

Palm Oil Risk Assessment Ghana

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 Ghana

Palm oil Risk Score: 36 / 100 in 2017

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

- Specified risk in 15 sub-categories.
- Low risk for 6 sub-categories.

Palm oil source types and risks

There are three palm oil source types found in Ghana. 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 differ between smallholder farms and the estates.

Estates	Monoculture palm oil plantations (usually at least 40 hectares in size) owned and managed by companies which are usually integrated with a processing mill.
Scheme smallholder farms	Palm oil farm supervised or managed by estate or scheme mill managers.
Outgrower smallholder farms	Palm oil farms which are located outside of the farmer’s own nucleus estate or are farm tenant on a third party’s land.
Independent Smallholder farms	Palm oil farms that are self-organised, managed and financed by independent farmers.

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

Regarding **business issues**, for farm collectives there is a risk of:

- palm oil farmers not having legal land tenure (sub-category 1.1) - Many palm farmers in Ghana are developing land while they have not obtained legal title of the land (Land Title Certificate or Deed) and/or the right to develop (Development Permit) because of the land tenure and development permit process is lengthy and many farmers do not wait for the process to be completed before developing the land. Also, there is a risk of land being purchased from the wrongful owner because of the buyer not following the required land transfer procedures.
- smallholder palm oil farms not complying with most of the legal requirements relating to plantation registration and management rights because of operating in the informal sector of Ghana, where economic activities (in law or practice) are not or insufficiently covered by formal arrangements (1.2).

- non-payment of royalties and fees (1.3) - Most palm oil farms may not be actively paying rent or may be in arrears because the Office of the Administrator of Stool Lands (OASL) is not effectively collecting land rents.
- Non-payment of value added taxes (1.4) - especially amongst smallholder farms, may not be charging VAT and NHIL because of ineffective law enforcement.
- non-payment of corporate taxes (1.5) - many smallholder palm oil farms and some palm oil estates do not pay corporate taxes because they are not registered with the Ghana Revenue Authority (GRA).
- smallholder palm oil farms not complying with legal requirements related to reporting (1.6) - many smallholder farms are not reporting occupational accidents and diseases which occur in the workplace to the appropriate government agency and/or submitting Monthly Contribution Report to Social Security and National Insurance Trust (SSNIT). This can be attributed to the high level of smallholder palm oil farms operating informally in Ghana.

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

- Risk of non-compliance and enforcement of Ghana's labour legislation in the smallholdings (2.1). The lack of labour governance is due to a lack of sufficient resources, including office facilities, transportation, and fuel, to conduct inspections. Moreover, the workforce working in the informal sector, particularly with palm oil smallholders, is characterised by income insecurity, unsafe working conditions, incidences of child labour and lack of unionization.
- Poor health and safety conditions and/or non-compliance with the relevant H&S regulations (2.2 and 2.3). These risks are present for several reasons including a fragmented occupational safety and health regime in Ghana, lack of workplace inspections, weak prosecution powers of occupational safety and health offenders, inadequate logistics for inspection and enforcement and inadequate staff for labour administration institutions. Furthermore, risks such as smallholder palm oil farms not as supplying or supervising the use of Personal Protective Equipment (PPEs) and registering of staff with the National Health Insurance Scheme were identified.

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

- Non-compliance with the environmental regulations (3.1 and 3.3.4). Some palm oil estates are not registered with the Environmental Protection Agency (EPA) and thus subsequently have not obtained the required EPA permits nor have conducted Environmental Impact Assessments (EIA) nor developed Environmental Management Plans (EMPs) approved by the EPA or some estates have approved EMPs but do not fully implement the plan. Some palm oil estates and most smallholders may not have water use rights as required by law and may not fully observe the safety requirements guiding the use of pesticides such supervision requirements, use of appropriate protective facilities and clothing which will permit safe handling of the pesticide, and use of approved pesticides.
- protected species may not be identified and protected before the establishment of palm oil farms. (3.2, 3.3.1 and 3.3.3). Due to lack of data if environmental permits were managed in environmental RTE sensitive areas and/or the risk enforcement linked to environmental permits not being enforced it is difficult to adequately assess the risk of palm oil farms impacts on protected sites, species and HCVs. However, in general it

has been reported that biodiversity of [off-forest reserve] areas are diminishing rapidly because of the unsustainable farming methods and practices which may also apply to the palm oil farm sector.

Regarding **conversion** (4.1), there is a risk of deforestation due to converting forest to palm oil farms and that companies may not obtain the required environmental permits. The annual deforestation rate for Ghana is often stated to be around 2% Cocoa has been the major driver of land use change in Ghana's high forest zone and oil palm production (and mining) also poses a threat, but at a much smaller scale. Furthermore, the only legal safeguard, in the form of an environmental permit there is a risk that even where it is required, companies may not obtain one It is therefore evaluated that there is an elevated risk of oil palm farms being established on land that is converted from natural forest.

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

Legal Category	Sub-category	Risk Conclusion		
		Smallholders	Estates	
Business Issues	1.1. Land tenure	Specified	Specified	
	1.2. Plantation registration & management rights	Specified	Low	
	1.3. Payment of royalties & required fees	Specified	Specified	
	1.4. Value Added taxes & other sales taxes	Specified	Specified	
	1.5. Income and profit taxes	Specified	Specified	
	1.6. Disclosure of Information	Specified	Low	
Social issues	2.1. Legal employment	Specified	Low	
	2.2. Health and safety	Specified	Specified	
	2.3. ILO Fundamental Conventions are upheld.	Specified	Specified	
	2.4. IP and TP rights are upheld.	Low	Low	
Environmental issues	3.1. Environment	Specified	Specified	
	3.2. Protected sites and species	Specified	Specified	
	3.3. HCV	3.3.1. Species diversity.	Specified	Specified
		3.3.2. Landscape-level ecosystems & mosaics.	Low	Low
		3.3.3. Ecosystems and habitats	Specified	Specified
		3.3.4. Critical ecosystem services.	Specified	Specified
		3.3.5. Community needs	Low	Low
3.3.6. Cultural values.	Low	Low		
Conversion	4.1. New plantations since November 2005 have not replaced natural forest or ecosystems.	Specified	Specified	
	4.2. Fire avoidance is being practiced	Low	Low	
GMOs	5.1. No GMO's	Low	Low	

C. Overview of the palm oil sector in Ghana

Palm oil is the most important edible oil crop in Ghana and in the whole West Africa region. In 2010, palm oil and palm kernel production represented 2% of Ghana's total agricultural production value. The sector is undergoing significant growth. This is demonstrated by an average annual increase in the production of fresh fruit bunches (FFB) during 1960 – 2010, 0.18 million metric tonnes (mt) to 1.64 million mt (Master Plan Study for the Oil Palm Industry in Ghana, 2011). FAO (FAOSTAT database) reports that 2.44 million tonnes were produced in 2014, an average annual increase of 12% since 2010. Due to increases in oil yield from FFB, crude palm oil (CPO) production increased by an average 19% annually during 1960 - 2009 (20 000 to 210 000 tonnes). Despite this growth, Ghana is a net-importer of palm oil.

Ghana currently has around 350,000 hectares (ha) planted with oil palm. Estates, defined as monoculture oil palm plantations, are usually at least 40ha in area and owned and managed by a company, and usually equipped with a processing mill, account for 12% of this area. Smallholder farms, which are oil palm plantations owned and managed by individuals or groups, usually below 40 hectares, and sometimes intercropped with subsistence or cash crops, account for 88%. Types of smallholders include:

- **Scheme Smallholders**, which are structurally bound by contract, credit agreement or planning to a mill. They are supervised or directly managed by the managers of the mill, estate or scheme to which they are bound;
- **Outgrowers**, which cultivate oil palm outside the nucleus estate on their own land or as a tenant on a third party's land. Outgrowers may be structurally bound by contract, credit agreement or planning to a mill. They are often organised, supervised or directly managed by the managers of the mill or estate to which they are bound; and
- **Independent Smallholders**, which are private farmers who are self-organised, self-managed and self-financed; and not contractually bound to any organisation.

FFB yield is around 3 times higher on company-owned estates than on independent smallholdings due to better planting material and management practices.

Palm oil is grown in Ghana's forest belt (or "oil palm belt" in the industry across Africa), located in the southern third of the country. Here, the rainfall is greater than 1200 mm/annum and there are two rainy seasons. The relevant regions (first level of subnational government administration in Ghana) are the Ashanti, Brong Ahafo, Western, Eastern and Central regions. The most suitable areas for oil palm cultivation are said to be in the Western, Central and Eastern Regions, where the large oil palm plantations (both estates and out-growers) and processing mills are located. Ghana has two main vegetation zones: the High Forest Zone (Comprising the subtypes; Evergreen and Semi Deciduous Tropical Forest) covers the southern third of Ghana where oil palm is grown, and the Savanna Woodlands Zone (consisting of Guinean and Sudanian Savanna subtypes), which covers the other, northern, two-thirds of the country.

The Ministry of Food and Agriculture (MOFA) is the relevant government body regulating the oil palm industry, and provides extension services and support to the palm oil industry. Currently, MOFA is spearheading the development of a master plan and national principles governing the sustainable production of palm oil in Ghana. The Environmental Protection Agency (EPA) regulates environmental aspects of the industry through the issuance of Environmental Permits.

Ghana is developing a national oil palm sustainability framework. The framework includes policy, master plan, acts/legal instruments, regulatory board, programmes, as well as the following:

- Ongoing establishment of a regulatory board by MOFA.
- Ghana's oil palm development master plan has been developed (but is not publicly accessible and its exact contents are not known).
- Ghana has signed the Tropical Forest Alliance (TFA) 2020 Palm Oil Initiative.
- Stakeholders are working on a sustainable oil palm development Principle and Action plan for Ghana.

In early 2011, Ghana was the first country in Africa to have its National Interpretation (NI) of the Roundtable on Sustainable Palm Oil (RSPO) Principles and Criteria for sustainable palm oil approved. Estates have subscribed to the RSPO certification to operate legally and implement best management practices: 14 027 ha of palm oil plantations (estates) are certified, as of October 2016. This has decreased from the 20,826 ha certified in mid-2015, when 25,760 tonnes certified sustainable palm oil was being produced.

MOFA and other organisations such as Proforest (which is facilitating the TFA process in Ghana) have organised a number of programmes to improve the capacity of various stakeholders in the palm oil sector to appreciate and implement best practices.

The Corruption Perception Index for Ghana in 2015 was 47 (on a scale from 0 to 100 where 100 is lowest level of corruption), and the country ranked 56 out of 167 countries, meaning that there is a fairly high perception that corruption is prevalent in Ghana.

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

- Lands Commission Act 2008 (Act 767) - [link](#)
- Conveyancing Act, 1973 (NRCD 175) - [link](#)
- Stamp Duty Act, 2005 (Act 689), Schedule 1 - [link](#)
- Land Registry Act, 1962 (Act 122) - [link](#)
- Land Title Registration Act, 1986 (PNDCL 152) - [link](#)
- Local Government Act, 1993 (Act 462), Section 49, 51, and 64 - [link](#)
- Office of the Administrator of Stool Lands Act, 1994 (Act 481) - [link](#)
- The 1992 Constitution of Ghana - [link](#)

1.1.2. Legal authority

- Ministry of Lands and Natural Resources
- Lands Commission
- Traditional authority
- Administrator of stool lands
- Town and country planning

1.1.3. Legally required documents or records

- Land title certificate or property deed

1.1.4. Sources of information

Government sources

- Office of the Administrator of Stool Lands (OASL): <http://www.mlnd.gov.gh/index.php/agencies/2015-06-12-08-37-10>
- Ministry of Lands and Natural Resources: <http://www.mlnd.gov.gh/index.php>
- Ghana Land Administration Project: <http://www.ghanalap.gov.gh/index.php/implementing-agencies/lands-commission>

Non-Government sources

- Asumadu, K. 2003. Reform of Ghana's Land Tenure System. URL: <https://www.modernghana.com/news/112044/1/reform-of-ghanas-land-tenure-system.html>

- Focus on Land in Africa. 2011a. Land Administration at a Crossroads in Ghana. URL: <http://www.focusonland.com/download/51c9d9763eb3b/>
- Focus on Land in Africa. 2011b. Customary Leaders and Conflicts of Interest over Land in Ghana. URL: <http://www.focusonland.com/download/524159517b49e/>
- Larbi, W.O. No date. Ghana's land administration project: accomplishments, impacts, and the way forward. URL: <http://siteresources.worldbank.org/INTIE/Resources/475495-1302790806106/GOV5Pres2Larbi.pdf>
- Owusu-Mensah, K. 2012. Land right and tenure security, necessities to increase agricultural production. 12 July 2012. <http://www.ghananewsagency.org/features/land-right-and-tenure-security-necessities-to-increase-agricultural-production-46183>
- Sittie, R. 2006. Land Title Registration –The Ghanaian Experience. URL: https://www.fig.net/resources/proceedings/fig_proceedings/fig2006/papers/ps07/ps07_15_sittie_0848.pdf
- World Bank. 2015. Doing business: measuring business regulations. URL: <http://www.doingbusiness.org/data/exploreeconomies/ghana/registering-property/>

1.1.5. Risk determination

Overview of Legal Requirements

Traditional authorities (stool, skin, clan and families) own the majority (78%) of Ghana's lands. The state owns 20%, while 2% is in split ownership. Both customary and common law rights exist in all the land ownership types, sometimes on the same parcel of land. Even so, the state has control over the administration of customary lands.

The Lands Commission Act 2008 (Act 767) established the Lands Commission to collaborate with structures such as the office of the Administrator of Stool Lands and the agency in charge of Town and Country Planning (Section 7 of Act 767); as well as traditional authorities, etc. (Section 5 of Act 767) to ensure that lands are used sustainably (Section 4 of Act 767). In accordance with article 259 of the Constitution, the Lands Commission comprises representatives of various stakeholders; including the National Association of Farmers and Fishermen (Section 8 of Act 767).

The Land Registration Division (LRD) of the Lands Commission registers and maintains land registration records (Section 21 of Act 767). Before land is leased or a tenure right is obtained, the rightful owner can be confirmed at the LRD. The vendor is required to obtain the Land Title Transfer Form at the Land Title Registry of the LRD. An attorney prepares the transfer document (transfer deed) for the vendor and the buyer and their witnesses to sign. The Land Title Transfer Form is duly executed and submitted at the LRD for processing.

The Land Valuation Division (LVD) of the Lands Commission is responsible for assessing the land value for the buyer to pay the Stamp Duty (Stamp Duty Act of 2005 (Act 659)). The buyer presents the deed of assignment to the Land Valuation Board of the LVD. The LVD inspects the land to determine its current open market value for the buyer to pay the Stamp Duty to the Land Valuation Board. Act 659 provides that for the conveyance or transfer on the sale of a property, the Stamp Duty is 0.25% if the property value is less than GH¢ 10,000; properties valued between GH¢ 10,000 and 50,000, Stamp Duty is 0.5%; and properties valued above GH¢ 50,000, Stamp Duty is 1%.

The buyer then submits the application for the Land Title Certificate at Land Title Registry of the LRD of the Lands Commission. The application includes: (i) Application form (ii) Original and one copy of the deed of assignment, duly completed (iii) Land Certificate (iv) Company's certificate of incorporation.

The transaction is then published in the national weekly newspaper to issue the Land Title Certificate. The Land Title Certificate is then issued by the Land Title Registry. The transaction

is recorded on the Land Certificate, which is returned to the buyer. The original of the deed of assignment, having been stamped to show that it has been registered, is also returned to the vendor; and the Registry keeps a duplicate. The folio of the Register is filed and the transaction document is placed in the land parcel file. The buyer will use the land after the Land Title Certificate is issued (in areas covered by Land Title Registration) or when the property deed (or indenture, which evidences the sale of the land) has been registered under the Deeds Registration Act (Act 122) and Development Permit granted by the Assembly. It is important to note that a land title certificate serves as the ultimate proof and indefeasible title but a registered instrument affecting land (deed) can also serve as proof of land ownership. Consequently, two systems of registration of interest in land exist in Ghana, that is, deed registration and title registration.

The Assemblies often mark physical structures of development projects like building for offices and housing that are without permits and stop the clearing of unapproved lands for projects like oil palm farming. For projects in areas approved for development, developers are requested to produce their permit at the Assembly at a specified time before the project can continue. Projects in unapproved locations are marked for removal; sometimes if the developer continues with the project after the marking or warning, the Assembly is compelled to demolish the structure which, in some cases, results in legal battles.

Description of risk

There is a risk of palm oil farmers not having legal land tenure.

- Many palm farmers in Ghana are developing land while they have not obtained legal title of the land (Land Title Certificate or Deed) and/or the right to develop (Development Permit) because of the land tenure and development permit process is lengthy and many farmers do not wait for the process to be completed before developing the land
- While buyers of land are required to use the land after the Land Title Certificate is issued (in areas covered by Land Title Registration) or when the Deed has been registered under the Deeds Registration Act (Act 122) (Section 267 (3) of the 1992 Constitution) and Development Permit (Act 462, Section 49, 51, and 64) granted by the Assembly, land owners, including oil palm farmers, usually begin development of the land while they are in the process of obtaining these clearances (World Bank, 2015). This is because these processes can take a long time. There is therefore a risk that this could occur with oil palm plantation establishment.

There is a risk of land being purchased from the wrongful owner because of the buyer not following the required land transfer procedures.

- Land could be acquired from the wrongful owner (a person or entity that doesn't own the land, or doesn't have the authority to sell family or community land), especially in areas with land disputes, if the required procedures are not followed by the buyer (Sittie, 2006).

Risk conclusion

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

- Land Registration Division (LRD) of the Lands Commission shall confirm ownership and validity of Land Title Certificate or property deed

- The property deed (land allocation, lease or indenture) shall indicate clear management rights.
- In areas with land ownership conflicts, consultation with neighbours, local communities, Office of the Administrator of Stool Lands, Lands Commission, and traditional authority shall confirm that land tenure rights are clear.

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

- Companies (Amendment) Ordinance, 1950 [soft copy not available]
- Taxpayers Identification Numbering System Act, 2002 (Act 632) - [link](#)
- Ghana Revenue Act 2009 (Act 791) - [link](#)
- Companies Act 1963 (Act 179) - [link](#)
- Local Government Act 1993 (Act 462) - [link](#)
- The Environmental Protection Agency Act, 1994 (Act 490) - [link](#)
- Environmental Assessment Regulations, 1999 (L.I 1652) - [link](#)
- Environmental Assessment (Amendment) Regulations, 2002 (L.I 1703) - [link](#)
- Public Health Act 2012, Act 851 - [link](#)

1.2.2. Legal authority

- Registrar General's Department
- Metropolitan, Municipal, and District Assemblies
- Environmental Protection Agency
- Traditional Authority
- Food and Drugs Authority

1.2.3. Legally required documents or records

- Certificate of Incorporation
- Business commencement certificate
- Business Operating Permit from the Metropolitan/Municipal/District Assembly
- Environmental Protection Agency (EPA) permit

1.2.4. Sources of information

Government sources

- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL: http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf

Non-Government sources

- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. URL: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>

1.2.5. Risk determination

Overview of Legal Requirements

Business owners are required to register their businesses and pay the relevant taxes (Taxpayers Identification Numbering System Act – 2002, ACT 632; Income Tax Act, Act 896; National Pension Act 2008, Act 766; VAT Act 2013, Act 870; Income Tax Act 2015, Act 896; Ghana Revenue Authority Act, 2009, Act 791). A business can be registered by first obtaining a tax identification number (TIN) from the Registrar General's Department (RGD) or Ghana Revenue Authority (GRA). The RGD was established under the Ordinance 1950 and now a department of the Ministry of Justice and Attorney General. The RGD is mandated by the Government of Ghana to register and administer businesses. The GRA, established by the GRA Act 2009 Act 791, is the legal authority for corporate, income and VAT tax. The GRA uses the TIN system to identify and track taxpayers (Act 632).

After obtaining the TIN, the business owner then submits the company documents to the Customer Service Unit of the RGD. Checks are conducted to determine the availability of the desired or proposed company name and a Certificate of Incorporation is issued if the name is available.

Prior to registration, the business owner can submit a written application to the RGD to reserve the proposed company name (section 15(13) of the Companies Act 1963, Act 179).

After incorporating the company, the business owner submits the required information on the company's ownership such as directors, business capital etc. to the RGD to obtain a certificate to commence business. The certificate to commence business is issued following the payment of business commencement tax which is 0.5% of the stated business capital which is deposited in a bank account. The RGD collects the business commencement tax on behalf of the GRA. The business is then fully registered with the RGD and automatically with the GRA for tax payment.

The business owner is required to obtain a Business Operating Permit from the Metropolitan/Municipal/District Assembly (Section 49, Act 462).

Description of risk

Risk that smallholder palm oil farms may not comply with the legal requirements relating to business registration:

- Smallholder oil palm farms are predominantly in the informal sector of Ghana, where economic activities (in law or practice) not covered or insufficiently covered by formal arrangements, including registration and regulation. It encompasses the self-employed as well as those who employ a small number of paid or unpaid workers, typically in micro and small-scale enterprises, such as smallholder oil palm farms (Ministry of Employment and Labour Relations, 2014).
- Given that the informal sector is generally characterized by poor compliance with legislation (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014), it is likely that smallholder oil palm farms may not comply with most of the legal requirements such as registration with the GRA and RGD, and payment of relevant taxes.

- Oil palm estates operate in the formal sector of Ghana where compliance with legal regulation is quite high (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014). Therefore, it is considered likely that estates, and smallholdings that are affiliated or contracted to estates to supply raw materials (especially the ones that receive support and assistance such as training etc. from the estates) comply with these requirements.
- Palm oil producers may not be registered with the FDA, which regulates the export of palm oil. Permits must be granted for export of palm oil, which require a business registration certificate, certificate of export (issued by Ghana Export Promotion Authority) and details of the facility and source of the palm oil. Producers that export palm oil and have the permit to do so may be more likely to pay the required taxes and fees.

Risk conclusion

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

This indicator has been evaluated low risk for estates: 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.

1.2.6. Risk designation and specification

Elevated risk for smallholdings

Low risk for estates

1.2.7. Control measures and verifiers

- Registrar General's Department shall confirm valid business license to operate in Ghana.
- Farm or enterprise shall possess valid business registration documents.
- Ghana Revenue Authority shall confirm valid tax registration.
- Social Security and National Insurance Trust (SSNIT) shall confirm payment or receipt of contributions.
- Metropolitan/Municipal/District Assembly shall confirm Business Operating Permit to operate within the Assembly.
- The issuance of EPA permit and registration with EPA shall be subject to public disclosure and hearing prior to commencement of development activities on the land or farm.
- Stakeholder consultation shall confirm that registration of farm has been granted following legally prescribed processes.
- Food and Drugs Authority shall confirm valid business registration for palm oil production, supply or distribution, and export.

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

- Office of the Administrator of Stool Lands Act, 1994 (Act 481) - [link](#)

- Local Government Act 1993 (Act 462) - [link](#)
- Lands Commission Act 2008 (Act 767) - [link](#)
- NLC Decree 396, 1969 [only hard copy available]

1.3.2. Legal authority

- Office of the Administrator of Stool Lands
- Traditional authority
- Metropolitan, Municipal and District Assemblies
- Ministry of Trade and Industry
- Ghana Export Promotion Authority
- Customs, Excise and Preventive Services
- Food and Drugs Authority (FDA)

1.3.3. Legally required documents or records

- Receipts of payment of land rent.
- Receipt of payment of business rate.
- Receipts of payment of property tax.
- Approved export permit from FDA
- Receipts of payment of export tax and fees

1.3.4. Sources of information

Government sources

- Food and Drugs Authority Ghana. 2016. Registered Products. http://www.fdaghana.gov.gh/index.php?option=com_fdasearch&Itemid=36

Non-government sources

- Afflu, M.K. 2015. MMDAs collecting registration of Business fees illegal (2015): <https://www.modernghana.com/news/617566/mmdas-collecting-registration-of-business-fees-illegal-char.html>

1.3.5. Risk determination

Overview of Legal Requirements

Article 257 (1) and (4) of the 1992 Constitution of Ghana provides that all public lands in Ghana shall be vested in the President on behalf of, and in trust for, the people of Ghana. Section 267 (1) provides that all stool lands in Ghana shall vest in the appropriate stool on behalf of, and in trust for, the subjects of the stool in accordance with customary law and usage. Section 267 (2) stipulates that the Office of the Administrator of Stool Lands (OASL) shall be established and responsible for (a) the establishment of a stool land account for each stool into which shall be paid all rents, dues, royalties, revenues or other payments whether income or capital from the stool lands.

The OASL is responsible for collecting the land rent from the lessee or allottee. The amount of the rent and terms of payment is stated on the lease, license, allocation note or agreement. The OASL disburses the revenue in accordance with the Office of the Administrator of Stool Lands Act, 1994 (ACT 481) and clause (6) of article 267 of the Constitution of Ghana.

For family and individually-owned lands, payments are based on the agreement between the landowner and the buyer.

The Metropolitan, Municipal, and District Assemblies may charge business fees and rates from businesses operating on stool, individual and/or family lands within their jurisdiction.

Description of risk

There is a risk of non-payment of land rent.

- Most palm oil farms may not be actively paying rent or may be in arrears because the Office of the Administrator of Stool Lands (OASL) is not effectively collecting land rents.
- According to experience in the country (anon. personal communication), the OASL is not very effective in the collection of land rents which are usually charged per year. The OASL sometimes allows the bill to accumulate over several years before they issue a rent demand note.
- The enforcement of payment is also said to be weak.
- As a result, most farms may not be paying land rent or may be in arrears. Businesses have challenged the legal basis for the Assemblies to charge business fees (Afflu, 2015).
- Some oil palm plantations may therefore not be paying their business fees or rates to the Assembly.

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.

1.3.6. Risk designation and specification

Elevated risk

1.3.7. Control measures and verifiers

- Receipts of payment of land rent shall exist.
- Receipt of payment of business rate shall exist.
- Receipts of payment of property tax shall exist.
- Approved export permit from FDA shall exist.
- Paid export tax and fees shall match exported volumes as stated on the packing list.

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

- Value Added Tax Act 2013 (Act 870) - [link](#)
- Ghana Revenue Act 2009 (Act 791) - [link](#)
- National Health Insurance Act, 2012 (Act 852) - [link](#)
- Taxpayers Identification Numbering System Act, 2002 (Act 632) - [link](#)

1.4.2. Legal authority

- Ghana Revenue Authority (GRA)
- National Health Insurance Authority

1.4.3. Legally required documents or records

- Receipts of payment of VAT (Value Added Tax)
- Receipts of payment of National Health Insurance Levy (NHIL)

1.4.4. Sources of information

Government sources

- Mandate of NHIA, (2016) <http://www.nhis.gov.gh/nhia.aspx>
- GRA (2016) Value Added Tax <http://www.gra.gov.gh/index.php/tax-information/value-added-tax>
- Food and Drugs Board - FDA, (2016) http://www.fdaghana.gov.gh/index.php?option=com_fdasearch&Itemid=36

Non-Government sources

- PKF. 2015. Ghana Tax Guide 2015/16. <http://www.pkf.com/media/10025993/ghana-tax-guide-2015-16.pdf>
- My Joy Online. 2014. New 17.5% VAT rate takes effect. 10-01-2014. <http://www.myjoyonline.com/business/2014/january-10th/new-175-vat-rate-takes-effect.php>
- Doing Business. 2016. Paying taxes in Ghana. World Bank Group. <http://www.doingbusiness.org/data/exploreeconomies/ghana/paying-taxes/>

1.4.5. Risk determination

Overview of Legal Requirements

Domestic taxes are under the administration of the Domestic Tax Revenue Division (DTRD) of the Ghana Revenue Authority. The Value Added Tax Act, 2013 (Act 870) imposes value added tax (Section 1), and defines the persons (Section 2) and businesses (Section 20) liable to pay tax. Value Added Tax (VAT) is a tax applied on the value added to goods and services at each stage in the production and distribution chain. It forms part of the final price the consumer pays for goods or services.

The National Health Insurance Act, 2012 (Act 852) (Section 86) imposes a national health insurance levy (NHIL) which is charged at 2.5% on goods and services supplied in or imported into Ghana. The Levy is charged on the VAT-exclusive selling price of the goods supplied or services rendered.

The NHIL and VAT are collected by the DTRD of the GRA through NHIL and VAT-registered persons. The GRA then pays the collected levy directly into the NHIF within thirty days of collection (NHIA, 2016; GRA, 2016).

The National Health Insurance Authority (NHIA) was established under the National Health Insurance Act 2003, Act 650. Act 852 replaced ACT 650 in October 2012 to consolidate the National Health Insurance Scheme (NHIS) to remove administrative bottlenecks, introduce transparency, and reduce opportunities for corruption and gaming of the system. The NHIA has the mandate to establish and manage the National Health Insurance Fund (NHIF) (NHI Act 2012, Act 852; Section 3(h)). The NHIA has established a Finance and Investment Committee (Act 852, Section 8(a)) to manage the NHIF and collect all money assigned to the NHIF (Act 852, Section 9(3)).

Description of risk

There is a risk of non-payment of value added taxes.

- Risk that palm oil farms, especially amongst smallholder farms, may not be charging VAT and NHIL because of ineffective law enforcement.
- Oil palm farms, especially smallholdings, that are producing (processing) palm oil may not be charging VAT or NHIL, and therefore the tax/levy revenue is lost.

- Risk is present because enforcement of the law has been weak. Consequently, the GRA has formed a Special Revenue Mobilization Task Force to embark on nationwide Tax Compliance checks as some businesses are not charging VAT and NHIL as required by law (GNA, 2016).

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.

1.4.6. Risk designation and specification

Elevated risk

1.4.7. Control measures and verifiers

- Sales documents shall include applicable sales taxes like VAT and NHIL.
- Receipts for payment of sales taxes like VAT and NHIL shall exist.
- Quantities and qualities given in sales and transport documents shall match the fees paid.
- Sales prices shall be in line with market prices.
- Quantities and qualities shall match the sales documents.
- GRA shall confirm that operation is up to date in payment of applicable sales taxes.

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

- Taxpayers Identification Numbering System Act, 2002 (Act 632) - [link](#)
- Income Tax Act 2015 (Act 896) - [link](#)
- Income Tax Amendment Act(Act 902) - [link](#)
- National Pension Act 2008 (Act 766) - [link](#)

1.5.2. Legal authority

- Ghana Revenue Authority
- Social Security and National Insurance Trust

1.5.3. Legally required documents or records

- Corporate Tax payment receipts
- Pay as You Earn (PAYE) payment receipts

1.5.4. Sources of information

Non-Government sources

- World Bank Group (2013) Doing Business in Ghana
<http://www.doingbusiness.org/data/exploreeconomies/ghana/paying-taxes/>

- Ghana News Agency - GNA (2015) GRA inaugurates taskforce to clamp down on tax evaders <http://citifmonline.com/2015/08/04/gra-inaugurates-taskforce-to-clamp-down-on-tax-evaders/>

1.5.5. Risk determination

Overview of Legal Requirements

Businesses are required to register with the Ghana Revenue Authority (GRA) and obtain a Tax Identification Number (TIN). The GRA established by the Ghana Revenue Authority Act 2009 Act 791, is the legal authority for corporate and income tax. The GRA uses the TIN system to identify and track taxpayers (Act 632). Domestic taxes are administered by the Domestic Tax Revenue Division (DTRD) of the Ghana Revenue Authority. The relevant income taxes (Income Tax Act, Act 896 section 1) administered by the DTRD is Corporate Tax. This is the tax paid by companies on their profits in the year (the tax rate is 25%) and VAT (VAT Act 2013).

Freezone companies licensed under the Freezone Act, 1995 (Act 504) are exempted from the payment of income tax on profits for the first 10 years [Act 896, sixth schedule, section 134, 9(1)]. This can include oil palm farms/companies that register to be freezone companies.

Description of risk

There is a risk of non-payment of income and profit taxes:

- Many smallholder palm oil farms and some palm oil estates allegedly do not pay corporate taxes because they are not registered with the Ghana Revenue Authority (GRA).
- Business owners are required to register their businesses with the GRA; and pay the relevant taxes (TIN System Act – 2002, ACT 632; Income Tax Act, Act 896; NPA 2008, Act 766; VAT Act 2013, Act 870; Income Tax Act 2015, Act 896; GRA Act 2009, Act 791; WBG, 2013). However, some small and large businesses evade taxes in Ghana (GNA, 2015).
- As a result, the GRA has set up a tax force to clamp down on tax evaders. The taskforce would be checking for returns by the due dates, and the payment of any outstanding tax liabilities (debts) owed the GRA, among other things (GNA, 2015).
- There is therefore a risk that some smallholder oil palm farms and oil palm estates may not be paying corporate taxes to the GRA.

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.

1.5.6. Risk designation and specification

Elevated risk

1.5.7. Control measures and verifiers

- Consultation with GRA to verify that all required income and profit taxes have been paid
- Receipts for payment of corporate tax
- GRA shall confirm that operation is up to date in payment of applicable income taxes

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 1963 (Act 179) - [link](#)
- Labour Act 2003 (Act 651) - [link](#)
- National Pension Act 2008 (Act 766) - [link](#)

1.6.2. Legal authority

- Registrar General's Department
- Environmental Protection Agency
- Social Security and National Insurance Trust

1.6.3. Legally required documents or records

- Corporate Tax payment receipts
- Pay As You Earn (PAYE) payment receipts
- Social Security and National Insurance Trust (SSNIT) contribution receipts
- Environmental Protection Agency (EPA) permit
- Environmental certificate issued by EPA
- Environmental management plan approved by EPA

1.6.4. Sources of information

Government sources

- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL: http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf

Non-Government sources

- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. Retrieved from: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>
- Ghana News Agency - GNA (2015) GRA inaugurates taskforce to clamp down on tax evaders <http://citifmonline.com/2015/08/04/gra-inaugurates-taskforce-to-clamp-down-on-tax-evaders/>

1.6.5. Risk determination

Overview of Legal Requirements

Businesses are required by the Companies Act 1963 (Act 179) Section 32(1) to prepare and keep a register of the names and addresses of their members. If a company has shareholders, a statement of the shares held by each member, the amount paid or agreed to be considered as paid on the shares of each member and of the amount remaining payable on the shares must also be kept. Section 123(1)(a), (b) and (c) requires that a company shall keep proper books of account with respect to its financial position and changes in the books of account. Section 196 (1) and (2) stipulates that a company shall keep at its registered office a register of its directors, including substitute directors appointed in accordance with section 187, but excluding alternate directors appointed in accordance with section 188 and secretaries. Section 198(1) (a) and (b) requires that a company shall in all trade circulars and business letter on or in which the company's name appears state in legible characters with respect to every director, including substitute directors appointed in accordance with section 187 but excluding alternate directors appointed in accordance with section 188. Section 122 of Act 179 require that

companies deliver to the Registrar for registration an annual return including the details of every member of the company at least once in every year.

Section 120 of Labour Act 2003 (Act 651) requires employers to report as soon as practicable; and not later than seven days from the date of the occurrence to the appropriate government agency, occupational accidents and diseases which occur in the workplace.

Employers are required under Section 63(7) of the National Pensions Act 2008 (Act 766) to submit their Monthly Contribution Report to SSNIT by the last day of the month. Failure to adhere to this legal requirement attracts sanctions under Sections 64(1)(a) and 83(1)(d).

Description of risk

There is a risk that many the smallholder palm oil farms are non-compliant with reporting legal requirements.

- Many smallholder farms are not reporting occupational accidents and diseases which occur in the workplace to the appropriate government agency and/or submitting Monthly Contribution Report to Social Security and National Insurance Trust (SSNIT). This can be attributed to the high level of smallholder palm oil farms operating informally in Ghana.
- Smallholder oil palm farms are predominantly in the informal sector of Ghana, in which economic activities (in law or practice) not covered or insufficiently covered by formal arrangements, including registration and regulation (Ministry of Employment and Labour Relations, 2014). It encompasses the self-employed as well as those who employ a small number of paid or unpaid workers, typically in micro and small-scale enterprises, such as smallholder oil palm farms.
- Given that the informal sector is generally characterized by poor compliance with legislation (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014), it is likely that at least most of the smallholder oil palm farms may not comply with legal requirements such as reporting occupational accidents and diseases which occur in the workplace to the appropriate government agency and submitting Monthly Contribution Report to SSNIT by the last day of the month. Smallholding that are affiliated or contracted to estates to supply raw materials, especially the ones which receive training etc. from estates) may meet these requirements.
- Oil palm estates operate in the formal sector of Ghana where compliance to legal regulation is quite high (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014). Therefore, it is likely that most estates comply with the administrative, SSNIT, accident and disease reporting requirements.

Risk conclusion

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

This indicator has been evaluated as low risk for estates. Identified laws are upheld consistently.

1.6.6. Risk designation and specification

Elevated risk for smallholders

Low risk for estates

1.6.7. Control measures and verifiers

- Ghana Revenue Authority shall confirm valid tax registration.

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- Registrar General Department shall confirm registration of business
 - Register of the members of the company
 - For companies with shareholders, a register of the shares of each shareholder and the amount agreed to be paid on each share and actual amounts paid
 - Social Security and National Insurance Trust (SSNIT) shall confirm payment or receipt of contributions.
 - The issuance of EPA permit and registration with EPA shall be subject to public disclosure and hearing prior to commencement of development activities on the land or farm.
 - Stakeholder consultation shall confirm that registration of farm has been granted following legally prescribed processes.

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 labor 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

- Labour Act 2003 (Act 651) - [link](#)
- The National Pension Act 2008 (Act 766) - [link](#)
- Factories, offices and shops act (Act 328) - [link](#)
- Labour regulations (LI 1833) - [link](#)
- National Health Insurance Authority Act, 2012 (Act 852) - [link](#)
- The Children's Act 1998, Act 560 - [link](#)

2.1.2. Legal authority

- Ministry of Employment and Labour Relations (MELR) (mandated to formulate policies on Labour and Employment issues, develop sector plans, coordinate Employment and Labour related interventions across sectors, promote harmonious labour relations and workplace safety, monitor & evaluate policies)
- Department of Factories Inspectorate (under MELR promotes measures that would safeguard the health and safety of persons employed in premises, which fall within the purview of the Factories, Offices, and Shops Act, 1970 (Act 328))
- Social Security and National Insurance Trust (SSNIT) (legal authority for social tax registration and payment)
- National Health Insurance Authority

2.1.3. Legally required documents or records

- Workers Employment Contract
- SSNIT Registration numbers of staff
- SSNIT Contribution payment receipts

2.1.4. Sources of information

Government sources

- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL: http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf

Non-Government sources

- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. Retrieved from: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>

2.1.5. Risk determination

Overview of Legal Requirements

The Labour Act, 2003 (Act 651) applies to all workers and employers in Ghana, except those the Armed Forces, the Police Service, the Prisons Service and the Security and Intelligence Agencies.

The Act outlines the duties of employers, including the provision of work and appropriate materials, machinery, equipment and tools, and to remunerate employees per the contract of employment, collective agreement or custom. Workers have the right to: work under satisfactory, safe and healthy conditions; receive equal pay for equal work without distinction of any kind; have rest, leisure and reasonable limitation of working hours and period of holidays with pay as well as remuneration for public holidays; form or join a trade union; be trained and retrained for the development of his or her skills; and receive information relevant to his or her work.

Section 12 to 17 of the act prescribes the conditions for legal employment. Section 12 requires employers to give their workers employment contracts. The contract must be in written form when workers are engaged for 6 months or more, or for a number of working days equivalent to 6 months or more within a year. The employer is required to provide the newly employed worker with written particulars of the contract of employment between the employer and worker; subject to the terms of the contract and within two months following the commencement of the employment (Section 13).

Employers are prohibited from using restrictive employment conditions to discriminate against persons, and prevent or require workers to form or take part in activities of trade union. Section 15 provides the grounds for the termination of employment; Section 16 prescribes the types of employment contract; and Section 17 describes the conditions for terminating employment contract. Section 20 provides for leave entitlement.

Employers are required by the National Health Insurance Authority Act 2012 (Act 852: Part II sections 12-13) to register their employees on the National Health Insurance Scheme (NHIS).

The business owner is required to apply for social security with the Social Security and National Insurance Trust (SSNIT) and pay the relevant contributions. SSNIT is the legal authority for social tax registration and payment (National Pension Act 2008, Act 766). Employers are required under Section 63(7) of the National Pensions Act 2008 (Act 766) to submit their Monthly Contribution Report to SSNIT by the last day of the month.

Description of risk

There is a risk of non-compliance and enforcement of Ghana's labour legislation.

- The lack of labour governance is due to a lack of sufficient resources, including office facilities, transportation, and fuel, to conduct inspections. Moreover, the workforce working in the informal sector, particularly with palm oil smallholders, is characterised by income insecurity, unsafe working conditions, incidences of child labour and lack of unionization.
- Smallholder oil palm farms are predominantly in the informal sector of Ghana, in which economic activities (in law or practice) are not covered or insufficiently covered by formal arrangements, including registration and regulation (Ministry of Employment and Labour Relations, 2014). It encompasses the self-employed as well as those who employ a small number of paid or unpaid workers, typically in micro and small-scale enterprises, such as smallholder oil palm farms.
- Trade unions are facing major challenges to organize workers in the informal sector to ensure that they work in an environment which is not harmful to them and secures their basic human needs (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014).

- Some of the smallholder oil palm farms may not have collective bargaining agreements (CBAs) or employment contracts for employees, and employees may not have or belong to Trade Union Congress (TUC) associations. Most of these farms may not meet the requirements for the obligatory National Health Insurance Scheme (NHIS). Most smallholder oil palm farms may not have registered their workers (if they have them) for the obligatory Social Security and National Insurance Trust (SSNIT); and therefore, do not pay their contributions.
- Smallholdings that are affiliated or contracted by the Oil palm estates to supply raw materials, especially the smallholdings that receive support such as training etc. from the estates, may meet most of these requirements, but risk is still present.
- Oil palm estates operate in the formal sector of Ghana where compliance to legal regulation is quite high (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014). Therefore, most estates may have the collective bargaining agreement (CBA) and employment contracts for their employees; and employees may have and belong to TUC associations.

Risk conclusion

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

This indicator has been assessed as low risk for estates. 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.

2.1.6. Risk designation and specification

Elevated risk for smallholders.

Low risk for estates.

2.1.7. Control measures and verifiers

- Companies shall have and maintain Workers Employment Contracts for all workers
- Seek evidence of SSNIT Registration numbers of staff and cross reference with samples of SSNIT Contribution payment receipts
- Company records shall confirm that all workers are covered by the NHIS as required by law
- Interview with staff and company payment records shall confirm that all workers are paid at least the legally established minimum wage (GH8.80 as of 01-01-17)
- Interview with staff and company employment records confirm that no underage person is employed (under 15) and personnel involved in hazardous work (must be 18) have attained the minimum age
- Stakeholders shall confirm that forced or compulsory labour is not involved in farm management activities

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

- The 1992 Constitution of Ghana - [link](#)
- Labour Act 2003 (Act 651) - [link](#)
- Labour regulations (LI 1833) - [link](#)
- National Health Insurance Authority Act, 2012 (Act 852) - [link](#)
- Pesticides Control and Management Act, 1996 (Act 528) - [link](#)

2.2.2. Legal authority

- Ministry of Employment and Labour Relations (MELR) (mandated to formulate policies on Labour and Employment issues, develop sector plans, coordinate Employment and Labour related interventions across sectors, promote harmonious labour relations and workplace safety, monitor & evaluate policies)
- National Health Insurance Authority (NHIA) (provides financial risk protection against the cost of quality basic health care for all residents in Ghana) (<http://www.nhis.gov.gh/nhia.aspx>)
- Ministry of Food and Agriculture (MoFA) (responsible for developing and executing policies and strategies for the agriculture sector)

2.2.3. Legally required documents or records

- Workers Registration on the National Health Insurance Scheme (NHIS)
- Health and Safety policy and procedures for the estate or smallholding
- Records of Purchase and Provision of Personal protective equipment
- Records of Health and Safety Training
- Records of Payment of work related injury compensation

2.2.4. Sources of information

Government sources

- Ministry of Employment and Labour Relations. 2014. National Employment Policy. URL: http://www.ilo.org/wcmsp5/groups/public/---africa/---ro-addis_ababa/---ilo-abuja/documents/publication/wcms_373458.pdf
- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL: http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf

Non-Government sources

- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. Retrieved from: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>

2.2.5. Risk determination

Overview of Legal Requirements

Article 24(1) of the 1992 Constitution states that every person has the right to work under satisfactory, safe and healthy conditions, and shall receive equal pay for equal work without distinction of any kind.

Regulation 18 of the Labour regulations, 2007 (LI 1833) deals with occupational safety and health at work, and requires employers to take appropriate measures to safeguard the health and safety of employees.

Under Part XV: 118-121 of the Labour Act, 2003 (Act 651), employers are responsible to ensure that workers work under satisfactory, safe and healthy conditions. This includes maintaining a safe workplace, providing the necessary information, instructions, training and supervision for safety, and supplying and maintaining at no cost to workers' adequate safety appliances, suitable fire-fighting equipment, personal protective equipment, and instruct the workers in the use of the appliances or equipment. Section 9 (c) of the Labour Act 2003, Act 651 provides that without prejudice to the provisions of this Act and any other enactment, in a contract of employment or collective agreement, the duties of an employer include the duty to take practicable steps to ensure that the worker is free from risk of personal injury or damage to health during and during the worker's employment or while lawfully on the employer's premises.

Employers are required by the National Health Insurance Authority Act, 2012 (Act 852: Part II sections 12-13) to register their employees on the National Health Insurance Scheme (NHIS). Section 27 of the National Health Insurance Act 2012 (Act 852) provides that (1) A resident of Ghana shall belong to the National Health Insurance Scheme.

Employers are required by the Pesticides Control and Management Act, 1996 (Act 528: Section 21) to provide workers with the means to protect themselves from injury or hazards when handling pesticides. In case of injury, accident or death of employees, the Workmen's Compensation Law (PNDC law 187) provides the procedure for compensation.

Description of risk

There is a risk of poor health and safety conditions and/or non-compliance with the relevant H&S regulations.

- These risks are present for several reasons including a fragmented occupational safety and health regime in Ghana, lack of workplace inspections, weak prosecution powers of occupational safety and health offenders, inadequate logistics for inspection and enforcement and inadequate staff for labour administration institutions.
- Furthermore, risks such as smallholder palm oil farms not as supplying or supervising the use of Personal Protective Equipment (PPEs) and registering of staff with the National Health Insurance Scheme were identified.
- The agricultural sector of Ghana has the dual challenge of a hazardous working environment and difficulty to enforce occupational safety and health (OSH) standards (Ministry of Employment and Labour Relations, 2014). Ghana's agriculture sector is one where there are the most fatal injuries, and more broadly in the country, there are issues in terms of poor working conditions and challenges associated with enforcing health and safety laws.
- In its National Employment Policy, the Ministry of Employment and Labour Relations (2014) notes that "immense" challenges faced by the country's labour administration system include a fragmented occupational safety and health regime, ineffective labour/workplace inspection, weak prosecution powers of occupational safety and health offenders, inadequate logistics for inspection and enforcement, poor working conditions, and inadequate staff for labour administration institutions.
- Problems are likely to be most acute in the informal sector of Ghana, where most smallholders operate. This sector is generally characterized by poor and unsafe working conditions, and poses unique problems, as employment conditions are largely unmonitored, mainly due to inadequate capacity and logistical problems of the regulatory institutions, as

well as the unstructured nature of the enterprise activities (Ministry of Employment and Labour Relations, 2014 and Osei-Boateng and Ampratwum, 2011).

- The trade unions are facing major challenges to organize workers in the informal sector to ensure that they work in an environment which is not harmful to them and secures their basic human needs (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014). Most of the smallholder oil palm farms may not comply with most of the legal requirements such as supply of PPEs and supervision of the use of PPEs; and registration of staff with the NHIS.
- Smallholding that are affiliated or contracted to estates to supply raw materials, especially the ones which receive training etc. from estates, may meet the requirement such as PPEs and to some extent NHIS registration.
- Oil palm estates are in the formal sector of Ghana, and given that compliance to legal regulations is relatively high (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014). Consequently, most oil palm estates are likely to observe the health and safety requirements, though this assessment could not confirm this, and furthermore, the country's national employment policy states that encouraging employers and employees in both the formal and informal sectors of the economy to reduce or eliminate occupational hazards to protect their workforce has become problematic Ministry of Employment and Labour Relations, 2014. It is therefore evaluated that risk related to the enforcement of health and safety laws is present across the Ghana oil palm sector.

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

- Company records such as purchase and PPE issue list and interview with staff confirm that all safety and health regulations are followed and all required safety equipment are used
- Observation of activities on farm shall confirm that occupational health and safety requirements are observed by all personnel involved in farm management activities.
- Interviews with staff and contractors shall confirm that legally required protection equipment is provided by the organization.
- Interviews with staff and observation on field shall confirm that all requirements on safe working environment are observed.

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.

2.3.1. Applicable laws and regulations

Country under assessment has ratified the following ILO Fundamental Conventions:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) - [link](#)
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98) - [link](#)
- Forced Labour Convention, 1930 (No. 29) - [link](#)
- Abolition of Forced Labour Convention, 1957 (No. 105) - [link](#)
- Minimum Age Convention, 1973 (No. 138) - [link](#)
- Worst Forms of Child Labour Convention, 1999 (No. 182) - [link](#)
- Equal Remuneration Convention, 1951 (No. 100) - [link](#)
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111) - [link](#)

2.3.2. Legal authority

- Ministry of Employment and Labour Relations (MELR) (mandated to formulate policies on Labour and Employment issues, develop sector plans, coordinate Employment and Labour related interventions across sectors, promote harmonious labour relations and workplace safety, monitor & evaluate policies)
- Department of Factories Inspectorate (under MELR promotes measures that would safeguard the health and safety of persons employed in premises, which fall within the purview of the Factories, Offices, and Shops Act, 1970 (Act 328))
- Ghana Police Service
- District Assembly's District Social Welfare Officer and Social Services Subcommittee
- Ministry of Gender, Children, and Social Protection (MGCSP)'s Human Trafficking Secretariat

2.3.3. Legally required documents or records

- Workers Employment Contract
- Signed Collective Bargaining Agreement (CBA)

2.3.4. Sources of information

- Ministry of Employment and Labour Relations: <http://melr.gov.gh>
- Department of Factory Inspectorate: <http://melr.gov.gh>
- Ministry of Employment and Labour Relations. 2014. National Employment Policy. URL: http://www.ilo.org/wcmsp5/groups/public/---africa/---ro-addis_ababa/---ilo-abuja/documents/publication/wcms_373458.pdf
- United States Department of Labour. 2015. Child Labour and Forced Labour Reports – Ghana. <https://www.dol.gov/agencies/ilab/resources/reports/child-labor/ghana>
- ILO. 2016. Ghana: Resources. <http://www.ilo.org/ipecc/Regionsandcountries/Africa/Ghana/Resources/lang--en/index.htm>
- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL: http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf
- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. Retrieved from: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>

- Tulane University. 2015. Final Report: 2013/14 Survey Research on Child Labour in West African Cocoa-Growing Areas. New Orleans, Payson Center for International Development and Technology Transfer
- Ghana Statistical Service. 2014. Ghana Living Standards Survey (GLSS6) Child Labour. Accra, August 26, 2014: http://www.statsghana.gov.gh/docfiles/glss6/GLSS6_Poverty%20Profile%20in%20Ghana.pdf
- Zdunnek, G; Dinkelaker, D; Kalla, B; Matthias, G; Szrama, R & Wenz, K. 2008. Child Labour and Children's Economic Activities in Agriculture in Ghana. Centre for Advanced Training in Rural Development (SLE). <http://www.fao.org/3/a-al001e.pdf>
- Ghana News Agency. 2014. Union championing child Labour free zones. 10 March 2014. <http://www.ghananewsagency.org/social/union-championing-child-labour-free-zones-71869>
- Free the Slave. 2016. Slavery in Ghana. <http://www.freetheslaves.net/where-we-work/ghana>

2.3.5. Risk determination

Overview of Legal Requirements

Ghana has ratified all 8 ILO fundamental conventions and has enacted legislation to implement them:

- Companies Act 1963 (Act 179): <http://laws.ghanalegal.com/acts/id/17/companies-act>
- Labour Act 2003 (Act 651): <http://www.ilo.org/legacy/english/inwork/cb-policy-guide/ghanalabouract2003section109.pdf>
- Labour regulations (LI 1833): <http://www.ilo.org/dyn/travail/docs/1198/Labour%20Regulations%202007.pdf>
- The Children's Act 1998, Act 560: <http://www.unesco.org/education/edurights/media/docs/f7a7a002205e07fbf119bc00c8bd3208a438b37f.pdf>

The list of Ratifications for Ghana is available at:

http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103231

These laws cover the following relevant issues:

- Forced labour: Article 16 (2) of the 1992 Constitution states that no person shall be required to perform forced labour. Section 116 of the Labour Act 2003, Act 651 states that; (1) A person shall not be required to perform forced labour; (2) An employer shall exact or cause to be exacted, or permit to be exacted, forced labour from a worker for the benefit of the employer; (3) An employer convicted of an offence under subsection (2) is liable to a fine not exceeding two hundred and fifty penalty units. Section 117 of the Labour Act 2003, Act 651 defines "forced labour" as work or service that is exacted from a person under threat of a penalty and for which that person has not voluntarily offered to work, but does not include (a) labour required as a result of a sentence or order of a Court; (b) labour required of a member of a disciplined force or service as his or her duties; (c) labour required during a period when the country is at war or in the event of an emergency or calamity that threatens life and well-being of the community, to the extent that the requirement of the labour is reasonably justifiable in circumstances of a situation arising or existing during that period for the purpose of dealing with the situation; or (d) labour reasonably required as part of normal communal or other civic obligations.

- Human trafficking: Sections 1-2 of the Human Trafficking Act 2005, Act 694, prohibits child trafficking. Section 3 and 4 of the Human Trafficking Act 2005 (Act 694) provides that; 3(1) A person who provides another person for purposes of trafficking commits an offence even where the person is a parent; and (2) A person who contravenes subsection (1) commits an offence and is liable on summary conviction to a term of imprisonment of not less than five years; (4) A person who uses a trafficked person commits an offence and is liable on summary conviction to a term of imprisonment of not less than five years.

- Minimum age for work: Section 89 of the Children's Act 1998, Act 560 provides that the minimum age for work in Ghana is 15 years.

Worst forms of child labour: Sections 91-92 of Act 560; article 58 of Act 651 prohibits the engagement of children in hazardous occupations and/or activities. The Ministry of Employment and Labour Relations (MELR) and the Anti-Human Trafficking Unit (AHTU) of the Ghana Police Service (GPS) are working together to enforce the labour laws. Article 124 of the Labour Code permits MELR inspectors to conduct unannounced visits in any type of workplace.

- Freedom of association: all persons shall have the right to freedom of association, which shall include freedom to form or join trade unions or other associations, national and international, for the protection of their interest (Article 21(1)(e) of the 1992 Constitution; Section 79 (1) (2) of the Labour Act 2003, Act 651).

Ghana Trades Union Congress (Ghana TUC) was launched in 1945 as a national centre of trade unions, with the major objective of leading the rest of organised labour in protecting collective bargaining rights as well as in policy intervention concerning labour market and other national issues. The TUC of Ghana is the main umbrella organization for trade union activities in Ghana. There are 18 affiliates with varying sizes, ranging from unions with less than a total membership of 1,000 to those with membership of well over 40,000. One of the relevant affiliated groups is the General Agricultural Workers' Union (GAWU).

- Collective bargaining: Act 651 prohibits employers from using restrictive employment conditions to discriminate against persons, and prevent or require workers to form or take part in activities of trade union. Part XII provides conditions for collective bargaining. The provisions of a collective agreement concerning the terms of employment and termination of employment, and rights and obligations of employers and employees shall be regarded as terms of a contract of employment between each worker to whom the provisions apply and his or her employer.

- Discrimination: Articles 35(5) of the 1992 Constitution prescribes that the State shall actively promote the integration of the peoples of Ghana and prohibit discrimination and prejudice on the grounds of place of origin, circumstances of birth, ethnic origin, gender or religion, creed or other beliefs. Article 17(2) states that a person shall not be discriminated against on grounds of gender, race, colour, ethnic origin, religion, creed or social or economic status. Article 17(3) defines "discriminate" as to give different treatment to different persons attributable only or mainly to their respective descriptions by race, place of origin, political opinions, colour, gender, occupation, religion or creed, whereby persons of one description are subjected to disabilities or restrictions to which persons of another description are not made subject or are granted privileges or advantages which are not granted to persons of another description. Regulation 9 of the Labour Regulations: An employer shall not discharge or otherwise discriminate against a person because that person has made a complaint or given evidence or assisted in respect of the initiation or prosecution of a complaint or other proceedings under these Regulations.

Section 46 of the Labour Act 2003 (Act 651)(1) provides that special incentives shall be provided to an employer who employs persons with disability. (2) Special incentives shall be given to a person with disability engaged in a business or enterprise. (3) The special incentives shall be determined by the Minister.

Section 50 of the Labour Act provides that the employment of a person who suffers disability after the employment, shall not cease if the residual capacity for work is such that that person can be found employment in the same or some other corresponding job in the same undertaking, but if a corresponding job cannot be found, the employment may be terminated by notice.

Section 57 of the Labour Act (1-9) provides the requirements and conditions for maternity leave.

Section 87 of the labour Act: (1) A trade union or employers' organisation shall not discriminate in its constitution or rules against a person on grounds of race, place of origin, political opinion, colour, religion, creed, gender or disability. (2) The Chief Labour Officer shall not register a trade union or employers' organisation which contravenes subsection (1), unless the trade union or employers' organisation takes steps to rectify the defect in its constitution or rules within a period specified by the Chief Labour Officer.

Section 127(1) of the Labour Act 2003, Act 651 states that: A person who discriminates against any other person with respect to the employment or conditions of employment because that other person is a member or an officer of a trade union is guilty of unfair labour practice.

- Wage: Section 68 of the Labour Act 2003, Act 651 requires every worker to receive equal pay for equal work without distinction of any kind. Section 74 (2) of the Labour Act requires that casual workers shall; (a) be given equal pay for work of equal value for each day worked in that organisation; (b) have access to the necessary medical facility made available to the workers generally by the employer; (c) be entitled to be paid for overtime work by the employer in accordance with section 35; and (d) be paid full minimum remuneration for each day on which the worker attends work, whether or not the weather prevents the worker from carrying on the worker's normal work and whether it is possible or not to arrange alternative work for the worker on such a day. Section 76 (1-3) provides the requirements for the remuneration of temporary worker or a casual worker. Section 4 requires that an employer shall pay a temporary worker or a casual worker the full minimum remuneration for each day on which the worker attends work, whether wet weather prevents the worker from carrying on with normal work and whether it is possible or not to arrange alternative work for the worker on that day. (5) A temporary worker or a casual worker is entitled to be paid for overtime work by the employer in accordance with section 35.

Description of risk

There is a risk that the ILO fundamental conventions are not upheld:

- Despite the relatively strong legal and institutional frameworks including the 1992 Constitution, the Labour Act, and ratification of ILO Conventions for the right to freedom of association, there have been some gross violations of this fundamental right of workers both at the national level and at the enterprise level (Ministry of Manpower, Youth and Employment, 2014).
- There is poor compliance and enforcement of Ghana's labour legislation, and the capacity of institutions of the industrial relations system is weak (Ministry of Manpower, Youth and Employment, 2014). Furthermore, it has been reported that the number of Ministry of Employment and Labour Relations (MELR) inspectors responsible for the enforcement of all labour laws in Ghana is insufficient to adequately enforce labour laws, and inspectors did not have sufficient resources, including office facilities, transportation, and fuel, to conduct inspections (United States Department of Labour, 2015).
- Only 10% of the Ghanaian workforce of 10 million people is in the formal economy where observation of legal labour requirements is quite high, while most the workforce found in the informal sector, which is largely characterized by weaker observation of labour

requirements, as well as income insecurity, unsafe working conditions, incidence of child labour, and lack of unionisation (Ministry of Manpower, Youth and Employment, 2014; Ministry of Employment and Labour Relations, 2014). Oil palm estates are in the formal sector and therefore most are likely to meet the legal labour requirements, while smallholder oil palm farms which are mostly in the informal sector, are much less likely to meet the legal labour requirements.

- The MELR works together with the Anti-Human Trafficking Unit (AHTU) to enforce the labour laws and training has been conducted for police officers in the AHTU and MELR inspectors on how to identify, investigate, and prosecute cases of child labour, and on child labour issues, Ghana's child labour legal framework, the National Plan of Action for the Elimination of the Worst Forms of Child Labour, and best practices for labour inspections, respectively. Additional training is likely to be needed, particularly at the district level. Training needs include application of basic information technology in communication; improving effectiveness of carrying out labour inspections; interpreting labour laws; and reporting techniques.
- Child labour is a problem in Ghana, particularly in the agricultural sector. In 2014, the Ghana Statistical Service released the results of the Living Standards Survey Round 6, which estimates that 21.8 percent of all children in Ghana are engaged in child labour, with roughly half of these children engaged in hazardous work as defined by the law.
- There is evidence that some Ghanaian children are engaged in the worst forms of child labour in agriculture, mainly in cocoa and fishing (ILO, 2016 and United States Department of Labour, 2015). Tulane University (2015) reported that assessed data collected during the 2013/2014 harvest season, there were an estimated 918,543 child laborers of ages 5 to 17 in the cocoa sector, of which 95.7 percent were engaged in hazardous work in cocoa production.
- The focus on cocoa is likely to be influenced by its importance to the Ghanaian economy, and it cannot be assumed that less attention to child labour on oil palm farms represents a lower risk in the palm oil sector.
- It has been reported that children are seldom used as workers on the oil palm farms in the Kwaebibirem District in the Eastern Region of Ghana (Ofosu-Budu & Sarpong, 2008). Elsewhere, it has been reported that the prevalence of child labour in oil palm farms in Ghana is "less clear" than is the case for some crops (Zdunnek et al., 2008). In 2005, a rapid assessment survey on child labour was conducted on four of the largest oil palm plantations in the country (and their smallholders and outgrowers) identified 45 child labourers (approximately 1500 people were employed in the plantations at the time) (Ghana Employers Association, 2005).
- The majority of key informants interviewed in the study stated that that the child labour situation is very prevalent within the communities and plantations. It was found that the plantations do not directly employ children, and that most children who are child labourers either work on their parents' palm plantations or work on smallholder or out grower farms. The plantations were involved in a project with the Ghana Employers Association to address the issue of child labour in the supply chains. The General Agricultural Workers Union has developed 30 "Child free labour zones" for fishing, cocoa and oil palm work in communities in three districts in the Volta, Eastern and Ashanti regions, indicating that child labour is still an issue, but one that is being worked on (Ghana News Agency, 2014). It is not clear how successful the programme has been.
- The rights of workers to freedom of association and collective bargaining are upheld through labour unions and the National Labour Commission is a government body with the mandate of ensuring that employers and unions comply with labour law. The labour administration suffers from the limited coverage of these trade unions however, and total members of labour organizations are mainly in the formal sector (i.e. less than one million

out of over 10 million workforce). The limited coverage of unions could be a hindrance to a broad based all-inclusive agreement on important industrial relations issues (Ministry of Manpower, Youth and Employment, 2014).

Risk conclusion

Laws related to ILO Fundamental Conventions 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

- Minimum age (15 years old) shall be observed for all personnel involved in farm management activities. Onsite verification shall confirm this in the field.
- Minimum age (18 years old) shall be observed for all personnel involved in hazardous work. Onsite verification shall confirm this in the field.
- 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.
- At least the legally established minimum salaries ((GH8.80 as of 01-01-17) shall be paid for personnel involved in farm management activities. Onsite verification shall confirm this in the field.
- Salaries shall be paid officially and declared by the employer according to requirements for personnel involved in farm management activities.

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.

Context and considerations

There are traditional people in Ghana but no indigenous people. Some of the traditional people live on lands adjacent to oil palm farms. Some are also oil palm farmers themselves.

2.4.1. Applicable laws and regulations

The rights of traditional people are protected by both common law and customary law. Provisions are made in Ghana's laws for enforcing the provisions of ILO Convention 169 and United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP):

- Office of the Administrator of Stool Lands Act, 1994 (Act 481); Section 267 - [link](#)

- The 1992 Constitution of Ghana; Articles 11, 20, 257 & 267 - [link](#)

2.4.2. Legal authority

- Office of the Administrator of Stool Lands
- Traditional authority
- Metropolitan, Municipal and District Assemblies
- Lands Commission

2.4.3. Legally required documents or records

N/A

2.4.4. Sources of information

- Action Aid. 2012. Land Grabbing, Biofuel Investment and Traditional Authorities in Ghana. http://www.actionaid.org/sites/files/actionaid/policy_brief.pdf
- Fiadzigbey, M.E. 2006. Customary Land Administrator in Ghana – Challenges and Prospects. Shaping the Change XXIII FIG Congress Munich, Germany, October 8-13, 2006. https://www.fig.net/resources/proceedings/fig_proceedings/fig2006/papers/ps07/ps07_16_fiadzigbey_0849.pdf
- Ghana Web. 2010. Foreign companies grab 37 percent of Ghana cropland. <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/Foreign-companies-grab-37-percent-of-Ghana-cropland-189898> Levitt, T. 2011. Palm oil giants target Africa in 'land grab' following Indonesia deforestation ban. The Ecologist. http://www.theecologist.org/News/news_analysis/823928/palm_oil_giants_target_africa_in_land_grab_following_indonesia_deforestation_ban.html
- Sarpong, G. 2006. Improving tenure security for the rural poor (Ghana – country case study). FAO <http://www.fao.org/3/a-k0783e.pdf>
- Sittie, R. 2006. Land Title Registration: The Ghanaian Experience. Shaping the Change XXIII FIG Congress Munich, Germany, October 8-13, 2006. https://www.fig.net/resources/proceedings/fig_proceedings/fig2006/papers/ps07/ps07_15_sittie_0848.pdf

2.4.5. Risk determination

Overview of Legal Requirements

In Ghana, the rights of traditional people are protected by both common law and customary law (Article 11 of the 1992 Constitution).

Article 20(2) of the 1992 constitution Compulsory acquisition of property by the State shall only be made under a law which makes provision for; (a) the prompt payment of fair and adequate compensation. These acquired public lands are vested in the President on behalf of, and in trust for, the people of Ghana (Article 257 of the Constitution Section 1).

The constitution provides regulations for ensuring that traditional people are duly compensated by oil palm estates and smallholdings on stool lands. Section 267 (1) provides that all stool lands in Ghana shall vest in the appropriate stool on behalf of, and in trust for, the subjects of the stool in accordance with customary law and usage. Section 267 (2) stipulates that the Office of the Administrator of Stool Lands (OASL) shall be established and responsible for (a) the establishment of a stool land account for each stool into which shall be paid all rents, dues, royalties, revenues or other payments whether income or capital from the stool lands. Section 267 (3) states that there shall be no disposition or development of any stool land unless the

Regional Lands Commission (RLC) of the relevant region certifies that activities are consistent with the development plan drawn up or approved by the planning authority for the area.

No interest in, or right over, any stool land shall be created which vests in any person or body of persons a freehold interest (5), and the Lands Commission and the OASL shall coordinate with all relevant public agencies and traditional authorities and stools in preparing a policy framework for the rational and productive development and management of stool lands (8).

Description of risk

Currently, there is no systematic violation of legal and customary rights of traditional people in relation to oil palm plantation establishment and management. The State has acquired some lands from the traditional people as public lands, and some of these lands were developed into oil palm estates, and landowners, who are usually the traditional authority or chiefs, do lease large tracts of lands to new investors (Action Aid, 2012). All the smallholder farmers are compensated, which could include payment for the existing crops and compensation for leaving the land. However, some of the smallholder farmers refuse the compensation in protest and may end up at the law court.

Risk conclusion

Low risk

2.4.6. Risk designation and specification

Low risk - However, it is important to note that with the growing worldwide demand for palm oil and Ghana as part of the new frontier for production in Africa, it is expected that more oil palm estates will be established and already existing ones will be expanded (Levitt, 2011). This could result in land grabs from smallholder farmers, given the tendency of traditional authorities or chiefs to lease land to investors.

2.4.7. Control measures and verifiers

N/A

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 Protection Agency (EPA) Act, 1994 (Act 490) - [link](#)
- Environmental Assessment Regulations, 1999 (L.I 1652) - [link](#)
- Environmental Assessment (Amendment) Regulations, 2002 (L.I 1703) - [link](#)
- Water use regulation 2001 L.I. 1692 - [link](#)
- National water policy - [link](#)
- Water resources commission act - [link](#)
- Land Planning and Soil Conservation Act 1953 (No 32) - [link](#)
- Land Planning and Soil Conservation (Amendment Act) Act 1957 (No 35) - [link](#)
- Plant and Fertilizer Act 2010 (Act 803) - [link](#)
- Plant Protection Regulations 2012 (L.I. 2193) (soft copy not available)

3.1.2. Legal authority

- Metropolitan, Municipal, and District Assemblies
- Environmental Protection Agency
- Traditional Authority
- Water Resources Commission
- Plant Protection and Regulatory Services Directorate
- Pesticide and Fertilizer Regulatory Division

3.1.3. Legally required documents or records

- Environmental permit issued by EPA
- Environmental certificate issued by EPA
- Environmental management plan approved by EPA
- Water use right or permit issued by the WRC
- Environmental Impact Assessment approved by EPA

3.1.4. Sources of Information

- Arkoh, A. 2016. Farmers told to avoid use of substandard agro-chemicals. Ghana News Agency. <http://www.ghananewsagency.org/science/farmers-told-to-avoid-use-of-sub-standard-agro-chemicals--102901>

- Environmental Protection Agency Ghana. 2016. About Us. <http://www.epa.gov.gh/epa/about>
- Ghana News Agency. 2011. Regulatory framework to implement Plant and Fertilizer Act underway. 8 March 2011. <http://www.ghananewsagency.org/science/regulatory-framework-to-implement-plant-and-fertilizer-act-underway--26349>
- Ministry of Food and Agriculture. 2016. Pesticide and Fertilizer Regulatory Division (PFRD). http://mofa.gov.gh/site/?page_id=4742
- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL: http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf
- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. Retrieved from: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>
- Water Resources Commission. 2016. Water Use Regulations. <http://www.wrc-gh.org/regulations/water-use/>

3.1.5. Risk determination

Overview of Legal Requirements

Section 13 of the Environmental Protection Agency (EPA) Act, 1994 (Act 490) states that The EPA Board shall, where it considers that the activities of an undertaking pose a serious threat to the environment or to public health, serve on the person responsible for the undertaking, an enforcement notice requiring that person to take the steps stipulated by the Board to prevent or stop the activities. The Environmental Assessment Regulations, 1999 (L.I 1652) (Regulation 1(1) stipulate that agricultural management areas involving; (a) the clearing of land of greater than 40 hectares in area, or (b) the clearing of land located in an environmentally sensitive area require registration and environmental permit from the Environmental Protection Agency (EPA). Regulation 3 of L.I 1652 stipulates that; land development for agriculture purposes not less than 40 hectares (1 a), agricultural programmes necessitating the resettlement of 20 families or more (1 b), and conversion of wetlands for industrial, housing or agricultural use (6c) require environmental impact assessment (EIA).

The application for the Environmental Permit includes:

- location and size of area;
- technology intended to be used;
- environmental, health and safety impact of the undertaking;
- clear commitment to avoid any adverse environmental effects which can be avoided on the implementation of the undertaking;
- clear commitment to address unavoidable environmental and health impacts and steps where necessary for their reduction;
- the concerns of the general public, if any, and in particular concerns of immediate residents; and
- alternatives to the establishment of the undertaking.

The EPA screens the application under regulation 5 and issues a screening report on the application which states whether the application is approved or not; or requires submission of (a) a preliminary environment report or (b) an environmental impact statement. The application is made available to stakeholders under Regulation 16 for comments. A public hearing is conducted as part of the review of the application (Section 17 of L.I 1652) especially if there is "great adverse public reaction", project involves resettlement of communities, and EPA considers that the project could have extensive and far reaching environmental effect. The

EPA constitutes a public hearing panel. At least a third of the panel members shall be residents of the geographical area of the proposed business and shall be representative of varying opinions, if any, on the subject of the hearing.

Registration and issue of environment permit: (1) Where an application is approved at the initial assessment, the EPA registers the undertaking and issue in respect of the undertaking an environmental permit. Part 1 Section 24 of L.I 1652 requires business owners to submit Environmental management plan to manage the significant environmental impacts of their operations following EPA guidelines. (2) Where application is rejected, the undertaking cannot commence and where it is in existence it is discontinued.

Water use

The Water Resources Commission (WRC) was established by the WRC Act 1996 (Act 522) as the overall body responsible for water resources management in Ghana. Water resources are vested in the President for and on behalf of the people of Ghana (Article 12 of Act 522; Articles 268 and 269 of the 1992 Constitution). Section 13 of Act 522 prohibits the use of water resources without prior authorization and grant of water use rights from the WRC. Section 16 of Act 522 provides the procedures and authority of the WRC to grant water right. Sections 1 (d) and (e) of the Water Use Regulations 2001 (LI 1692) provides that a person may obtain a permit from the WRC for industrial and agricultural water use respectively. Sections 2 and 3 of LI 1692 provide the permit application procedure.

Section 5 of LI 1692 prescribes that the WRC shall conduct investigation to establish whether the proposed water use is in accordance with policy and plan, and assess the potential environmental and social impacts, and the need for public participation in decision making on the application. Section 6 (1) provides that the WRC shall hold a public hearing if (a) upon gazette of an application under Section 3 (1) there is adverse public reaction, (b) the use of the water involves the dislocation, relocation, resettlement or in any manner cause the destruction of the natural water resources of the community; or (c) the WRC considers that the use of the water will have an impact on the natural resources at the basin.

Section 8 of LI 1692 provides that procedures and conditions for objecting to the issuance of a permit by the WRC. Section 9 exempts any water use resulting from the abstraction of water (1) by manual means, and (2) for firefighting. Section 10 (1) provides that (a) water abstracted by mechanical means and used for any purpose where the abstraction level does not exceed five litres per second; and (b) subsistence agricultural water use for land areas not exceeding 1 hectare are exempted from the permit requirement under regulation 2 but are required to register with the relevant District Assembly under Section 11.

Section 12 provides that cases where the WRC in consultation with the Environmental Protection Agency (EPA) considers a proposed water use requires an environmental impact assessment (EIA), the applicant shall attach to the application evidence that an environmental impact assessment has been approved by the EPA. The approved EIA shall be one of the conditions for the grant of water use permit.

Emission of gas

Section 2 (f) of the Environmental Protection Agency Act, 1994 (Act 490) authorizes the EPA to issue environmental permits and pollution abatement notices for controlling the volume, types, constituents and effects of waste discharges, emissions, deposits or any other source of pollutants and of substances which are hazardous or potentially dangerous to the quality of the environment or a segment of the environment. Section 2 (h) of Act 490 mandates the EPA to prescribe standards and guidelines relating to the pollution of air, water, land and any other forms of environmental pollution including the discharge of waste and the control of toxic substances.

Fertilizer use

The Land Planning and Soil Conservation Act 1953 (No 32) as amended provides a framework for the better utilization of land through planning and soil conservation. Section 106 of the Plant and Fertilizer Act 2010 (Act 803) established a Pesticide and Fertilizer Regulatory Division which operates under the Plant Protection and Regulatory Services Directorate of the Ministry.

Pesticide use

Section 106 of the Plant and Fertilizer Act 2010 (Act 803) established a Pesticide and Fertilizer Regulatory Division which operates under the Plant Protection and Regulatory Services Directorate of the Ministry.

Regulation 5 of the Plant Protection Regulations 2012 (L.I. 2193) (1) provides that the directorate shall in collaboration with other institutions carry out surveillance of growing plants in accordance with section 9 (c) of the Act (2) The surveillance system consists of (a) general surveillance and (b) specific surveys. (3) the directorate shall use information obtained from surveillance to define (a) pest free areas (b) areas of low pest prevalence (c) new populations of quarantined pests and (d) populations of quarantined pests with limited distribution in the country. Regulation 7 of L.I. 1293 (1) provides that for purposes of eradicating a pest or preventing the spread of a pest, a designated officer may exercise a power under Section 10 of the Act where (a) after a pest risk assessment the designated officer suspects that a plant, plant product or other regulated article and (i) is a pest (ii) could be infested (iii) is a biological obstacle to the control of a pest and (b) the minister determines that it is necessary and economically and socially justifiable to take pest control measures.

Section 30 of the Environmental Protection Agency Act, 1994 (Act 490) prescribes that (1) the EPA shall, for the purposes of registration, classify a pesticide as being (a) for general use (if it considers that the pesticide when used as applied for will not have an unreasonable adverse effect on the environment; (b) for restricted or suspended use if it considers that use of the pesticide (in the absence of additional regulatory restrictions) may cause unreasonable adverse effects on people, animals, crops or on the environment; or (c) a banned pesticide. Pesticides classified as restricted, suspended or banned are subject to the prior informed consent procedure defined in Section 63.

Section 31 of the EPA Act provides that the Agency may approve a pesticide subject to the prescribed conditions and may only register a pesticide if it is satisfied (a) that the pesticide is safe and effective for the use for which it is intended, and (b) that the pesticide has been tested for efficacy and safety under local conditions. Section 32 of the EPA Act prescribes that (1) where in respect of an application for registration of a pesticide, the Agency is satisfied (a) that most of the information required for its registration has been provided to the Agency, and (b) that the pesticide does not present a toxicological risk to people, animals, crops or the environment, it may provisionally clear the pesticide for use without the registration, which shall be temporary pending the registration of the pesticide. (2) A provisional clearance is subject to the conditions specified in writing by the Agency. (3) The Agency shall cancel a provisional clearance if the application for the registration of the pesticide is refused.

Section 33 of the EPA Act requires that (1) a provisional clearance for a pesticide is valid for a period not exceeding one year as determined by the Board. (2) The Agency may require (a) the submission of information, and (b) the analysis of a sample, which appears to the Agency to be necessary to determine whether and under what conditions a provisional clearance shall be granted. Section 35 provides that a pesticide registration remains valid for a period not exceeding three years from the date of registration. Section 37 prescribes that if the EPA is satisfied that a registered pesticide under the existing conditions of its registration or provisional clearance (a) is not effective, or (b) may cause hazard to people, animals, crops or the environment, it may by publication in the Gazette amend the classification, suspend or ban the pesticide or cancel the registration or provisional clearance at any time after the registration or during the period of a provisional clearance.

Section 40 of the EPA Act requires that (1) a person shall not import, export, manufacture, distribute, advertise or sell a pesticide except in accordance with a license issued under this Act. (2) A license issued under this Act is subject to the conditions specified in writing by the EPA.

Section 44 of the EPA Act prescribes that (1) A person shall not use or require an employee to use a pesticide in a manner that is inconsistent with this Act or the Regulations. (2) A person concerned with the use of a pesticide shall inform any other person who uses a pesticide of the dangers involved in the misuse of pesticides. (3) Where the Regulations require that a pesticide shall be applied by or under the supervision of a person authorized in that behalf by the Agency, a person shall not apply that pesticide unless authorized or supervised. (4) A person shall not require or permit an employee to handle or use a pesticide during employment without providing and requiring the employee to use the protective facilities and clothing which will permit safe handling of the pesticide. (5) Where protective facilities and clothing are required as a condition for a license, an employer whose employees use or handle pesticides to which the license relates shall provide and require the use of the facilities and clothing. (6) A person shall not harvest or offer for sale a foodstuff on which pesticides have been used except in compliance with the prescribed practices including the interval between the application of pesticides and the harvest.

Description of risk

There is a risk of non-compliance with the environmental regulations.

- Some palm oil estates are not registered with the Environmental Protection Agency (EPA) and thus subsequently have not obtained the required EPA permits nor have conducted Environmental Impact Assessments (EIA) nor developed Environmental Management Plans (EMPs) approved by the EPA or some estates have approved EMPs but do not fully implement the plan.
- Some palm oil estates and most smallholders may not have water use rights as required by law and may not fully observe the safety requirements guiding the use of pesticides such supervision requirements, use of appropriate protective facilities and clothing which will permit safe handling of the pesticide, and use of approved pesticides.
- Oil palm estates operate in the formal sector of Ghana. In this sector, compliance with legal requirements is very high (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014). Consequently, it is expected that at least most estates are likely to meet the requirements of the EPA and water regulations, though it is possible that some estates may not be registered with the EPA, have EPA permits and have conducted EIAs, or developed EMPs approved by the EPA. With the exception of an EMP approved by the EPA, smallholder oil palm farms have the same requirements as estates. Smallholder farmers operate in the informal sector of Ghana where compliance of legal requirements is relatively weaker (Osei-Boateng and Ampratwum, 2011; Ministry of Manpower, Youth and Employment, 2014) and therefore most of them may not meet these requirements.

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

- For palm oil sourced from estates, an EIA and environmental permit approved by the EPA shall be in place and the issuance of environmental permit and registration with EPA shall

be subject to public disclosure and hearing prior to commencement of development activities on the land or farm.

- The District Assemblies shall confirm the registration of farms exempted from water use rights or permits (note: Water use application that result in adverse public reaction shall be granted after public hearing)
- Water Resources Commission shall confirm the issuance of water use right or permit
- Farm shall have valid water use rights

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

- The Forest Protection (Amendment) Act 2002 (Act 624) - [link](#)
- Forest Protection Decree, 1974 (N.R.C.D. 234) - [link](#)
- Ghana Forest and Wildlife Policy (2012) - [link](#)
- Timber Resources Management Regulations (1998) - [link](#)
- Trees and Timber Act (1974) - [link](#)
- Wild Animals Preservation Act, 1961 (Act 43) - [link](#)
- Environmental Assessment Regulations, 1999 (L.I 1652) - [link](#)

3.2.2. Legal authority

- Forestry Commission (FC) (the principal authority overseeing forest management in Ghana)
- Forest Services Division (FSD) (supports the FC in the preservation and management of forest reserves in Ghana)
- Resource Management Support Centre (RMSC) (is the technical wing of the FC and responsible for the exploration, development, facilitation, institutionalization, implementation, and monitoring of effective and affordable forest management systems in Ghana)
- Ministry of Food and Agriculture
- Traditional Authority
- District, Municipal, and Metropolitan Assemblies

3.2.3. Legally required documents or records

- Environmental Protection Agency (EPA) permit
- Environmental certificate issued by EPA
- Environmental management plan approved by EPA
- Environmental Impact Assessment approved by EPA
- Permit issued by the Forestry Commission (FC)

3.2.4. Sources of Information

Government sources

- GFPS (2013) Ghana Forest Plantation Strategy 2015 – 2040
<https://fcghana.org/userfiles/files/Plantation%20Annual%20Report/ghana%20forest%20plantation%20strategy.pdf>
- SESA (2014) STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT (SESA) FOR REDD+ MECHANISM IN GHANA. <http://www.fcghana.org/userfiles/files/REDD+/SESA%20Annex4-Field%20consultation%20report.pdf>
- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL:
http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf

Non-Government sources

- Amankawa, C. 2010. Off-reserve areas. Clearing House Mechanism of Ghana. <http://gh.chm-cbd.net/convention/strategic-framework-biodiversity-management/reserve-areas>
- Anane, M. 1997. Implementing Agenda 21. Religion and Conservation in Ghana
- Anderson, K. 2010. Creation and Strengthening of the management of Protected Area Systems. Convention of Biological Diversity, Clearing House Mechanism of Ghana. <http://gh.chm-cbd.net/convention/strategic-framework-biodiversity-management/creation-and-strengthening-management-protected>
- Bempah, J. 2014. Socio-Economic Effects of Presidential Special Initiative On Forest Plantation on the Farmers in the Birim North District. Doctoral dissertation, University of Cape Coast.
- Client Earth. 2013. An overview of the legal framework of the Forest and Wildlife sector. November 2013. <http://www.clientearth.org/external-resources/ghana/forests-and-wildlife/Overview-and-collection-Forest-and-Wildlife-laws-Ghana.pdf>
- Corbin, A. (2008). Sacred Groves of Ghana. Sacred Land Film Project Retrieved 29/07/2013, from <http://www.sacredland.org/sacred-groves-of-ghana/>
- Dorm-Adzobu, C., Ampadu-Agyei, O., & Veit, P. G. 1991. Religious beliefs and environmental protection: the Malshegu sacred grove in northern Ghana (Vol. 4): Acts Press.
- Forest and Wildlife Policy (2002). <http://www.clientearth.org/external-resources/ghana/forests-and-wildlife/2012-Forest-and-wildlife-policy-GHANA.pdf>
- Ghana Clearing House Mechanism. (2016). Protected Areas of Ghana. (<http://gh.chm-cbd.net/biodiversity/faunal-diversity-ghana/-situ-conservation-2/protected-areas-ghana>)
- Ghana News Agency. 2010. Illegal cocoa farms destroyed in Krokosua Forest Reserve. <http://www.ghananewsagency.org/human-interest/illegal-cocoa-farms-destroyed-in-krokosua-forest-reserve-23375>
- IUCN. 2010. Parks and reserves of Ghana. IUCN. <https://portals.iucn.org/library/efiles/documents/2010-073.pdf>
- Kotey, E.N.A., Francois, J., Owusu, J.G.K., Yeboah, R., Amanor, K.S. and Antwi, L. 1998. Falling into Place. Policy that works for forests and people series no. 4. International Institute for Environment and Development, London.
- Manual of Operations (MOPs) and Logging manual (MoP Section A (<http://www.clientearth.org/reports/130819-climate-and-forests-MOP-A.pdf>), MoP Section B

(<http://www.clientearth.org/reports/130819-climate-and-forests-MOP-B.pdf>, MoP Section C
<http://www.clientearth.org/reports/130819-climate-and-forests-MOP-C.pdf>, MoP Section D
<http://www.clientearth.org/reports/130819-climate-and-forests-MOP-D.pdf>, MoP Section E
<http://www.clientearth.org/reports/130819-climate-and-forests-MOP-E.pdf>, MoP Section F
(<http://www.clientearth.org/reports/130819-climate-and-forests-MOP-F.pdf>)

- Modern Ghana. 2009. <https://www.modernghana.com/news/243722/forest-commission-wins-case-against-sefwi-farmers-but.html>
- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. Retrieved from: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>
- The FLEGT Newsletter, 4th Edition, March 2016, Page 3

3.2.5. Risk determination

Overview of Legal Requirements

Ghana has established 282 forest reserves, which cover about 11 % of the total land surface area of Ghana (Anderson, 2010). 216 of the reserves are in the high forest zone and cover 1,634,100 hectares (ha) (Client Earth, 2013). The forest reserves are considered 'permanently protected'. 75% of the reserve area is comprised by productive reserves for timber harvesting – these are protected in the sense that they are to remain as forests and ensure sustained timber yield, ready game hunting opportunities, and protection of humans from wild animals classified as harmful and dangerous, and not in the sense that their purpose is to protect/conservate these areas from anthropogenic threats, and the other 25% is protected for conservation purposes (Anderson, 2010 and Kotey et al., 1998). Of those protected for conservation, there are 21 wildlife protected areas (WPAs) in Ghana, totalling 1,347,600 ha or 5.6% of the country's total surface area. These protected area categories include seven national Parks, six resource reserves, two wildlife sanctuaries, one strict nature reserve and five coastal wetlands that have been identified and put under conservation in accordance with the Ramsar Convention.

Forests within the reserves are classified as 'on-reserve' and those outside as 'off-reserve'. Farming, including oil palm, is not allowed in any of the forest reserves, whether they are for conservation or timber production, and are only allowed in the off-reserve areas. Off-forest reserve is primarily composed of farmlands, where production of crops (including oil palm) is the main activity, as well as patches of forests on non-gazetted lands. During the demarcation of the permanent forest estates, some settlements (or hamlets) and farms were included in the estates. These farms are referred to as 'admitted farms' and they are documented and monitored to prevent further expansion.

The Forestry Commission (FC) manages the permanent forest estates and protected areas through its various Divisions. The Wildlife Division (WD) of the FC is responsible for managing all the wildlife estates or protected areas (PAs) in Ghana. The Forest Services Division (FSD) of the FC oversees managing and protecting the forest resources in the forest reserves and to some extent the off-forest reserve areas.

The Environmental Assessment Regulations (1999) require an environmental permit for agricultural activities in areas that are 'environmentally sensitive', which includes areas that constitute the habitat of any endangered or threatened species of indigenous wildlife (flora and fauna). Such a permit shall only be issued once an environmental impact assessment has been conducted.

Description of risk

There is a risk that that protected species may not be identified and protected before the establishment of palm oil farms.

- Due to lack of data if environmental permits were managed in environmental RTE sensitive areas and/or the risk enforcement linked to environmental permits not being enforced it is difficult to adequately assess the risk of palm oil farms impacts on protected sites, species and HCVs. However, in general it has been reported that biodiversity of [off-forest reserve] areas are diminishing rapidly because of the unsustainable farming methods and practices which may also apply to the palm oil farm sector.
- Forest reserves are mainly found in the High forest zone (HFZ), where Ghana's oil palm belt is, and the Savanna woodlands zone. Due to limited land availability in some areas and the perceived high fertility of forest soils, forest reserves have been encroached by some farmers from the adjacent communities. However, there is no evidence of the establishment of oil palm plantations within forest reserves in Ghana.
- As above, there are some 'admitted farms' that were included within forest reserves during the demarcation of the permanent forest estates, which are demarcated and monitored by the FSD to prevent expansion. Some admitted farms, mostly cocoa farms, have been expanding beyond the legal boundaries over time, but there has been no mention of oil palm plantations being established in the forest reserves. In most of these cases, the Forest Services Division of the Forestry Commission has destroyed the illegal cocoa farms, and prevented the establishment of fresh farms and expansion of admitted farms.
- The FSD monitoring team made up of military personnel and forestry officials have destroyed about 1000 hectares of cocoa and other crops illegally cultivated inside the Krokosua forest reserve at Juaboso in the Western Region (Ghana News Agency, 2010). Some of the cases have resulted in legal battles at the law courts (Modern Ghana, 2009; SESA, 2014). It is therefore determined that there is low risk of oil palm farms existing in protected areas in Ghana.
- While trees found in on-reserve areas are protected by the rules regulating (prohibiting) farm establishment within the permanent forest estate, farms may be established off-reserve, and this is where the oil palm farms exist in Ghana. If protected species occur off-reserve, their protection depends on the effectiveness of requirements for environmental permits. As an environmental permit is required for areas that constitute the habitat of any endangered or threatened species of indigenous wildlife, these may be required where protected species occur. However, it is not known if this is the case, and if environmentally sensitive areas would be properly identified, establishing the need for an environmental impact assessment.
- Furthermore, it has been assessed that laws relating to environmental permits may not be enforced in the country (see indicator 3.1). It has been reported that "The biodiversity of [off-forest reserve] areas are diminishing rapidly because of the unsustainable farming methods and practices, human settlement development, bush fires, fuelwood harvesting, gathering of minor forest products and over-exploitation of timber (Amankwa, 2010).
- There is a risk that oil palm farm establishment contributes to this, and that protected species contribute to the biodiversity that is diminishing.

Risk conclusion

This indicator has been evaluated as Elevated risk for protected species within palm oil plantations due to lack of data if environmental permits were managed in environmental RTE sensitive areas and/or the risk enforcement linked to environmental permits not being enforced (see also 3.1).

3.2.6. Risk designation and specification

Elevated risk

3.2.7. Control measures and verifiers

- For palm oil sourced from estates, an EIA and environmental permit approved by the EPA shall be in place and the issuance of EPA permit and registration with EPA shall be subject to public disclosure and hearing prior to commencement of development activities on the land or farm.
- Evidence that comprehensive biodiversity surveys (potentially as part of an HCV assessment) have been undertaken to identify presence of legally protected species.
- Evidence of management plans for protected species if identified in surveys including actions for their protection, survival, and prevention of poaching, are develop for the management area and surrounding landscape and are implemented.

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

Approximately 16% (more than 38,000 km²) of the total land area of Ghana is under some form of protection. Most of the country's forests only exist in statutory forest reserves. Outside of these, there are small patches of traditionally (not legally) protected forest occurring as sacred groves, which represent less than two percent of the total forest area.

In recent years, protected areas have expanded and the status of reserves has been upgraded. Ghana has reserved over 300 ecologically important areas for biodiversity conservation and developed a national strategy for this purpose under the framework for the Convention on Biological Diversity. The protected areas in the forests, among some other ecosystems, have been the most effective areas for national implementation of the Convention.

However, inadequate information has impeded successful implementation of the national strategy. There is insufficient knowledge of biodiversity in off-reserve areas as well as in many forest reserves, and the strategy has been found to be inadequate to address the threats to biodiversity in Ghana. The rate of degradation and loss of habitat are not decreasing, due to increasing social and economic pressures. Major threats to biodiversity include land-use change (conversion), habitat degradation, over-exploitation, invasive alien species, climate change, predation, wild fires and poaching. Land use conversion involves large-scale farming and mono-cultural plantations including palm oil plantations.

Protected areas

- Ghana has designated the following areas for management and protection;
- Forest reserves
- Permanently protected areas (7 National Parks, 6 Resource Reserves, 2 Wildlife Sanctuaries, and 1 Strict Nature Reserve)
- Wetlands and RAMSAR Ramsar sites
- 30 Globally significant biodiversity areas (GSBAs) (352,500ha)

Forest reserves and GSBAs are managed by the Forestry Commission (FC) of Ghana through its Forest Services Division. The FC manages the permanently protected areas through the Wildlife Division and the Water Resources Commission manages the water bodies, wetlands and RAMSAR sites.

Management of wildlife resources

The Wildlife Division (WD) of the Forestry Commission is responsible for all wildlife in the Ghana and administers 16 Wildlife-Protected Areas (PAs) and five coastal RAMSAR Sites. It also assists with the running of 2 community-owned Wildlife Sanctuaries. The land is acquired and given legal recognition; and managed by the WD. The 16 PAs are:

2 Wildlife Sanctuaries

1 Strict Nature Reserve

7 National parks

6 Resource reserves

Other areas managed by the WD are five coastal RAMSAR Sites.

Role of EPA

Section 13 of the Environmental Protection Agency Act, 1994 (Act 490) states that where the EPA considers that activities pose a serious threat to the environment or to public health, and shall require the organization responsible for the conducting the activities to take the steps stipulated by the Board to prevent or stop the activities. The Environmental Assessment Regulations, 1999 (L.I 1652) (Regulation 1(1) stipulates that agricultural management areas involving; (a) the clearing of land of greater than 40 hectares in area, or (b) the clearing of land located in an environmentally sensitive area require registration and environmental permit from the Environmental Protection Agency (EPA). Regulation 3 of L.I 1652 stipulates that; land development for agriculture purposes not less than 40 hectares (1 a), agricultural programmes necessitating the resettlement of 20 families or more (1 b), and conversion of wetlands for industrial, housing or agricultural use (6c) require environmental impact assessment (EIA).

The application for the Environmental Permit includes;

- location and size of area;
- technology intended to be used;
- environmental, health and safety impact of the undertaking;
- clear commitment to avoid any adverse environmental effects which can be avoided on the implementation of the undertaking;
- clear commitment to address unavoidable environmental and health impacts and steps where necessary for their reduction;
- the concerns of the general public, if any, and in particular concerns of immediate residents; and
- alternatives to the establishment of the undertaking.

The EPA screens the application under regulation 5 and issues a screening report on the application which states whether the application is approved or not; or requires submission of (a) a preliminary environment report or (b) an environmental impact statement. The application is made available to stakeholders under Regulation 16 for comments. A public hearing is conducted as part of the review of the application (Section 17 of L.I 1652) especially if there is 'great adverse public reaction', project involves resettlement of communities, and EPA considers that the project could have extensive and far reaching environmental effect. The EPA constitutes a public hearing panel. At least a third of the panel members shall be residents of the geographical area of the proposed business and shall be representative of varying opinions, if any, on the subject of the hearing.

Registration and issue of environment permit: (1) Where an application is approved at the initial assessment, the EPA registers the undertaking and issue in respect of the undertaking an environmental permit. Part 1 Section 24 of L.I 1652 requires business owners to submit Environmental management plan to manage the significant environmental impacts of their

operations following EPA guidelines. (2) Where application is rejected, the undertaking cannot commence and where it is in existence it is discontinued.

Main threats to HCVs from farm establishment and management activities

- Due to limited land availability in some areas and the perceived high fertility of forest soils, forest reserves have been encroached by some farmers from the adjacent communities. Expansion of admitted farms in forest reserves results in clearing of protected plant species and disturbance of protected animal species in some cases.
- Illegal farming in GSBAs results in clearing of protected plant species, disturbance of protected animal species, clearing of sensitive areas such as slopes above 30% etc.
- Expansion of farms and settlements in Ramsar Sites results in clearing of habitats such as mangroves, pollution of habitats with insecticides and pesticides, and disturbance of migratory birds and other species like turtles.
- Lack of protection of riparian areas

Main types of safeguards exist for having low risk of impacting HCVs

- Enforcement of forest, water and wildlife laws
- Awareness raising and capacity building

How safeguards are enforced including a general comment on the state of governance in the country/region

- Governance Ghana's current pattern of development is heavily dependent on the natural capital. Although biodiversity issues are captured in the National Development Agenda, the level of coordination within and among the various actors (public, private and civil society) is generally poor. Many of the institutions involved in biodiversity governance, at both the national and sub-national levels, have weak capacity (NDPC, 2014).
- There is no evidence of conversion of protected areas into oil palm plantations. The available evidence shows that there has been illegal farming (mainly cocoa) in some forest reserves in the high forest zone of Ghana since 2005. In most of these cases, the Forest Services Division of the Forestry Commission has destroyed the farms and prevented the establishment of fresh farms; and expansion of admitted farms. For instance, the FSD monitoring team made up of military personnel and forestry officials have destroyed about 1000 hectares of cocoa and other crops illegally cultivated inside the Krokosua forest reserve at Juaboso in the Western Region (see e.g. <http://www.ghananewsagency.org/human-interest/illegal-cocoa-farms-destroyed-in-krokosua-forest-reserve-23375>). However, there may be conversion of forests outside of protected areas (see 4.1). This is an issue for biodiversity values that exist outside of the reserve system.
- A number of NGOs and civic society organization have partnered governmental organizations like Wildlife Division and Water Resources Commission to educate and build the capacity of fringe communities and other stakeholders on the need to manage the resources sustainably.

Data sources in addition to above

- Convention on Biological Diversity country status report: <https://www.cbd.int/countries/profile/>
- The Wildlife Division: <http://www.fcghana.org/page.php?page=46§ion=22&typ=1&subs=254>
- List of GSBAs: <http://gh.chm-cbd.net/biodiversity/faunal-diversity-ghana/-situ-conservation-2/list-of-globally-significant-biodiversity-areas-gsba>

- Environmental Protection Agency: <http://www.epa.gov.gh/epa/about>
- Water Resources Commission: <http://www.wrc-gh.org/regulations/water-use/>
- Regulation of water use: <http://www.wrc-gh.org/regulations/water-use/>
- Arkoh, A. 2016. Farmers told to avoid use of sub0standard agro-chemicals. Ghana News Agency. <http://www.ghananewsagency.org/science/farmers-told-to-avoid-use-of-sub-standard-agro-chemicals--102901>
- Ghana News Agency. 2011. Regulatory framework to implement Plant and Fertilizer Act underway. <http://www.ghananewsagency.org/science/regulatory-framework-to-implement-plant-and-fertilizer-act-underway--26349>
- Ministry of Food and Agriculture: http://mofa.gov.gh/site/?page_id=4742
- Environmental Assessment Regulations, 1999 (L.I 1652): <http://faolex.fao.org/docs/pdf/gha78169.pdf>
- Environmental Assessment (Amendment) Regulations, 2002 (L.I 1703): <http://www.lexadin.nl/wlg/legis/nofr/oeur/arch/gha/l11703.pdf>
- Water use regulation 2001 L.I. 1692: https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi566DE0ubOAhVGSRoKHVciDPEQFggeMAA&url=http%3A%2F%2Fwww.wrc-gh.org%2Fdmsdocument%2F43&usq=AFQjCNFCAht-HdX6I8_O6Fbs_e1cNqnwSg&sig2=aGgDoKEPROJaLwr2h4rBWg
- National water policy: <http://faolex.fao.org/docs/pdf/gha147106.pdf>
- Water resources commission act: <http://www.wrc-gh.org/assets/Uploads/pdf/register/Water-Resources-Commission-Act-522.pdf>
- Land Planning and Soil Conservation Act 1953 (No 32): <http://faolex.fao.org/docs/pdf/gha3102.pdf>
- Land Planning and Soil Conservation (Amendment Act) Act 1957 (No 35): <http://faolex.fao.org/docs/pdf/gha3120.pdf>
- Plant and Fertilizer Act 2010 (Act 803): https://piorin.gov.pl/files/userfiles/wnf/przepisy/ghana/act_803.pdf
- Plant Protection Regulations 2012 (L.I. 2193) (soft copy not available)
- Timber Resources Management Act 1997 (Act 547) (http://fcghana.org/library_info.php?doc=45&publication:Timber%20Resource%20Management%20Act,%201997%20-%20Act%20%20547&id=15);
- Timber Resources Management Regulations 1998 (LI 1649) (http://fcghana.org/library_info.php?doc=46&publication:L.I.%201649%20-%20Timber%20Resources%20Management%20Regulations,%201998&id=15)
- <http://dare.uva.nl/document/2/110485>

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

Protected areas and forests that contain outstanding concentrations of threatened or endangered species are considered to contain HCV1 in Ghana.

Protected areas

Protected areas are often, though not always, established to protect biodiversity. They are therefore included under HCV 1, as they likely to contain concentrations of biodiversity values. There are several types of protected area in Ghana. The following designations are considered HCV:

- National Parks
- Resource Reserves
- Global Protection Reserves
- Globally Significant Biodiversity Areas
- Hill Sanctuaries
- Provenance Protection Areas
- Wildlife Sanctuaries

Wildlife protected areas

There are 7 National Parks, 6 Resource Reserves, 2 Wildlife Sanctuaries, and 1 Strict Nature Reserve in Ghana. These sites include the Keta Lagoon Complex RAMSAR Site (KLCRS), Kyabobo National Park and the Mole National Park. The Kyabobo National Park covers an area of 359.8 km² in the Dry semi-deciduous forest zone and has both forest and savanna species of plants and animals. The Park contains the nationally endangered endemic tree *Talbotiella gendtii*. The national parks contain some rare and endangered or threatened species like Buffalo, Kob, Warthog, Aardvark, Baboon, Lion, Elephant, Bongo, Reedbuck and Hartebeest, Waterbuck and primate species, Leopard, hyena and over 300 bird species (see <http://www.fcghana.org/page.php?page=168§ion=32&typ=1>).

Wetlands and Ramsar sites

Ghana has six Ramsar sites covering a total area of 176134.48 hectares; with the Keta Lagoon Complex Ramsar Site (KLCRS) covering 57% (101022.7 ha). The vegetation in the sites is swamps, scrublands, and mangrove forests (Ramsar, 2015) which serve as habitat for thousands of migratory birds and breeding grounds of sea turtle and various species of aquatic organisms. For example, the KLCRS supports over 72 resident and migratory bird species estimated to number over 100,000 individuals. It is therefore considered the most important coastal wetland for birds in Ghana. The KLCRS provides safe nesting grounds for three (3) species of threatened marine turtles: olive ridley (*Lepidochelys olivacea*), leatherback turtle (*Dermochelys coriacea*) and the green turtle (*Chelonia mydas*). It is also important for the Nile monitor (*Varanus niloticus*), the vulnerable West African Manatee (*Trichechus senegalensis*), and the West African Sitatunga (*Tragelaphus spekii*) which is an endangered amphibious antelope. The wetland supports the livelihood activities of hundreds of thousands of people.

Globally significant biodiversity areas

GSBAs are specially protected from logging and conversion into any other form of land use such as oil palm plantation. In recognition of their extraordinary biological importance, 30 forest reserves in the Eastern, Ashanti, Western and Central regions have been re-designated as Globally Significant Biodiversity Areas (GSBAs). The GSBAs include Atewa Range (23,200 ha), Fure Headwaters (2,304 ha) and Tano Offin (10,752 ha). These GSBAs serve as habitats for plant and animal species, and breeding grounds for animal species. For instance Tano Offin Forest Reserve supports several nationally rare bird species such as *Columba unicincta*, *Cercococcyx olivinus* and *Tockus camurus*. A total of 110 bird species have been recorded in the reserve by the International Birdlife in 2000 (see <http://www.birdlife.org/datazone/sitefactsheet.php?id=6333>). Other species include the rare tree fern *Cyathea manniana*, which is used for medicinal purposes.

Hill sanctuaries

All areas within forest reserves that have steep slopes (>15 degrees) are mapped out and designated as hill sanctuaries. These areas are excluded from timber exploitation (and in effect, oil palm establishment) because of the environmental damage associated with the extraction of logs on steep terrain.

Provenance protection areas

These are designated areas within forest reserves for the protection from exploitation of a population of an economically threatened species. The aim is to maintain the population's gene pool as close as possible to the condition prior to human interventions such as logging. This is to ensure the availability of useful source of genetic material for prime economic timbers species for both natural regeneration and artificial multiplication. Currently 42 compartments located in 26 forest reserves have been identified, demarcated and pillared as provenance protection areas (PPAs).

Concentrations of threatened or endangered species

Recognising that there may be significant concentrations of biodiversity values outside of protected areas, forest areas are also considered to have HCV1 if there is evidence to suggest:

- Presence of populations of at least 25% of the forest dependent, red-listed species that are naturally resident in Ghana.
- Presence of a population of at least one nationally protected species, whose survival in Ghana is critically dependent on the sustainable management of the population in question as integrity of the forest is not the only factor influencing the survival.

All forest dependent species listed on the IUCN red list, in all threat categories, are considered relevant to this HCV. Similarly, all species listed as nationally protected under the National Wildlife Conservation Regulation will be considered if they are a) dependent on forest and b) are so restricted that the population in the individual forest reserve could be regarded as critical to the survival of the species in Ghana.

3.3.1.2. Sources of information

- Amankwah, C. 2010. Off reserve areas. Clearing House mechanism of Ghana, Convention on Biological Diversity. <http://gh.chm-cbd.net/convention/strategic-framework-biodiversity-management/reserve-areas>
- CBD. 2016. Ghana – Country Profile. Retrieved from: <https://www.cbd.int/countries/profile/default.shtml?country=gh#facts>
- Hackman, K.O., 2014. The state of biodiversity in Ghana: Knowledge gaps and prioritization. *International Journal of Biodiversity and Conservation*, 6(9), pp.681-701.

- Ministry of Manpower, Youth and Employment. 2014. National Employment Policy (First Draft Version 4). URL: http://siteresources.worldbank.org/INTLM/Resources/Ghana_NATPOLICYDEC11B.pdf
- Osei-Boateng, C.I. & Ampratwum, E. 2011. The Informal Sector in Ghana. Friedrich Ebert Stiftung. Retrieved from: <http://library.fes.de/pdf-files/bueros/ghana/10496.pdf>

3.3.1.3. Risk determination

All protected areas that are considered to contain HCV1 are contained in forest reserves, and it has been evaluated in this risk assessment that there is low risk of oil palm farms being established within these (see 3.2 Protected sites and species). Therefore, the focus is on the risk that palm oil farms threaten the maintenance of HCV1 either systematically or at a large scale in forests where there are significant concentrations of biodiversity values outside of reserves. The off-reserve areas, described as “open to free access” in terms of utilisation, are said to contain important components of biological diversity, and the biodiversity of these areas is diminishing rapidly as a result of the unsustainable farming methods and practices, human settlement development, bush fires, fuelwood harvesting, gathering of minor forest products and overexploitation of timber (Amankwah, 2010). The entire south-western third of Ghana is mapped as a biodiversity hotspot on the Global Forest Watch, and it’s in this area that oil palm is grown. However, specific areas that contain the attributes outlined under HCV occurrence are not mapped in the country, so it cannot be known with any certainty where such areas occur. Knowledge of off-reserve biodiversity has been described as “insufficient” (Hackman, 2014), and it has been stated that “The biodiversity of [off-forest reserve] areas is diminishing rapidly as a result of the unsustainable farming methods and practices, human settlement development, bush fires, fuelwood harvesting, gathering of minor forest products and over-exploitation of timber (Amankwa, 2010). The key risk to HCV1 is the development or expansion of oil palm farms at the expense of natural forest or other ecosystems. It is important to note that the risk of oil palm farms replacing natural forest or other ecosystems has been assessed as elevated (See 4.1).

An environmental permit from the Environmental Protection Agency (EPA) is the main safeguard against negative effects to HCV1 occurring off-reserve. It is required for agricultural management areas involving; (a) the clearing of land of greater than 40 hectares in area, or (b) the clearing of land located in an environmentally sensitive area, and an environmental impact assessment and statement are required as part of the permit process. Environmentally sensitive areas include areas which constitute the habitat of any endangered or threatened species of indigenous wildlife (flora and fauna) and the EIA and its resulting environmental impact statement must cover direct and indirect impacts on any community, habitat or specie of flora or fauna. However, a major problem is that there is no requirement for an EIA in areas likely to be high in biodiversity, so it can’t be known that EIAs will be conducted in areas with HCV1, or if environmentally sensitive areas would be properly identified, establishing the need for an environmental impact assessment. According to Ghana’s CBD country profile, the EIA application forms could be improved to better cover the status of biodiversity. Furthermore, it has been assessed that laws relating to environmental permits may not be enforced in the country (see indicator 3.1).

Ghana is signatory to the UN Convention on Biological Diversity (CBD). The country’s 5th national report to the CBD reports that recent uncontrolled socio-economic activities such as illegal strip mining, logging and poaching have resulted in massive degradation of Ghana’s forests. It states that the country’s forest area declined by 2.24% between 2005 and 2010, and important biodiversity hotspots have been devastated by severe illegal activities including encroachments. Land preparation practices (slash and burn) and farming along water bodies are said to have posed great threat to biodiversity at landscape level. The report does not make it clear whether Ghana has met or is on track to meet the various CBD targets, including the target of at least 17 per cent of terrestrial and inland water areas, especially those of importance for biodiversity and ecosystem services, being conserved in representative

protected areas by 2020 (target 11). Ghana's CBD country profile web page states that approximately 16% of the total land area of Ghana is under "some form" of protection. This page states that protected areas have expanded and the status of reserves has been upgraded, but that sustainability has not been achieved, with unsustainable harvesting leading to scarcity and, in some cases, evidence of threat of extinction for some species.

3.3.1.4. Risk designation and specification

Elevated risk

3.3.1.5. Control measures and verifiers

- Environmental permit from the EPA, and the EIA that was conducted. Ensure that the EIA included an assessment of biodiversity values as defined under HCV1 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.
- 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 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 EPA consultation with environmental NGOs knowledgeable on protected areas.

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 map¹ 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.*

¹ <http://www.intactforests.org/world.map.html>

3.3.2.1. HCV Occurrence

The process used to develop the national HCV interpretation for Ghana, used the IFL definition to determine presence of HCV2 in Ghana and it was found that such areas are not present in Ghana. It noted that while some forest reserves are considerably large, they are fragmented by roads, farms, settlements, etc. Furthermore, the IFLs maps on the Global Forest Watch platform also confirmed there are no IFLs in Ghana.

3.3.2.2. Sources of information

- Global Forest Watch: <http://www.globalforestwatch.org>
- Rayden, T., Jesse-Dodoo, I., Lindhe, A., and Baffoe, A. 2016, An Interpretation of Global HCVF Toolkit for use in Ghana

3.3.2.3. Risk determination

N/A

3.3.2.4. Risk designation and specification

Low risk: There is no HCV 2 in the area under assessment.

3.3.2.5. Control measures and verifiers

N/A

3.3.3. Ecosystems and habitats – HCV 3

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

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

3.3.3.1. HCV Occurrence

Under this category, the Global HCVF Toolkit for Ghana considered broad forest types in Ghana (as defined by Hall and Swaine (1981) and smaller 'habitat types' occurring within the forest types. The forest types are the Evergreen forest (wet and moist), Southern marginal, Mangroves, and Semi-deciduous forest (moist and dry).

Forest type	Naturally rare	Reduced in extent or quality	Threatened by current and future changes
Wet evergreen			
Southern Marginal			
Mangrove			

Dry Semi-Deciduous			
Moist Semi-Deciduous			

The habitat types are Upland marshes and wetlands, Savannah forest, Lowland swamps, and Coastal savannah.

Habitat type	Naturally rare	Reduced in extent	Threatened by current and future changes
Upland marshes and upland wetlands			
Savannah gallery forest			
Lowland swamps			
Coastal Savannah			

The forest types and the habitats within them may fall under;

- Forest reserves [permanent forest estates] (contains both production and protection areas). These are stool (or community) lands which are under the custody of chiefs but vested in the President with the state acting as 'trustee' on behalf of the stool;
- National Parks and Resource Reserves. These are wholly protected reserves where exploitation of trees are prohibited). These are stool or skin (or community) lands under custody of chiefs but vested in the state with the state acting as 'trustee' on behalf of the stool (The Forests Act, 1927; Concessions Act 1962);
- Off forest reserves (OFR) (lands not gazetted for permanent forestry). These are stool (or community) lands with chiefs as custodians, Family lands (Family head as custodian), Individual lands, and public lands; and
- Submerged forests (located on off-reserves; e.g. Volta Lake). These are stool lands (community) and family lands. Submerged forests are not relevant to oil palm farm establishment and management as they are under water.

Except for mangroves, the forest types identified above are mapped in The State of the World's Forest Genetic Resources Country report for Ghana (Ministry of Lands and Natural Resources, 2012, page 15). Regarding the habitat types, savannah gallery forest is not relevant as it does not occur in the south of Ghana, where oil palm is grown, though coastal savannah overlaps with oil palm growing areas, as may marshes, wetlands and swamps. It is noted in the Interpretation of Global HCVF Toolkit for use in Ghana that the habitat types identified should be set aside for complete protection, and for oil palm farm establishment and management, the same should apply to the forest types as well.

3.3.3.2. Sources of information

- Amankwah, C. 2010. Off reserve areas. Clearing House mechanism of Ghana, Convention on Biological Diversity. <http://gh.chm-cbd.net/convention/strategic-framework-biodiversity-management/reserve-areas>
- CBD. 2016. Ghana – Country Profile – Biodiversity Facts. <https://www.cbd.int/countries/profile/default.shtml?country=gh#facts>
- Global Forest Watch. <http://www.globalforestwatch.org/map>
- Ministry of Lands and Natural Resources. 2012. The State of the World’s Forest Genetic Resources Country report for Ghana: <http://www.fao.org/3/a-i3825e/i3825e29.pdf>
- Rayden, T., Jesse-Dodoo, I., Lindhe, A., and Baffoe, A. 2016, An Interpretation of Global HCVF Toolkit for use in Ghana

3.3.3.3. Risk determination

All forest and habitat types considered HCV3 that fall within forest reserves are considered to be protected from oil palm establishment and management, as the risk of oil palm farms being established within these has been evaluated to be low (see 3.2 Protected sites and species). The Ghana HCVF Toolkit states that in many cases the habitat types occur within existing protected areas, but there may be incidences where these habitat types occur within production forest areas. Therefore, the focus is on the risk that palm oil farms threaten the maintenance of HCV3 either systematically or at a large scale in the identified forest and habitat types where they occur outside of reserves. The off-reserve areas, described as “open to free access” in terms of utilisation, are said to contain important components of biological diversity, and the biodiversity of these areas is diminishing rapidly as a result of the unsustainable farming methods and practices, human settlement development, bush fires, fuelwood harvesting, gathering of minor forest products and overexploitation of timber (Amankwah, 2010). The south-western third of Ghana is mapped as a biodiversity hotspot on the Global Forest Watch, and it’s in this area that palm oil is grown. However, the specific forest and habitat types have not been mapped at a scale that could show that they do occur outside of reserves, and that they may be threatened by oil palm farms. The key risk to HCV1 is the development or expansion of oil palm farms at the expense of natural forest or other ecosystems. It is important to note that the risk of oil palm farms replacing natural forest or other ecosystems has been assessed as elevated (See 4.1).

An environmental permit from the Environmental Protection Agency (EPA) is the main safeguard against negative effects to HCV3 occurring off-reserve. It is required for agricultural management areas involving; (a) the clearing of land of greater than 40 hectares in area, or (b) the clearing of land located in an environmentally sensitive area, and an environmental impact assessment and statement are required as part of the permit process. Environmentally sensitive areas include areas which constitute the habitat of any endangered or threatened species of indigenous wildlife (flora and fauna) and the EIA and its resulting environmental impact statement must cover direct and indirect impacts on any community, habitat or species of flora or fauna, however a major problem is that there is no requirement for an EIA in areas that contain the forest and other habitat types identified as HCV3 in Ghana, , so it can’t be known that EIAs will be conducted in areas with HCV3, or if environmentally sensitive areas would be properly identified, establishing the need for an environmental impact assessment. Furthermore, it has been assessed that laws relating to environmental permits may not be enforced in the country (see indicator 3.1).

Ghana is signatory to the UN Convention on Biological Diversity (CBD). The country’s 5th national report to the CBD reports that recent uncontrolled socio-economic activities such as illegal strip mining, logging and poaching have resulted in massive degradation of Ghana’s forests. It states that the country’s forest area declined by 2.24% between 2005 and 2010,

and important biodiversity hotspots have been devastated by severe illegal activities including encroachments. Land preparation practices (slash and burn) and farming along water bodies are said to have posed great threat to biodiversity at landscape level. The report does not make it clear whether Ghana has met or is on track to meet the various CBD targets, including the target of at least 17 per cent of terrestrial and inland water areas, especially those of importance for biodiversity and ecosystem services, being conserved in representative protected areas by 2020 (target 11). Ghana's CBD country profile web page states that approximately 16% of the total land area of Ghana is under "some form" of protection. This page states that protected areas have expanded and the status of reserves has been upgraded, but that sustainability has not been achieved, with unsustainable harvesting leading to scarcity and, in some cases, evidence of threat of extinction for some species.

3.3.3.4. Risk designation and specification

Elevated risk

3.3.3.5. Control measures and verifiers

- Environmental permit from the EPA, and evidence the EIA that was conducted. Ensure that the EIA included an assessment of the rare and threatened ecosystems identified under "HCV occurrence" 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 habitats are met.
- 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 and threatened habitats include actions for their protection are developed for the management area and surrounding landscape and are implemented.
- Supplier records of stakeholder consultation with environmental NGOs knowledgeable on rare and threatened habitats.

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

A number of forest reserves provide regulating ecosystem services such as protection from natural hazards like fire, floods, prevention of soil erosion, removal of pollutants and excess nutrients from water bodies, and are therefore considered to contain HCV. Several reserves are referred to as "Shelter belt forest reserves" and these are considered to contain HCV relevant to the provision of fire barriers and erosion control. Shelter belts in the transition zone between the high forest and savannah zones of Ghana (such as Bia, Tano, Asukese,) are also relevant to climate regulation, but oil palm is grown mainly in the forest, and not transition, zone. Catchment Area Forests, which are forests that cover the entire sub-catchment of a major river or stream of a basin (e.g. Afram, Atewa, Birimso, Owabi, Sekondi and Bia Headwater forests),

and forests adjacent to reservoirs, water works or hydro power systems are also considered to contain HCV for erosion control. This HCV is also thought likely to be present in some areas within the Dry semi-deciduous forest zone and in hilly areas dominated by the Upland evergreen forest type, where forests are critical to water catchments. Specific areas include Afram, Atewa and Bia headwater, as well as all other forest reserves designated for protecting river head waters.

Except for (potentially) forests adjacent to reservoirs, water works or hydro power systems, the above are all contained within Ghana's forest reserves.

Oil palm farms may be found adjacent to forest reserves. Riparian areas within oil palm farms would also be considered HCV4.

3.3.4.2. Sources of information

- Adomako, T. and Ampadu, B., 2015. The Impact of Agricultural Practices on Environmental Sustainability in Ghana: A Review. *Journal of Sustainable Development*, 8(8), p.70.
- Rayden, T., Jesse-Dodoo, I., Lindhe, A., and Baffoe, A. 2016. An Interpretation of Global HCVF Toolkit for use in Ghana
- Water Resources Commission. 2016. Basins. <http://www.wrc-gh.org/basins>
- Ministry of Water Resources, Works and Housing. 2011. Riparian Buffer Zone Policy for Managing Freshwater Bodies in Ghana <http://faolex.fao.org/docs/pdf/gha149365.pdf>

3.3.4.3. Risk determination

Nearly all areas that are considered to contain HCV4 are contained in forest reserves, and it has been evaluated in this risk assessment that there is low risk of oil palm farms being established within these (see 3.2 Protected sites and species). Therefore, it is necessary to focus on the risk that palm oil farms threaten the maintenance of HCV4 systematically or at a large scale in forests adjacent to reservoirs, water works or hydro power systems, and forests that cover the entire sub-catchment of a stream on which a community (or communities) depends for drinking water, irrigation water or fishing, and that provide a function in regulating the quality and quantity of water on which these functions depend. It is also necessary to focus on waterways and riparian areas within oil palm farms.

Very little information is available on oil palm (or agriculture in general) and effects on ecosystem services in Ghana. The Ghana Water Resources Commission provides information on water use and management challenges of some of the water basins in the country, and mentions palm oil as a main use of water in two of them; the Ankobra and Pra Basins. The Ankobra is said to be arguably the most exploited basin in Ghana in terms of natural resources, while the Pra Basin is one of the most extensively and intensively used river basin areas in Ghana in terms of settlement, agriculture, logging and mining. Oil palm is an important user of water in both basins, however, it does not feature in the descriptions of main challenges in the catchments.

An environmental permit is required for agriculture that involves the clearing of land located in an environmentally sensitive area, which includes areas prone to bushfires, hilly areas with critical slopes, and water bodies characterised by one or more of the following conditions: water tapped for domestic purposes; water within the controlled and/or protected areas; and water which supports wildlife and fishery activities. This appears to align well with what has been identified as HCV4 in Ghana. The permit can only be obtained once an environmental impact assessment is conducted and the permit is approved by the Environmental Protection Agency. As for the risk evaluation for 3.1 Environment, it is expected that oil palm estates are more likely to comply with EPA requirements than smallholders due to differences in the normal compliance with laws between Ghana's formal sector (in which estates are said to operate) and its informal sector (where smallholders tend to operate), however, there is still a

risk that laws relating to environmental permits may not be enforced in the country (see indicator 3.1).

Ghana does have a national buffer zone policy for managing freshwater bodies. It contains recommendations on buffer widths, which are:

1. Municipal reservoir shoreline protective buffer: 60 to 90 meters (e.g. Weija Dam, Lake Bosomtwe);
2. Major perennial rivers/streams: 10 to 60 meters (e.g. Volta, Tano, Offin);
3. Minor perennial streams: 10 to 15 meters;
4. Important intermittent streams: 10 to 20 meters;
5. Stream within forest reserves: 10 to 50 meters.
6. Wetland will require a buffer zone of 30 meters around the perimeter as defined from the high-water elevation.

The slope affects the buffer zone: slope of 15-20 %, add 3 meters; slope of 20-25 %, add 10 meters, and slope of 25-30 %, add 20 meters.

The implementation of the buffer zone policy in practice is not a legal requirement, and there is therefore a risk that it is not implemented.

3.3.4.4. Risk designation and specification

Elevated risk

3.3.4.5. Control measures and verifiers

- Environmental permit, granted following an environmental impact assessment
- Environmental management plan that details steps to manage any significant environmental impact that may result from the operation of the undertaking
- Evidence of implementation of the national buffer zone policy
- Evidence that areas of slopes above 30o are not cleared or planted.
- 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>
- Evidence of management include actions for HCV 4 protection and ongoing monitoring of the status of HCV 4.

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

Local communities have a variety of uses of forests in Ghana, including food, materials, spices and medicines, and it is where a community or a part thereof is entirely reliant on the forest as

the sole source of that commodity (it cannot be obtained from any other source, and that product or service is critical to their livelihood), that HCV5 may be considered to be present. During the development of the HCV interpretation for Ghana, it was decided that the basic needs most likely to occur are the following:

- Food (e.g. bushmeat) where this is a fundamental protein component of diet;
- NTFP harvesting (e.g. bushmeat and rattan) where this provides essential household income;
- Medicinal materials in the absence or lack of access to local clinics, or in cases where traditional medicine is the only affordable option;
- Building materials (e.g. roof thatches, wood etc.);
- Other basic household needs such as fuel wood (for heating) or pestle (for preparing staple food forming the main diet of the community) where there are no affordable alternatives.

Given the way HCV5 is defined, it is impossible to state the geographic locations of HCV5 in the country. The national interpretation of HCV in Ghana refers to forest reserves in the country, stating that local communities are established around the fringes of most if not all forest reserves in Ghana.

3.3.5.2. Sources of information

- Rayden, T., Jesse-Dodoo, I., Lindhe, A., and Baffoe, A. 2016, An Interpretation of Global HCVF Toolkit for use in Ghana

3.3.5.3. Risk determination

With the association of HCV5 with forests, and forest reserves in particular, and noting that oil palm plantations do not encroach upon forest reserves (see 3.2), oil palm farming activities are considered unlikely to impact upon a community's access to and use of goods in the forest reserve. More generally, the rights of traditional people are protected by both common law and customary law. Oil palm estates operate in the formal sector of Ghana and are therefore more formal in their approach in handling issues pertaining to their activities. It is unlikely that estates would not formally engage communities and document social amenities and benefits that will be provided by the estates as part of its social responsibility. Once such an agreement is reached, the community then has a basis to demand what is due them. Most smallholder farmers may have formal arrangements with landowners but not communities; especially when the farms are not very big in size. However, as part of social responsibility, smallholders provide benefits such as employment to communities. See Category 2.4 for more details.

3.3.5.4. Risk designation and specification

Low risk

3.3.5.5. Control measures and verifiers

N/A

3.3.6. 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

Forests often have deep spiritual and cultural significance for the various ethnic groups in Ghana and there are patches of forests found in various communities in Ghana that play a critical role in providing ecosystem services to the fringe communities and cities that are near to them. These patches of forest are called fetish or sacred groves and are considered to contain HCV6.

A sacred grove is a forest that is preserved for local socio-cultural purposes and regulated with traditional rules, customs and taboos (Dorm-Adzobu, Ampadu-Agyei, & Veit, 1991). Some sacred groves can be as small as half of a hectare while others are as large as 1,500 hectares. Some individual species are also protected because of their traditional significance. Some animals are considered sacred because they are the symbol of some clans, while others are afforded protection only when they enter a grove. Certain plants were held sacred and were given offerings before being harvested. They are believed to be the dwelling places of gods. Certain species of trees are protected because they have healing powers. The sacred quality of other groves derives from reverence for an animal species that lives there, most commonly monkeys or leopards. The sacredness of others originates from a river or stream that is home to a water god; the surrounding woods then become a protected area (Corbin, 2008). The local people of Ghana have loyally protected the forest ecosystems, biological diversity, and streams contained in sacred groves for centuries. Anane (1997) found that 1.5% of the land area of Ghana is covered by some 2000 sacred groves. shrines and serve as a place of worship while others are cemeteries.

3.3.6.2. Sources of information

- Anane, M. 1997. Implementing Agenda 21. Religion and Conservation in Ghana
- Corbin, A. 2008. Sacred Groves of Ghana. Sacred Land Film Project Retrieved 29/07/2013, from <http://www.sacredland.org/sacred-groves-of-ghana/>
- Dorm-Adzobu, C., Ampadu-Agyei, O., & Veit, P. G. 1991. Religious beliefs and environmental protection: the Malshegu sacred grove in northern Ghana (Vol. 4): Acts Press.

3.3.6.3. Risk determination

While Ghana has experienced considerable forest loss, the fetish or sacred groves are regulated with traditional rules, customs and taboos (Corbin, 2008). Customary or traditional laws do not permit forest clearing or farming in the sacred groves. Loggers and oil palm managers are required to observe traditional customs and taboo days, which are duly respected. The rules and customs that regulate the use of sacred groves are relatively weaker today, and as result, some groves are degraded and some are threatened by settlement and farm expansion. However, there is no evidence that oil palm plantations are established in sacred groves in Ghana.

3.3.6.4. Risk designation and specification

Low risk

3.3.6.5. Control measures and verifiers

N/A

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.

4.1.1. Applicable laws and regulations

- The Forest Protection (Amendment) Act 2002 (Act 624) - [link](#)
- Forest Protection Decree, 1974 (N.R.C.D. 234) - [link](#)
- Timber Resources Management Act 1997 (Act 547): [link](#)
- Timber Resources Management Regulations, 1988 LI 1649 - [link](#)
- Forest Plantation Development Fund Act, 2000 (Act 583) - [link](#)
- Forest Plantation Development Fund Amendment Act 2002 (Act 623) - [link](#)
- Ghana Forest and Wildlife Policy (2012) - [link](#)
- Trees and Timber Amendment Act 493 - [link](#)
- Manual of Operations (MOPs) (MoP Section A) - [link](#) and MoP Section D - [link](#)
- Timber Resources Management Amendment Regulations 2003 (LI 1721) - [link](#)
- Local Government Act 1993 (Act 462) - [link](#)
- The Environmental Protection Agency Act, 1994 (Act 490) - [link](#)
- Environmental Assessment Regulations, 1999 (L.I 1652) - [link](#)
- Environmental Assessment (Amendment) Regulations, 2002 (L.I 1703) - [link](#)

4.1.2. Legal authority

- Forestry Commission (FC) (the principal authority overseeing forest management in Ghana): <http://fcghana.org/>
- Forest Services Division (FSD) (They support the Commission in the preservation and management of forest reserves in Ghana): <http://fcghana.org>
- Resource Management Support Centre (RMSC) (is the technical wing of the Forestry Commission (FC) and responsible for the exploration, development, facilitation, institutionalization, implementation, and monitoring of effective and affordable forest management systems in Ghana): <http://www.fcghana.org/page.php?page=46§ion=22&typ=1&subs=252>
- District, Municipal, and Metropolitan Assemblies
- Environmental Protection Agency

4.1.3. Legally required documents or records

- Salvage permit issued by the Forestry Commission

- Environmental Protection Agency (EPA) permit
- Environmental certificate issued by EPA
- Environmental Management Plan
- Environmental management plan approved by EPA

4.1.4. Sources of information

Government sources

- Environmental Protection Agency Ghana: <http://www.epa.gov.gh>

Non-Government sources

- Anane, M., 2003. Implementing Agenda 21: Religion and Conservation in Ghana. New York: United Nations Non-Governmental Liaison Service.
- Asare, R., Afari-Sefa, V., Osei-Owusu, Y. and Pabi, O., 2014. Cocoa agroforestry for increasing forest connectivity in a fragmented landscape in Ghana. *Agroforestry systems*, 88(6), pp.1143-1156
- Corbin, A. 2008. Sacred Groves of Ghana. Sacred Land Film Project. <http://www.sacredland.org/sacred-groves-of-ghana/>
- Doreo Partners and Proforest. 2012. Reducing Cocoa and Palm Oil Expansion into Ghanaian Forests: Analysis of Implementation and Financing Gaps. Commissioned by The Prince's Rainforests Project. 7 June 2012. [http://pcfisu.org/wp-content/uploads/pdfs/Reducing Cocoa and Palm Oil Expansion into Ghanaian Forests A nalysis Implementation and Financing Gaps.pdf](http://pcfisu.org/wp-content/uploads/pdfs/Reducing_Cocoa_and_Palm_Oil_Expansion_into_Ghanaian_Forests_Analysis_Implementation_and_Financing_Gaps.pdf)
- Dorm-Adzobu, C., Ampadu-Agyei, O., & Veit, P. G. 1991. Religious beliefs and environmental protection: the Malshegu sacred grove in northern Ghana (Vol. 4): Acts Press.
- Ghana News Agency. 2010. Illegal cocoa farms destroyed in Krokosua Forest Reserve. <http://www.ghananewsagency.org/human-interest/illegal-cocoa-farms-destroyed-in-krokosua-forest-reserve-23375>
- GhanaWeb. 2016. Gov't proposes Oil Palm Development Agency. <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/Gov-t-proposes-Oil-Palm-Development-Agency-422083>
- Modern Ghana. 2009. Forest commission wins case against Sefwi farmers but... <https://www.modernghana.com/news/243722/forest-commission-wins-case-against-sefwi-farmers-but.html>
- Noponen, M.R.A., Mensah, C.D.B., Schroth, G. & Hayward, J. 2014. A landscape approach to climate-smart agriculture in Ghana. *ETFRN News* 56: November 2014. URL: <http://www.rainforest-alliance.org/sites/default/files/2016-08/A-landscape-approach-to-climate-smart-agriculture-in-Ghana.pdf>
- Pouliot, M., Treue, T., Obiri, B.D. and Ouedraogo, B., 2012. Deforestation and the limited contribution of forests to rural livelihoods in West Africa: Evidence from Burkina Faso and Ghana. *Ambio*, 41(7), pp.738-750.
- Pulse. 2015. Eight Farmers arrested for farming in forest reserve. <http://pulse.com.gh/news/caught-red-handed-eight-farmers-arrested-for-farming-in-forest-reserve-id4107979.html>

- The Forestry Commission Ghana. 2010. Readiness Preparation Proposal Ghana. http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Jan2011/Revised_Ghana_R-PP_2_Dec-2010.pdf
- The REDD Desk. 2016. Ghana. <http://theredddesk.org/countries/ghana/statistics>
- Vijay V, Pimm SL, Jenkins CN, Smith SJ. (2016). The Impacts of Oil Palm on Recent Deforestation and Biodiversity Loss. PLoS ONE 11(7)

4.1.5. Risk determination

Overview of Legal Requirements

Ghana's oil palm belt is in the country's High Forest Zone (HFZ) and therefore this assessment focusses on the risk that oil palm farms have replaced natural forests. Ghana's forests are classified into (i) Forest reserve (FR) (1.63 million hectares of gazetted permanent forest estates which includes permanently protected areas (national parks, globally significant biodiversity areas of 352,500ha), (ii) Off-forest reserve (OFR) (primarily farmlands, where production of crops (including oil palm) is the main activity, as well as patches of forests on non-gazetted lands), (iii) Plantations (estimated at 250,000ha) which are found in both FRs and OFRs, and (iv) Submerged forest (SF), which are covered by water.

Agriculture is not allowed in the forest reserves, effectively making conversion of/within them illegal. There are a number of admitted farms (mainly cocoa) and settlements within some of the forest reserves in Ghana, but these farms and settlements are documented and monitored to prevent further expansion. The lands in the off-forest reserve areas are primarily farmlands, including oil palm farms. Here, farmers (including oil palm farmers) are allowed to cut down trees or forest to farm. The farmers are required to obtain Salvage permits from the Forestry Commission (Act 547, Sections 18G; LI 1649 Section 38) before they can cut down the trees. Salvage permits are issued to salvage trees from areas of land undergoing development such as road construction, expansion of human settlement or cultivation of farms. An environmental permit from the Environmental Protection Agency is required for clearing land to establish an estate (which is greater than 40 hectares). The Forest Protection Decree of 1974 (N.R.C.D. 234) [Section 12] allows the Minister to declare a farmland which is wholly or mainly comprised of standing trees or timber as a protected area to prevent the waste of forest resources.

Description of Risk

There is a risk of deforestation due to converting forest to palm oil farms and that companies may not obtain the required environmental permit.

- The annual deforestation rate for Ghana is often stated to be around 2% (Pouliot et al. 2012, The Redd Desk, 2016). Ghana's REDD Readiness Proposal claims that the most important driver of deforestation is agricultural expansion (The Forestry Commission Ghana, 2010), and much of this is said to have been due to the dependency of the traditional farming system on extensive farming practices to increase production (Doreo Partners and Proforest 2012).
- The real or potential role that the establishment of oil palm farms plays or could play in deforestation is not completely clear due to the focus on the greater role that cocoa, or agriculture in general, has played, and conflicting reports specific to palm oil.
- Cocoa has been the major driver of land use change in Ghana's high forest zone (Lawson et al., 2014; Noponen et al., 2014). Oil palm production (and mining) also poses a threat, but at a much smaller scale (Noponen et al., 2014). The available evidence shows that there has been illegal farming (mainly cocoa) in some forest reserves in the High Forest Zone of Ghana since 2005, while there is no mention of this taking place for oil palm establishment.

- In most of these cases, the Forest Services Division of the Forestry Commission has destroyed the cocoa farms, and prevented the establishment of fresh farms and expansion of admitted farms. For example, the FSD monitoring team, made up of military personnel and forestry officials, has destroyed about 1000 hectares of cocoa and other crops illegally cultivated inside the Krokosua forest reserve at Juaboso in the Western Region (Ghana News Agency, 2010).
- Due to the protection afforded to forest reserves (see also 3.2 Protected areas and species), it may be considered that there is low risk of conversion to palm oil in these areas. That leaves potential risk outside of forest reserves where oil palm is grown.
- The occurrence of conversion has said to be highest in off-reserve areas (Doreo Partners and Proforest, 2012). The available literature does not contain reports of specific instances of forests being cleared for oil palm, however it is referred to as a threat.
- There is the aforementioned report by Noponen et al., which stated that oil palm is a threat to forests in Ghana's Western Region, and Doreo Partners and Proforest (2012) have stated that "the expansion of Ghana's palm oil sector is recognized as one of the key drivers of deforestation in the country".
- Unfortunately, neither study cites other studies or data in making these statements to quantify the problem. A 2016 study by Vijay et al. calculated (based on a 3.9% sample of the oil palm planted area in the country, assumed to represent the whole country) that from 1989-2013 only 0.4% of the 63.9% increase in area planted with oil palm was from conversion, which may indicate low risk that oil palm establishment is responsible for conversion of forest.
- In addition, the Vijay et al. study also estimated the percentage of forest area vulnerable to oil palm expansion, based on mapping of area suitable for establishment now and in future, and area of forest in the areas suitable for oil palm. The value calculated for Ghana was between 5 and 10%, which was one of the lowest for all of the 20 palm oil producing countries studied. The authors remarked that all countries with low percentage of vulnerable forest had low deforestation rates, likely a consequence of prior deforestation. A separate issue is whether the deforestation has occurred since 2005. Analysis of time-series data on the Global Forest Watch map shows that there has been considerable forest loss since that year.
- Assessing the risk of conversion is made difficult by a lack of data, but while the sole study with data indicates that a low level of deforestation has occurred due to oil palm establishment, this study was only based on a small percentage of the total oil palm area in Ghana. The mentions of oil palm as a threat to forests in the country, Ghana's high deforestation rate, and plans to grow the palm oil sector means that there is still an elevated risk that conversion is taking place.
- Furthermore, the only legal safeguard, in the form of an environmental permit, is only required for areas of more than 40 ha, and there is a risk that even where it is required, companies may not obtain one (see section 3.1). It is therefore evaluated that there is an elevated risk of oil palm farms being established on land that is converted from natural forest.

Risk conclusion

Elevated risk

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.

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.

4.2.1. Applicable laws and regulations

- Control and Prevention of Bushfires Act, 1990 (PNDCL 229)
- Ghana National Fire Service Act 1997 (Act 537)

4.2.2. Legal authority

- Director of Agricultural Extension Services
- or
- Director of Animal Health and Production Department

4.2.3. Legally required documents or records

- n/a

4.2.4. Sources of information

- Agyarko T. 2008. Forestry Outlook Study for Africa (FOSA), Ghana, Ministry of Lands and Forestry.
- Amissah, L., Kyereh, B. and Agyeman, V.K., 2010. Wildfire incidence and management in the forest transition zone of Ghana: farmers' perspectives. Ghana Journal of Forestry, 26(1).
- Appiah, M., Damnyag, L., Blay, D. and Pappinen, A., 2010. Forest and agroecosystem fire management in Ghana. Mitigation and adaptation strategies for global change, 15(6), pp.551-570.

- Control and Prevention of Bushfires Act, 1990 (PNDCL 229): <http://faolex.fao.org/docs/pdf/gha40958.pdf>
- Graphic online. 2015. National Biosafety Authority Board of Directors inaugurated <http://www.graphic.com.gh/news/general-news/national-biosafety-authority-board-of-directors-inaugurated.html>
- Hoogenbosch, L. 2010. Forest plantations and livelihoods in Ghana's High Forest Zone. University of Amsterdam
- National Fire Service Regulations, 2003 (LI 1725): [http://d1020125.u42.pws-servers.com/UploadFiles/Publications/National%20Fire%20Service%20Regulation,%202003%20\(L.I%201725\)090407134004.pdf](http://d1020125.u42.pws-servers.com/UploadFiles/Publications/National%20Fire%20Service%20Regulation,%202003%20(L.I%201725)090407134004.pdf)
- Ministry of lands, forestry and mines. 2006. National Wildfire Management Policy: <http://www.fire.uni-freiburg.de/intro/2015/update-1054/Ghana-Wildfire-Policy-2006.pdf>
- US Department of Agriculture. 2006. Wildfire Management Project in the Forest Transitional Zone: Identification of Fire Engines, Hand Tools and Fire Lookout Towers. https://rmportal.net/library/content/usda-forest-service/africa/Ghana_Fire_management.pdf/view

4.2.5. Risk determination

Overview of Legal Requirements

The Control and Prevention of Bushfires Act, 1990 (PNDCL 229) prohibits the ignition of bushfires for purposes other than those contained in the Act. It is lawful to use burning as a means of farmland preparation in Ghana – Section 4 (1) of the Act provides that any person authorized by the Director of Agricultural Extension Services or the Director of Animal Health and Production Department may set fire to a specified area other than a conservation area for range management or other agricultural purpose. Section 4 (2) provides that any fire set by Section 4 (1) shall be controlled and confined to the specified area and shall not exceed the purpose for which the fire is permitted.

Section 3 of the Ghana National Fire Service Act 1997 (Act 537) provides that the objective of the Service is to prevent and manage undesired fire. Section 4 provides that for achieving its objective, the Service shall;

- organize public fire education programmes to -
 - create and sustain awareness of the hazards of fire; and
 - heighten the role of the individual in the prevention of fire;
- provide technical advice for building plans in respect of machinery and structural layouts to facilitate escape from fire, rescue operations and fire management;
- inspect and offer technical advice on fire extinguishers;
- co-ordinate and advise on the training of personnel in firefighting departments of institutions in the country;
- train and organize fire volunteer squads at community level;
- offer rescue and evacuation services to those trapped by fire or in other emergency situations, and
- Undertake any other function incidental to the objective of the Service.

Description of risk

Fire is an important driver of forest degradation in Ghana, and has been described as the greatest threat to the long-term survival of half the forest in Ghana (Agyarko, 2008;

Hoogenbosch, 2010). The causes of bush fires are both intentional and unintentional (Agyarko, 2008). Forests are intentionally burnt for the purpose reducing the risk of intense fires in the late summer, while unintentional fires are said to result from activities of hunters who may fail to extinguish campfires. Separately, Appiah et al (2010) have reported that slash-and-burn land preparation is the main cause of wildfires, with hunting-related fires in second place.

Fire is a commonly used in land preparation in the oil palm growing areas in Ghana (Agyarko, 2008 and Appiah et al., 2010). Even though the use of fire for preparing farmland is legal, it can spread to adjoining lands and result in bushfires if not properly controlled. However, palm oil is not a publicized source of fires that spread and cause damage to ecosystems. However, controlled burning is used to prevent the fire from spreading to nearby farms and forests, and burning of farmlands is not a major cause of bushfires in Ghana (Agyarko, 2008). Studying perceptions of farmers on farming-related wildfire incidences, specific activities in farming associated with incidence of wildfires, and coping measures being used by farmers to manage wildfires, Amisah et al. (2010) found that contrarily to the popular belief that fire is used irresponsibly by farmers, farmers have adequate knowledge of causes of agricultural-related fires and have developed strategies to cope with them. Furthermore, the cultivation of tree crops was said to carry the lowest fire risk, due to the timing of the burning carried out for tree crops (during wetter periods).

The Agricultural Extension Service of the Ministry of Food and Agriculture provides training to farmers on control of fire and use of other alternatives in farm establishment than fire; among other initiatives with other state agencies. This has been effective in ensuring that farmland preparation does not spread to other areas.

Risk conclusion

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 (Management of Biotechnology) Regulations, 2007 (LI 1887)
- Biosafety Act, 2011 (Act 831) The primary objectives of the Biosafety Act are to ensure an adequate level of protection in the field of safe development transfer, handling and use of GMOs resulting from biotechnology that may have an adverse effect on health and the environment, and to establish a transparent and predictable process to review and make decisions on GMOs. The Act does not apply that are pharmaceuticals for human use. The law, in effect, allows for the use of GMOs for contained or confined activities, introduction into the environment, and placing on the Ghanaian market. The Biosafety Act 2011 (Act 831) has established the National Biosafety Authority (NBA) to oversee the regulation of modern biotechnology in Ghana; which is in line with Ghana's obligation under the Cartagena Protocol on Biosafety.

5.1.2. Legal authority

- National Biosafety Committee (NBC)
- National Biosafety Authority (NBA)
- Technical Advisory Committee (TAC)
- Environmental Protection Agency (EPA)

5.1.3. Legally required documents or records

The Biosafety Act, 2011, Act 831, stipulates that the commencement of all activities relating to GMOs requires prior approval by the National Biosafety Authority (NBA). The NBA acts as the national focal point responsible for liaising with any other agency or international organizations concerned with biotechnology and biosafety. The NBA is responsible for receiving and deciding on the following applications under and in conformity with Act 831;

1. Application for contained or confined use
2. Application for introduction into the environment
3. Application to import or place on the market
4. Application to export
5. Genetically modified organisms in transit

5.1.4. Sources of information

- African Agricultural Technology Foundation. 2015. CSIR Harvests Fourth Batch Of Genetically Modified Rice. <http://hybrid-rice.aatf-africa.org/news/media/csir-harvests-fourth-batch-genetically-modified-rice>
- Domfeh, K.A. 2015. Ghanaian scientists edge up GM rice trials. Joy Online. 24 January 2015. <http://www.myjoyonline.com/business/2015/january-24th/ghanaian-scientists-edge-up-gm-rice-trials.php>
- Febiri, A.K. 2013. Ghana begins testing for GM cotton production. GhanaWeb. 23 September 2013. <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=286633>
- Food Sovereignty Ghana. 2014. Parliament Beats a Retreat on Plant Breeders' Bill! Food Sovereignty Ghana. 27 November 2014. <http://foodsovereigntyghana.org/parliament-beats-a-retreat-on-plant-breeders-bill/>
- Food Sovereignty Ghana. 2016. The Protection of Farmers' Rights and Food Sovereignty in Ghana. Food Sovereignty Ghana. <http://foodsovereigntyghana.org/the-protection-of-farmers-rights-and-food-sovereignty-in-ghana/>
- Food and Drugs Authority Ghana. 2016. Frequently Asked Questions on Biosafety of Genetically Modified (Engineered) Crops. Food and Drugs Authority Ghana. http://www.fdaghana.gov.gh/index.php?option=com_content&view=article&id=32&Itemid=42
- Ghana Community Network Services Limited. 2016. Plant Protection And Regulatory Services. Ghana Community Network Services Limited. <https://emda.gcnetghana.com/mda/TraderController.do?where99=PPRS>
- Mensah, M. 2015. National Biosafety Authority Board of Directors inaugurated. Graphic Online, 19 February 2015. <http://www.graphic.com.gh/news/general-news/38890-national-biosafety-authority-board-of-directors-inaugurated.html#sthash.HDziFrPR.dpuf>

5.1.5. Risk determination

Overview of legal requirements

LI 1887 established the National Biosafety Committee (NBC) as the national focal point on biosafety and responsible body for liaising with the Secretariat of the Convention on Biological Diversity for the administrative functions required under the Cartagena Protocol on Biosafety. The NBC's role included certification of institutional biosafety committees to undertake laboratory and field trials and monitoring functions of GMO activities, and certifies high-level laboratories, and green and animal houses intended for high-risk GMO work. Applications considered by the NBC included (i) import of GMOs, (ii) contained use and confined field trials, and (iii) GMOs in transit.

The NBC's role has been taken over by the National Biosafety Authority (NBA), which was established by the Biosafety Act 2011 (Act 831) to oversee the regulation of modern biotechnology in Ghana, in line with Ghana's obligation under the Cartagena Protocol on Biosafety. The NBA is responsible for receiving and deciding on the following applications under and in conformity with Act 831:

1. Application for contained or confined use

2. Application for introduction into the environment
3. Application to import or place on the market
4. Application to export
5. Genetically modified organisms in transit

The NBA has a thirteen-member Board of Directors to oversee its activities. It also has a technical advisory committee (TAC) comprised by representatives of several regulatory agencies like the Food and Drugs Authority, Environmental Protection Agency, Plant Protection and Regulatory Services Directorate, Customs and Excise Division, Veterinary Services Directorate, and Atomic Energy Commission, to advise on matters concerning or related to GMOs and carries out risk assessments and audits of applications at the request of the Board of the NBA. Three confined field trials of rice, cowpea and cotton are currently being evaluated in Ghana in compliance with the Biosafety Act 2011, Act 831.

Ghana is also seeking to pass a Plant Breeders Bill aimed at establishing a legal framework to protect the rights of breeders of new varieties of plants or plant groupings and to promote the breeding of new varieties of plants aimed at improving the quantity, quality and cost of food, fuel, fibre and raw materials for industry. The Bill will promote the development of new varieties adapted to the environment and specific needs of the country and the increase of agricultural productivity in the face of scarcity of arable land and other resources. Passage of this Bill has been delayed due to concerns raised by NGOs, civil society organizations, and farmer associations. According to these groups, the Bill neglects farmers' rights (i.e. to use, sell, save and exchange farm-saved seeds); and does not preserve Ghana's sovereign independence and the DNA of Ghana's traditional seeds from biopiracy.

Risk Description

The NBC has given approval for confined field trials of rice for mass production, which are being conducted by the Crops Research Institute of the Council for Scientific and Industrial Research at Nobewam in the Ashanti Region of Ghana. Three confined field trials of rice, cowpea and cotton are currently being evaluated in Ghana in compliance with the Biosafety Act 2011, Act 831, which regulates GMOs. While there is no ban on the commercial use of GMO palm oil or crops in Ghana, there is no evidence of any trials of palm oil and farms in Ghana have not been planted with genetically modified palm oil.

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 Source Types in Ghana** identifies the different types of plantations in **Ghana** which supply palm oil to the market.

'Palm oil source type' is a term used to describe the different types of palm oil plantations in the country, to allow a more detailed specification of risk. The Palm Oil Source 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 SOURCE TYPES IN GHANA			
Plantation classification	Ownership	Management regime	Description of source types
Estates (\geq 40 ha)	Public/private	Commercial estates	Monoculture palm oil plantations (usually at least 40 hectares in size) owned and managed by companies which are usually integrated with a processing mill. Estates account for 12% of the palm oil production area.
Smallholdings (<40 ha)	Private	Commercial - Scheme Smallholders	Palm oil farm supervised or managed by estate or scheme mill managers. Scheme Smallholders are structurally bound by contract, credit agreement or planning to a mill. They are supervised or directly managed by the managers of the mill, estate or scheme to which they are bound.
	Private	Commercial - Outgrowers	Palm oil farms which are located outside of the farmer's own nucleus estate or are farm tenant on a third party's land. Outgrowers may be structurally bound by contract, credit agreement or planning to a mill. They are often organised, supervised or directly managed by the managers of the mill or estate to which they are bound.
	Private	Commercial and subsistence - Independent Smallholders	Palm oil farms that are self-organised, managed and financed by independent farmers. They are not contractually bound to any organisation.

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.



NEPCon (Nature Economy and People Connected) is an international, non-profit organisation that builds commitment and capacity for mainstreaming sustainability. Together with our partners, we foster solutions for safeguarding our natural resources and protecting our climate.

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