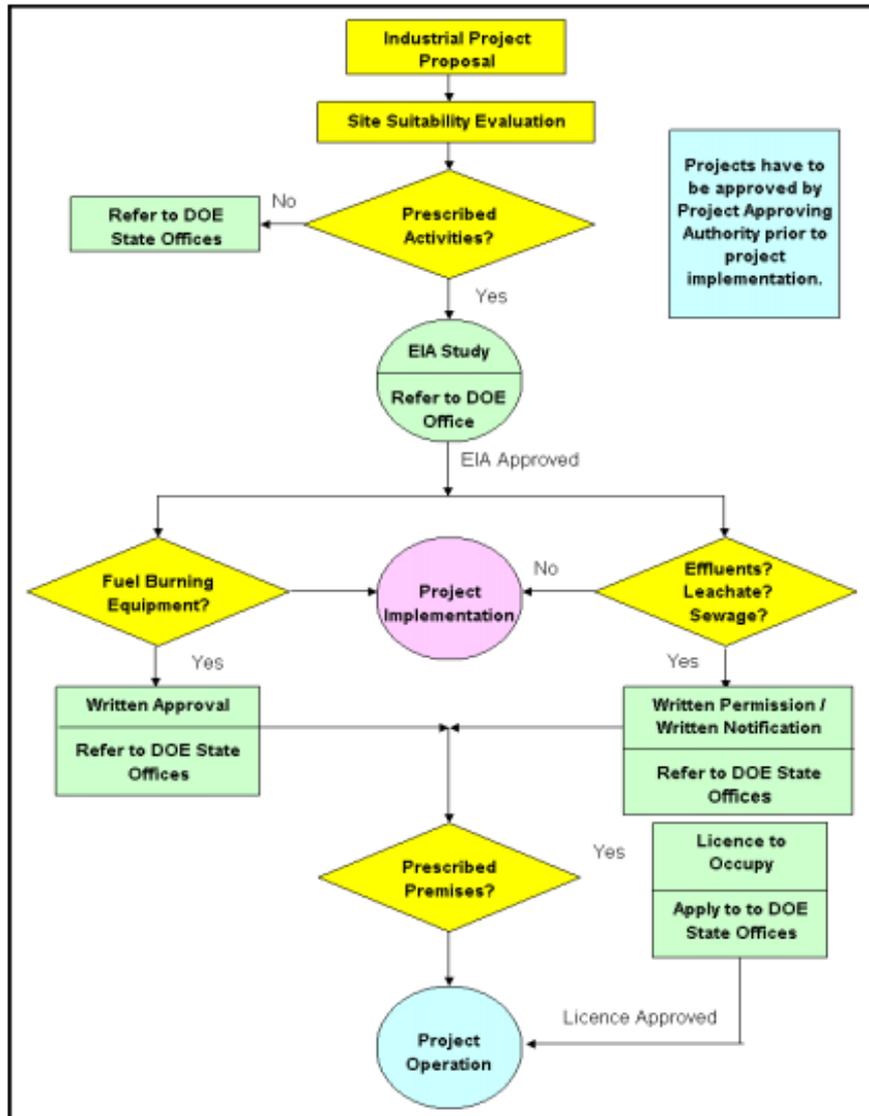
1.2.3. Legally required documents or records¹

- A business license is required and is provided by the relevant State authority
- Complete a Business Registration Form (Form A) to the SSM
- In addition, establishment and management of a palm oil plantation in Peninsular Malaysia requires the following licenses:
 - If the proposed agricultural plantation is of more than 500 ha derived from secondary- or primary forests (or from modification of present land use) it requires project proponents to submit an Environmental Impact Assessment (EIA) and obtain approval from DOE (http://www.rspo.org/files/resource_centre/OP_Chain_Part%20A_new.pdf).
- MPOB License (MPOB L1):
 - All persons wanting to be involved in the palm oil business needs to be licensed the MPOB according to the MPOB Regulations of 2005.
 - This includes the production, sale, purchase, movement, storage, commence construction of oil palm mill, milling, commence construction of bulking facilities, survey, test, export and import of oil palm products (<http://161.142.157.2/pnp/bi/pelesenan.html>)
- Palm Oil Mills: Referent to the Environmental Quality Act 1974, all treatment and disposal facilities (e.g. crude palm oil mill) must obtain prior written permission from the Director-General of Environmental Quality (RSPO, 2014)
 - A separate license from the DOE is required to occupy and operate crude palm oil mills (RSPO, 2014)
- If the proposed agricultural plantation is of more than 500 ha derived from secondary- or primary forests (or from modification of present land use) it requires project proponents

¹ (Department of Environment , 2010, p. 20)

to submit an Environmental Impact Assessment (EIA) and obtain approval from DOE (http://www.rspo.org/files/resource_centre/OP_Chain_Part%20A_new.pdf).

Figure 1
APPLICATION PROCEDURE FOR ENVIRONMENTAL REQUIREMENTS IN MALAYSIA



STEP 1

- **Site Suitability Evaluation** (for non-Prescribed Activities).
- **EIA Approval** (for Prescribed Activities).

STEP 2

Activities subject to air and water pollution control:

- **Written Permission** (Air).
- **Written Notification** (Sewage, Industrial Effluent, Leachate).
- **Written Approval** (Prescribed Premises: Crude Palm Oil Mills, Raw Natural Rubber Mills, Scheduled Wastes Facilities)

STEP 3

Licence to occupy:

- Crude Palm Oil Mills.
- Raw Natural Rubber Factories.
- Scheduled Waste Treatment and Disposal Activities
- Prescribed Conveyance

1.2.4. Sources of information

Government sources

- Department of Environment. (2010). Environmental Requirements: A Guide for Investors. Kuala Lumpur: Government of Malaysia.

Non-Government sources

- Borneo Post Online. (2014, December 4). MPOB to take legal action against two palm oil traders. Retrieved from www.theborneopost.com:

<http://www.theborneopost.com/2014/12/04/mpob-to-take-legal-action-against-two-palm-oil-traders/>

- Colchester, M., Pang, W. A., Chuo, W. M., & Jalong, T. (2007). Land is Life: Land Rights and Oil Palm Development in Sarawak. Forest Peoples Programme and Perkumpulan Sawit Watch.
- Friends of the Earth. (2008). Palm Oil in Malaysia - green gold or green wash? Friends of the Earth.
- Global Witness. (2013). Inside Malaysia's Shadow State: Backroom deals driving the destruction of Sarawak. Global Witness.
- Idris, S. M. (2008). Annex I - Plantation Development, Deforestation and Native Customary Rights (NCR). In F. o. Earth, Malaysian Palm Oil - green gold or green wash? (p. 53). Friends of the Earth.
- Lawson, S., Blundell, A., Cabarle, B., Basik, N., Jenkins, M., & Canby, K. (2014). Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations. Forest Trends.
- Lim, T. W. (2013). Malaysia: Illegalities in Forest Clearance for Large-Scale Commercial Plantations. Washington D.C.: Forest Trends.
- Raj, T. (2013). Who is King of Sarawak's Rainforest? An Insight to Sarawak's Land Corruption Led by its Chief Minister and His Family. Earth Common Journal.
- Transparency International. (2016, August 2). Corruption Index. Retrieved from transparency.org: <https://www.transparency.org/country/#MYS>

1.2.5. Risk determination

Overview of Legal Requirements

Having obtained land in Sarawak, a series of licenses from various authorities are needed in the palm oil industry. Firstly, any company must register with the Companies Commission of Malaysia (SSM) using a Business Registration Form (Form A).

Furthermore, a set of the licenses from the Department of Environment (DOE) is needed to establish an oil palm plantation or mill (see description in 1.2.3). If the plantation exceeds 500 hectares, an Environmental Impact Assessment (EIA) must be completed. In Sarawak, the EIA is conducted by the Ministry of Resource Planning and Environment. After the EIA, the palm oil plantation will be subject to DOE regulations and monitoring referent to the Environmental Quality Act 1974 (Teoh, 2002).

All parties engaged in the palm oil sector must further obtain a MPOB L1 license subject to the MPOB Licensing Regulations 2005. The MPOB L1 license covers specific areas audited by the MPOB such as: production, sale, purchase, movement, storage, construction, milling, survey, test, export and imports. Thus, if an organization has been approved for production, storage and movement but wants to start selling and exporting Crude Palm Oil (CPO) or palm oil products, then a reassessment of the MPOB L1 is required.

Description of risk

Risk of corruption in the awarding of plantation licenses; allegedly the political elite to exercise political patronage, cronyism and nepotism. In addition, there have been cases in Sarawak of palm oil producers selling unlicensed Fresh Fruit Bunches and seedlings.

- In general, the oil palm sector in Malaysia has the legal framework in place to become a highly organized, regulated, taxed and monitored sector. However, as stated by Transparency International Malaysia, there is always an element of risk when private companies get involved in agriculture, because the only objective is the generation of revenue (Transparency International Malaysia, 2011).
- In their 2011 Forest Governance Integrity Report of Peninsular Malaysia, Transparency International pointed to several weaknesses in the legislation and possible areas influenced by corruption. In relation to corruption and licensing in the forestry sector, the main concern was the legislation's inability to address issues of preferential treatment exercised by state governments towards private companies.
- Sarawak is known as a State where corruption is rife, and it has received a great amount of international media-attention in the 1980s-1990s due to its high rates of deforestation and human rights abuses (Friends of the Earth, 2008). Focus has now partially shifted towards palm oil and several reports of corruption in Sarawak has surfaced regarding circumvention of EIA's, incorrect reporting, a lack of transparency and exclusion of NCR community consent (Idris, 2008).
- In addition, Global Witness reported in 2013 that former Sarawak Chief Minister and current governor Abdul Taib Mahmud through his ministerial role in the Ministry of Resource Planning and Environment effectively controls land classification as well as timber- and plantation licensing (Global Witness, 2013, p. 2). Hence, the main risk is the possibility of the political elite to exercise political patronage, cronyism and nepotism in the issuance of licenses.
- This suspicion is further enforced by the findings of Lawson (2014) and Lim (2013), who reports 35 instances of corruption in relation to Agro-Conversion in Sarawak.
- In addition to the risk of preferential treatment, there have been cases in Sarawak of palm oil producers selling unlicensed Fresh Fruit Bunches and seedlings (Borneo Post, 2014).

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

1.2.6. Risk designation and specification

Elevated risk

1.2.7. Control measures and verifiers

Verifiers:

- NGO investigations and reports (Forest Peoples Programme <http://www.forestpeoples.org>, , Rainforest Action Network www.ran.org, <http://www.schusterinstituteinvestigations.org>, greenpeace.org, Friends of the Earth

foe.org, Forest-Trends <http://www.forest-trends.org/>, REDD-Monitor <http://www.redd-monitor.org/>)

- Media reports (Mongabay.com, greenomics.org, red-monitor.org, , eyesontheforest.org, etc.)
- Assess corporate risk – trace origins back to company and compare company ownership based on their policies, practices, initiatives, and goals (utilizing ZSL’s Sustainable Palm Oil Transparency Toolkit (SPOTT) <http://www.sustainablepalmoil.org/companies/>)

Control Measures:

- Obtain and verify the following documents:
 - Malaysian Palm Oil Board (MPOB L1) License – required for the establishment and management of a palm oil plantation
 - A business license and a completed a Business Registration Form (Form A) to the SSM (The Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia or SSM) - required for operating a palm oil plantation.
 - Written Permission to Construct a Palm Oil Mill from the Director-General of Environmental Quality.
 - License to occupy and operate a crude palm oil mill from the Department of Environment Malaysia (DOE)
 - Records Free Prior Informed Consent and/or a participatory social impact assessment and/or was conducted and copies of negotiated agreements are available
 - Evidence a dispute resolution mechanism is in place
- Palm Plantations >500 hectares or palm oil plantations clearing more than >50 hectares of land: evidence an approved Environmental Impact Assessment (EIA) from the Department of Environment Malaysia (DOE)

1.3. Payment of royalties and required fees

Legislation covering payment of all legally required commodity fees such as royalties and other volume based fees. It also includes payments of the fees based on correct classification of quantities, qualities and species. Incorrect classification of products is a well-known issue often combined with bribery of officials in charge of controlling the classification.

1.3.1. Applicable laws and regulations

- Malaysian Palm Oil Board Act 1998 - [link](#)
- Malaysian Palm Oil Board (Licensing) Regulations 2005 - [link](#)
- Malaysian Palm Oil Board (Cess) Order 2000 - [link](#)
- Malaysian Palm Oil Board (Cess) Order 2011 - [link](#)
- Malaysian Palm Oil Board (Cess) (Oil palm fruit) 2007 - [link](#)
- Windfall Profit Levy Act 1998 (Act 592) - [link](#)

- Windfall Profit Levy (Crude Palm Oil And Crude Palm Kernel Oil) Order 2008 - [link](#)

1.3.2. Legal authority

- The Ministry of Finance - <http://www.treasury.gov.my/index.php/en/ministrys-profile/treasurys-profile.html>

The ministry in charge of formulating and implementing monetary policies and further in charge of distribution and the management of financial resources of Malaysia

- Malaysian Palm Oil Board (MPOB) - <http://www.mpob.gov.my/en/about-us/about>

Government agency charged with overseeing, regulating and developing the Malaysian Palm Oil sector.

Licensing and taxation authority in the palm oil sector

- Royal Malaysian Customs Department
Collects Windfall Levy

1.3.3. Legally required documents or records

- MPOB License (MPOB L1):
 - All persons wanting to be involved in the palm oil business needs to be licensed the MPOB according to the MPOB Regulations of 2005.
 - This includes the production, sale, purchase, movement, storage, commence construction of oil palm mill, milling, commence construction of bulking facilities, survey, test, export and import of oil palm products (<http://161.142.157.2/pnp/bi/pelesenan.html>)
- Records of payment of Windfall Tax (using form WPA No.3 – see: http://www.customs.gov.my/en/pg/Pages/pg_pwt.aspx)

1.3.4. Sources of information

Non-government sources

- Chin, M. (2011). Biofuels in Malaysia: An Analysis of the Legal and Institutional Framework. Bogor, Indonesia: CIFOR.
- Global Witness. (2013). Inside Malaysia's Shadow State: Backroom deals driving the destruction of Sarawak. Global Witness.
- LHDN. (2015). Real Property Gains Tax. Retrieved from www.lampiran.hasil.gov.my: http://lampiran.hasil.gov.my/pdf/pdfam/RISALAH_R13_BI_15.pdf
- Malaysiakini. (2013, March 19). Sarawak's way of evading tax and shareholding rules. Retrieved from www.malaysiakini.com: <https://www.malaysiakini.com/news/224250>

1.3.5. Risk determination

Overview of Legal Requirements

Taxation in Sarawak is governed by the policies set forth by the Federal Government. Due to the importance of agriculture in Malaysia, several measures and laws have been implemented

to support and advance the growth of the sector, while legislation also has been designed to make agriculture a source of direct income for the Federal and State governments. Taxation of the palm oil industry is characterized by government taxes, cesses and levies, paid primarily to the Ministry of Finance and MPOB (Chin, 2011).

A cess is paid to the MPOB based on the weight of CPO produced. The focus on CPO means that this cess only applies to oil palm farms that process FFB into CPO.

- Most large-scale plantations are centred on the production of CPO - the vast majority have an integrated mill, thus converting Fresh Fruit Bunches to CPO instantly.
- Few smallholders can afford their own mill and therefore typically sell their FFB to middle-men or directly to a mill and do not pay the palm oil cess. This supply-chain must be short though, and transportation fast, as FFB deteriorate quickly.

In addition, cesses are paid to the palm oil price stabilization fund (also based on CPO production) and the cooking oil stabilization scheme. The latter is meant to subsidize the price of cooking oil and is only paid by estates larger than 40.46 ha (Chin, 2011). Palm oil producers in Sarawak pay a windfall tax when CPO prices are over 3000MYR per tonne. Smallholders with estates under 40 ha are exempt from the windfall tax (Chin, 2011, pp. 9-10).

The CPO export duty is also of significant importance for the Malaysian palm oil industry, and is 5% as of April 2016, but this number fluctuates monthly (Ching, 2016). There is no export duty on refined palm oil or biodiesel.

The above information is summarized in the figure below (Chin, 2011, p. 10), which includes sales taxes and goods and services tax (relevant to 1.4) and corporate tax (relevant to 1.5) (note that the data is from 2010).

Table 3. Taxation on the Malaysian oil palm industry

Charge	Rate
Corporate tax	25% of corporate profit
Cess for MPOB	MYR11 per tonne of CPO
Cess for Price Stabilisation Fund	MYR2 per tonne of CPO
Cess for cooking oil subsidy	5% above CPO price of MYR1700 per tonne
Windfall profit tax	15% above CPO price of MYR2500 per tonne (Peninsular) 7.5% above CPO price of MYR3000 per tonne (Sabah and Sarawak)
Foreign workers levy	MYR540 per worker
Sabah sales tax	7.5% for CPO price at MYR1000 per tonne and above
Sarawak sales tax	2.5% for CPO price at MYR1000–1500 per tonne 5.0% for CPO price above MYR1500 per tonne
Sarawak land tax	MYR5 per ha
Property assessment tax (by District Councils)	0.5% of rental value of land
Export duty on CPO	10%–30% per tonne of CPO
Goods and Service Tax (GST)	4% of sales value on fresh fruit bunch, CPO, processed palm oil (proposed implementation by 2011)

Source: Malaysian Estate Owners Association, quoted in Hanim (2010b)

Description of risk

The main risk related to taxation in Sarawak is related to high-profile tax evasion. Furthermore, as Malaysia scores a 50/100 on Transparency International's corruption index, corruption is thus an issue in the country. On logging and plantation development, Global Witness (2013) reported that it is a common practice among high-profile individuals connected to the former Chief Minister and current governor Taib Mahmud in Sarawak to avoid paying the RPGT through the usage of two sets of agreements. One agreement set in Malaysia, where a nominal fee would be paid and taxed RPGT and another agreement set in Singapore where the principal amount would be paid and thus exempted from the RPGT (Malaysiakini, 2013). However, this way of evading tax is illegal and, subject to the Real Property Gains Act 1976, punishable by prison sentence. In the Global Witness report, a lawyer who has represented both the Sarawak government and several public-linked companies confirmed that using Singapore as a tax-haven was a standard way of doing business (Global Witness, 2013, p. 4).

Transparency International Malaysia (2011) reports that the risks are transfer pricing (tax evasion through undervaluation) and bribery to undervalue timber. It thus seems reasonable to subject that similar risks are present in the oil palm sector. Supporting this claim is the findings by Chin (2011), who reports that there have been several complaints from the palm oil industry about the heavy taxation and this can thus be considered a prime motivation for tax evasion.

Risk conclusion

There is a risk of tax evasion due to corruption. There are several complaints from the palm oil industry about the heavy taxation and this is considered a prime motivation for tax evasion which is commonly linked to businesses with family, government and foreign ownerships.

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

1.3.6. Risk designation and specification

Elevated risk

1.3.7. Control measures and verifiers

Evidence of:

- Evidence of Proof of ownership, provided by two documents: Issue Document of Title and Register Document of Title
- Evidence of a business license and a completed a Business Registration Form (Form A) to the SSM
- Evidence of MPOB License
- Receipts shall exist for payments of related royalties, taxes and other required fees.
- Volumes, and qualities given in sales and transport documents shall match the paid fees.
- Classification of volumes and qualities shall match the royalties and fees paid.

1.4. Value added taxes and other sales taxes.

Legislation covering different types of sales taxes which apply to the material being sold. Risk relates to situations where products are sold without legal sales documents or far below market price resulting in illegal avoidance of taxes.

1.4.1. Applicable laws and regulations

- The Goods and Services Act 2014 - [link](#)
- Malaysian Palm Oil Board (Licensing) Regulations 2005 - [link](#)

1.4.2. Legal authority

- The Ministry of Finance: <http://www.treasury.gov.my/index.php/en/ministrys-profile/treasurys-profile.html>

The ministry in charge of formulating and implementing monetary policies and further in charge of distribution and the management of financial resources of Malaysia

- Royal Malaysian Customs Department:

http://www.customs.gov.my/en/ci/Pages/ci_vmv.aspx

Responsible for the nations indirect tax-policies, hereunder the GST

- The Ministry of Plantation Industries and Commodities (MPIC): <http://www.kppk.gov.my/mpic/index.php/en/>

The main functions of MPIC are policy and strategy development in the plantation and commodity sector, as well as supervision of relevant government department and agencies (e.g. MPOB) in regards to finance and implementation

- Malaysian Palm Oil Board (MPOB): <http://www.mpob.gov.my/en/about-us/about>

Government agency charged with overseeing, regulating and developing the Malaysian Palm Oil sector.

Licensing and taxation authority in the palm oil sector

1.4.3. Legally required documents or records

- Proof of ownership is provided by two documents: Issue Document of Title and Register Document of Title
 - If the buyer of land is a foreign person or company, the transfer needs to be sanctioned by the State Authority
- A business license is required and is provided by the relevant State authority
- Complete a Business Registration Form (Form A) to the SSM
- In addition, establishment and management of a palm oil plantation in Peninsular Malaysia requires the following licenses:
 - If the proposed agricultural plantation is of more than 500 ha derived from secondary- or primary forests (or from modification of present land use) it requires project proponents to submit an Environmental Impact Assessment (EIA) and

obtain approval from DOE
(http://www.rspo.org/files/resource_centre/OP_Chain_Part%20A_new.pdf).

- MPOB License (MPOB L1):
 - All persons wanting to be involved in the palm oil business needs to be licensed by the MPOB per the MPOB Regulations of 2005.

This includes the production, sale, purchase, movement, storage, commence construction of oil palm mill, milling, commence construction of bulking facilities, survey, test, export and import of oil palm products (<http://161.142.157.2/pnp/bi/pelesenan.html>)

1.4.4. Sources of information

Government sources

- LHDN. (2015). Real Property Gains Tax. Retrieved from www.lampiran.hasil.gov.my:
http://lampiran.hasil.gov.my/pdf/pdfam/RISALAH_R13_BI_15.pdf

Non-Government sources

- Borneo Post. (2013, November 22). Sabah to retain State Sales Tax when GST implemented – Musa. Retrieved from www.theborneopost.com:
<http://www.theborneopost.com/2013/11/22/sabah-to-retain-state-sales-tax-when-gst-implemented-musa/>
- Borneo Post. (2014, December 4). MPOB to take legal action against two palm oil traders. Retrieved from www.theborneopost.com:
<http://www.theborneopost.com/2014/12/04/mpob-to-take-legal-action-against-two-palm-oil-traders/>
- Borneo Post. (2016, January 29). Waive SST until CPO price stabilises. Retrieved from www.theborneopost.com: <http://www.theborneopost.com/2016/01/29/waive-sst-until-cpo-price-stabilises/>
- Chin, M. (2011). Biofuels in Malaysia: An Analysis of the Legal and Institutional Framework. Bogor, Indonesia: CIFOR.
- Ching, O. T. (2016, March 16). CPO export tax hike to benefit refiners. New Straits Times Online.
- Lakshana, M. (2015, May 7). Oil palm planters: GST on fertiliser and pesticide will encourage black market trade. Retrieved from www.theedgemarkets.com:
<http://www.theedgemarkets.com/my/article/oil-palm-planters-gst-fertiliser-and-pesticide-will-encourage-black-market-trade>
- Malaysiakini. (2013, March 19). Sarawak's way of evading tax and shareholding rules. Retrieved from www.malaysiakini.com: <https://www.malaysiakini.com/news/224250>
- Ting, E. H. (2015). At a Glance – The Malaysian Goods and Services Tax Act 2014. Abdullah Chan & Co.

1.4.5. Risk determination

Overview of Legal Requirements

The Goods and Services Tax (GST) was implemented on a nation-wide basis April 1st 2015 and replaced the former types of sales- and service tax. The GST is a multi-staged "... consumption based tax on goods and services" (Ting, 2015, p. 2) and as such it differs from direct taxes (RPGT, income tax etc.). The GST will apply to goods or services supplied in Malaysia, as well as on any importation of goods into Malaysia (Ting, 2015) and is rated at either 6% or 0% unless explicitly exempt by the law. In relation to palm oil, only cooking oil is rated at 0%, meaning that FFB, which is sold from the farms to the mills for oil extraction and the final product, CPO, ready for the refiners as well as other oil palm products are rated at 6%. The GST is imposed on most the transactions in the production process and consequently refunded to all parties in the process except for the final consumer.

In Sarawak, there has been great commotion about the implementation of the GST in 2015, because Sarawak and Sabah already had their own State Sales Taxes (SST). The SST is imposed on CPO, slot machines and lotteries. From the perspective of Sarawak and Sabah, the issue with the introduction of the GST is the choice between losing important state income and the prospect of 'double taxation' on CPO. This is because while the SST goes in the State coffers, the GST belongs to the Federal Government. The two Borneo States chose to retain their SST and CPO is thus both subject to GST and SST; something that affects the mills and consequently the price the mills can pay farmers for their Fresh Fruit Bunches (Borneo Post, 2013; Borneo Post, 2016).

Description of risk

The discontent with the introduction of GST on Borneo (Sarawak and Sabah) and the increased costs of production carried by the planters and millers of CPO does provide a motivation to avoid payment of GST and SST. The extent of the circumvention of GST and SST is difficult to estimate, but the double-taxation on CPO serves as an incentive to avoid this extra cost. However, no information has been found on the level of payment or avoidance of the relevant taxes in the country, for palm oil, or other businesses.

Risk conclusion

This indicator has been evaluated as low risk. Identified laws are upheld. Cases where law/regulations are violated are efficiently followed up via preventive actions taken by the authorities and/or by the relevant entities.

1.4.6. Risk designation and specification

Low risk

1.4.7. Control measures and verifiers

N/A

1.5. Income and profit taxes

Legislation covering different types of sales taxes which apply to the material being sold. Risk relates to situations where products are sold without legal sales documents or far below market price resulting in illegal avoidance of taxes.

1.5.1. Applicable laws and regulations

- Malaysian Palm Oil Board (Licensing) Regulations 2005 - [link](#)

- Malaysia Income Tax Act 1967 - [link](#)
- The Goods and Services Act 2014 - [link](#)

1.5.2. Legal authority

- The Ministry of Finance: <http://www.treasury.gov.my/index.php/en/ministries-profile/treasurys-profile.html>

The ministry in charge of formulating and implementing monetary policies and further in charge of distribution and the management of financial resources of Malaysia

- Royal Malaysian Customs Department: http://www.customs.gov.my/en/ci/Pages/ci_vmv.aspx

Responsible for the nations indirect tax-policies, hereunder the GST

- The Ministry of Plantation Industries and Commodities (MPIC): <http://www.kppk.gov.my/mpic/index.php/en/>

The main functions of MPIC are policy and strategy development in the plantation and commodity sector, as well as supervision of relevant government department and agencies (e.g. MPOB) in regards to finance and implementation

- Malaysian Palm Oil Board (MPOB): <http://www.mpob.gov.my/en/about-us/about>

Government agency charged with overseeing, regulating and developing the Malaysian Palm Oil sector.

Licensing and taxation authority in the palm oil sector

1.5.3. Legally required documents or records

- Proof of ownership is provided by two documents: Issue Document of Title and Register Document of Title
 - If the buyer of land is a foreign person or company, the transfer needs to be sanctioned by the State Authority
- A business license is required and is provided by the relevant State authority
- Complete a Business Registration Form (Form A) to the SSM
- MPOB License (MPOB L1):
 - All persons wanting to be involved in the palm oil business needs to be licensed the MPOB according to the MPOB Regulations of 2005.
 - This includes the production, sale, purchase, movement, storage, commence construction of oil palm mill, milling, commence construction of bulking facilities, survey, test, export and import of oil palm products (<http://161.142.157.2/pnp/bi/pelesenan.html>)

1.5.4. Sources of information

Government sources

- Zakaria, T. S. (2010). Tax System in Malaysia: The ASEAN Tax System Seminar 2010. Bangkok, Thailand: Government of Malaysia.

Non-Government sources

- PwC. (2016). 2015/2016 Malaysian Tax and Business Booklet . Kuala Lumpur, Malaysia: PricewaterhouseCoopers Taxation Services Sdn Bhd.

1.5.5. Risk determination

Overview of Legal Requirements

In Malaysia, the standard taxation of corporate income is at 25%. This level of taxation applies to all sectors, except banking, insurance, air transport and shipping. Taxable income is all earnings derived from Malaysia and covers gains from dividend, royalty and land trading. Companies with annual earnings below 2,500,000MYR are classified as 'Small-to-Medium Enterprise' (SME) and qualify for a 5% tax decrease for the first 50,000MYR (PwC, 2016).

Description of risk

The main risk in relation to taxation is corruption. Malaysia scores a 50/100 on Transparency International's corruption index and thus corruption is an issue in Malaysia. In relation to forestry and oil palm plantation development, Transparency International Malaysia (2011) reports that the risks are transfer pricing (tax evasion through undervaluation) and bribery to undervalue timber. In particular, family, government and foreign ownerships have been proven as the potential determinants of corporate tax avoidance (Annuar, 2014); these types of ownerships are also found in the palm oil plantation sector in Malaysia.

It thus seems reasonable to subject that similar risks are present in the oil palm sector. Supporting this claim is the findings by Chin (2011), who reports that there have been several complaints from the palm oil industry about the heavy taxation and this can thus be considered a prime motivation for tax evasion.

Risk conclusion

This indicator has been evaluated as low risk. Identified laws are upheld. Cases where law/regulations are violated are efficiently followed up via preventive actions taken by the authorities and/or by the relevant entities.

1.5.6. Risk designation and specification

Elevated risk

1.5.7. Control measures and verifiers

Country Specific

Evidence of:

- Proof of ownership is provided by two documents: Issue Document of Title and Register Document of Title
- Evidence of a business license and a completed a Business Registration Form (Form A) to the SSM

- Evidence of MPOB License

Generic

- Consultation with financial authority to verify that all required income and profit taxes have been paid.

1.6. Disclosure of information

Legislation covering requirements for regular business reporting to ensure information disclosure and transparency. Risk relates to lack of business transparency and/or incorrect disclosure of legally required business information.

1.6.1. Applicable laws and regulations

- Companies Act 1965 (Act 125) - [link](#)

1.6.2. Legal authority

- Malaysian Accounting Standard Board (MASB): <http://masb.org.my/pages.php?id=14>
In charge of formulating accounting standards

1.6.3. Legally required documents or records

N/A

1.6.4. Sources of information

Non-Government sources

- Othman, R., & Ameer, R. (2010). Environmental Disclosures of Palm Oil Plantation Companies in Malaysia: A Tool for Stakeholder Engagement. Corporate Social Responsibility and Environmental Management, 52-62.

1.6.5. Risk determination

Overview of Legal Requirements

Subject to the Companies Act 1965, reporting in the palm oil industry is confined to financial data with no reference to disclosure to environmental information. However, the Financial Reporting Standard 1 (FRS) does make a special reference to environmental disclosures, but it only encourages companies to present additional information and environmental reporting is thus voluntary (Othman & Ameer, 2010).

Description of risk

In their research on environmental disclosures in the Malaysian oil palm industry, Othman & Ameer (2010) found that companies only disclosed limited information in their annual reports (p. 61). With the increasing media- and public attention towards both social- and environmental consequences of oil palm plantation development, it must be assumed that stakeholders and investors must be increasingly dissatisfied with the lack of disclosure of information. However, following the current legal requirements, the requirements of disclosure seem to be adhered to.

Risk conclusion

This indicator has been evaluated as low risk. Identified laws are upheld. Cases where law/regulations are violated are efficiently followed up via preventive actions taken by the authorities and/or by the relevant entities.

1.6.6. Risk designation and specification

Low risk

1.6.7. Control measures and verifiers

N/A

SOCIAL ISSUES

2.1. Civil rights - legal employment

Legal requirements for employment of personnel involved in plantation activities including requirement for contracts and working permits, requirements for obligatory insurances, requirements for competence certificates and other training requirements, and payment of social and income taxes withhold by employer. Risk relates to situations/areas where systematic or large scale noncompliance with labour and/or employment laws. The objective is to identify where serious violations of the legal rights of workers take place, such as forced, underage or illegal labour.

2.1.1. Applicable laws and regulations

- Sarawak Labour Ordinance 1952 - [link](#)
- Minimum Wages Order 2016 - [link](#)
- Industrial Relations Act 1967 (Act 177) - [link](#)
- Employment (Restriction) Act 1968 - [link](#)
- Employment (Information) Act 1953 - [link](#)
- Sarawak Weekly Holidays Ordinance 1951 - [link](#)
- Wages Council Act 1947 - [link](#)
- Workers Minimum Housing Standards and Amenities Act 1990 (Act 446) - [link](#)
- Employees Provident Fund Act 1991 - [link](#)
- Employee Social Security Act 1969 - [link](#)
- Workmen's Compensation Act 1952 - [link](#)
- Children and Young Persons (Employment) Act 1966 - [link](#)
- Occupational Safety and Health 1994 - [link](#)
- Employment (Restriction) Act 1968 - [link](#)
- Trade Unions Act 1959 (Act 262) - [link](#)
- Immigration Act 1957 - [link](#)
- Immigration Regulations 1959/63 - [link](#)
- Anti-Trafficking in Persons and Anti-Smuggling of Migrants Act 2007 (Amendment 2010) - [link](#)

2.1.2. Legal authority

- The Ministry of Human Resources (MOHR): Ministry charged with the regulation of wages as well as health and safety standards
 - Department of Labour Sarawak:
 - Occupational Health and Safety Department – Responsible for reviewing, enforcing and promoting industrial health and safety

- The Industrial Court of Malaysia: Main functions are to "... hear and down decisions or awards in industrial disputes referred to it by the Minister or directly by the parties" (Industrial Court of Malaysia, n.d.) and to monitor the collective agreement reached between the employer/trade union of employers and trade union of employees (<http://www.mp.gov.my/en/about-us/client-s-charter>)
- Social Security Organization (SOSCO): Government Agency administering and enforcing the Employee Social Security Act 1969 and Employee Social Security General Rules 1971
- Ministry of Finance
 - Employees' Provident Fund (EPF): Management of mandatory savings- and retirement planning for all Malaysian workers in the private sector. To Malaysians, membership of EPF is obligatory and voluntary for non-Malaysian workers.
- Ministry of Home Affairs: Main function is "To ensure orderly management of the issue of travel documents, entry/exit of citizens and foreign nationals as well as the issue of appropriate passes to foreign nationals who reside in this country in accordance with immigration acts and regulations" (<http://www.moha.gov.my/index.php/en/maklumat-korporat/fungsi-kementerian>)
 - The Immigration Department: Charged with issuance of passports and travel documents to Malaysians, visas, passes and permits to foreign nationals and management the movement of people at authorized entry and exist points (<http://www.imi.gov.my/index.php/en/corporate-profiles/introduction.html>)
- Plantation Industries and Commodities Ministry: The main functions of MPIC are policy and strategy development in the plantation and commodity sector, as well as supervision of relevant government department and agencies in regards to finance and implementation – e.g. MPOB (<http://www.kppk.gov.my/mpic/index.php/en/>)

2.1.3. Legally required documents or records

- Employment Contract
 - Subject to the Sarawak Labour Ordinance 1952 and the Industrial Relations Act 1967, any employer or self-employed person must provide his/her employees with a written contract of employment (unless the duration of the work is less than one month, in which an oral contract will suffice)
 - The contract must include the following information:
 - Names of both employer and employee
 - Job title
 - Date of commencement of work
 - Place of work as well as work address
 - Required notice period as well as retirement age
 - By law, following minimum terms and conditions must be adhered to:
 - No more than 48 hours per week

- No more than 8 hours per day (maximum 10 hours if spread over a day)
- A minimum 30 minute of rest for every five hours worked
- One day off per week
- Migrant workers further must have a valid passport, valid visa as well as pass a medical exam prior to employment

2.1.4. Sources of information

Government sources

- PERKESO. (n.d.). Social Security Principles. Retrieved August 10, 2016, from [www.perkeso.gov.my: http://www.perkeso.gov.my/en/social-security-protection/social-security-principles.html](http://www.perkeso.gov.my/en/social-security-protection/social-security-principles.html)

Non-Government sources

- Borneo Post. (2015, February 11). Sarawak's palm oil industry in dire need of workers. Retrieved from [www.theborneopost.com: http://www.theborneopost.com/2015/02/11/sarawaks-palm-oil-industry-in-dire-need-of-workers/](http://www.theborneopost.com/2015/02/11/sarawaks-palm-oil-industry-in-dire-need-of-workers/)
- Borneo Post. (2016, February 20). Nod for Sarawak, Sabah to recruit own foreign workers. Retrieved from [www.theborneopost.com: http://www.theborneopost.com/2016/02/20/nod-for-sarawak-sabah-to-recruit-own-foreign-workers/](http://www.theborneopost.com/2016/02/20/nod-for-sarawak-sabah-to-recruit-own-foreign-workers/)
- Business & Human Rights Resource Centre . (2015, June 10). Malaysia: Palm oil company PJP Pelita Selangau denies exploitation & abuse of 100 Indonesian workers in Sarawak. Retrieved from [www.business-humanrights.org: https://business-humanrights.org/en/malaysia-palm-oil-company-pjp-pelita-selangau-denies-exploitation-abuse-of-100-indonesian-workers-in-sarawak](https://business-humanrights.org/en/malaysia-palm-oil-company-pjp-pelita-selangau-denies-exploitation-abuse-of-100-indonesian-workers-in-sarawak)
- ICLG. (2016). The International Comparative Guide to: Employment and Labour Law 2016 (6th ed.). Global Legal Group.
- ILO. (2013). Malaysia - 2013. Retrieved from [www.ilo.org: http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO::P1100_ISO_CODE3,P1100_YEAR:MYS,2013](http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO::P1100_ISO_CODE3,P1100_YEAR:MYS,2013)
- Othman, S. A., & Rahim, R. A. (2014). Migrant Workers in Malaysia: Protection of Employers. *Pertanika - Social Sciences & Humanities*, 271-282.
- US Department of State. (2016). 2015 Trafficking in Persons Report. US Department of State.
- Villadiego, L. (2015). Palm oil: why do we care more about orangutans than migrant workers? *The Guardian*.

2.1.5. Risk determination

Overview of Legal Requirements

The Employment Act 1955 (EA) covers employees that have a monthly salary less than 2,000MYR, engage in manual labour, supervise manual labour, operate propelled machinery,

or work as a domestic servant, as well as employees in certain positions in sea-going vessels (ICLG, 2016). The coverage of manual labour means that the EA effectively covers most oil palm farm workers and is significant to the palm oil industry. Employees covered by the EA have the following minimum terms and conditions of employment:

- Maximum hours of work per day and per week;
- Overtime payment for work more than normal hours of work;
- Protection from deduction of wages;
- Paid annual leave/vacation leave;
- Paid sick leave
- Minimum 10 paid public holidays, five of which are determined by law
- Termination notice period
- Payment of termination benefits, except in cases where the termination of employment is due to misconduct or poor performance
- A minimum wage of 920MYR per month or 4.42 per hour in Sarawak (ICLG, 2016)

The EA requires all employees in the private sector to be members of the Employee's Provident Fund (EPF) and the Social Security Organization (SOCSO). EPF handles savings- and retirement- planning, while SOCSO provides medical insurance. SOCSO membership is contingent upon a salary not exceeding 3,000MYR unless the employee is a registered contributor (PERKESO, n.d.). An important note is that foreign nationals working in Malaysia are excluded from EPF and SOCSO (ICLG, 2016). Instead, foreign workers are covered by the Workmen's Compensation Act. The EA also states that all contracts with a duration of one month or more must be in written form and contain provision for termination. Should a written contract not exist, the employment relationship and contractual terms still stand (ICLG, 2016).

Summing up, people working on palm oil farms in Malaysia are covered by the EA and thus enjoy a set of minimum terms and conditions of employment, as well as implied rights to protection from unjust dismissal (ICLG, 2016). Unionizing is governed by the Trade Unions Act 1959 (TUA) and the Industrial Relations Act 1967 (IRA). Membership is restricted to certain sectors and the law prohibits migrant workers from forming a trade union, but allows for migrant workers to join an existing union. Subject to section 28(1) of the Trade Union Act, a migrant worker cannot hold an executive position in a trade union.

Malaysian law states that all job vacancies must be offered to Malaysian nationals before opening for migrant applications. In the case of vacancies, which is the norm in the palm oil industry, an application to the Immigration Department (ID) is made by the employer and if successful, the ID will grant the employer with a license to import migrant workers. Migrant workers must then be able to show a valid visa and passport as well as pass a medical exam (Othman & Rahim, 2014). Upon expiry of the visa (usually valid for three months), the migrant worker is terminated. Migrant labour is thus temporary and workers are tied to one Malaysian employer. Referent to the Workmen's Compensation Act of 1952, all employers must insure all their foreign employees. In addition, it is the duty of the employer to produce a written OSH policy for the workplace, hire a safety and health officer (only in some cases)

as well as provide the necessary training to the employees (ILO, 2013). Migrant labourers in Malaysia thus enjoy legal protection that is like that of Malaysians.

Description of risk

The main risk of legal employment is related to the import and working conditions of migrant workers. Industrial growth in Malaysia has often led to an acute labour shortage in certain sectors, necessitating an influx of migrant workers. According to the 2015 Trafficking in Persons (TIP) report prepared by the US Department of State, Malaysia is a major destination for illegal trafficking and forced labour. This has been especially evident in the palm oil industry in Malaysia and Indonesia, which employs a total of some 3,5 million workers (Villadiego, 2015). In Malaysia, most of these workers are migrant workers from the Philippines, Nepal, Bangladesh and Indonesia.

It is estimated that Malaysia currently has two million documented, and even more undocumented, foreign workers (US Department of State, 2016, p. 254). Furthermore, it is concluded that Malaysia's legal framework is currently insufficient to protect foreign workers, because the law imposes several processing fees and levies on the employer and consequently allows these fees to be deducted from the workers' wages, thus incentivizing forced labour and debt bondage (US Department of State, 2016). Common policies in the treatment of foreign workers further include passport retention (both authorized and unauthorized), contract violations, restricted movement, wage fraud and imposition of debt by both recruitment agents and employers (US Department of State, 2016, p. 255). In 2002, the Human Rights Resource Centre concluded that: "There have been complaints of mistreatment, exploitation by unscrupulous recruitment agencies, physical abuse and poor living and work conditions of foreign workers" (Lih, 2012) and further that these problems are exacerbated by the lack of law enforcement.

In Sarawak, the issue of migrant workers is especially pertinent, as Sarawak currently faces a significant shortage of labour in the oil palm industry (Borneo Post, 2015). It has been reported that 1.5 billion MYR is lost annually due to the lack of harvesters for the FFBS (Borneo Post, 2016). Apparently in recognition of a lack of willingness by Malaysian to undertake the dirty, dangerous and difficult (3D) work of oil palm harvesters, Sarawak has been allowed to import its own foreign labour (Borneo Post, 2016). However, this sourcing of migrant labour is not without risks. Several reports of abuse of foreign workers in Malaysian oil palm plantations have surfaced in the media the last couple of years. An example is the report of abuses of 100 Indonesian workers in Sarawak in June 2015 (Business & Human Rights Resource Centre, 2015). This is one of many cases of alleged abuse of foreign workers in the Malaysian palm oil industry, which have prompted the US Department of Labour to designate palm oil as a product produced by both forced- and child labour (US Department of Labour, 2014). Hence, despite enjoying legal protection close to that of Malaysian nationals, reports of abuses of foreign labour are much more prominent in the media.

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

2.1.6. Risk designation and specification

Elevated risk

2.1.7. Control measures and verifiers

Evidence of:

- List of employees (e.g., request the employer's payroll list) and ask for a sample of Employment Contract(s) of those employees on the list.
 - The contract must include the following information:
 - Names of both employer and employee
 - Job title
 - Date of commencement of work
 - Place of work as well as work address
 - Required notice period as well as retirement age
- Request the employer's payment voucher and evidence that that required payments such as social security contributions are being paid.
- Request from the employee or the employer pay stubs to verify it is in line within the relevant contract agreement
- Interviewing employees and ask what activity performed, that amount paid by the employer for the activity, which method of payment have (daily / daily wage, monthly, performance / production), how long working hours, few days a week they work.
- To ensure that employees are registered with EPF and SOCSO, one can cross check the record of salary payment slips with receipts from EPF and SOCSO and the corresponding payment forms (Form A for EPF and Form 8A for SOCSO)

The employer is the one responsible to register employees with EPF and SOCSO, so the employer itself should be able to provide the list of workers registered. To ensure that all employees are registered, I think easiest is to cross check record of salary payment slips, and official receipts from EPF and SOCSO and the corresponding payment forms (Form A for EPF, Form 8A for SOCSO).

2.2. Health and Safety

National and sub national laws and regulations incorporation of the ILO Fundamental Conventions. This is to ensure minimum employment requirements cover an observance of minimum working age, legislation against forced and compulsory labour, and discrimination and freedom of association etc. Risk relates to if there are gaps in the national and/or sub national laws and regulations with the ILO Fundamental Conventions. The objective is to identify the gaps and/or where there may be serious violations of the legal rights of workers take place against the eight core ILO Fundamental Conventions.

2.2.1. Applicable laws and regulations

- Occupational Safety And Health Act 1994 (Act 514) - [link](#)
- Factories and Machinery Act 1967 (Act 139) - [link](#)
- Petroleum (Safety Measures) Act 1984 (Act 302) - [link](#)

2.2.2. Legal authority

- The Ministry of Human Resources (MOHR): Ministry charged with the regulation of wages as well as health and safety standards
 - The Department of Occupational Safety and Health (DOSH) Sarawak is the department under MOHR responsible for the safety, health and welfare of the working people.

2.2.3. Legally required documents or records

- It is required of all employer and self-employed persons to produce a written Occupational Health & Safety policy. It is further the responsibility of the employer to advise about the content of the policy, revise it as well as alter it based on suggestions made by his employees
- Furthermore, for large-scale oil palm plantations and mills, the hiring of a health and safe officer is a requirement

2.2.4. Sources of information

Non-Government sources

- Al-Mahmood, S. Z. (2015, July 26). Palm-Oil Migrant Workers Tell of Abuses on Malaysian Plantations. Retrieved from www.wsj.com: <http://www.wsj.com/articles/palm-oil-migrant-workers-tell-of-abuses-on-malaysian-plantations-1437933321>
- Bahrin, J. S. (2016). Self-Regulation and Occupational Safety and Health Act (OSHA) 1994. Dinner talk between the Society of Occupational and Environmental Medicine of the Malaysian Medical Association (SOEM-MMA), the Malaysia Medical Association (MMA) and the Executive Director of Malaysian Employers Federation (MEF). (pp. 1-2). Kuala Lumpur: Malaysian Employers Federation.
- Human Rights Watch. (2011). They Deceived Us at Every Stage: Abuse of Cambodian Domestic Workers Migrating to Malaysia. Human Rights Watch.
- ILO. (2004). Safety and Health Fact Sheet - Oil Palm. Geneva: International Programme on the Elimination of Child Labour.
- ILO. (2013). Malaysia - 2013. Retrieved from www.ilo.org: http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO::P1100_ISO_CODE3,P1100_YEAR:MYS,2013
- Villadiego, L. (2015). Palm oil: why do we care more about orangutans than migrant workers? The Guardian.
- US Department of State. (2016). 2015 Trafficking in Persons Report. US Department of State.

2.2.5. Risk determination

Overview of Legal Requirements

The main components guiding Occupational Health and Safety (OSH) in Malaysia is the Occupational Safety and Health Act 1994, the Factories and Machinery Act 1967, the Petroleum Act (safety measures) 1984. However, there are others laws mentioning OSH, but the three above are the most important. Of special relevance to the palm oil industry is

concerns such as legally required protection and training, safety requirements of machinery and safety requirements in relation to chemical usage.

Section 15(1) of the Occupational Safety and Health Act 1994 states that it is the duty of every employer and self-employed person to ensure the safety and welfare of all his employees while at work. The act further states in section 24(1c) that it is the duty of the employer to provide the necessary protective equipment for the workers. The employer has the duty to ensure the usage of the protective equipment. The employer must provide first-aid kit, sanitary installations, drinking water as well as rest- and eating areas (ILO, 2013). Furthermore, it is the duty of the employer to produce a written OSH policy for the workplace, hire a safety and health officer (only in some cases) as well as provide the necessary training to the employees (ILO, 2013).

An important feature of the Occupational Safety and Health Act 1994 is that it is based on the concept of self-regulation, meaning that health and safety concerns must be handled by whoever creates the risks. Self-regulation comes in one of three forms; voluntary self-regulation, mandated full self-regulation or mandated partial self-regulation (Bahrin, 2016). Voluntary self-regulation is pure self-regulation, where the company or industry makes the rules and enforces these rules without government intervention. Mandated full self-regulation means that both rules and enforcement are handled by the company or industry, but subject to government monitoring and enforcement, if necessary. Finally, mandated partial self-regulation means that the company or industry can choose to either make the rules or enforce the rules, but not both. This effectively means public enforcement of private rules or vice versa (Bahrin, 2016).

Description of risk

The above walk-through of the central OSH legal requirements relevant to the palm oil industry shows a Malaysian regulatory framework protective of its workers. This protection is indeed necessary, as workers in oil palm plantations face several OSH hazards daily. Some major risks are:

- Falling fruit bunches (weighing 15-25 kilograms)
- Injuries from cutting tools
- Eye damage from falling fronds
- Bites from insects and snakes as well as oil palm pest (fire caterpillars)
- High level of sun exposure causing heating, dehydration and increased risk of skin cancer
- Poisoning from toxic herbicides (such as paraquat)
- Abrasion from the thorns of the palm oil fruit
- Injuries from heavy lifting and carrying as well as repetitive movements (ILO, 2004)

It is evident that the legal framework in Malaysia effectively covers the hazards listed above, however several instances of breaches of Malaysian health and safety standards have surfaced in the last years. While what may have been the most prominent report from the Wall Street Journal (Al-Mahmood, 2015) was related specifically to Peninsular Malaysia, it also reported that a lack of protective equipment, training and contact with dangerous herbicides were systematic throughout Malaysia and Southeast Asia generally. Several sources have reported instances of breaches of health and safety both throughout Malaysia

and specifically in Sarawak (Asia Pacific Migration Network, 2014; Business & Human Rights Resource Centre, 2015; MPIC, 2011; US Department of Labor, 2014; US Department of State, 2016). One study conducted by Kumar, Ismail & Govindarajo (2014) suggested that OSH breaches were more common in smallholder- than large-scale plantations. However, this suggestion stands in contradiction to the widespread OSH breaches reported in FELDA-plantations by Al-Mahmood (2015).

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

2.2.6. Risk designation and specification

Elevated risk

2.2.7. Control measures and verifiers

Seek evidence on:

- Company's occupational safety and health (OSH) management system reporting via published annual sustainability reports in combination with:
- Verify that the company has an occupational safety and health (OSH) program, and that the program used in practice.
 - Verify that the employees of the company have been trained about work safety
 - Obtain records of reports of workplace deaths. Deaths in the workplace must be recorded.

For Large-scale private plantations [>40 - >100,000 ha]

- Evidence of a H&S officer position and training, procedures and equipment are in place

Generic

- All safety and health regulations shall be followed and all required safety equipment shall be used
- Occupational health and safety requirements shall be observed by all personnel involved in farm management activities.
- Interviews with staff and contractors shall confirm that legally required protection equipment is required/provided by the organization.
- All requirements on prevention of air and water pollution shall be followed and are verified through reports monitoring pollution (when applicable).

2.3. ILO Fundamental Conventions are upheld

Legally required personnel protection equipment for persons involved in plantation activities and safety requirements to machinery used. Legally required safety requirements in relation to chemical usage. The health and safety requirements that shall be considered relate to operations on the plantation. Risk relates to situations/areas where health and safety regulations are consistently violated to such a degree that puts the health and safety of plantation workers at significant risk throughout plantation establishment and management operations.

Context

Malaysia has ratified the following ILO Fundamental Conventions:

- Right to Organise and Collective Bargaining Convention, 1949 (No. 98)
- Forced Labour Convention, 1930 (No. 29)
- Minimum Age Convention, 1973 (No. 138)
- Worst Forms of Child Labour Convention, 1999 (No. 182)
- Equal Remuneration Convention, 1951 (No. 100)

Malaysia ratified the Abolition of Forced Labour Convention, 1957 (No. 105), but it was denounced on 10 January 1990, and is not in force.

For ratified ILO conventions by Malaysia:

http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::no:11200:p11200_country_id:102960

For non-ratified ILO conventions by Malaysia:

http://www.ilo.org/dyn/normlex/en/f?p=1000:11210:375936265133562:::P11210_INSTRUMENT_SORT:1

For information on ILO Conventions and Recommendations:

<http://www.ilo.org/global/standards/introduction-to-international-labour-standards/conventions-and-recommendations/lang--en/index.htm>

2.3.1. Applicable laws and regulations

Relevant Legislation (see section 2.1.1 for hyperlinks to applicable legislation):

- Federal Constitution of Malaysia
 - Part II outlines right to personal liberty, freedom of speech, assembly and association
 - Art. 6 provides protection from forced labour
 - Art. 8 states that all are equal before the law and that there shall be no discrimination based on religion, race, descent or place of birth
- Sarawak Labour Ordinance 1952
 - Provides minimum protection to employees about their terms and conditions of service consisting of working hours, wages, holidays and retrenchment benefits (see section 2.1.4) (ILO, 2014)
- Workers Minimum Housing Standards and Amenities Act 1990 (Act 446)
 - Prescribes minimum standards of housing while requiring employers to provide medical- and social amenities for workers (ILO, 2014)
- Workmen Compensation Act 1952 (Act 273)
 - Provides payment of compensation for injuries sustained in accidents during employment (ILO, 2014)

- Children and Young Persons (Employment) Act 1966
 - Provides regulation to protect children and young persons engaged in employment in terms of working hours, type of work, abuse, etc. (ILO, 2014)
- Occupational Safety and Health 1994
 - Provides regulations to secure the safety, health and welfare at work against risks to safety or health arising out of the activities of persons at work (ILO, 2014)
- Anti-Trafficking in Persons and Anti-Smuggling of Migrants Act 2007

2.3.2. Legal authority

See 2.1.2

2.3.3. Legally required documents or records

See 2.1.3

2.3.4. Sources of information

Government Sources:

- Ratifications by Malaysia Ratified ILO conventions by Malaysia:

http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::no:11200:p11200_country_id:102960
- Non-ratified ILO conventions by Malaysia:

http://www.ilo.org/dyn/normlex/en/f?p=1000:11210:375936265133562:::P11210_INSTUMENT_SORT:1
- Further information on ILO Conventions and Recommendations:

<http://www.ilo.org/global/standards/introduction-to-international-labour-standards/conventions-and-recommendations/lang--en/index.htm>

Non-Government Sources:

- Accenture. 2013. Exploitative Labour Practices in the Global Palm Oil Industry.

http://humanityunited.org/pdfs/Modern_Slavery_in_the_Palm_Oil_Industry.pdf
- Al-Mahmood, S. Z. (2015, July 26). Palm-Oil Migrant Workers Tell of Abuses on Malaysian Plantations. Retrieved from www.wsj.com: <http://www.wsj.com/articles/palm-oil-migrant-workers-tell-of-abuses-on-malaysian-plantations-1437933321>
- Amnesty International. (2016). Amnesty International 2015/16: The State of the World's Human Rights. Amnesty International.
- Chi, M. (2013, October 30). In bid to stop 'slave trading', Putrajaya cuts red tape on foreign hires. Retrieved from www.themalaymailonline.com: <http://www.themalaymailonline.com/malaysia/article/in-bid-to-stop-slave-trading-putrajaya-cuts-red-tape-on-foreign-hires>
- Human Rights Watch. (2011). They Deceived Us at Every Stage: Abuse of Cambodian Domestic Workers Migrating to Malaysia. Human Rights Watch.

- ILO. (2014). Individual Case (CAS) - Discussion: 2014, Publication: 103rd ILC session (2014). Retrieved from www.ilo.org: http://www.ilo.org/dyn/normlex/en/f?p=1000:13100:0::NO:13100:P13100_COMMENT_ID:3175038
- MPIC. (2014, December 14). PALM OIL -Reduce red tape for hiring foreign workers, employers group tells Putrajaya. Retrieved from www.kppk.gov.my: <http://www.kppk.gov.my/mpic/index.php/en/media-mpic-vbi/media-release/2-uncategorised/129-palm-oil-reduce-red-tape-for-hiring-foreign-workers-employers-group-tells-putrajaya>
- Othman, S. A., & Rahim, R. A. (2014). Migrant Workers in Malaysia: Protection of Employers. *Pertanika - Social Sciences & Humanities*, 271-282.
- Pusat Komnas. (2016). Malaysia Racial Discrimination Report 2015. Petaling Jaya, Selangor: Pusat Komnas Malaysia - Non-Discrimination Programme
- Short, A., Pietropaoli, I., & Dhanarajan, S. (2015). Business & human rights in Malaysia: A report from Kuala Lumpur. Business & Human Rights Resource Centre.
- US Department of Labour. (2014). List of Goods Produced by Child Labour or Forced Labour. Washington D.C.: US Department of Labour.
- US Department of State. (2016). 2015 Trafficking in Persons Report. US Department of State.
- Verite. 2013. Sustainable Palm Oil? Promoting New Measures to Combat Risks of Forced Labor and Human Trafficking in Palm Oil Supply Chains. http://www.verite.org/sites/default/files/images/Palm_White_Paper_May_2013_Final_Draft_0.pdf
- Villadiego, L. (2015). Palm oil: why do we care more about orangutans than migrant workers? *The Guardian*.

2.3.5. Risk determination

Overview of Legal Requirements

Malaysia has only ratified six of the eight fundamental ILO conventions and further denounced convention number 105, meaning that five of eight conventions currently are in force. However, from the legislation above it is evident that Malaysia has an encompassing legal framework for labourers effectively covering the eight fundamental conventions of employment.

Description of risk

In relation to the ILO fundamental conventions and Malaysian legal framework, the risks seem to be twofold. First, it is a clear risk that Malaysia currently has only ratified 5/8 ILO fundamental conventions. Second, despite the existence of an encompassing legal framework, there exist several cases of alleged illegal labour, human trafficking, child labour and abuses of foreign workers in oil palm plantations in Peninsular Malaysia. Abuses include lack of safety training, inadequate housing, unfair withholding of pay and a lack of medical insurance in case of injury (Section 2.1.4 for further information).

The Anti-Trafficking in Persons and Anti-Smuggling of Migrants Act 2007 signifies an increased Malaysian awareness on the issue of human trafficking and illegal immigration, which is a serious issue in the palm oil sector. While the increased attention towards human trafficking and smuggling is a positive and indeed necessary development, little attention is awarded to the rights of migrant workers. Malaysia has not ratified ILO Conventions 97 (Migration for Employment Convention) and 143 (Migrant Workers (Supplementary Provisions)) or the United Nations International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families. Considering that most oil palm plantation workers are foreign, this lack of ratification of international conventions is worrisome.

Despite the seemingly encompassing legal framework, evidence and reports from both newspaper articles and official government departments suggests that the Malaysian legal framework covering areas of employment is not consistently enforced in the palm oil sector (Al-Mahmood, 2015; Human Rights Watch, 2011; US Department of Labour, 2014; US Department of State, 2016). Reports of use of illegal immigrants and abuse of foreign workers in plantations suggests that neither ILO conventions nor the Malaysian legal framework are being sufficiently enforced (see section 2.1.5). In addition, it seems that the freedoms of association and collective bargaining are not upheld as Amnesty International reports that an erosion of civil liberties is currently happening in Malaysia, compromising liberties as the freedom of speech and freedom of association and assembly (Amnesty International 2016).

Risk conclusion

Country/region under assessment has not ratified all the ILO Fundamental Conventions and ILO Fundamental Conventions related laws are not upheld consistently by all entities and/or are systematically ignored, and/or are not enforced by relevant authorities.

2.3.6. Risk designation and specification

Elevated risk

2.3.7. Control measures and verifiers

Verifiers:

- Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations. Check palm oil producers scores: <http://www.sustainablepalmoil.org/companies/> and review the relevant company(s) annual or sustainability report to determine if and how they are reporting on labour right issues.

Control Measures:

- Evidence of that the palm oil farm(s) have a clear policy and compliance system in place that prohibits child labour and its worst forms and sets the minimum age for employment consistent with applicable law.
- Documentation of pay and conditions and evidence is provided it is being implemented credibly (additional cross checks with employees and/or objective observers/stakeholders

could be conducted). See also control measures under 2.1.5 for more guidance on evidence of legal employment.

Generic

- At least the legally established minimum salaries shall be paid for personnel involved in farm management activities.
- Salaries shall be paid officially and declared by the employer according to requirements for personnel involved in farm management activities.
- Minimum age shall be observed for all personnel involved in farm management activities.
- Minimum age shall be observed for all personnel involved in hazardous work.
- Stakeholders shall confirm that forced or compulsory labour is not involved in farm management activities.
- There evidence and/or employees confirm the employer allows them the right to organize and collective bargain.

2.4. The rights of indigenous and traditional peoples are upheld

Legislation requirements addressing: i) customary rights relevant to plantation activities including requirements covering sharing of benefits and indigenous rights ii) "free prior and informed consent" in connection with transfer of plantation management rights and customary rights to the organisation in charge of the plantation operation iii) Legislation that regulates the rights of indigenous/traditional people as far as it's related to plantation activities. Possible aspects to consider are land tenure, right to use certain plantation related resources or practice traditional activities, which may involve plantation lands.) When there is no or inadequate legislation addressing the rights of traditional and indigenous peoples, their rights are still upheld by the relevant plantation operation(s). Risk relates to the violation of indigenous and traditional peoples' rights including land tenure rights, resource access and use rights, a due process has been follow in cases of transference of rights, a recognised dispute conflict resolution process exists etc.

2.4.1. Applicable laws and regulations

- Malaysia Federal Constitution - [link](#)
- Sarawak Land Code 1958 - [link](#)
- National Land Code (Act No. 56 of 1965) - [link](#)
- Land Acquisition Act 1960 - [link](#)
- Native Court Ordinance 1992 - [link](#)
- Native Court Rules 1993 - [link](#)
- United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) - [link](#)

2.4.2. Legal authority

- Federal Government: Referent to the National Land Code 1965, the Federal government can intervene in land matters to promote uniformity of law and policy and thus plays an important coordinating role across law, administration and policy (<http://aseanvaluer.org>)

- Department of Environment Malaysia (DOE): Responsible for the implementation and regulation of environmental legislation
 - Key activities: environmental assessment, monitoring, review and enforcement of environmental regulations and orders as prescribed under the Environmental Quality Act (http://www.rsपो.org/files/resource_centre/OP_Chain_Part%20A_new.pdf)
- The Ministry of Plantation Industries and Commodities (MPIC): <http://www.kppk.gov.my/mpic/index.php/en/>
 - The main functions of MPIC are policy and strategy development in the plantation and commodity sector, as well as supervision of relevant government department and agencies in regards to finance and implementation – e.g. MPOB
 - Malaysian Palm Oil Board (MPOB): <http://www.mpob.gov.my/en/about-us/about>: Government agency charged with overseeing, regulating and developing the Malaysian Palm Oil sector.
- State Government: All land belongs to the State; land that has not been alienated, declared as reserved land or mining land is considered State land (http://www.fao.org/gender-landrights-database/country-profiles/countries-list/land-tenure-and-related-institutions/en/?country_iso3=MYS). Because land is a State matter, each State has its own responsible entity. In Sarawak, such entities are:
 - Ministry of Resource Planning and Environment – Main function is “To provide outline on the government's policies concerning forestry, development of land and natural resources as well as physical planning development of the state” (http://www.kpps.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=45&menu_id=0&sub_id=67)
 - Land and Survey Department, Sarawak – in charge of the administration and management of land in Sarawak (http://www.landsurvey.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=610&menu_id=0&sub_id=78)
 - Land Custody and Development Authority (PELITA): Statutory body, which acts as an intermediary between landowners and corporations in joint venture development schemes. Develops both NCR- and State land (http://www.pelita.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=65&menu_id=0&sub_id=87)
 - Natural Resources and Environment Board (Sarawak) – Responsible for enforcement of the Natural Resources and Environment Ordinance 1993

2.4.3. Legally required documents or records

- See also legal documents required under 1.1.2
- Malaysian Identity Card (MyKad)
 - Mandatory identity card for all Malaysians over the age of 12. The card must be carried always and functions as a driver’s license, ATM card as well as public key.

In relation to traditional rights, the MyKad shows ethnicity and thus determines whether a person can be a Malaysian aborigine.

2.4.4. Sources of information

- Bulan, R. (2010). Indigenous Peoples and the Right to Participate in. International Expert Seminar on Indigenous Peoples and The Right to Participate in Decision Making. Chang Mai, Thailand.
- Colchester, M., Jalong, T., & Chuo, W. M. (2013). Sarawak: IOI-Pelita and the community of Long Teran Kanan. In M. Colchester, & S. Chao, Conflict or Consent? (pp. 232-258). FPP, Sawit Watch and TUK INDONESIA.
- Lim, T. W. (2013). Malaysia: Illegalities in Forest Clearance for Large-Scale Commercial Plantations. Washington D.C.: Forest Trends.
- Lucas, J. (2013, November 26). Forest people 'disillusioned' in battle to protect land. Retrieved from Thomson Reuters Foundation News: <http://news.trust.org/item/20131126101312-463ag/>
- Minority Rights Group International. (2016). Malaysia - Indigenous peoples and ethnic minorities in Sarawak. Retrieved from www.minorityrights.org: <http://minorityrights.org/minorities/indigenous-peoples-and-ethnic-minorities-in-sarawak/>
- Subramaniam, Y. (2015). Ethnicity, Indigeneity and Indigenous Rights: The 'Orang Asli' Experience. QUT Law Review, 71-91.

2.4.5. Risk determination

Overview of Legal Requirements

As defined by article 161A of the Constitution, an indigenous person in Sarawak is a person who is born of parents who are both natives. The largest indigenous group is the Iban (31% of Sarawak's population). Other groups are Bidayuh, Kenyah, Kayan, Kedayan, Murut, Punan, Bisayah, Kelabit, Berawan and Penan (Minority Rights Group International, 2016).

The Sarawak legal system constitutionally upholds and protects the native custom of its indigenous people (Colchester, Jalong, & Chuo, 2013). The village heads (tuai rumah or tua elocat), regional chiefs (penghulu) and paramount chiefs (pemancha and temongong) are not only recognized by the government of Sarawak, they receive compensation for their role in maintaining the rule of law. Despite the provision in the constitution allowing the Federal Government to make laws in an emergency or promote uniformity, the indigenous decision making process remains protected because it is embedded in native customary practices (Colchester, Jalong, & Chuo, 2013; Bulan, 2010).

Description of risk

The main risks related to traditional- and indigenous rights are a legal framework that appears incapable of adequately protecting indigenous rights as well as State- and Federal governments, who have used this legal framework systematically to prioritize 'public purpose development' over customary land rights.

Malaysia has not ratified ILO convention 169 on indigenous and tribal peoples and the national legal framework does not adequately cover all rights of indigenes. While a positive development is traceable in the Malaysian court system, this road to justice oftentimes requires vast amounts time and resources not in the possession of all indigenous communities. Malaysia has adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and thus adheres to some level of international standards. As argued by Subramaniam (2015), while UNDRIP might not be legally enforceable as such, its adoption does bring about some moral and ethical expectations (p. 72). Hence, while perhaps not in direct opposition to the national legal framework, the current status and treatment of the indigenous peoples of Sarawak in relation to land tenure is in contradiction with Malaysia's international moral obligations.

While the Sarawak legal system constitutionally upholds and protects the native custom of its indigenous, it is evident that the indigenous peoples of Sarawak suffer from a high level of tenure insecurity as the law also provides incontestable power over land matters to the State authority to promote private land development over NCR rights. This insecurity is mainly caused by the narrow interpretation of NCR by the Sarawak Government and the large land concessions handed over to private enterprises by the government. Land policy in Sarawak is governed by the Sarawak Land Code 1958. The law in itself limits many aspects of NCR land and the amendments made by former Chief Minister and current governor Taib Mahmud have aggressively promoted private investments and large-scale plantations (Colchester, Jalong, & Chuo, 2013). The creation of the Sarawak Land Consolidation and Rehabilitation Authority SALCRA, section 46 of the Land Code as well as amendments made in 1996 and 1998 has provided the state with absolute power to extinguish NCR to promote private development (Colchester, Jalong, & Chuo, 2013; Bulan, 2010). ILO Convention 169 has not been ratified by Malaysia or Sarawak, but the UNDRIP has been adopted.

There is evidence of systematic violations of legal and customary rights of indigenous or traditional peoples. The complex nature of land tenure in Sarawak and the high level of corruption has made NCR breaches one of the most prominent issues in Malaysia for many years. In 2013, Lim (2013) reported that over 200 cases of breaches of NCR rights were pending in Sarawak alone, and cases are being filed faster than they can be resolved (p. 25). Of the 200 cases, 70 were related to plantation development and a vast majority of these were related to oil palm (Lim, 2013). Several of the cases are notable, perhaps the most famous is IOI-Pelita vs. Long Teran Kanan. In 1996, IOI-Pelita, and RSPO member, was granted land to a joint venture in the Tinjar area in northern Sarawak; an area that overlapped with NCR land of the Berawan-, Kayan- and Kenyah communities (Colchester, Jalong, & Chuo, 2013). The court first ruled in favour of the native community, however, this decision was later overturned after an appeal thus leaving the indigenous communities without land after a more than 15 year long legal battle (Lucas, 2013). In general, the disputes between the indigenous groups of Sarawak and the State- and Federal governments have been solved in the courts and the decisions of the courts seems to be respected by both parties, however court cases are generally both protracted and expensive and consequently out of reach for some indigenous groups of Malaysia.

Risk conclusion

The risk is determined as Elevated as Malaysia's legal framework is inadequately protecting indigenous rights as well as State- and Federal governments use the legal framework systematically to prioritize 'public purpose development' over customary land rights.

2.4.6. Risk designation and specification

Elevated risk

2.4.7. Control measures and verifiers

Verifiers:

- Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations. For land tenure issues check palm oil producers' 'Landbank' and 'Environmental' scores – the latter which covers FPIC and IP rights:
<http://www.sustainablepalmoil.org/companies/>
- Conduct a search on latest news and NGO reports on disputes and developments on indigenous and traditional peoples' land claims and assurance of rights via websites and NGOs including:
 - NGO investigations and reports: (Forest Peoples Programme <http://www.forestpeoples.org>, , Rainforest Action Network www.ran.org, <http://www.schusterinstituteinvestigations.org>, greenpeace.org, Friends of the Earth [foe.org](http://www.foe.org), Center for Orang Asli Concerns (COAC) (<http://www.coac.org.my/>), The Human Rights Commission of Malaysia (SUHAKAM) (<http://www.suhakam.org.my/>), Pusat Komnas (komnas.org), Cultural Survival ([culturalsurvival.org](http://www.culturalsurvival.org)))
 - Media reports: (Mongabay.com, greenomics.org, red-monitor.org, , eyesontheforest.org, sarawakreport.org, malaysiakini.com)
 - Global Platform of Indigenous and Community lands:
<http://www.landmarkmap.org/>

Control Measures:

- Evidence of legal land tenure ownership as per requirements cited under 1.1:
 - Evidence of palm oil farms obtaining proof of ownership documents: Issue Document of Title and Register Document of Title
 - Evidence of MPOB License
 - Palm Oil Plantations >500 hectares or palm oil plantations clearing more than >50 hectares of land: evidence an approved Environmental Impact Assessment (EIA) from the Department of Environment Malaysia (DOE)

And

- Records from the farm that demonstrate active consultation and/or evidence of a participatory social impact assessment and/or conducting a Free Prior Informed Consent before developing farm activities.

- Evidence of maps of an appropriate scale showing the extent of recognised legal, customary or user rights developed through participatory mapping involving affected parties (including neighbouring communities where applicable, and relevant authorities) are available.
- Copies of negotiated agreements detailing the process of free, prior and informed consent are available.
- Evidence of an absence of significant disputes on land use, tenure and access is provided and corroborated by local stakeholders and/or evidence of consent of indigenous and/or traditional communities has been obtained.
- Evidence there is a mutually agreed and documented system for dealing with complaints and grievances and is accessible and agreed upon by all affected parties and that where conflicts have arisen the conflict resolution mechanism is being used and outcomes are considered mutually agreed including by affected parties.

THE ENVIRONMENT

3.1. Environment

National and sub national laws and regulations related to the identification and/or protection of environmental values including but not limited to those relating to water use, air and green-house gas emissions, chemical, fertilizer and pesticide use. Risk relates to systematic and/or large scale non-compliance with legally required environmental protection measures that are evident to an extent that threatens natural resources or other environmental values.

3.1.1. Applicable laws and regulations

- Environmental Quality Act 1974 (Prescribed Premises) (Crude Palm-Oil) Regulations 1977 - [link](#)
- Environmental Quality (Clean Air) Regulation 1978 - [link](#)
- Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987 - [link](#)
- Environment Quality (Scheduled Wastes) Regulations 2005 - [link](#)
- Environment Quality (Declared Activities)(Open Burning) Order 2003 - [link](#)
- Environmental Quality (Control of Emission from Diesel Engines) Regulation 1996 - [link](#)
- Environmental Quality (Control of Emission from Petrol Engines) Regulation 1996 - [link](#)
- Factories and Machinery (Noise Exposure) Regulations 1989 - [link](#)
- Land Conservation Act 1960, revised 1989 - [link](#)
- National Land Code 1965 - [link](#)
- Pesticide Act 1974 (Pesticide Registration) Rules 2008 - [link](#)
- Pesticide (Labelling) Regulations 1984 - [link](#)
- Pesticide (Sale and Storage Licencing) Rules 2007 - [link](#)
- MPOB Code of Good Agricultural Practice for Oil Palm - [link](#)
- Malaysian Standard Good Agricultural Practice - [link](#)
- Street, Drainage & Building Act 1974 (Act 133) - [link](#)
- Irrigation Areas Act 1953 (Revised 1989) - [link](#)
- Garis Panduan Pembangunan Melibatkan Sungai dan Rizab Sungai, Department of Irrigation and Drainage Malaysia - [link](#)
- Destruction of Disease-Bearing Insects Act (1975) - [link](#)
- Food Act 1983 (Act 281) - [link](#)
- Food Regulations, 1985 - [link](#)
- OSH Act 1994 (Act 514) Regulations and Orders - [link](#)
- Use & Standards Exposure of Chemicals Hazardous to Health (USECHH) Regulations 2000 - [link](#)

- Road Transport Act 1987(Act 334) - [link](#)
- Water Act 1920 (Act 418) - [link](#)
- Sarawak Biodiversity Centre (Amendment) Ordinance 2014 - [link](#)
- Wildlife Protection Ordinance, 1998 - [link](#)
- National Parks and Nature Parks Ordinance (Sarawak) 1998 - [link](#)
- Natural Resources and Environment (Prescribed Activities) Order 1994 (Incorporating all amendments up to November 2004) - [link](#)
- Natural Resources & Environment Ordinance (Cap.84-Laws of Sarawak 1958 ed.) - [link](#)
- Sarawak Rivers Ordinance, 1993 - [link](#)
- Water Ordinance, 1994 - [link](#)
- SARAWAK FORESTRY CORPORATION ORDINANCE, 1995 - [link](#)
- Wildlife Conservation Act 2010 - [link](#)
- The Forest Bill 2015 (hyperlink not available)

3.1.2. Legal authority

- Ministry of Planning Resources and Environment (MRPE): is responsible for outlining and proposing amendments to government's policies and legislations concerning forestry, development of land and natural resources as well as physical planning development of the state.
- Natural Resources and Environment Board: Pursuant to Section 5 of the Natural Resources and Environment Ordinance, 1993, the Board's functions are To determine and take necessary measures, including the issue of directive or order to any Environmental Authority or any other person to prevent, abate or stop the destruction of vegetation for the protection of natural resources, rivers and other environmental elements; To liaise with and make representation to the National Environmental Council or relevant Ministry at the Federal level to determine the standards for control of environment and the enforcement of relevant rules; To provides rules, guidelines and directions for the protection and enhancement of environment relating to land use, protection of sources of water supply, exploitation of aquatic life & plants in rivers and foreshores; To direct any Environmental Authority and any person to undertake environmental monitoring and auditing of any prescribed activities.
- Sarawak Department of Environment (DOE): is responsible to prevent, eliminate, control pollution and improve the environment, consistent with the purposes of the Environmental Quality Act 1974.
- Sarawak Department of Occupational Safety and Health (DOSH): is responsible for the administration and enforcement of legislations related to occupational safety and health of the country.
- Department of Director General of Lands and Mines (JKPTG): is responsible for Amendment or improvement of any provision of land law and legislation regarding with land administration; Management of the record of Federal Government's Property in Land; Acquisition of the alienated land for Federal Project purposes; Tenancy and

enforcement of Federal Government's Property in Land; and Management of Small Estate Distribution.

- Sarawak Forest Department: is responsible To constitute any area as Forest Reserves, Protected Forests, Communal Forests, National Parks, Nature Reserves and Wildlife Sanctuaries; To issue licences and permits under the Forest Bill 2015, National Parks & Nature Reserves Ordinance 1998 and Wild Life Protection Ordinance 1998; To impose and collect royalties, premiums, fees and other payments due to the Government; To regulate production and export of logs from Sarawak; To enforce the provisions under the Forest Bill 2015, the National Parks & Nature Reserve Ordinance 1998 and Wild Life Protection Ordinance 1998.
- Sarawak Forestry Corporation: is governed by 4 major ordinances, namely the Sarawak Forestry Corporation Ordinance, 1995; the Forest Bill 2015; the National Parks and Nature Reserves Ordinance, 1998 and the Wild Life Protection Ordinance, 1998. Its functions include: Sustainable forest management and conservation, Reforestation and rehabilitation, Management of protected and totally protected areas, conducting scientific research on Sarawak's rainforests and its products, Training and education of employees, stakeholders and the general public, Providing customers of Sarawak's forest products with reliable information and support.
- Sarawak Department of Agriculture (DOA): is responsible for the provision of consultation services, technical support and professional advice in various agricultural field to ensure sufficient food production that are safe for consumption and control environmental pollution.
- Sarawak Department of Irrigation and Drainage (DID): is responsible to provide engineering expertise services and water resources management including river management, coastal and manage flood and drought to improve water security and environment sustainability.
- Malaysian Palm Oil Board (MPOB): an agency under the Ministry of Plantation Industries and Commodities with the stated goal to enhance the Malaysian oil palm industry. MPOB is responsible for research and development, regulatory and enforcement functions.

3.1.3. Legally required documents or records

- Environmental Impact Assessment reports are required for the following prescribed activities under the Natural Resources and Environment Ordinance The natural resources and environment (Prescribed Activities) order, 1997:
 - Development of agricultural estates or plantations of an area exceeding 500 hectares-
 - from land under secondary or primary forests, or
 - which would involve the resettlement of more than 100 families; or
 - Which would involve modification in the use of the land.
 - Conversion of mangrove swamps into agricultural estate having area exceeding 50 hectares.

- Environmental Mitigation Measure (EMM) is applicable for replanting and new planting when ordered by the Environmental Controller of Sarawak.
- Pursuant to Article 3 of the Natural Resources and Environment (Prescribed Activities) Order 1994, (Sarawak. L.N. 45/94) the EIA report must be prepared by such expert or authority as may be approved by the Natural Resources and Environment Board).
- Environmental Mitigation Measure (EMM) is required for replanting and new planting when ordered by the Environmental Controller of Sarawak.
- Any person intending to construct on any land or any building; or carrying out work that would cause the land or building to become prescribed premises (crude palm oil mills, raw natural rubber processing mills, and treatment and disposal facilities of scheduled wastes), as stipulated under Section 19 of the Environmental Quality Act, 1974 must obtain prior written permission from the Director-General of Environmental Quality. (Applies to whole of Malaysia.)
- A separate licence from DOE is required to occupy and operate crude palm oil mills (Applies to whole of Malaysia).

3.1.4. Sources of Information

- Chin, M. (2011). Biofuels in Malaysia: An analysis of the legal and institutional framework. Bogor: Centre for International Forestry Research. Retrieved from <http://www.cifor.org/library/3470/biofuels-in-malaysia-an-analysis-of-the-legal-and-institutional-framework/>
- Department of Environment. (2010). Environmental Requirements: A Guide For Investors. Putrajaya: Environmental Requirements: A Guide For Investors. Retrieved from <http://www.doe.gov.my/eia/wp-content/uploads/2012/03/A-Guide-For-Investors1.pdf>
- Emang, J. J. (2006). PUBLIC PARTICIPANT IN EIA PROCESS IN SARAWAK: ANY ROOM FOR IMPROVEMENT? Fourth Sabah-Sarawak Environmental Convention 2006, (pp. 1-8). Retrieved from http://ww2.sabah.gov.my/jpas/news/Conv06/Papers/Pap6_NREB.pdf
- Lim, T. W. (2013). Malaysia: Illegalities in Forest Clearance for Large-scale. Forest Trends. Retrieved from http://www.forest-trends.org/publication_details.php?publicationID=4195
- Maidin, A. J. (2005, November 17). Challenges in implementing and enforcing environmental protection measures in Malaysia. Retrieved from The Malaysian Bar: http://www.malaysianbar.org.my/environmental_law/challenges_in_implementing_and_enforcing_environmental_protection_measures_in_malaysia_by_ainul_jaria_bt_maidin.html
- Memon, A. (2012). Devolution of environmental regulation:. Retrieved from [http://www.unep.ch/etu/publications/13\)%2045%20to%2061%20doc.pdf](http://www.unep.ch/etu/publications/13)%2045%20to%2061%20doc.pdf)
- Ministry of the Environment, Japan. (n.d.). Overview of Environmental Issues and Environmental Conservation Practices in Malaysia.
- Sharom, A. (2008). Environmental Laws in Malaysia: Time to Walk the Walk. Inaugural University of Malaya Law Conference. Kuala Lumpur. Retrieved from http://eprints.um.edu.my/13465/1/environmental_laws_in_malaysia.pdf

3.1.5. Risk determination

Overview of Legal Requirements

The Environment Quality Act (EQA) 1974 forms the backbone of Malaysia's system of environmental legislation to regulate industrial pollution. Palm oil production was one of the major industrial activities that necessitated the EQA 1974 (Ministry of the Environment, Japan). Under that law, the DOE has comprehensive jurisdiction over environmental administration related to industrial activities and is charged with formulating environmental rules and regulations; enforcing legislation and carrying out monitoring in relation to water pollution, air pollution, and hazardous substances; conducting environmental impact assessment (EIA) of proposed development projects; and carrying out Site Suitability Evaluation of proposed factories (Ministry of the Environment, Japan). More specific environmental controls for the palm oil sector consist of a raft of regulations and orders, formulated separately under the provisions of the EQA, plus a number of guidelines (Ministry of the Environment, Japan). As listed in Section 3.1.1, these EQA regulations cover production of crude palm oil, emissions from mills, environmental impact assessment, scheduled wastes, open burning, and emissions from diesel and petrol engines.

In Sarawak, both the Federal and State environmental laws require EIA to be conducted (Emang, 2006). The Federal law is the Environmental Quality Act, 1974 and the State law is the Natural Resources and Environment Ordinance, 1993 (Emang, 2006). The evaluation process for EIA reports at both the Federal Department of Environment (DOE) and the Natural Resources and Environment Board, Sarawak (NREB) is generally similar, but the EIA procedure in Sarawak does not require any public participation (Emang, 2006).

Legislation under agriculture, forestry, conservation, land management and infrastructure development also regulates the palm oil industry in terms of the environment. These include the Pesticide Act 1974, Wildlife Protection Ordinance 1998, the Forest Bill 2015, and Land Conservation Act 1960, and Street, Drainage & Building Act 1974.

Description of risk

The expansion of oil palm plantations in the tropics has been associated with a host of environmental problems such as deforestation, biodiversity loss, water pollution, soil erosion, carbon emissions resulting from land use change and forest fires, and pesticide use (Chin, 2011). The DOE is responsible for enforcing environmental laws to prevent, eliminate, control pollution and improve the environment, but has limited powers to deal with the land planning system which designates where oil palm can be and is grown, because power to regulate land development is solely within the discretion of the State Planning Committee at the state government level and the local planning authorities at the local government level (Maidin, 2005). Furthermore, the DOE has had limited resources to undertake its functions (Memon, 2012 and Yaacob & Yusof, 2013), and despite the significant numbers of breaches of environmental law, the proportion of prosecutions or other enforcement action is extremely low (Maidin, 2005). Until 2005 there had only been five reported cases under the heading of environmental law in the law reports in Malaysia (Maidin, 2005). In 2014, Malaysia Federal Court judge Datuk Azhar Mohamed told a UN forum that enforcement agencies in Malaysia "do not have sufficient trained officers and tools, and many cases are not brought before the courts" (AHMAD, 2014).

Under the Natural Resources and Environment (Prescribed Activities) Order, 1994, agricultural development activities that require an EIA include development of agricultural estates or plantations of an area exceeding 500 hectares from land under primary or secondary forest, which would involve the resettlement of more than 100 families, or which would involve modification in the use of the land, and when mangrove swamps are converted into an agricultural estate that exceeds 50 hectares. There are serious problems with the EIA system under the law as there is commonly a conflict of interest between the companies and the consultants they hire to do the EIA, and because companies can easily break their plantation activities into smaller lots (less than 500ha) to avoid the EIA requirement in the first place (Sharom, 2008). There are also a number of procedural weaknesses in the EIA system now in place in Sarawak, where the state-level enactments and the NREB have been established to carry out EIAs for forestry and land conversion activities while the DOE covers EIAs related to other activities such as emissions from factories (Lim, 2013). Most relevant officials often lack sufficient expertise to vet the Development Proposals and the EIA reports submitted by the applicants seeking for grant of planning permission, and monitoring environmental compliance is lacking due to lack of personnel and increasing numbers of newly approved development projects (Maidin, 2005).

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

3.1.6. Risk designation and specification

Elevated risk

3.1.7. Control measures and verifiers

Evidence of:

- For palm oil plantations > 500 ha or palm oil plantations clearing more than >50 hectares of land a completed and approved Environmental Impact Assessment for areas that require them (see section 3.1.3) (check list of approved EIAs on the DOE website: <http://www.doe.gov.my/eia/eia-reports/>) and verify that environmental controls are followed in the field through evidence of an audit. Ensure that any legal requirements relating to the protection of the species or habitat are met.
- Agricultural land title or lease to prove site location is on agricultural land (see 1.1 and 1.2 for more details)
- Written Permission to Construct a Palm Oil Mill from the mill
- License to occupy and operate a crude palm oil mill from the mill

3.2. Protected sites and species

International, national, and sub national treaties, laws, and regulations related to protected areas allowable forest uses and activities, and/or, rare, threatened, or endangered species, including their habitats and potential habitats. Risk relates to illegal plantation establishment and/or management within protected sites. Note that protected areas may include protected cultural sites, including sites with historical monuments.

3.2.1. Applicable laws and regulations

- Convention on Biological Diversity (CBD) - [link](#)
- The International Trade in Endangered Species Act 2008 - [link](#)
- Wildlife Protection Ordinance, 1998 - [link](#)
- National Parks and Nature Parks Ordinance (Sarawak) 1998 - [link](#)
- Land Conservation Act 1960, revised 1989 - [link](#)
- Sarawak Land Code 1958 - [link](#)
- Customs Act 1967 (amended in 1988) - [link](#)
- Environmental Quality Act 1974 (amended 1985) - [link](#)
- Local Government Act No. 171 of 1976 - [link](#)
- Fisheries Act 1985 (Act 317) - [link](#)
- Wildlife Conservation Act 2010 - [link](#)
- The Forest Bill 2015 (hyperlink unavailable)

3.2.2. Legal authority

- Sarawak Department of Environment (DOE): enforces the Environmental Quality Act 1974.
- Sarawak Department of Director General of Lands and Mines (JKPTG): enforces land law and legislation regarding with land administration.
- Royal Malaysian Customs Department (RMC): enforces Customs Act 1967 (amended in 1988).
- Department of Fisheries Malaysia (DOF): enforces Fisheries Act 1985 (Act 317).
- Forest Department Sarawak: is responsible for enforcing the Forest Bill 2015.
- Sarawak Forestry Corporation: is empowered under the Sarawak Forestry Corporation Ordinance 1995 (Sarawak Cap. 17/95) to enforce the Forest Bill 2015, Wildlife Protection Ordinance and National Parks & Nature Reserves Ordinance on the ground. It also includes regulation, inspection and issuance of permits and certificates in line with CITES, with notable enforcement successes in terms of seizures of illegal timber and wildlife.

3.2.3. Legally required documents or records

- Native Title
- Gazette notification of Protected Forest
- Gazette notification of Forest Reserve
- Gazette notification of Communal Forest
- DWNP Plant Collection License
- CITES permit

3.2.4. Sources of Information

Government sources

- Malaysian Palm Oil Board. (2016, August 22). About Us. Retrieved from Official Portal of Malaysian Palm Oil Board: <http://www.mpob.gov.my/en/about-us/about>
- Ministry of Natural Resources and Environment, Malaysia. (2014). Fifth National Report to the Convention on Biological Diversity. Putrajaya: Ministry of Natural Resources and Environment, Malaysia. Retrieved from <https://www.cbd.int/doc/world/my/my-nr-05-en.pdf>

Non-Government sources

- Azhar, B., Sapari, M., Zulkifly, S., Suhailan, W. M., & Sajap, A. S. (2013). Protecting Biodiversity outside Natural Forests: Environmental-friendly Oil Palm Plantations as an Off-reserve Strategy in Peninsular Malaysia. TROPICAL AGRICULTURAL SCIENCE. Retrieved from [http://www.pertanika.upm.edu.my/Pertanika%20PAPERS/JTAS%20Vol.%2036%20\(S\)%20Dec.%202013/21%20Page%20231-246%20\(JTAS%200476-2012\).pdf](http://www.pertanika.upm.edu.my/Pertanika%20PAPERS/JTAS%20Vol.%2036%20(S)%20Dec.%202013/21%20Page%20231-246%20(JTAS%200476-2012).pdf)
- Bulan, R., & Locklear, A. (2008). Legal perspective on native customary land rights in Sarawak. Human Rights Commission of Malaysia (SUHAKAM). Retrieved from <http://www.suhakam.org.my/wp-content/uploads/2013/12/Legal-Perspectives.pdf>
- Clean Malaysia. (2016, February 13). Malaysia's Law Enforcement is failing Endangered Species. Retrieved from Clean Malaysia: <http://cleanmalaysia.com/2015/08/28/5-reasons-malaysias-wildlife-conservation-act-is-one-of-historys-most-important-wildlife-regulations/>
- Human Rights Commission of Malaysia (SUHAKAM). (2013). REPORT OF THE NATIONAL INQUIRY INTO THE LAND RIGHTS OF INDIGENOUS PEOPLES. Human Rights Commission of Malaysia (SUHAKAM). Retrieved from <http://nhri.ohchr.org/EN/Themes/BusinessHR/Business%20Womens%20and%20Childrens%20Rights/SUHAKAM%20BI%20FINAL.CD.pdf>
- Ji, Y. (2015). Sarawak targets 1.5 million hectares of totally protected areas. The Star Online. Retrieved from <http://www.thestar.com.my/news/nation/2015/03/22/sarawak-tpa/>
- Lim, T. W. (2013). Malaysia: Illegalities in Forest Clearance for Large-scale. Forest Trends. Retrieved from http://www.forest-trends.org/publication_details.php?publicationID=4195
- Moh, J. (2015). Plantation blamed for destruction of graves. Borneo Post Online. Retrieved from <http://www.theborneopost.com/2015/03/20/plantation-blamed-for-destruction-of-graves/>
- Yong, C., SACCESS, & JKOASM. (2014). Deforestation Drivers and Human Rights in Malaysia. Forest Peoples Programme. Retrieved from <http://www.forestpeoples.org/topics/climate-forests/publication/2014/deforestation-drivers-and-human-rights-malaysia>

3.2.5. Risk determination

Overview of Legal Requirements

As a signatory of the CBD, Malaysia has an obligation to contribute to global targets for protected areas. According to Ministry of Natural Resources and Environment (NRE), Malaysia has 3,400,000 ha of terrestrial protected areas (PAs) which is approximately 10% of the land base (UNDP, 2013). Timber harvesting and hunting is prohibited in these areas. In Sarawak, protected areas are referred to as "Totally Protected Areas" (TPAs). These are comprised by 30 national parks, six wildlife sanctuaries and eight nature reserves. According to the Sarawak Forestry Corporation, TPAs encompass 602,035.8 ha of land, not including 229,789 ha of protected bodies of water (JI, 2015). This is less than 5% of the total land area of the state.

The Wildlife Conservation Act 2010 came into force in 2011 and contains significantly stricter provisions on species protection than were in place previously, by assigning new species a protective status and raising the protection status of a number of other species (Ministry of Natural Resources and Environment, Malaysia, 2014). The Act provides for "presumptions under the law", whereby if there is possession of snares, the presumption is that there was an intention to hunt, trap and/or kill wildlife. There is also the presumption that if any wildlife or any part or derivative or any wildlife or snare is found on any premises, the 'occupier' of the premises is presumed to be in possession of the above.

More specifically to land use, the main relevant laws are the Federal Environmental Quality Act, 1974 and the State Natural Resources and Environment Ordinance, 1993, which both require environmental permits and an environmental impact assessment before certain agricultural activities can proceed (Emang, 2006). The evaluation process for EIA reports at both the Federal Department of Environment (DOE) and the Natural Resources and Environment Board, Sarawak (NREB) is generally similar, but the EIA procedure in Sarawak does not require any public participation (Emang, 2006).

Description of risk

Cases where oil palm has been grown in currently gazetted totally protected areas have not been found in publicly available information, however, most protected areas and forest reserves are surrounded by oil palm plantations and smallholdings (e.g. Taman Negara, Krau Wildlife Reserve, and Endau Rompin National Park). There are limited data on the number of ecological studies conducted in oil palm-dominated landscapes worldwide for supporting biodiversity conservation in industrial plantations (Azhar, Sapari, Zulkifly, Suhailan, & Sajap, 2013).

Malaysia's Fifth National Report to the Convention on Biological Diversity states that the country's monitoring against CBD targets is weak: "The lack of cohesive and comprehensive monitoring mechanisms/indicators towards the National Policy on Biological Diversity has posed some challenges towards measuring actual progress in certain conservation areas. Malaysia recognises the need to step up efforts on awareness raising on the importance and significance of biodiversity conservation, protection and management across all levels of society in Malaysia (Ministry of Natural Resources and Environment, Malaysia, 2014)."

The main legal safeguard for the protection of legally protected species outside of totally protected areas is the requirement for an environmental permit (for which an environmental impact assessment (EIA) and mitigation actions are required) in some situations. Under the

Natural Resources and Environment (Prescribed Activities) Order, 1994, agricultural development activities that require an EIA include development of agricultural estates or plantations of an area exceeding 500 hectares from land under primary or secondary forest, which would involve the resettlement of more than 100 families, or which would involve modification in the use of the land, and when mangrove swamps are converted into an agricultural estate. The requirements for an EIA are not detailed, but a section for "Habitat and species" is required under "Biological system".

There are also serious problems with the EIA system under the law as there is commonly a conflict of interest between the companies and the consultants they hire to do the EIA, and there are also loopholes whereby an EIA is required based on the size of the project but plantation companies can easily break the project into smaller lots to avoid the EIA requirement (Sharom, 2008). Most officials from environment related departments including the Town and Country Planning Department and the DOE often lack sufficient expertise to vet the Development Proposals and the EIA reports submitted by the applicants seeking for grant of planning permission (Maidin, 2005). Despite the realisation of the importance of monitoring compliance of the EIA process, it is lacking due to lack of personnel and increasing numbers of newly approved development projects (Maidin, 2005).

According to Lime (2013), most forest conversion projects do produce EIAs, and most that are submitted are approved, with mitigation measures prescribed. Given the complexity of the natural ecosystems, environmental consultants have difficulty identifying specific mitigation measures for the protection of certain rare and threatened species in oil palm plantations. Few proponents are willing to pay for expertise that addresses the full range of species found in a natural project site. There is no central source of practical information related to the distribution of rare species in Malaysia. Given this scenario, environmental consultants often address biodiversity conservation indirectly by focusing on keeping an area of natural habitat intact via river buffers and slope protection, with the occasional addition of token set-aside areas associated with salt-licks or swampy areas that would not be operable anyway (Lim, 2013). It therefore considered that even where EIAs are required and conducted, the requirements and level of enforcement are not sufficient to ensure the protection of legally protected species.

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

3.2.6. Risk designation and specification

Elevated risk

3.2.7. Control measures and verifiers

Verifiers:

- NGO investigations and reports (Indigenous Peoples Network of Malaysia (JOAS) <http://orangasal.blogspot.my/>, Malaysian Nature Society (MNS) <https://www.mns.my/>, WWF Malaysia <http://www.wwf.org.my/>, Forest Peoples Programme <http://www.forestpeoples.org>, Rainforest Action Network www.ran.org,

<http://www.schusterinstituteinvestigations.org>, greenpeace.org, Friends of the Earth foe.org)

- Media reports (Clean Malaysia <http://cleanmalaysia.com/>, Malaysian Environmental NGOs <http://www.mengo.org/>, Mongabay.com, redd-monitor.org)
- Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations. Particularly review environmental management and fragile, marginal and peat soils in addition to reviewing the company's latest sustainability and/or annual report if the scorecard is out of date.
- <http://www.iucnredlist.org/>

Control Measures

- For palm oil plantations > 500 ha or palm oil plantations clearing more than >50 hectares of land seek a completed and approved Environmental Impact Assessment for areas that require them (see section 3.1.3) (check list of approved EIAs on the DOE website: <http://www.doe.gov.my/eia/eia-reports/>) and verify that environmental controls are followed in the field through evidence of an audit. Ensure that any legal requirements relating to the protection of the species or habitat are met.
- Agricultural land title or lease to prove site location is on agricultural land.
- Evidence that comprehensive biodiversity surveys and/or a High Conservation Value (HCV) assessment that includes both the planted area itself and relevant wider landscape-level considerations (such as wildlife corridors) to identify HCV 1- 6 have been undertaken. [<https://www.hcvnetwork.org/als/public-summaries>].
- Evidence of management plans for rare, threatened or endangered species (RTE) include actions for their protection, survival, and prevention of poaching, are develop for the management area and surrounding landscape have been developed and are implemented.
- The RTE management plan takes into consideration traditional hunting by communities outside the management area and includes specific activities to contribute to the protection and survival of RTE species affected by hunting.
- Supplier records of stakeholder consultation with environmental NGOs knowledgeable on protected areas (see NGOs listed in verifier)
- Obtain information on location of the farm (e.g. from management plan) and compare with locations of protected areas in Malaysia
 - Information on protected areas in Malaysia:
 - Protected Area Master List owned by the Ministry of Natural Resources and Environment (contact: <http://www.nre.gov.my/en-my/ContactUs/Pages/default.aspx>), which is not publicly available. Older version of the list compiled by WWF-Malaysia can be found here: http://awsassets.wwf.org.my/downloads/list_of_pa.pdf

3.3. High Conservation Values (HCV)

International, national, and sub national treaties, laws, and regulations related to protected areas allowable forest uses and activities, and/or, rare, threatened, or endangered species, including their habitats and potential habitats. Risk relates to illegal plantation establishment and/or management within protected sites. Note that protected areas may include protected cultural sites, including sites with historical monuments.

Overall Context

According to Ministry of Natural Resources and Environment (NRE), Malaysia has 3,400,000 ha of terrestrial protected areas (PAs) which is approximately 10% of the land base. Agricultural development is prohibited in these areas.

In general, PAs in Malaysia can be grouped according to the laws used for their establishment (Sukswan & Abidin, 2012):

- National parks and state parks under the park laws
- Sanctuaries or reserves under the wildlife laws
- Protection forests under the forestry laws
- Marine parks and fisheries prohibited areas under the National Fisheries Act 1985
- Areas reserved for a public purpose under the land laws

In Sarawak, protected areas are referred to as "Totally Protected Areas" (TPAs). These are comprised by 30 national parks, six wildlife sanctuaries and eight nature reserves, according to the Sarawak Forestry Corporation, TPAs encompass 602,035.8 ha of land, not including 229,789 ha of protected bodies of water (JI, 2015). This is less than 5% of the total land area of the state.

At the State level, some forest areas of conservation significance have been identified, primarily as a result of opportunistic assessments that are conducted in reaction to the discovered presence of endangered species (or habitats) or other species of conservation significance, and there has not been a systematic assessment of the HCVs at the State level.

Most protected areas and forest reserves are surrounded by oil palm plantations and smallholdings and there are limited data on the number of ecological studies conducted in oil palm-dominated landscapes worldwide for supporting biodiversity conservation in industrial plantations (Azhar, Sapari, Zulkifly, Suhailan, & Sajap, 2013).

The main threat to HCVs from oil palm establishment and management is the removal of the forest/ecosystem containing the HCV for the establishment of oil palm plantation, and encroachment of plantations in areas containing indigenous values.

There are federal and state legal requirements for environmental permits for agricultural activities covering an area exceeding 500 hectares from land under primary or secondary forest, which would involve the resettlement of more than 100 families, or which would involve modification in the use of the land, and when mangrove swamps are converted into an agricultural estate that exceeds 50 hectares. These requirements do not apply to most plantations under 500ha. Serious problems have been reported regarding the implementation of EIAs and impact mitigation activities in the issuance of permits, including conflict of interest between the companies and the consultants hired for EIAs, and the splitting of

plantations into smaller lots (less than 500ha) to avoid the EIA requirements. There are also a number of procedural and capacity-related weaknesses that result in poor enforcement of the requirements.

3.3.1. Species Diversity – HCV 1

Concentrations of biological diversity including endemic species, and rare, threatened or endangered species that are significant at global, regional or national levels. HCV 1 sub-categories also consider:

- a) Areas that contain species that are listed as rare, threatened or endangered by IUCN and or Official National and/or regional lists;*
- b) Centres of endemism where concentrations of endemic species occur;*
- c) Areas that contain species that are listed as depleted or poorly reserved at national or regional scale;*
- d) Areas with mapped significant seasonal concentrations of species (e.g. migratory staging areas);*
- e) Areas of high species/communities diversity*
- f) Areas that are identified in the literature as refugia.*

3.3.1.1. HCV Occurrence

HCV1 occurs throughout Sarawak. The whole island of Borneo is a global biodiversity hotspot, and Sarawak's forests exhibit a diverse and iconic assemblage of terrestrial plant and animal life.

Key examples of important species in Sarawak include eight hornbill species (Borneo Post, 2015) and eleven primates (Sarawak Forestry Corporation, 2006). There is a high level of intra-specific variation, with some species containing several sub-species and melanistic forms exhibited from west to east, e.g. the Prevost's Squirrel (*Callosciurus prevostii*) (Cassola, 2016) and the White-rumped Shama (*Copsychus malabaricus*).

A large number of species are endangered, with biomes such as the Sundaic Lowland Forests and Sundaic Montane Forests being characterised by one of the most endangered avifaunal assemblages in the world (Bell, 2016). In the lowland forests, the wrinkled hornbill (*Aceros corrugatus*) is particularly vulnerable, as are hill specialists such as the Bornean Kauri (*Agathis borneensis*) (EN). The White-shouldered Ibis (*Pseudibis davisoni*) (CR), Bornean Peacock Pheasant (*Polypectron schleiermacheri*) (EN) and the Mountain Serpent Eagle (*Spilornis kinabaluensis*) (VU) are representatives of globally significant endangered species (Birdlife International, 2016). The Bornean Orang Utan (*Pongo pygmaeus*) is endemic, recently differentiated from the Sumatran species, and is listed as critically endangered (Bell, 2016). All these species are also listed in the IUCN Redlist of Threatened species (IUCN, 2016).

Borneo has a high level of endemism and concentrations of restricted-range species of mammals, birds (the best documented – see Bell, 2016 and Birdlife International, 2003) and plants. Around 5,000 species (34% of those found on the island) of flowering plants, and 44 mammal species are endemic to Borneo (Aik et al., 2007). There are 27 species of globally threatened birds, and fifty-one endemic species (Bell, 2016 and Birdlife International, 2003).

Forest areas that are important to wildlife for feeding, nesting, roosting, migration or contain saltlicks are unsurveyed and undocumented. However, limited information exists on the mass migrations of the Bornean Bearded Pig (*Sus barbatus*), and the large congregations of the

Giant Flying Fox (*Pteropus vampyrus*). Forest migrants from the northern hemisphere are a significant addition to the avifauna. Maps of Endemic Bird Areas on the Global Forest Watch show a considerable area of these in Sarawak, particularly near the Indonesian border and in the north-east of the state.

All gazetted protected areas (national parks, wildlife sanctuaries, and nature reserves) are used as a proxy to partly identify HCV1, and no timber may be sourced from these areas. However, the wide distribution of species means it is likely that HCV1 areas occur throughout Sarawak, and are likely to be found adjacent to and within areas planted with oil palm.

3.3.1.2. Sources of information

- Azhar, B., Sapari, M., Zulkifly, S., Suhailan, W. M., & Sajap, A. S. (2013). Protecting Biodiversity outside Natural Forests: Environmental-friendly Oil Palm Plantations as an Off-reserve Strategy in Peninsular Malaysia. TROPICAL AGRICULTURAL SCIENCE. Retrieved from [http://www.pertanika.upm.edu.my/Pertanika%20PAPERS/JTAS%20Vol.%2036%20\(S\)%20Dec.%202013/21%20Page%20231-246%20\(JTAS%200476-2012\).pdf](http://www.pertanika.upm.edu.my/Pertanika%20PAPERS/JTAS%20Vol.%2036%20(S)%20Dec.%202013/21%20Page%20231-246%20(JTAS%200476-2012).pdf)
- Bell, L. 2016. Bornean orangutan declared 'critically endangered' as forests shrink. The Guardian. <https://www.theguardian.com/environment/2016/jul/07/bornean-orangutan-declared-critically-endangered-as-forests-shrink>
- BirdLife International. 2003. Saving Asia's threatened birds: a guide for government and civil society. Birdlife International. Cambridge, UK
- Birdlife International. 2016. Birdlife International Data Zone. <http://datazone.birdlife.org/home>
- Borneo Post. 2015. The magnificent hornbills of Sarawak. <http://www.theborneopost.com/2015/07/12/the-magnificent-hornbills-of-sarawak/>
- Cassola, F. 2016. *Callosciurus prevostii*. The IUCN Red List of Threatened Species 2016. IUCN. <http://www.iucnredlist.org/details/3603/0>
- Copenhagen Zoo. (2010). Red list Of Mammals For Peninsular Malaysia. Kuala Lumpur: Department of Wildlife and National Parks Peninsular Malaysia. Retrieved from http://www.wildlife.gov.my/images/stories/penerbitan/lain_lain/Redlist%20Final.pdf
- Global Forest Watch. <http://www.globalforestwatch.org/>
- IUCN. 2016. The IUCN Red List of Threatened Species. Version 2016-2. <http://www.iucnredlist.org>
- Lim, T. W. (2013). Malaysia: Illegalities in Forest Clearance for Large-scale. Forest Trends. Retrieved from http://www.forest-trends.org/publication_details.php?publicationID=4195
- Ministry of Natural Resources and Environment, Malaysia. (2014). Fifth National Report to the Convention on Biological Diversity. Putrajaya: Ministry of Natural Resources and Environment, Malaysia. Retrieved from <https://www.cbd.int/doc/world/my/my-nr-05-en.pdf>
- Mohd-Azlan, J., & Lawes, M. J. (2011). 15. The Efficacy of Protected Areas and Future Challenges for Wildlife Conservation in Sarawak.

- Persey, S., Imanuddin, & Sadikin, L. (2011). A Practical Handbook for Conserving High Conservation Value Species and Habitats within oil palm landscapes. Zoological Society of London. Retrieved from <http://www.sustainablepalmoil.org/wp-content/uploads/sites/2/2015/11/A-Practical-Handbook-for-Conserving-High-Conservation-Value-species-and-Habitats-within-Oil-Palm-Landscapes-Indonesia-focus.pdf>
- Sarawak Forestry Corporation. 2006. Proboscis Monkey (*Nasalis larvatus*). <http://www.sarawakforestry.com/htm/snp-bc-tpa-proboscis.html>
- Sodhia, N. S., Kohb, L. P., Clementsc, R., Wangerd, T. C., Hille, J. K., Hamerf, K. C., Leeh, T. M. (2010). Conserving Southeast Asian forest biodiversity in human-modified landscapes. *Biological Conservation*, 2375–2384. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0006320709005370>

3.3.1.3. Risk determination

Annex 2 shows a GFW map of significant total tree cover loss from 2005-2014 overlaid with proxy HCV 1 and 3 mapped areas (Protected Areas, BirdLife Endemic Bird Areas and Conservation International Biodiversity Hotspots).

In general, conversion of forest to agriculture is an intense form of forest disturbance, often involving complete and permanent removal of trees (Sodhia, et al., 2010). Threats to HCV 1 are mainly caused by conversion of natural forests into oil palm plantations (see also Section 4) which results in habitat removal and fragmentation – see Annexes 1 and 2 for evidence of significant tree cover loss from 2005 -2014 and Intact Forest Landscape loss (2000 -2013) in key HCV 1 proxy areas including protected areas, important bird habitat areas.

The expansion of palm oil plantations has been an important contributor to the removal and fragmentation of forest in Sarawak. The encroachment and unregulated expansion of plantations are considered a major threat to larger mammals since movement patterns of these species are known to be disrupted around forest edges (Kinnaird et al., 2003; Wich et al., 2003; Mohd-Azlan & Lawes, 2011). The remaining primary forest in Sarawak is being increasingly fragmented and isolated and the ability of species to persist within these remnants is an issue of concern (Mohd-Azlan & Lawes, 2011). Several protected areas in Sarawak are surrounded by oil palm plantation, and most protected areas in Sarawak are too small to maintain viable populations of most medium-sized and larger vertebrates and possibly some tree species with large spatial scales of recruitment, with the exception of the large Lanjak Entimau Wildlife Sanctuary, which comprises approximately 34% of the protected area in Sarawak (Mohd-Azlan & Lawes, 2011).

Given the complexity of the natural ecosystems, environmental consultants have difficulty identifying specific mitigation measures for the protection of certain rare and threatened species in oil palm plantations. Few proponents are willing to pay for expertise that addresses the full range of species found in a natural project site. There is no central source of practical information related to the distribution of rare species in Malaysia. Given this scenario, environmental consultants often address biodiversity conservation indirectly by focusing on keeping an area of natural habitat intact via river buffers and slope protection, with the occasional addition of token set-aside areas associated with salt-licks or swampy areas that would not be operable anyway (Lim, 2013). These two measures are intended to avoid impacts on the physical and ecological environment (Lim, 2013). However, the effectiveness

of the monitoring is often limited by manpower shortages and other constraints faced by DOE (Lim, 2013).

Malaysia is a signatory to the Convention on Biological Diversity (CBD). Malaysia's Fifth National Report to the Convention on Biological Diversity states that the country's monitoring against CBD targets is weak: "The lack of cohesive and comprehensive monitoring mechanisms/indicators towards the National Policy on Biological Diversity has posed some challenges towards measuring actual progress in certain conservation areas. Malaysia recognises the need to step up efforts on awareness raising on the importance and significance of biodiversity conservation, protection and management across all levels of society in Malaysia (Ministry of Natural Resources and Environment, Malaysia, 2014). Additionally, according the IUCN Red List Peninsular Malaysia has 99 vulnerable, threatened and endangered species (IUCN, 2016). This indicates the overall level of implementation and monitoring biodiversity protection in Malaysia needs to improve.

In conclusion, given the threats to HCV 1 are mainly caused by conversion of natural forests into oil palm plantations (see also Section 4) which results in habitat removal and fragmentation this indicator is considered Elevated risk.

3.3.1.4. Risk designation and specification

Elevated risk

3.3.1.5. Control measures and verifiers

- For plantations >500 ha or palm oil plantations clearing more than >50 hectares of land, seek a completed and approved Environmental Impact Assessment for areas that require them (see section 3.1.3) (check list of approved EIAs on the DOE website: <http://www.doe.gov.my/eia/eia-reports/>) and verify that environmental controls are followed in the field through evidence of an audit. Ensure that any legal requirements relating to the protection of the species or habitat are met.
- Agricultural land title or lease to prove site location is on agricultural land.
- Evidence that comprehensive biodiversity surveys and/or a High Conservation Value (HCV) assessment that includes both the planted area itself and relevant wider landscape-level considerations (such as wildlife corridors) to identify HCV 1- 6 have been undertaken. [<https://www.hcvnetwork.org/als/public-summaries>] [It is highly recommended that the
- Evidence of management plans for rare, threatened or endangered species (RTE) include actions for their protection, survival, and prevention of poaching, are develop for the management area and surrounding landscape have been developed and are implemented.
- The RTE management plan takes into consideration traditional hunting by communities outside the management area and includes specific activities to contribute to the protection and survival of RTE species affected by hunting.
- Supplier records of stakeholder consultation with environmental NGOs knowledgeable on protected areas (see NGOs listed in verifier)

- Obtain information on location of the farm (e.g. from management plan) and compare with locations of protected areas in Malaysia
 - Information on protected areas in Malaysia:

Protected Area Master List owned by the Ministry of Natural Resources and Environment (contact: <http://www.nre.gov.my/en-my/ContactUs/Pages/default.aspx>), which is not publicly available. Older version of the list compiled by WWF-Malaysia can be found here: http://awsassets.wwf.org.my/downloads/list_of_pa.pdf

3.3.2. Landscape-level ecosystems and mosaics – HCV 2

Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance. Sub-categories:

- a) *Intact Forest Landscapes (IFL map² uses the most recent coverage)*
- b) *Landscape-scale natural forests that have experienced lesser levels of past human disturbance (e.g., minimal timber harvesting) or other management (e.g. fire suppression), or areas within such forests.*
- c) *Forests recognised as being regionally significant at the bioregion or larger scale by conservation organisations (in formally recognised reports or peer reviewed journals) due to the unusual landscape-scale biodiversity values provided by size and condition of the forest relative to regional forest land cover and land use trends.*
- d) *Forests that provide regionally significant habitat connectivity between larger forest areas or between refugia and mosaics.*
- e) *Significant Roadless areas.*
- f) *Significant Forests that haven't been affected by forest management activities.*

3.3.2.1. HCV Occurrence

HCV 2, occurs as intact forest landscapes within the area under assessment, primarily along the borders with Indonesia and Brunei (Intact forests, 2016; GFW 2016).

The "Heart of Borneo" refers to the main part of the island of Borneo where forests remain intact and is one of the largest transboundary rainforests remaining in the world (ASEAN Centre for Biodiversity, 2010; Forest Department Sarawak, 2016; WWF, 2016b; WWF, 2016c). It covers 22 million hectares in both Sarawak and Sabah, as well as in Indonesia and Brunei Darussalam. In 2007, the governments of Brunei Darussalam, Indonesia and Malaysia agreed that the remaining vital areas of the rainforest needed protecting, and the Heart of Borneo Initiative was established with the aim of conserving the biodiversity of the Heart of Borneo for the benefit of the people who rely upon it through a network of protected areas, sustainable management of forests and other sustainable land uses (ASEAN Centre for Biodiversity, 2010; Forest Department Sarawak, 2016).

Ecologically speaking, plantations are areas that have been cleared of original vegetation, possibly drained and cut and maintained with an alternative plant cover (Copenhagen Zoo, 2010). These lands are considered ecologically altered – cleared and no longer in their

² <http://www.intactforests.org/world.map.html>

original state or maintained in a state of arrested or deflected succession. However, oil palm plantations may be established on land converted from areas that are considered HCV 2 (i.e. natural forest may be converted to oil palm plantation) (see Annex 1 and also Section 4), and present plantation boundaries may pose threats to adjacent HCV 2.

3.3.2.2. Sources of information

- ASEAN Centre for Biodiversity. 2010. ASEAN Biodiversity Outlook. http://e-news.aseanbiodiversity.org/acb_eweb_jan14/images/abo.pdf
- Copenhagen Zoo. (2010). Red list Of Mammals For Peninsular Malaysia. Kuala Lumpur: Department of Wildlife and National Parks Peninsular Malaysia. Retrieved from http://www.wildlife.gov.my/images/stories/penerbitan/lain_lain/Redlist%20Final.pdf
- Forest Department Sarawak. 2016. Heart of Borneo Initiative. Retrieved form: http://www.forestry.sarawak.gov.my/modules/web/pages.php?mod=webpage&sub=page&id=993&menu_id=0&sub_id=146
- Global Forest Watch. <http://www.globalforestwatch.org/>
- Global Witness. (2012). In the future, there will be no forest left. Retrieved from: <https://www.globalwitness.org/en-gb/archive/hsbc/>
- Hitchner, S. L. (2010). Heart of borneo as a 'Jalan Tikus': Exploring the links Between indigenous rights, extractive and exploitative industries, and conservation at the World Conservation Congress 2008. *Conservation and Society*, 8(4), 320.
- Intact Forest Landscapes. <http://intactforests.org>
- SADIA, Aidenvironment & Earthsight Investigations. (2016). Sarawak oil palm concessions. Accessed through Global Forest Watch on [date]. www.globalforestwatch.org
- WWF. (2016a). Threats to Borneo Forests. Retrieved from: http://wwf.panda.org/what_we_do/where_we_work/borneo_forests/borneo_deforestation/
- WWF. (2016b). Heart of Borneo. http://wwf.panda.org/what_we_do/where_we_work/borneo_forests/
- WWF. (2016c). About the Heart of Borneo. http://wwf.panda.org/what_we_do/where_we_work/borneo_forests/about_borneo_forests/

3.3.2.3. Risk determination

The growth of oil palm plantations is one of the biggest drivers of deforestation in the Heart of Borneo, though much of the information about the threat that oil palm in the Heart of Borneo relates to the whole (cross-country) area, and not just Sarawak (WWF, 2017). According to Hitchener (2010), many natural forests in Borneo, including those within the Heart of Borneo, have been cut to make way for oil palm plantations.

Within Sarawak, ADIA, Aidenvironment & Earthsight Investigations (2016) have mapped the boundaries of known oil palm concessions and there are two instances where oil palm concession area overlaps with mapped IFL. It's in these areas that a reduction in the extent of IFL (between 2000 and 2013) is mapped. The converted land is inside an area that has

been formally proposed by Sarawak's authorities as a national park (Global Witness, 2012). It is important to note that this map is known to be incomplete and some of the boundaries imprecise. It does not include concessions which were issued or published environmental assessment reports after 2010, and some boundaries and associated information relating to concessions may also have changed since the source information was published. Along with a lack of publicly available maps of concession areas, and ability to only map concessions with environmental assessments, there is a risk that there are other, undocumented palm oil plantations within the Heat of Borneo.

3.3.2.4. Risk designation and specification

Elevated risk

3.3.2.5. Control measures and verifiers

Verifiers:

- Geographic risk –
 - Cross reference palm oil supply area with above maps to identify any overlap with HCV areas
 - Examine deforestation, peat, fires, social indicators and other trends by region/province/district (<http://commodities.globalforestwatch.org/>)
- Corporate risk - Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations.
- Check palm oil producers' 'environmental management' and 'fragile, marginal and peat soils' scores: <http://www.sustainablepalmoil.org/companies/> and/or the company's latest annual report.
- mill + supply base – when CPO or derivative palm oil can be traced back to the mill of known location, then risk associated with the particular mill can be examined (utilizing the upcoming GFW mill neighbourhood environmental risk assessment tool).
<http://commodities.globalforestwatch.org/>

Control Measures:

- Completed and approved Environmental Impact Assessment for areas that require them (see section 3.1.3) (check list of approved EIAs on the DOE website: <http://www.doe.gov.my/eia/eia-reports/>) and verify that environmental controls are followed in the field through evidence of an audit. Ensure that any legal requirements relating to the protection of HCV 2 are met.
- Agricultural land title or lease to prove site location is on agricultural land.
- Evidence a High Conservation Value (HCV) assessment that includes both the planted area itself and relevant wider landscape-level considerations (such as wildlife corridors) to identify HCV 1- 6 have been undertaken. [<https://www.hcvnetwork.org/als/public-summaries>]

- Evidence that management plans have been developed for the management area and surrounding landscape have been developed and are implemented to ensure the maintenance of HCV 2 values.

3.3.3. Ecosystems and habitats – HCV 3

Rare, threatened, or endangered ecosystems, habitats or refugia. Sub categories:

- Existing forests in forest landscapes where these ecotypes are rare;*
- Areas of important genes or genetically distinct populations;*
- Ecosystems that are depleted or poorly reserved at the regional or national scale;*
- Old growth forests, outside of forest biomes where the concept is redundant;*
- Remnant natural forest vegetation in heavily cleared landscapes.*

3.3.3.1. HCV Occurrence

HCV3 occurs within Sarawak, identified as habitats that are conservation priorities, listed in the National HCV Interpretation for Malaysia. Oil palm plantations may contain patches of natural forest, and may be adjacent to natural forest that may contain HCV 3.

Habitats of highest conservation significance include peat swamp forests, level dry lowland mixed dipterocarp forests, freshwater swamp forests, and tropical heath forest. The whole of the island of Borneo is considered a biodiversity hotspot (Mittermeier et al, 2005 and Conservation International, 2011).

Level lowland dipterocarp forest is mixed dipterocarp forest growing on flat terrain below 100m in elevation. It has the highest diversity of tree species, and the dipterocarp trees grow to their largest on this terrain. This forest type has almost disappeared completely in Sarawak, and the small remaining areas are mostly within protected areas. Areas of this habitat are usually found on lowland riparian environments, and within forest management units, are almost always the first to be harvested because it has the largest trees, and highest stocking. Plant and animal diversity is usually highest in this habitat. Most of the globally threatened species of mammals and birds are those confined to, or largely restricted to this habitat (Aik et al., 2007; BirdLife International, 2003; WWF, 2016).

Freshwater swamp forest is a successional swamp forest type, between mangrove forests and peat swamp forests. It is characterized by a specific faunal and floral assemblage and has always been a rare habitat compared with the other habitat types on Borneo, and in Sarawak (Mackinnon, 1996). It is occasionally found within mixed dipterocarp forest, in depressions or basin formations. Only very small patches remain.

Tropical heath forest is locally known as kerangas forest, an iban word meaning “where rice will not grow”. Tropical heath forest grows on nutrient-poor sandy soils found in western Sarawak and on sub-montane elevations. This habitat is confined to western Borneo, and most of its distribution is in Sarawak (Mackinnon, 1996). It is characterized by short stature trees, and a proliferation of drought-tolerant plant species. It is a remnant habitat of an ancient Sundaland ecosystem, today called Riau-Pocket vegetation.

Peat swamp forests used to be extensive in Sarawak, but unlogged areas of this habitat can only be found in Brunei. The peat swamps of Sarawak are unique, with an endemic dipterocarp defining this peat swamp ecosystem – the Alan tree (*Shorea albida*). This habitat

occurs on rising elevated domes from river channels, and forms concentric circles of six different phasic communities (Yamada, 1997). Alan grows in monotypic stands in phasic communities, reaching heights of over 70m.

3.3.3.2. Sources of information

- Aik, YC; Sebastian, AC & Davison, GWH. 2007. Directory of Important Bird Areas in Malaysia. Key Sites for Conservation. Malaysian Nature Society
- BirdLife International. 2003. Saving Asia's threatened birds: a guide for government and civil society. Birdlife International. Cambridge, UK
- Conservation International. 2011. The World's 10 Most Threatened Forest Hotspots. <http://www.conservation.org/NewsRoom/pressreleases/Pages/The-Worlds-10-Most-Threatened-Forest-Hotspots.aspx>
- Mackinnon, K. 1996. The Ecology of Kalimantan. Oxford University Press.
- Ministry of Natural Resources and Environment, Malaysia. (2014). Fifth National Report to the Convention on Biological Diversity. Putrajaya: Ministry of Natural Resources and Environment, Malaysia. Retrieved from <https://www.cbd.int/doc/world/my/my-nr-05-en.pdf>
- Mittermeier, R.A., Gil, P.R., Hoffman, M., Pilgrim, J.D., Brooks, T., Mittermeier, C.G., Lamoreaux, J., and Da Fonseca, G.A.B. (2005). Hotspots Revisited: Earth's Biologically Richest and Most Endangered Terrestrial Ecoregions (University of Chicago Press). Cited in: Struebig, Matthew J. Abdullah, Tajuddin et al. 2015. Targeted Conservation to Safeguard a Biodiversity Hotspot from Climate and Land-Cover Change Current Biology, Volume 25, Issue 3, 372 – 378
- Mohd-Azlan, J., & Lawes, M. J. (2011). 15. The Efficacy of Protected Areas and Future Challenges for Wildlife Conservation in Sarawak.
- Rainforest Journal. 2011. Dipterocarp trees. Rainforest Journal. Wetlands International. <https://www.rainforestjournal.com/dipterocarp-trees/>
- Wetlands International. 2016. Towards sustainable palm oil. <https://www.wetlands.org/casestudy/towards-sustainable-palm-oil/>
- Wich, S., Meijaard, E., Marshall, A.J., Husson, S., Ancrenaz, M., Lacy, R.C., van Shaik, C.P., Sugardjito, J., Simorangkir, T., Traylor-Holzer, K., Doughty, M., Suprianta, J., Dennis, R., Gumal, M., Knott, C.D., Singleton, I., 2008. Distribution and conservation status of the orang-utan (*Pongo* spp.) on Borneo and Sumatra: how many remain. *Oryx*, 42: 329–339.
- WWF. 2016. Borneo Plants. WWF. http://wwf.panda.org/what_we_do/where_we_work/borneo_forests/about_borneo_forests/borneo_animals/borneo_plants/
- Yamada, I. 1997. Tropical Rain Forests of Southeast Asia: A Forest Ecologist's View. University of Hawaii Press.
- Zainudin, Z., Ansari, A. H., & Baharudin, H. (2013). Riparian zone management and rehabilitation in Malaysia through restorative justice. *Advances in Environmental Biology*, 7(11), 3264-3271.

3.3.3.3. Risk determination

Annex 2 shows a GFW map of significant total tree cover loss from 2005-2014 overlaid with proxy HCV 1 and 3 mapped areas (Protected Areas, BirdLife Endemic Bird Areas and Conservation International Biodiversity Hotspots).

Threats to HCV 3 are mainly from the conversion of natural forests into oil palm plantations (see also Section 4). For example, lowland dipterocarp forest has been and is being converted into, oil palm or rubber plantations (Rainforest Journal, 2011), and a large area of peatland in Malaysia has already been drained for large scale oil palm plantations and continues to be cleared for oil palm plantations, with the highest rate of oil palm planting on peat occurring in Sarawak (Wetlands International, 2016).

The expansion of palm oil plantations has been an important contributor to the removal and fragmentation of forest in Sarawak. The encroachment and unregulated expansion of plantations are considered a major threat to larger mammals since movement patterns of these species are known to be disrupted around forest edges (Wich et al., 2008 and Mohd-Azlan & Lawes, 2011). The remaining primary forest in Sarawak is being increasingly fragmented and isolated and the ability of species to persist within these remnants is an issue of concern (Mohd-Azlan & Lawes, 2011). Several protected areas in Sarawak are surrounded by oil palm plantation, and most protected areas in Sarawak are too small to maintain viable populations of most medium-sized and larger vertebrates and possibly some tree species with large spatial scales of recruitment.

A key area of management is in the buffer zones around plantations so that it does not negatively affect the value of the peat swamp forest remnant (Wetlands International – Malaysia, 2010). Unfortunately, one of the main contributing factors of riparian buffer zone destruction in Malaysia is the encroachment of river reserves by oil palm plantations, releasing pollutants such as fertilizers and pesticides (Zainudin, Ansari, & Baharudin, 2013).

Malaysia is a signatory to the Convention on Biological Diversity (CBD). Malaysia's Fifth National Report to the Convention on Biological Diversity states that the country's monitoring against CBD targets is weak: "The lack of cohesive and comprehensive monitoring mechanisms/indicators towards the National Policy on Biological Diversity has posed some challenges towards measuring actual progress in certain conservation areas. Malaysia recognises the need to step up efforts on awareness raising on the importance and significance of biodiversity conservation, protection and management across all levels of society in Malaysia" (Ministry of Natural Resources and Environment, Malaysia, 2014).

In conclusion, given the threats to HCV 3 are mainly caused by conversion of natural forests into oil palm plantations (see also Section 4) which results in habitat removal and fragmentation this indicator is considered Elevated risk.

3.3.3.4. Risk designation and specification

Elevated risk

3.3.3.5. Control measures and verifiers

Country Specific

- Corporate risk - Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations.

Check palm oil producers' 'environmental management' and 'fragile, marginal and peat soils' scores: <http://www.sustainablepalmoil.org/companies/> and/or the company's latest annual report.

Control Measures:

- Completed and approved Environmental Impact Assessment for areas that require them (see section 3.1.3) (check list of approved EIAs on the DOE website: <http://www.doe.gov.my/eia/eia-reports/>) and verify that environmental controls are followed in the field through evidence of an audit. Ensure that any legal requirements relating to the protection of HCV 3 are met.
- Agricultural land title or lease to prove site location is on agricultural land.
- Evidence that comprehensive biodiversity surveys and/or a High Conservation Value (HCV) assessment that includes both the planted area itself and relevant wider landscape-level considerations (such as wildlife corridors) to identify HCV 1- 3 have been undertaken. [<https://www.hcvnetwork.org/als/public-summaries>]
- Evidence of management plans for rare, threatened or endangered ecosystems include actions for their protection, survival, and prevention of poaching, are develop for the management area and surrounding landscape have been developed and are implemented.

3.3.4. Critical ecosystem services – HCV 4

Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. Sub-categories:

- a) protection from flooding;
- b) protection from erosion;
- c) barriers from destructive fire;
- d) clean water catchments

3.3.4.1. HCV Occurrence

HCV 4 occurs throughout natural forests in Sarawak in the form of steep slopes (areas under Terrain 4 areas (slopes exceeding 35 degrees)) and water catchment areas identified by the Drainage and Irrigation Department (DID). Publicly available information does not map these areas out, nor describe specific locations.

3.3.4.2. Sources of information

- Crowder, N. 2015. How palm oil cultivation in Borneo is threatening the ecosystem everywhere. The Washington Post. 1 December 2015. https://www.washingtonpost.com/news/in-sight/wp/2015/12/01/how-palm-oil-cultivation-in-borneo-is-threatening-the-ecosystem-everywhere/?utm_term=.6915a7fa602e

- Ewers, R.M., Didham, R.K., Fahrig, L., Ferraz, G., Hector, A., Holt, R.D., Kapos, V., Reynolds, G., Sinun, W., Snaddon, J.L. and Turner, E.C., 2011. A large-scale forest fragmentation experiment: The Stability of Altered Forest Ecosystems Project. *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 366(1582), pp.3292-3302.
- Gandaseca, S., Rosli, N., Hossain, M.S. and Arianto, C.I., 2014. Assessment of oil palm plantation and tropical peat swamp forest water quality by multivariate statistical analysis. *American Journal of Environmental Sciences*, 10(4), pp.391-402.
- Ligtermoet, E., Chambers, J.M., Kobryn, H.T. and Davis, J., 2009. Determining the extent and condition of riparian zones in drinking water supply catchments in Sarawak, Malaysia. *Water Science and Technology: Water Supply*, 9(5), pp.517-531.
- Lim, T. W. (2013). *Malaysia: Illegalities in Forest Clearance for Large-Scale Commercial Plantations*. Washington D.C.: Forest Trends.
- Maidin, A. J. (2005, November 17). Challenges in implementing and enforcing environmental protection measures in Malaysia. Retrieved from The Malaysian Bar: http://www.malaysianbar.org.my/environmental_law/challenges_in_implementing_and_enforcing_environmental_protection_measures_in_malaysia_by_ainul_jaria_bt_maidin.htm
- Mercer, E.V., Mercer, T.G. and Sayok, A.K., 2014. Effects of forest conversions to oil palm plantations on freshwater macroinvertebrates: a case study from Sarawak, Malaysia. *Journal of Land Use Science*, 9(3), pp.260-277.
- Sarawak Integrated Water Resources Management Master Plan. 2009. Sarawak Integrated Water Resources Management Master Plan Study (2008-2009). http://www.siwr.com.my/modules/iwrm/page.php?id=12&menu_id=0&sub_id=7
- Sharom, A. (2008). *Environmental Laws in Malaysia: Time to Walk the Walk*. Inaugural University of Malaya Law Conference. Kuala Lumpur. Retrieved from http://eprints.um.edu.my/13465/1/environmental_laws_in_malaysia.pdf
- Zainudin, Z., Ansari, A. H., & Baharudin, H. (2013). Riparian zone management and rehabilitation in Malaysia through restorative justice. *Advances in Environmental Biology*, 7(11), 3264-3271.

3.3.4.3. Risk determination

HCV4 becomes threatened by oil palm plantation activities when areas containing HCV4 are converted to oil palm, and when environmental safeguards such as maintenance of riparian buffer zones are not implemented. Agriculture is generally not practiced in very steep areas, so it is assumed risk primarily relates to water catchment areas and maintenance of buffer zones.

Palm oil plantations have been accused of loading rivers with sediment caused by soil erosion and gradually destroying the waterways with nutrient overload and pesticides (e.g. Crowder, 2015). A small number of studies have analysed riparian buffers (or lack thereof) in oil palm plantations in Sarawak. In one study, it has been suggested that one of the main contributing factors of riparian zone destruction in Malaysia is the encroachment of river reserves by oil palm plantations (Zainudin et al., 2013). In another, no distinct difference in stream quality

between streams passing through rainforests and streams passing oil palm plantations was found, however quality differences were indicated by invertebrates being less abundant, species rich and diverse in palm oil streams (Mercer et al., 2014). It was suggested that this may have been due to the disappearance of natural bank habitats, sensitivity to insecticides used in oil palm plantations, or a combination of both. In Peat forests, agricultural and oil palm plantation activities have been suggested as a possible source of pollutants that resulted in negative changes in water quality (Gandaseca, 2014).

The Sarawak Integrated Water Resources Management Master Plan Study (2008-2009) proposed a three-priority protection matrix of water catchments in the state. "Priority 1" catchments were defined to be areas where it should be ensured that there is no degradation of drinking water sources by preventing potentially harmful land use activities from occurring in these areas. These areas are said to normally encompass land owned or managed by State Agencies, but may include private or communal land that is strategically significant to the protection of drinking water source (e.g. land immediately adjacent to a reservoir), and totally protected areas, nature reserves and wildlife sanctuaries could also conceivably come under this category. It is stated that most land use activities create some risk to water quality and are therefore defined as incompatible in priority 1 areas. This would include oil palm. In Priority 2 and 3 areas there should be no increased risk of water source contamination or pollution. The areas include established low-risk land development (e.g. low intensity rural activity). Land use activities that do not result in loss of ground cover or in the exposure of the soil to erosion hazards are allowed, and all land use activities would be subject to the conditions of EIAs and contingent on being able to maintain water quality. It is noteworthy that oil palm is listed as an existing land use in a number of gazetted water catchments (explicitly defined as HCV 4, above), and existing drinking water catchments, as well as proposed drinking water catchments, that are proposed as Priority 1. This indicates that oil palm could be a threat to water quality in these areas.

The main legal safeguard for protecting HCV4, which is the requirement for an environmental permit in some situations (for which an environmental impact assessment (EIA) and mitigation actions are required), only applies in some cases, and may not be effective when it is required. Under the Natural Resources and Environment (Prescribed Activities) Order, 1994, agricultural development activities that require an EIA include development of agricultural estates or plantations of an area exceeding 500 hectares from land under primary or secondary forest, which would involve the resettlement of more than 100 families, or which would involve modification in the use of the land, and when mangrove swamps are converted into an agricultural estate that exceeds 50 hectares. An EIA is also required for activities which may damage or have an adverse impact on the quality of environmental or natural resources of the state, including any development activity intended to be carried out within a water catchment area declared under section 8 of the Water Ordinance, 1994 (Cap. 13). Upon completion of the EIA, the report is submitted to the relevant agency for approval and, once approved, an agreement is put in place for the proponent to implement mitigating measures prior, during and after the project.

There are also serious problems with the EIA system under the law as there is commonly a conflict of interest between the companies and the consultants they hire to do the EIA, and there are also loopholes whereby an EIA is required based on the size of the project but plantation companies can easily break the project into smaller lots to avoid the EIA requirement (Sharom, 2008). Most officials from environment related departments including

the Town and Country Planning Department and the DOE often lack sufficient expertise to vet the Development Proposals and the EIA reports submitted by the applicants seeking for grant of planning permission (Maidin, 2005). Despite the realisation of the importance of monitoring compliance of the EIA process, it is lacking due to lack of personnel and increasing numbers of newly approved development projects (Maidin, 2005).

Most forest conversion projects do produce EIAs, and most that are submitted are approved, with mitigation measures prescribed (Lim, 2013). River buffers and slope protection are common mitigation measures for most forest clearance projects, primarily because they are useful proxies for biodiversity. However, companies attempt to minimize the size of reserve areas, e.g. by using low resolution maps that understate the density of waterways, and pressure environmental consultants to underreport the extent of rivers in a project area, underreporting the steepness of an area and using low resolution maps to make the land appear flatter, etc. as they reduce potential profits from reduced plantable area. The environment agency carries out compliance audits to ensure that the mitigating measures are implemented satisfactorily, but audit effectiveness is limited by capacity and other constraints, and there is considerable non-compliance with mitigation due to ambiguities regarding the implementation of these measure (Lim, 2013). Fines are not large enough to act as deterrents, and maps used as part of enforcement activities are not at the scale required to represent the reality on the ground.

3.3.4.4. Risk designation and specification

Elevated risk

3.3.4.5. Control measures and verifiers

Country Specific

Verifiers:

- Corporate risk - Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations.
- Check palm oil producers' 'environmental management' and 'fragile, marginal and peat soils' scores: <http://www.sustainablepalmoil.org/companies/> and/or the company's latest annual report.

Control Measures:

- Completed and approved Environmental Impact Assessment for areas that require them (see section 3.1.3) (check list of approved EIAs on the DOE website: <http://www.doe.gov.my/eia/eia-reports/>) and verify that environmental controls are followed in the field through evidence of an audit. Ensure that any legal requirements relating to the protection of HCV 3 are met.
- Agricultural land title or lease to prove site location is on agricultural land.
- Evidence that a High Conservation Value (HCV) and Environment Impact Assessment that includes both the planted area itself and relevant wider landscape-level considerations

(such as wildlife corridors) to identify HCV 4 have been undertaken.
[<https://www.hcvnetwork.org/als/public-summaries>]

3.3.5. Community needs – HCV 5

Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (e. g.: for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples. Sub-categories:

- a) *Unique/main sources of water for drinking and other daily uses;*
- b) *Unique/main sources of water for the irrigation of food crops;*
- c) *Food, medicines or fuel etc. for local consumption.*

3.3.5.1. HCV Occurrence

HCV5 is present in various areas within Sarawak. The state is populated by a wide range of ethnic communities, and there is no area of forest that has not been used by indigenous communities at some point. LandMark (2016) has published an (incomplete) interactive map of lands that are collectively held and used by Indigenous Peoples and local communities worldwide. In Sarawak, such lands are mapped in the north-east of the state, however this does not mean that these are the only indigenous lands in the state.

The “Dayak” of Sarawak – an umbrella term for the many different indigenous ethnic groups – comprise over one million people out of a total population of 2.3 million (Bujang, 2009, Nelson et al., 2016). Officially, Sarawak comprises some 40 ethnic groupings. However, in reality there are over 60 distinct tribes, distinguished by languages and dialects.

All Dayak identify with the forest in numerous ways, and strongly assert their rights to use the forest. Most Dayak are rural based, living in permanent settlements near navigable stretches of rivers or confluences, and are highly skilled in shifting agriculture while still maintaining a dependence on forest and river resources (Bujang, 2009 and Jayasooria, 2008). A small minority maintain a nomadic lifestyle (Bujang, 2009). The Penan are the most nomadic native tribe, although most have abandoned their nomadic lifestyles out of necessity, and the disappearance of the large forested landscapes that supported them in the past. While many today live in permanent settlements, these are extremely remote with poor access, and they still depend on the forests for satisfying almost all their fundamental basic necessities. For example, Colchester et al. (2007) refer to a Penan community that still depends greatly on forest products and wildlife from the surrounding forest areas and nearby rivers and streams for their daily needs. In a separate study of a community in the Bau district, it was concluded that the community’s dependency towards the forest is “fairly high”, with forest dependencies including sites to build houses, for agriculture purposes and as a source of water supply (Nelson et al., 2015).

The primary critical uses of the forest by local communities are: hunting, fishing, timber for buildings and boats, medicinal plants, fruits and other edible plants, various sources of oils, NTFPs for household materials and handicrafts, resins for buildings, cooking and sealants for boats, etc.

3.3.5.2. Sources of information

- Colchester, M., Pang, W. A., Chuo, W. M., & Jalong, T. (2007). Land is Life: Land Rights and Oil Palm Development in Sarawak. Forest Peoples Programme and Perkumpulan Sawit Watch.
- Jayasooria, J. 2008. Forest based communities & their struggles for survival in modern Malaysia. Asia Views, August-September 2008. URL: <http://www.snap-undp.org/lepknowledgebank/Public%20Document%20Library/Forest%20Based%20Communities%20and%20Legal%20Empowerment.pdf>
- LandMark. 2016. Global Platform of Indigenous and Community Lands. <http://www.landmarkmap.org/map/#x=115.79&y=3.49&l=6>
- Nelson et al. 2015. Community's forest dependency and its effects towards the forest resources and wildlife abundances in Sarawak, Malaysia. International Journal of Sustainable Development & World Ecology, 2015 Vol. 22, No. 5, 401 – 412. URL: https://www.academia.edu/19492010/Community_s_forest_dependency_and_its_effects_towards_the_forest_resources_and_wildlife_abundances_in_Sarawak_Malaysia
- Yong, C., SACCESS, & JKOASM. (2014). Deforestation Drivers and Human Rights in Malaysia. Forest Peoples Programme. Retrieved from <http://www.forestpeoples.org/topics/climate-forests/publication/2014/deforestation-drivers-and-human-rights-malaysia>

3.3.5.3. Risk determination

Government of Sarawak's limited interpretation of the extent of customary rights is at odds with the perception of the communities themselves (Colchester, Pang, Chuo, & Jalong, 2007), and the Dayak have been defending their forests and livelihoods from the activities of oil palm plantations promoted by the federal and state governments (World Rainforest Movement, 2000). Communities interpret their customary rights areas as being all those areas that they have rights to according to customary laws including their cultivated lands, gardens, burial sites, sacred sites, communal forest reserves and the bounded virgin forests which they use for their wider livelihood activities and to allow for future expansion (Colchester, Pang, Chuo, & Jalong, 2007).

The top leaders Sarawak have been exposed for using their political positions to build up excessive powers to control the forests and resources through logging and palm oil concessions, linked to a chain reaction of corruption (Yong, SACCESS, & JKOASM, 2014). There are longstanding disputes as many oil palm plantation leases issued to investors encroach indigenous peoples' forest reserves and farm lands (Ali, 2011). The courts in Sarawak and those at the national/federal level have tended to uphold a much wider understanding of customary rights than the government, however development has typically already begun (Colchester, Pang, Chuo, & Jalong, 2007).

3.3.5.4. Risk designation and specification

Elevated risk

3.3.5.5. Control measures and verifiers

Verifiers:

- Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations. For land tenure issues check palm oil producers' 'Landbank' and 'Environmental' scores – the latter which covers FPIC and IP rights:
<http://www.sustainablepalmoil.org/companies/>
- Conduct a search on latest news and NGO reports on disputes and developments on indigenous and traditional peoples' land claims and assurance of rights via websites and NGOs including:
 - NGO investigations and reports (Forest Peoples Programme <http://www.forestpeoples.org>, , Rainforest Action Network www.ran.org, <http://www.schusterinstituteinvestigations.org>, greenpeace.org, Friends of the Earth [foe.org](http://www.foe.org), Center for Orang Asli Concerns (COAC) (<http://www.coac.org.my/>), The Human Rights Commission of Malaysia (SUHAKAM) (<http://www.suhakam.org.my/>), Pusat Komang (komang.org), Cultural Survival ([culturalsurvival.org](http://www.culturalsurvival.org)))Media reports (Mongabay.com, greenomics.org, red-monitor.org, , eyesontheforest.org, sarawakreport.org, malaysiakini.com)
 - Global Platform of Indigenous and Community lands:
<http://www.landmarkmap.org>

Control Measures:

It is important to remember that the appropriate way to maintain or enhance each value will depend on the value itself. There are a variety of possible options to maintain or enhance various HCVs, which include:

- Evidence that a High Conservation Value (HCV) assessment to identify HCV 5 have been undertaken. [<https://www.hcvnetwork.org/als/public-summaries>]
- Where HCV set-asides with existing rights of local communities have been identified, there is evidence of a negotiated agreement that optimally safeguards both the HCVs and these rights in accordance with internationally recognized FPIC standards, are not constrained by local legal frameworks (see Category 2.2 also for more details).
- Documents or records of consultations with local communities for any land or rights dispute resolutions.

3.3.5. Cultural values – HCV 6

Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples. Sub-categories:

- a) *Aesthetic values;*
- b) *Historic values;*
- c) *Scientific values;*
- d) *Social (including economic) values;*
- e) *Spiritual values.*

3.3.6.1. HCV Occurrence

There is virtually no forest in Sarawak that has not been touched or lived in by its native people. Therefore, the entire area under assessment is treated (and claimed) by the peoples of Sarawak as HCV6. Unlike HCV5 which can be subjective or temporal in their locations, HCV6 tend to be more permanent, and independent of the current location of a specific community.

Indigenous peoples of Malaysia have a close relationship to their lands, territories and resources (Human Rights Commission of Malaysia (SUHAKAM), 2013). Their lands and resources are significant not only as a means of livelihood but also as part of their spiritual and cultural life, and form part of their identity as peoples (Human Rights Commission of Malaysia (SUHAKAM), 2013). Examples of HCV6 in the light of native perspectives include: forests that have historically been left as hunting grounds, some small, some extending several thousands of hectares; areas where nomadic tribes used to (but no longer) wander, and represent to them a visible, standing statement of their heritage and identity; mosaics of lakes and rivers where communities have traditionally fished; specific features like mountain tops, outcrops in the forest, caves, and stretches of rivers which have mystical legends attached to them; burial areas which are not a single site, but extend over several river systems and ridges; areas where historical battles have occurred between tribes; and ancestral routes used by migrating tribes across Borneo.

The Bruno Manser Fund's Sarawak Geoportal has mapped the area (but not specific HCV6 areas) of the Eastern Penan ("Penan Selungo"), in which HCV6 is likely to occur, however the area of Western Penan is not mapped, and neither are the areas of other indigenous peoples. In some cases, areas such as those containing megaliths are documented or mapped (e.g. Jay, n.d.; WWF, 2015), but aside to these instances, specific areas that can be considered HCV6 are generally not documented and/or mapped.

3.3.6.2. Sources of information

- Ali, A. A. (2011). LAND RIGHTS ISSUES AFFECTING THE INDIGENOUS OF SARAWAK. Retrieved from <http://www.farmlandgrab.org/uploads/attachment/Land%20Rights%20Issues%20Affecting%20the%20Indigenous%20of%20Sarawak.pdf>
- Bulan, R., & Locklear, A. (2008). Legal perspective on native customary land rights in Sarawak. Human Rights Commission of Malaysia (SUHAKAM). Retrieved from <http://www.suhakam.org.my/wp-content/uploads/2013/12/Legal-Perspectives.pdf>
- Bruno Manser Fund. 2016. Sarawak Geoportal. <http://www.bmfmaps.ch/EN/composer/#maps/1001>
- Human Rights Commission of Malaysia (SUHAKAM). (2013). REPORT OF THE NATIONAL INQUIRY INTO THE LAND RIGHTS OF INDIGENOUS PEOPLES. Human Rights Commission of Malaysia (SUHAKAM). Retrieved from <http://nhri.ohchr.org/EN/Themes/BusinessHR/Business%20Womens%20and%20Childrens%20Rights/SUHAKAM%20BI%20FINAL.CD.pdf>
- Jay, M. No date. The sacred stones of Borneo. <http://mikejay.net/the-sacred-stones-of-borneo/>

- Moh, J. (2015). Plantation blamed for destruction of graves. Borneo Post Online. Retrieved from <http://www.theborneopost.com/2015/03/20/plantation-blamed-for-destruction-of-graves/>
- WWF. 2015. Sarawak Highlanders in the Heart of Borneo. 2015. http://wwf.panda.org/wwf_news/?240170/Sarawak-Highlanders-in-the-Heart-of-Borneo
- Yong, C., SACCESS, & JKOASM. (2014). Deforestation Drivers and Human Rights in Malaysia. Forest Peoples Programme. Retrieved from <http://www.forestpeoples.org/topics/climate-forests/publication/2014/deforestation-drivers-and-human-rights-malaysia>

3.3.6.3. Risk determination

There is a growing number of longstanding land dispute cases filed in courts by native landowners against oil palm plantation companies, state government and others in the industry due to oil palm plantation leases being issued for lands occupied by indigenous peoples (Ali, 2011; Yong, SACCESS, & JKOASM, 2014). Apart from loss of land, many community witnesses have complained that the opening of plantations has resulted in destruction of graveyards and crops, and pollution of rivers and loss of livelihoods and traditional ways of life (Human Rights Commission of Malaysia (SUHAKAM), 2013). It has been reported that plantation management destroys the graves or burial grounds or shrines of indigenous peoples of Sarawak (Human Rights Commission of Malaysia (SUHAKAM), 2013; Moh, 2015), which are supposed to be protected under Section 5(1) of the Sarawak Land Code (Bulan & Locklear, 2008).

Given the evidence presented above on the potential threats to HCV 6 by palm oil plantations this indicator is considered Elevated risk.

3.3.6.4. Risk designation and specification

Elevated risk

3.3.6.5. Control measures and verifiers

Verifiers:

- Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations. For land tenure issues check palm oil producers' 'Landbank' and 'Environmental' scores – the latter which covers FPIC and IP rights: <http://www.sustainablepalmoil.org/companies/>
- Conduct a search on latest news and NGO reports on disputes and developments on indigenous and traditional peoples' land claims and assurance of rights via websites and NGOs including:
 - NGO investigations and reports (Forest Peoples Programme <http://www.forestpeoples.org>, , Rainforest Action Network www.ran.org, <http://www.schusterinstituteinvestigations.org>, greenpeace.org, Friends of the Earth [foe.org](http://www.foe.org), Center for Orang Asli Concerns (COAC) (<http://www.coac.org.my/>), The Human Rights Commission of Malaysia

(SUHAKAM) (<http://www.suhakam.org.my/>), Pusat Komang (komang.org), Cultural Survival (culturalsurvival.org)) Media reports (Mongabay.com, greenomics.org, red-monitor.org, , eyesontheforest.org, sarawakreport.org, malaysiakini.com)

- Global Platform of Indigenous and Community lands:
<http://www.landmarkmap.org/>

Control Measures:

It is important to remember that the appropriate way to maintain or enhance each value will depend on the value itself. There are a variety of possible options to maintain or enhance various HCVs, which include:

- Conservation set-asides (e.g. appropriately designed protected areas, buffer zones, habitat corridors)
- Restoration (e.g. remediation of previous damage to ecosystems, reintroduction of hunted species, creation of wildlife corridors between forest blocks)
- Community development and livelihoods projects (e.g. employment and healthcare)
- Local government and NGO support (e.g. extending or renewing leases, preventing inappropriate development, supporting company conservation initiatives).
- Evidence that a High Conservation Value (HCV) assessment to identify HCV 6 have been undertaken. [<https://www.hcvnetwork.org/als/public-summaries>]
- Where HCV set-asides with existing rights of local communities have been identified, there is evidence of a negotiated agreement that optimally safeguards both the HCVs and these rights in accordance with internationally recognized FPIC standards, are not constrained by local legal frameworks (see Category 2.2 also for more details).
- Documents or records of consultations with local communities for any land or rights dispute resolutions.

CONVERSION

4.1. New plantations have not replaced natural forest or natural ecosystems since November 2005

November 2005 has been set as the baseline of natural forest and/or ecosystem conversion. Risk relates to plantation establishment on converted natural forest and/or ecosystem areas post November 2005. Note: The baseline of natural forests and ecosystem conversion has been set at November 2005 to be in aligned with other international benchmarks set through the Roundtable on Sustainable Palm Oil's deforestation 2005 baseline and to complement initiatives such as Amazon Soy Moratorium establishment in 2006.

Context

The area planted with oil palm has expanded rapidly in the last few decades. Between 1959 to 2008, the area under oil palm went from 51,053 to 4,691,160 ha. (Department of Statistics Malaysia, 2010; MPOB, 2010). Malaysia also has a deforestation problem, and the rate of deforestation in Sarawak is higher than in Sabah and Peninsular Malaysia (Mohd-Azlan and Lawes, 2011). Forest cover in Sarawak declined from 8.98 million hectares in 2005 to 8.12 million hectares in 2010 (SarVision, 2011). The two trends are connected; it has been stated that the expansion of oil palm was mainly achieved by deforestation and transforming economically less attractive plantations (Koh & Wilcove, 2008), and analysis of land-cover data compiled by the United Nations Food and Agriculture Organization suggests that during the period 1990–2005, 55%–59% of oil palm expansion in Malaysia occurred at the expense of forests (Koh & Wilcove, 2008).

Although oil palm expansion in Malaysia has significantly slowed down during the past two decades, data from MPOB suggest that most of the current expansion in oil palm plantations in Malaysia is occurring in Sarawak (Toh, 2013). Between 2010 and 2012, a 70% of the increase in the national total planted area took place in Sarawak (Toh, 2013). In Malaysia, and particularly in Sabah and Sarawak, the direct conversion as opposed to progressive degradation of forest to oil palm was more common than in Indonesia, whereas the conversion of other types of land use, such as rubber has been more important in Peninsular Malaysia (Gunarso, Hartoyo, Agus, & Killeen, 2014).

4.1.1. Applicable laws and regulations

- National Physical Plan (NPP)
- Convention on Biological Diversity (CBD) - [link](#)
- The National Parks Ordinance 1962 - [link](#)
- Wildlife Conservation Enactment 1997 - [link](#)
- Environment Protection Enactment 2002 - [link](#)
- Environment Protection (Prescribed Activities)(Environmental Impact Assessment) Order 2005 - [link](#)
- Forest Enactment 1968 - [link](#)
- Land Conservation Act 1960, revised 1989 - [link](#)

- Environmental Quality Act 1974 (amended 1985) - [link](#)
- Local Government Act No. 171 of 1976 - [link](#)
- Wildlife Conservation Act 2010 - [link](#)
- Forests (Planted Forests) Rules 1997
- The Natural Resources and Environment (Prescribed Activities) Order, 1994

4.1.2. Legal authority

N/A

4.1.3. Legally required documents or records

- EIA report

4.1.4. Sources of information

- Gunarso, P., Hartoyo, M. E., Agus, F., & Killeen, T. J. (2014). Oil palm and land use change in Indonesia, Malaysia and Papua New Guinea. Roundtable on Sustainable Palm Oil (RSPO). Retrieved from http://www.tropenbos.org/file.php/1343/4_oil_palm_and_land_use_change_gunarso_et_al.pdf
- Hon, J., & Shibata, S. (2013). A review on land use in the Malaysian state of Sarawak, Borneo and recommendations for wildlife conservation inside production forest environment. *Borneo Journal of Resource Science and Technology*, 3(2), 22-35.
- Koh, L. P., & Wilcove, D. S. (2008). Is oil palm agriculture really destroying tropical biodiversity?. *Conservation letters*, 1(2), 60-64.
- Lawson, S. 2014. Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations. *Forest Trends*. Accessed 6 March 2015 at http://www.forest-trends.org/documents/files/doc_4718.pdf
- Lim, T. W. (2013). Malaysia: Illegalities in Forest Clearance for Large-scale. *Forest Trends*. Retrieved from http://www.forest-trends.org/publication_details.php?publicationID=4195
- Maidin, A. J. (2005, November 17). Challenges in implementing and enforcing environmental protection measures in Malaysia. Retrieved from http://www.malaysianbar.org.my/environmental_law/challenges_in_implementing_and_enforcing_environmental_protection_measures_in_malaysia_by_ainul_jaria_bt_maidin.html
- Miyamoto, M., Parid, M. M., Aini, Z. N., & Michinaka, T. (2014). Proximate and underlying causes of forest cover change in Peninsular Malaysia. *Forest Policy and Economics*. Retrieved from http://ac.els-cdn.com/S1389934114000768/1-s2.0-S1389934114000768-main.pdf?tid=01863d62-70da-11e6-8107-00000aacb360&acdnat=1472799411_b7045641ac61a25dd4e1f5a42ce44ec2
- Mohd-Azlan, J., & Lawes, M. J. (2011). 15. The Efficacy of Protected Areas and Future Challenges for Wildlife Conservation in Sarawak.

- Sarawak Report. (2014). Sarawak Oil Palm Owners Show True Colours - And Let Taib's Cat Out Of The Bag!. Sarawak Report, 20 January 2014.
<http://www.sarawakreport.org/2014/01/sarawak-oil-palm-owners-show-true-colours-and-let-taibs-cat-out-of-the-bag/>
- SarVision. 2011. Impact of oil palm plantations on peatland conversion in Sarawak 2005-2010. SarVision
- Sharom, A. (2008). Environmental Laws in Malaysia: Time to Walk the Walk. Inaugural University of Malaya Law Conference. Kuala Lumpur. Retrieved from
http://eprints.um.edu.my/13465/1/environmental_laws_in_malaysia.pdf
- Toh, S. M. (2013). National Updates on Agribusiness Large Scale Land Acquisitions in Southeast Asia Brief #5 of 8: Federation of Malaysia. Forest Peoples Programme. Retrieved from <http://www.forestpeoples.org/sites/fpp/files/publication/2013/08/briefing-5-8-malaysia.pdf>
- Yong, C., SACCESS, & JKOASM. (2014). Deforestation Drivers and Human Rights in Malaysia. Forest Peoples Programme. Retrieved from
<http://www.forestpeoples.org/topics/climate-forests/publication/2014/deforestation-drivers-and-human-rights-malaysia>

4.1.5. Risk determination

Overview of Legal Requirements

Conversion is legally allowed in Sarawak. The planting of oil palm inside the permanent forest estate has been approved in Sabah and Sarawak on a case-by-case and conditional basis (Lim, 2013). In Sarawak, the Forests (Planted Forests) Rules 1997 allow 20% of a license area to be planted with oil palm for one rotation of 25 years.

The Natural Resources and Environment (Prescribed Activities) Order, 1994 lists the activities requiring EIAs in that state. Agricultural development requires an EIA for (Lim, 2013):

- development of agricultural estates or plantations of an area exceeding 500 hectares –
 - from land under secondary or primary forests, or
 - which would involve the resettlement of more than 100 families; or
 - which would involve modification in the use of the land.
- Conversion of mangrove swamps into agricultural estate having an area exceeding 50 hectares.

Upon completion of the EIA, the report is submitted to the relevant agency for approval and, once approved, an agreement is put in place for the proponent to implement mitigating measures prior, during and after the project. Two measures (river buffers and slope protection) are common for most forest clearance projects. These two measures are intended to avoid impacts on the physical environment but also have significant socioeconomic and ecological benefits.

Description of risk

It is not illegal to convert forest or other natural ecosystems to oil palm, and therefore there is a clear risk that conversion will occur for this purpose, and this is witnessed in practice.

The greatest driver of land conversion in Sarawak is oil palm, accelerated by the exhaustion of land bank in Peninsular Malaysia.

The Sarawak government has classified large tracts of lands claimed as belonging to the state as State Land Forest (SLF) under the Land Bank (Yong, SACCESS, & JKOASM, 2014). Sarawak's land bank is estimated as 3.9 million ha, in contrast to Sabah with 0.6 million ha and Peninsular Malaysia with 0.2 million ha (Yong, SACCESS, & JKOASM, 2014). This means that Sarawak has more deforestation occurring than in the other two regions since it has bigger areas earmarked for conversion to plantation agriculture, using the FAO category of plantations as "planted" forests (Yong, SACCESS, & JKOASM, 2014).

Malaysia's expansion of oil palm area was mainly achieved by deforestation and transforming economically less attractive plantations (Koh & Wilcove, 2008). Analysis of land-cover data compiled by the United Nations Food and Agriculture Organization suggests that during the period 1990–2005, 55%–59% of oil palm expansion in Malaysia occurred at the expense of forests (Koh & Wilcove, 2008). Currently there is already one million ha of land under oil palm in Sarawak yet the Land Development Minister James Masing said the government intended to double the area to 2 million ha by 2015, whilst the Sarawak Oil Palm Plantation Owners Association (SOPPOA) recently revealed, by accident, that the Sarawak government's actual plan is to achieve 3 million ha of oil palm (Sarawak Report, 2014).

There are numerous reports about the prevalence of illegal land conversion in the state involving land clearance for oil palm plantations; with this activity also occurring within National Parks, peat swamps etc. (Lim, 2013). A study commissioned by Forest Trends identified 53 separate documented cases from the last ten years of alleged illegalities in forest conversion for commercial plantations in Malaysia, with 36 of these cases involving oil palm plantation, and occurring in Sarawak. The alleged illegalities were associated with corruption and violation of native customary rights (Lim, 2013). A series of investigations and by NGO, local partners and communities document alarming findings of deforestation rates, notably forest conversion for oil palm and other plantations in Sabah and Sarawak (Yong, SACCESS, & JKOASM, 2014).

Risk conclusion

Elevated risk: The agricultural commodity is driving direct impact of converting natural forest or ecosystems post November 2005. Data yield evidence that conversion is occurring on a widespread and/or systematic basis.

4.1.6. Risk designation and specification

Elevated risk

4.1.7. Control measures and verifiers

Verifiers:

- (1) geographic risk – examine time series tree cover (deforestation trends) by region/province/district (<http://commodities.globalforestwatch.org/>)
- (2) corporate risk – Corporate risk - Review the Zoological Society of London (ZSL)'s Sustainable Palm Oil Transparency Toolkit (SPOTT) tool to assess the palm oil producer's

commitments to environmental and social best practice which is based on publicly available information on disclosure of their operations.

- Check palm oil producers' 'environmental management' and 'fragile, marginal and peat soils' scores: <http://www.sustainablepalmoil.org/companies/> and/or the company's latest annual report.

Control Measures:

- Obtain the shape file of the farm property's boundaries and compare/overlay with mapping data from the following initiative that are using satellite time series images to detect the land change cover: www.globalforestwatch.org
- Evidence that a comprehensive HCV assessment, including stakeholder consultation, was conducted prior to any conversion or new planting before November 2005. Evidence should include historical remote sensing imagery which demonstrates that there has been no conversion of primary forest or any area required to maintain or enhance one or more HCV.
- Evidence is provided of undeveloped areas of peat land (of any depth) are not developed or drained post November 2005. Evidence should include historical data which demonstrates that there has been no conversion of peatlands post November 2005. Evidence should include maps identifying marginal and fragile soils, including excessive gradients and peat soils and how the farm management plans has identified and protected peatlands.
- Evidence of management plans that demonstrates fires and road-building on peat soils are prohibited.
- Where peat land has been cleared since November 2005, and without a prior and adequate HCV and HCS assessment, exclusion of the palm oil farm(s) palm oil supply should be considered from the upstream buyer's supply chain.

4.2. Fire avoidance is being practiced

Assess the risk of fire use in plantation establishment and/or management activities. Risk relates to assessing the role of fire use driving natural ecosystem conversion.

Context

The Environmental Quality Act 1974 has effectively banned open burning on vast plantation areas and a 2000 amendment placed a complete ban on burning on any peat soil area (Abdullah, 2002). However, exemptions are allowed including for the burning of the following: "any diseased and noxious plants; agricultural equipment; residues from land cleared for cultivating food crops; and residues from smallholdings cleared for planting or replanting crops in an area not exceeding 2 ha per day" (Abdullah, 2002).

4.2.1. Applicable laws and regulations

- Guidelines for implementation of ASEAN policy on zero-burning, 2003 - [link](#)
- Environment Quality (Declared Activities) (Open Burning) Order 2003 - [link](#)

4.2.2. Legal authority

- Department of Environment

4.2.3. Legally required documents or records

- EIA report

4.2.4. Sources of information

- Abdullah, A. (2002). A Review and Analysis of Legal and Regulatory Aspects of Forest Fires in South East Asia. Jakarta: Project FireFight South East Asia. Retrieved from <https://portals.iucn.org/library/sites/library/files/documents/2002-074.pdf>
- Reuters, The Star/Asia News Network. 2016. Malaysia planning to amend law to seize land if there are big fires. The Straits Times, 28 April 2016. <http://www.straitstimes.com/asia/se-asia/kl-planning-to-amend-law-to-seize-land-if-there-are-big-fires>
- Senathirajah, S. Personal communication. (2016, September 1).

4.2.5. Risk determination

Description of risk

Use of fire in land preparation for palm oil establishment has greatly reduced in Malaysia, however use of fire is still observed in the clearing of biomass waste and domestic waste (pers. comms. Senathirajah, 2016). According to a news article quoting Malaysia's Natural Resources and Environment Minister, Malaysia is proposing to amend its Environmental Protection Act to allow the government to seize control of land where big fires are discovered, as part of its long-term efforts to curb haze from slash-and-burn forest clearing techniques usually linked to palm oil plantations (Reuters, The Star/Asia News Network, 2016). This would indicate that while most information about forest fires related to clearing for palm oil plantations is about Indonesia, the issue remains important in Malaysia as well.

No information has been found on the level of competence of plantation staff with respect to fire management, however it has been said that management staff typically attend very basic fire management training (pers. comms. Senathirajah, 2016).

Risk conclusion

Low risk. Expert consultation reveals that fire use in land preparation for oil palm has been greatly reduced in Peninsular Malaysia, thus it presents low risk.

4.2.6. Risk designation and specification

Low risk

4.2.7. Control measures and verifiers

N/A

GENETICALLY MODIFIED ORGANISMS (GMOs)

5.1. There is no commercial use of genetically modified palm.

Plantations have not been planted with genetically modified commodities and/or GMO fertiliser is not being used. Risk relates to the use of GMO plants and/or fertiliser as a potential factor influencing upstream buyers purchasing decisions based on consumer preferences.

5.1.1. Applicable laws and regulations

- BIOSAFETY ACT 2007 - [link](#)
- The Biosafety (Approval and Notification) Regulations 2010

5.1.2. Legal

- Department of Biosafety, Ministry of Natural Resources and Environment Malaysia.

5.1.3. Legally required documents or records

N/A

5.1.4. Sources of information

- Department of Biosafety, Ministry of Natural Resources and Environment Malaysia. NO DATE. User's Guide to the Biosafety Act and Regulations. <http://ibc.um.edu.my/images/ibc/Download/Biosafety%20User%20Guide.pdf>
- Masani MYA, Noll GA, Parveez GKA, Sambanthamurthi R & Prüfer D. 2014. Efficient Transformation of Oil Palm Protoplasts by PEG-Mediated Transfection and DNA Microinjection. <http://dx.doi.org/10.1371/journal.pone.0096831>
- Parveez GKA, Rasid OA, Hashim AT, Ishak Z, Rosli SK & Sambanthamurthi R. 2015. Tissue Culture and Genetic Engineering of Oil Palm. In: Lai O-M, Tan CP & Akohe Palm Oil: Production, Processing, Characterization, and Uses.

5.1.5. Risk determination

Overview of Legal Requirements

The Biosafety Act of Malaysia follows the broad scheme laid down by the Cartagena Protocol on Biosafety (CPB). Just like the Protocol, Malaysia recognizes the twin aspects of modern biotechnology: the great potential offered by modern biotechnology, and, the need to protect human health and the environment from the possible adverse effects of the products of biotechnology (Ministry of Natural Resources and Environment (NRE) Malaysia, 2008).

The Biosafety Act of Malaysia establishes a process to vet all applications for direct release of living modified organisms (LMOs) into the environment to ensure that the LMO is safe (Ministry of Natural Resources and Environment (NRE) Malaysia, 2008). If it is safe, then it is approved. To arrive at this decision, a science-based risk assessment report submitted by the applicant is reviewed by the Genetic Modification Advisory Committee (GMAC), consisting almost entirely of scientists (Ministry of Natural Resources and Environment (NRE) Malaysia, 2008). The process is as suggested by the CPB and there is no a priori (preconceived)

assumption against biotechnology or the approval of the LMO (Ministry of Natural Resources and Environment (NRE) Malaysia, 2008).

Description of risk

The Malaysian Biosafety Act 2007 came into force on 1 December 2009, and the Biosafety (Approval and Notification) Regulations 2010 were passed and came into force on 1 November 2010 to implement it. Together they represent a new national scheme for the regulation of living modified organisms (LMOs (synonymous with GMO)) and products of LMO (Department of Biosafety, n.d.). There is no legislation that applies specifically to oil palm, or palm oil products.

The Malaysian Palm Oil Board (MPOB) initiated genetic engineering of oil palm in the late 1980s and breakthroughs made in the 1990's provided impetus for further ventures (Parveez et. Al, 2015). Many transgenic oil palm plantlets have been produced and are currently growing in MPOB screenhouses, in accordance with the Malaysian Biosafety Act – they are not allowed to be planted in open fields as their safety has not been fully assessed (Parveez et. Al, 2015).

The main objectives of this program are to produce transgenic oil palm with a higher content of oleic acid, modified oil quality (e.g. a higher content of stearic acid), and the ability to produce value-added oils such as palmitoleic and ricinoleic acid, as well as novel products such as biodegradable plastics (Masani et al 2014). Transgenic oil palms are being produced for niche markets such as the oleochemical industry, lubrication, and nutraceuticals, and not for use as commodity oil Parveez et. Al, 2015.

The current palm oil being produced in Malaysia is free from GMO source, and it is expected that this status will continue until at least 2030, due to the regeneration time required for yield testing and multiplying plants for commercialization (Parveez et. Al, 2015).

No information has been found regarding unauthorized use of GM palm oil in the country.

Risk conclusion

LOW RISK: There is no commercial use of GM species in the area under assessment.

5.1.6. Risk designation and specification

Low risk

5.1.7. Control measures and verifiers

N/A

Annex I. Palm oil plantation types

The table **Palm oil plantations Types in Malaysia - Sarawak** identifies the different types of plantations in **Malaysia - Sarawak** which supply palm oil to the market.

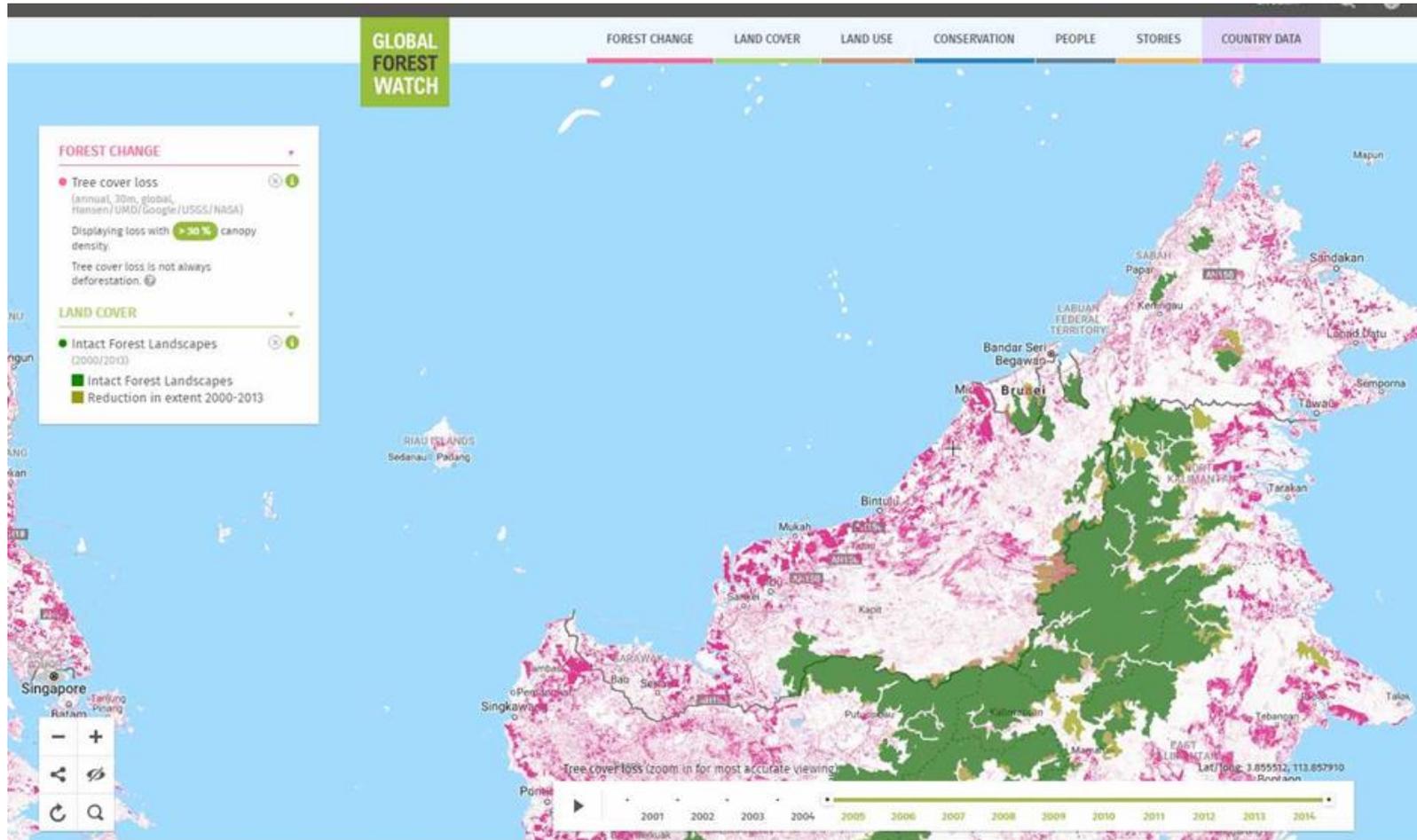
'Palm oil plantation type' is a term used to describe the different types of palm oil plantations in a country, to allow a more detailed specification of risk. The Palm oil plantation Type is used to clarify:

- which plantation types palm oil can be sourced from legally;
- what the legal requirements are for each plantation type, and
- if there are risks related to certain plantation types and not others.

PALM OIL PLANTATION TYPES IN MALAYSIA - SARAWAK					
Source Type	Legal Land Classification	Ownership	Plantation Classification	Management regime	Description of plantation type
Government land development schemes	Native Customary Rights (NCR)	Private (smallholder) who has NCR	Government land development schemes Mono-Cropping; <40 ha; Commercial	Joint venture between state agency and land owners NCR participants supplies their land to the state-led rural development scheme Sarawak Land Consolidation and Rehabilitation Authority (SALCRA) for a 25 year period (Cooke, Toh & Vaz, 2011)	Palm oil from smallholder mono-crop commercial plantations (less than 40 hectares in size) where Native Customary Rights (NCR) participants lease their land to the state-led rural development scheme Sarawak Land Consolidation and Rehabilitation Authority (SALCRA), for a 25-year period. Financial and technical assistance is provided by Sarawak Land Consolidation and Rehabilitation Authority (SALCRA) in exchange for 25 year lease and a 4% interest rate return between years 7-25.
State mediated private development scheme		Private (smallholder) who has NCR	State mediated private development scheme Mono-Cropping; Min. 5,000 ha; Commercial	Joint venture company (JVC) involving native landowners, state agencies and private sector investors. NCR participants lease land to a private company for a 60 year period. The Land Custody and Development Authority (LCDA) functions as land bank, intermediary and smallholder trustee.	Palm oil from private commercial plantations (minimum size of 5,000 hectares). Native Customary Rights (NCR) participants lease land to a private company for a 60-year period through a Joint Venture Company. The Land Custody and Development Authority (LCDA) functions as land bank, intermediary and smallholder trustee. Though legally owned by smallholders, private companies hold a 60% majority in the JVC and thus exercise control of the plantation development.
Large-scale private plantation	Alienated land	Private (large land holder) Either:	Large-scale private plantation	Private company, either a Government-linked companies (GLC) or Non-	Palm oil from large-scale private mono-crop commercial plantations from 40 to greater than 100,000 ha on alienated land under a country land title (CL) under a 99-

		<ul style="list-style-type: none"> Freehold Land title; or Country Land title (CL) under a 99-year lease 	<p>Mono-cropping; >40 - >100,000 ha; Commercial</p>	<p>government-linked companies (Non GLC).</p>	<p>year lease or have a Freehold Land title and are often an integrated company production mill and process facilities.</p> <p>A majority of expansion of oil palm plantation in Malaysia is by private companies in Sarawak (Toh, 2005).</p>
Small-scale private plantation	Alienated Land	<p>Private (smallholder) Either:</p> <ul style="list-style-type: none"> Freehold Land title, or Country Land title (CL) under a 99-year lease; or Native Title (NT) (incl. Malay reservation or Native Customary Right land for the indigenous peoples of Sarawak) or Communal Title. 	<p>Small-scale private plantation</p> <p>Mono-cropping; <40 ha; Subsistence & Commercial</p>	<p>Independent smallholder</p>	<p>Palm oil from small-scale private commercial/subsistence plantations (less than 40 ha). Plantations are located on alienated land, which is held by the smallholders either under Freehold Land title or Country Land title (CL) under a 99-year lease, or Native Title (NT) alienated for perpetuity.</p> <p>These scattered smallholdings are managed by farmers who work their own plantation with minimal government assistance. They sell their FFB directly to local mills and traders.</p>

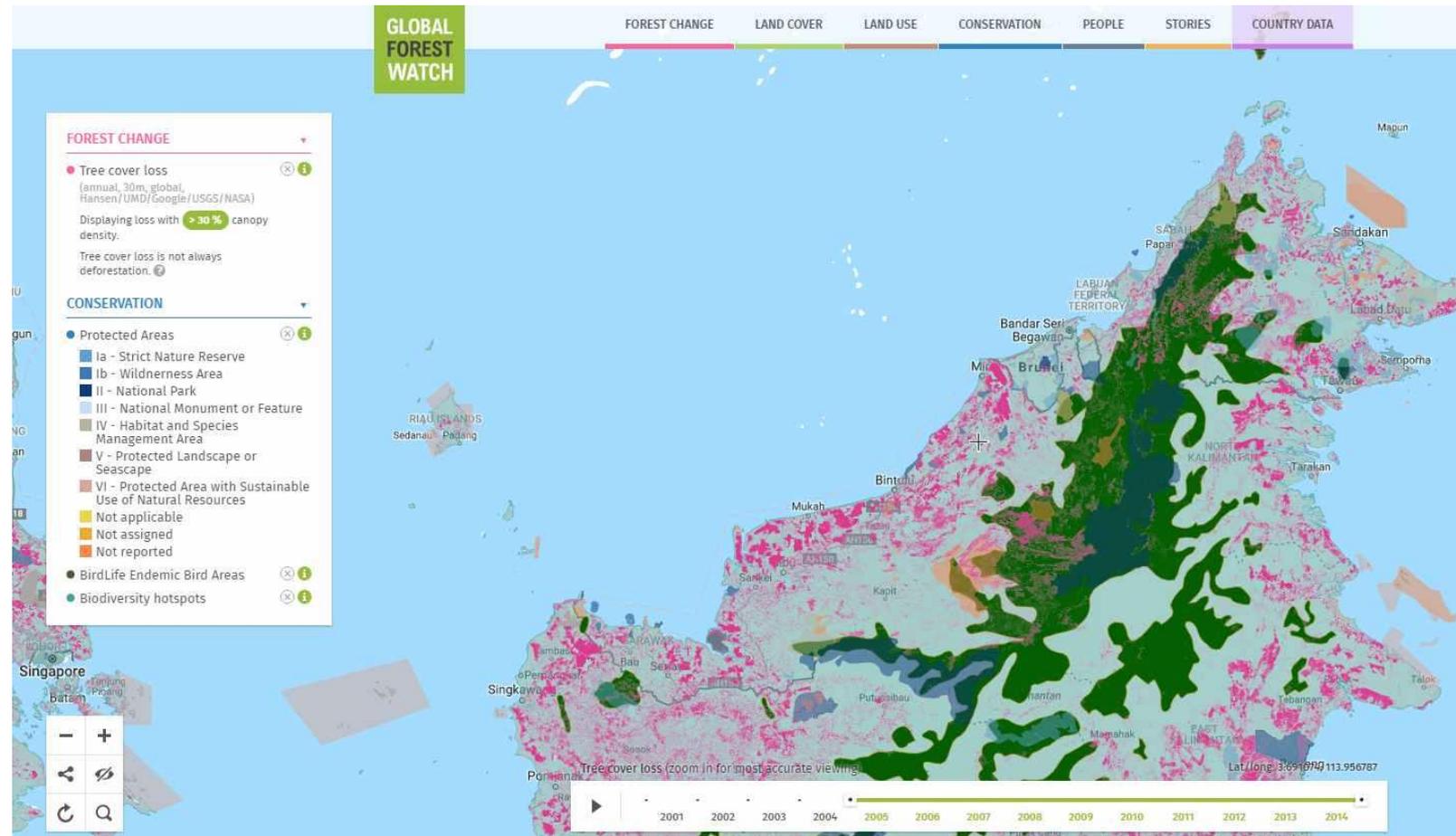
Annex II. Global Forest Watch Map of Tree Cover Loss (2005 -2014) and Intact Forest Landscapes (IFLs) Loss 2000-2013 in Sarawak and Sabah



As last seen on 3rd November 2016: http://www.globalforestwatch.org/map/7/3.86/113.86/ALL/grayscale/loss/607?tab=analysis-tab&begin=2005-01-01&end=2015-01-01&threshold=30&dont_analyze=true

Annex III. Global Forest Watch Map of Total Tree Cover Loss 2005-2014 in Peninsular Malaysia

With overlaid with proxy HCV 1 and 3 areas (Protected Areas, BirdLife Endemic Bird Areas and Tiger Conservation Landscapes)



As last seen on 3rd November 2016:

http://www.globalforestwatch.org/map/7/3.69/113.96/ALL/grayscale/loss/612,592,618?tab=analysis-tab&begin=2005-01-01&end=2015-01-01&threshold=30&dont_analyze=true

Bibliography

- Agrawal, A., Cashore, B., Hardin, R., Shepherd, G., & Benson, C. (2013). Economic contributions of forests. In *Background paper prepared for the United Nations Forum on Forests*.
- AHMAD, R. (2014, December 13). 'Enforce environmental laws'. *The Star Online*. Retrieved from <http://www.thestar.com.my/news/nation/2014/12/13/enforce-environmental-laws-judge-shortage-of-trained-officers-hinders-cases-being-brought-to-court/>
- Baharuddin, H. (1995). Timber certification: an overview. In *Unasy/va - No. 183 - Trade and marketing of forest products*. FAO.
- Chen, J., Innes, J. L., & Tikina, A. (2010). Private cost-benefits of voluntary forest product certification. *International Forestry Review*, Vol.12(1), 1-12.
- Chen, J., Innes, J., & Tikina, A. (2010). Private cost-benefits of voluntary forest product certification. ., *International Forestry Review*, 12(1), 1-12.
- Chin, M. (2011). *Biofuels in Malaysia: An analysis of the legal and institutional framework*. Bogor: Center for International Forestry Research. Retrieved from <http://www.cifor.org/library/3470/biofuels-in-malaysia-an-analysis-of-the-legal-and-institutional-framework/>
- CIA. (2016). *Malaysia*. Retrieved September 28, 2016, from <https://www.cia.gov/library/publications/the-world-factbook/geos/my.html>
- Cubbage, F., Moore, S., Henderson, T., & Araujo, M. (2009). Costs and benefits of forest certification in the Americas. In J. Paulding (Ed.), *Natural resources: Management, economic development and protection* (pp. 155-183). Hauppaa: Nova Publishers.
- EFECA. (2016). *Comparison of the ISPO, MSPO and RSPO standards*. EFECA.
- FAO. (2002). Rome.
- FAO. (2012). *State of the World's Forests 2012*. Rome: FAO.
- FAO. (2014). *State of the World's forests: Enhancing the socioeconomic benefits from forests*. Rome: FAO.
- FAO. (2016). *FAOSTAT*. Retrieved October 14, 2016, from <http://www.fao.org/faostat/en/#home>
- FAO. (2016). *Forest products statistics*. Retrieved September 20, 2016, from <http://www.fao.org/forestry/statistics/80938/en/>
- FAO. (2016). *Global Forest Resources Assessment (2nd ed.)*. Rome: Food and Agriculture Organization of the United Nations.
- Fernholz, K., & Kraxner, F. (2012). *Certified forest products markets, 2011–2012*. UNECE/FAO Forest Products Annual Market Review, Geneva, pp. 107–116.
- FSC. (2016). *Facts and Figures*. Retrieved October 15, 2016, from <https://ic.fsc.org/en/facts-figures>

- FSC. (2016). *Why should I become FSC certified?* Retrieved September 13, 2016, from <https://ic.fsc.org/en/solution/become-certified>
- Gani, I. Q., Rasat, M. S., Wahab, R., Ramle, N. H., Mohamed, M., Nawawi, S. A., & Nor, A. N. (2014). Regression analysis on factors affected roundwood production in Malaysia. *Advances in Environmental Biology*, 8(1), 66-69.
- Haowei, D., Pay, M., Yan, H., & Prasad, N. (2015). *Palm Oil Industry Report*. NUS Investment Society.
- Hoare, A. (2015). *Illegal Logging and Related Trade: The response in Malaysia*. Chatham House.
- Kissinger, G., & Herold, M. (2012). *Drivers of deforestation and forest degradation. A synthesis report for REDD+ Policymakers*.
- Kollert, W., & Lagan, P. (2007). Do certified tropical logs fetch a market premium?. A comparative price analysis from Sabah, Malaysia. *Forest Policy and Economics*, 9(7), pp.862–868.
- MacDicken, K. G., Phosiso, S., Hall, J. E., Sabogal, C., Tadoum, M., & de Wasseige, C. (2015). Global progress toward sustainable forest management. *Forest Ecology and Management*, 352, pp.47-56.
- Malaysian Palm Oil Board. (2016, October 7). *Official Portal of the Malaysian Palm Oil Board*. Retrieved from About us: <http://www.mpob.gov.my/en/about-us/about>
- Mallet, P., Maireles, M., Kennedy, E., & Devisscher, M. (2016). *How sustainability standards can contribute to landscape approaches and zero deforestation commitments*. ISEAL.
- Ministry of Plantation Industries and Commodities. (2016). *Media Release: Ministerial Meeting The Council of Palm Oil Producing Countries*. Retrieved October 16, 2016, from <http://www.kppk.gov.my/mpic/index.php/en/media-mpic-vbi/media-release/1655-ministerial-meeting-the-council-of-palm-oil-producing-countries>
- Ministry of Plantation Industries and Commodities. (2016). *Ministerial Meeting the Council of Palm Oil Producing Countries*. Retrieved October 8, 2016, from <http://www.kppk.gov.my/mpic/index.php/en/media-mpic-vbi/media-release/64-archive-press-statement/kenyataan-akhbar-2016-bi/1655-ministerial-meeting-the-council-of-palm-oil-producing-countries>
- Miyamoto, M., Parid, M. M., Aini, Z. N., & Michinaka, T. (2014). *Proximate and underlying causes of forest cover change in Peninsular Malaysia*. *Forest Policy and Economics*. Retrieved from http://ac.els-cdn.com/S1389934114000768/1-s2.0-S1389934114000768-main.pdf?_tid=01863d62-70da-11e6-8107-00000aacb360&acdnat=1472799411_b7045641ac61a25dd4e1f5a42ce44ec2
- Moore, S. E., Cabbage, F., & Eiche, C. (2012). Impacts of Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) Forest Certification in North America. *Journal of Forestry*(March 2012), 79-88.
- MPOB. (2016). *Statistics*. Retrieved October 10, 2016, from <http://bepi.mpob.gov.my/index.php/en/>

- MPOC. (2016). *Malaysia Palm Oil Industry*. Retrieved September 27, 2016, from http://www.mpoc.org.my/Malaysian_Palm_Oil_Industry.aspx
- MPOC. (2016). *Malaysian Palm Oil Industry*. Retrieved September 27, 2016, from http://www.mpoc.org.my/Malaysian_Palm_Oil_Industry.aspx
- MPOCC. (2016). *Detailed Breakdown of Certified Plantations, Smallholders and Mills as at December 2016*. MPOCC.
- MTCS. (2016). *Malaysian Timber Certification Scheme (MTCS)*. Retrieved September 21, 2016, from <http://mtc.com.my/malaysian-timber-certification-scheme/>
- MTIB. (2016). *Export E statistics, August 2016*. Malaysia Timber Industry Board.
- NEPCon. (2016). *Supply Chain Mapping of Malaysian Timber and Wood-based Industries*. NEPCon.
- Newsom, D., Bensel, T., & Bahn, V. (2008). *Are There Economic Benefits from Forest Stewardship Council (FSC) Certification? An Analysis of Pennsylvania State Forest Timber Sales*. Rainforest Alliance.
- Palm Oil Today. (2016, December 5). *What are the issues with RSPO and can MSPO be a game changer ..* Retrieved December 10, 2016, from <http://palmoiltoday.net/issues-with-the-rspo/>
- Payne, J. (2016). *Introduction to the Sabah Jurisdictional Approach to Sustainable Palm Oil Production*. Bangkok.
- PEFC. (2016). *Find certified*. Retrieved October 1, 2016, from <http://www.pefc.org/find-certified/certified-certificates>
- Potts, J., Lynch, M., Wilkings, A., Huppé, G., Cunningham, M., & Voora, V. (2014). *The State of Sustainability Initiatives Review 2014 - Standards and the Green Economy*. Winnipeg: International Institute for Sustainable Development.
- RSPO. (2015, June 4). *European palm oil industry sets course for 100% certified palm oil by 2020*. Retrieved September 18, 2016, from <http://www.rspo.org/news-and-events/news/european-palm-oil-industry-sets-course-for-100-certified-sustainable-palm-oil-by-2020>
- RSPO. (2015). *RSPO congratulates the Sabah state government for its recent milestone decision towards palm oil sustainability*. Retrieved October 4, 2016, from <http://www.rspo.org/news-and-events/announcements/rspo-congratulates-the-sabah-state-government-for-its-recent-milestone-decision-towards-palm-oil-sustainability>
- RSPO. (2015). *RT13 2015: An event by RSPO*. Kuala Lumpur, Malaysia: RSPO.
- RSPO. (2016). *How RSPO certification works*. Retrieved September 14, 2016, from <http://www.rspo.org/certification/how-rspo-certification-works>
- RSPO. (2016). *Impacts*. Retrieved November 2016, 7, from <http://www.rspo.org/about/impacts>

- Sabah Forestry Department. (2015). *Official Portal of the Sabah Forestry Department*. Retrieved November 7, 2016, from <http://www.forest.sabah.gov.my/media-centre/press-release/474-statewide-certified-sustainable-palm-oil>
- Sabah Forestry Department. (2016). *Sabah Jurisdictional Certified Sustainable Palm Oil (CSPO) – A Ten Year Planning Program*. Retrieved December 12, 2016, from <http://www.forest.sabah.gov.my/media-centre/press-release/506-sabah-jurisdictional-certified-sustainable-palm-oil-cspo-a-ten-year-planning-program>
- Schreiber, J. (2012). *A Cost Benefit Analysis of Forest Certification at The Forestland Group*. Duke University.
- Simula, M., Astana, S., Ishmael, R., Santana, E. J., & Schmidt, M. L. (2004). *Report on Financial Cost-Benefit Analysis of Forest Certification and Implementation of Phased Approaches*. Yokohama: International Tropical Timber Council.
- Simula, M., Astana, S., & Ishmael, R. (2004). *Report on .*
- Singh, H., & Kumaran, S. (2016). Malaysian Palm Oil Certification Council's role in the implementation of the MSPO certification scheme. *Presented at European Palm Oil Conference, 5-6 October 2016, Warsaw, POLAND*.
- Tachibana, S. (2000). *Forest-Related Industries and Timber Exports of Malaysia: Policy And Structure*. University of Tokyo.
- The World Bank. (2016). *Malaysia*. Retrieved September 28, 2016, from <http://data.worldbank.org/country/malaysia>
- Union of Concerned Scientists. (2016). *Other Deforestation Drivers*. Retrieved November 28, 2016, from <http://www.ucsusa.org/global-warming/stop-deforestation/other-deforestation-drivers>
- Van Kooten, G., Nelson, H., & Vertinsky, I. (2005). Certification of sustainable forest management practices: a global perspective on why countries certify. *Forest Policy and Economics, 7(6)*, 857-867.
- World Bank. (2016). *World Bank Open Data*. Retrieved September 25, 2016, from <http://data.worldbank.org/>
- WWF. (2016). *Palm Oil Buyers Scorecard: Measuring the Progress of Palm Oil Buyers*. Gland: WWF.
- WWF, FMO & CDC. (2012). *Profitability and Sustainability in Palm Oil Production - Analysis of Incremental Financial Costs and Benefits of RSPO Compliance*. WWF.
- Wyn, L. T. (2013). *Malaysia: Illegalities in Forest Clearance for Large-scale*. Forest Trends. Retrieved from http://www.forest-trends.org/publication_details.php?publicationID=4195
- Yaacob, M. R., & Yusof, M. F. (2013). Perindustrian dan Kelestarian Kualiti Alam Sekitar di Malaysia – Asas dan Pendekatan Teori Pemodenan Ekologikal. *Prosiding Persidangan Kebangsaan Ekonomi Malaysia Ke VIII 2013*, (pp. 991 - 1003). Retrieved from http://www.ukm.my/fep/perkem/pdf/perkemVIII/PKEM2013_4B4.pdf

Yong, C., SACCESS, & JKOASM. (2014). *Deforestation drivers and human rights in Malaysia*. Forest Peoples Programme.

Zakariah, Z. (2016, March 9). Govt will continue to grow palm oil sector. *New Straits Times Online*, pp. <http://www.nst.com.my/news/2016/03/131805/govt-will-continue-grow-palm-oil-sector>.

About

Responsible Sourcing of Soy, Cattle and Palm Oil

Responsible Sourcing of Soy, Cattle and Palm Oil is a project aimed at creating awareness and capacity among Danish companies to minimise risks of social and environmental problems connected to sourcing palm oil, soy and cattle from developing countries. The project is run by NEPCon and SEGES and funded by DANIDA, Ministry of Foreign Affairs of Denmark.



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