





Centralized National Risk Assessment for Thailand

FSC-CNRA-TH V1-0 EN

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FSC's vision is that the world's forests meet the social, ecological, and economic rights and needs of the present generation without compromising those of future generations.

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Risk assessments that have been finalized for Thailand

Controlled Wood categories		Risk assessment completed?
1	Illegally harvested wood	YES
2	Wood harvested in violation of traditional and human rights	YES
3	Wood from forests where high conservation values are threatened by management activities	YES
4	Wood from forests being converted to plantations or non-forest use	YES
5	Wood from forests in which genetically modified trees are planted	YES

Risk designations in finalized risk assessments for Thailand

	Risk designations in finalized risk assessments for Thailand			
Indicator	Risk designation (including functional scale when relevant)			
	Controlled wood category 1: Illegally harvested wood			
1.1	Specified risk			
1.2	<u>Low risk</u>			
1.3	Specified risk for public plantations in forest reserves. Others N/A.			
1.4	Specified risk			
1.5	<u>Low risk</u>			
1.6	<u>Low risk</u>			
1.7	<u>Low risk</u>			
1.8	<u>N/A</u>			
1.9	Specified risk			
1.10	<u>N/A</u>			
1.11	Specified risk			
1.12	Specified risk			
1.13	<u>N/A</u>			
1.14	<u>N/A</u>			
1.15	<u>N/A</u>			
1.16	Specified risk for restricted species, NA for unrestricted species			
1.17	Specified risk			
1.18	<u></u> <u>N/A</u>			
1.19	Specified risk			
1.20	Specified risk			
1.21	<u>N/A</u>			
Controlled wood category 2: Wood harvested in violation of traditional and human				
rights				
2.1	Low risk			
2.2	Specified risk			
2.3	Specified risk			
Controlled	wood category 3: Wood from forests where high conservation values			
are threate	ned by management activities			
3.0	<u>Low risk</u>			
3.1	Specified risk			
3.2	Specified risk			
3.3	Specified risk			
3.4	Specified risk			
3.5	Specified risk			
3.6	Low risk			
Controlled wood category 4: Wood from forests being converted to plantations or				
non-forest use				
4.1	Specified risk			
Controlled wood category 5: Wood from forests in which genetically modified trees				
	are planted			
5.1	<u>Low risk</u>			
5.1	<u>Low risk</u>			

Risk assessments

Controlled wood category 1: Illegally harvested wood

Overview

Key bullet points

- Thailand's natural forests have banned concession management since 1989. The main source of timber is from national plantations and imported wood. Native forests cannot be harvested.
- Forests are present in many different classifications, as can be found in the source table below. In 2017 there was 16 345 016 ha (16,3 million) of forest, resulting in a 31,5% forests cover. This measurement was done by satellite images.
- Tree species are effectively divided into:
 - Restricted species (which comprise almost all of the commercial species native to Thailand) and whose management and regulation is covered by the Forest Act 1941.
 - Unrestricted species. They represent the majority of trees grown commercially by farmers, smallholders and larger commercial ventures. The unrestricted (unregulated) species are dominated by fir, rubberwood, eucalyptus and acacia. Rubberwood is grown as a monoculture or as a mixture with some agricultural crops or as a mixed tree cropping system: rubberwood is a major by-product and used extensively by the domestic fiberboard, pulp and paper manufacturers. Unrestricted species are commonly regarded as inherently low risk because they cannot be confused with native species. But unrestricted species (especially from private land) have no requirement to maintain harvest and transport documentation. Consequently, establishing an origin for the timber and a reliable chain of custody is currently very difficult, and in some cases not possible. This means that the risk related to these species is high.
- There are two main types of forests in Thailand: Evergreen Forest and Deciduous Forest:

Evergreen forest. The Evergreen Forest is subdivided into the Tropical Evergreen Forest, the Pine Forest, the Mangrove Forest and the Beach Forest.

Tropical evergreen forest. The Tropical Evergreen Forest is found all over the moist parts of the country. This type of forest is also subdivided into the Tropical Rain Forest, the Semi-evergreen Forest and the Hill Evergreen Forest.

- The tropical rain forest is characterized by a very rich flora diversification and very dense undergrowth. This type of forest is commonly found in the Southern and the Eastern regions where rainfall is above 2,000 millimetres. It is also found along rivers and/or in valleys in other parts of the country. The predominant species (the top storey species) are, for example, *Dipterocarpus spp*, *Hopea spp*, *Lagerstroemia spp*, and *Shorea spp*, whereas the lower storey species are bamboos, palms and rattans.
- The semi-evergreen forest is scattered all over the country where the rainfall is between 1,000-2,000 millimetres. The predominant species are *Dipterocarpus spp, Hopea spp, Diospyros spp, Afzelia spp, Terminalia spp*, and *Artocarpus spp*. The main undergrowth species consist of bamboos and rattan.

• The hill evergreen forest is found on the highland parts (above 1,000 metres from the sea level) of the country where the climatic condition is the Humid Subtropical type. The presence of mosses and lichens on trees and rocks is the indicator of this forest type. The predominant species are oaks and chestnuts, or *Castanopsis spp*, *Quercus spp*, and *Lithocarpus spp*.

Pine forest. There are two species of tropical pines in Thailand. They are *Pinus merkusii* locally called Son Song Bi (the two-needle pine) and *Pinus kesiya* locally called Son Sam Bi (the three-needle pine). *Pinus merkusii* is found in the Northern and the western part of the Central regions, where the soil is poor gravel, lateritic and podzolic. *Pinus kesiya* is found only on the highlands of the Northern and North-eastern regions.

Mangrove and beach forests. Mangrove and Beach forests occur along the coastal areas of the Eastern, Central and Southern regions. The Mangrove forest is scattered along the estuaries of rivers and muddy seashores where the soil is muddy and influenced the tide. The predominant species are *Rhizophora spp, Xylocarpus spp, Avecennia spp, Bruguiers spp, Nypa spp.* The Beach Forest occurs along the sandy coastal plains especially in the eastern coast of the Southern regions. The main species in this type of forest are *Diospyros spp, Croton spp, Lagerstroemia spp* and *Casuarina spp.*

<u>Deciduous forest</u>. The Deciduous Forest is commonly found throughout the country. It is broadly subdivided according to the species composition into the Mixed Deciduous Forest (with and without teak) and the Dry Dipterocarp Forest.

Mixed deciduous forest. The Mixed Deciduous Forest is among the most commercially valuable forest of Thailand. In the Northern Region, this type of Forest is named as the Teak (*Tectona grandis*), *Xylia kerrii*, *Pterocarpus macrocarpus*, *Afzelia xylocarpus* and *Dalbergia spp* (rose wood).

Dry dipterocarp forest. The Dry Dipterocarp Forest is commonly found in the dry area (rainfall below 1,000 millimetres) where the soil condition is infertile and sandy or gravelly lateritic soil. The predominant species are mainly in the family of *Dipterocarpaceae* such as *Dipterocarpus tuberculatus*, *Dipterocarpus obtusifolius*, *Shorea obtusa*, *Shorea siamensis*, with the presence of other species such as *Dalbergia spp*, *Lagerstroemia spp*, *Terminalia spp*.

• Forest landownership. In Thailand, land is classified into private land and public or government land. The Land Code (1954) defines different types of documents depending on whether the owner can claim occupancy, utilization, or legal possession of the land. Ownership can be separated from use rights. Usufruct certificates have been given to households that were living and continue to live in National Forest Reserves before those reserves were demarcated. All natural forests are owned by the public. Around 2.7 million ha is designated to be National Forest under the control of the Royal Forest Department. As logging is banned, no part of the forest estate is designated as production forest. Some public forests are co-managed as 'community forests'. The forest management enterprise (FME) of Forest Industry Organization (FIO) consists of 245 forest plantations covering 185 280 ha (2016 annual report FIO, lit 25) distributes all over Thailand. Most of the plantations in the north are Teak, but there is also Scot pine. The plantations in the northeast are primarily Eucalyptus, while those in the south are Rubberwood trees for parawood. Approximately 50% of the plantations are teak, 20% eucalyptus, 9% rubberwood and 21% various mixed species. Private owners can be found in the plantation sector only. In

- general, it can be assumed that 84% of the forest is owned by public organisations and 16% by private people (lit 6). No further data exists about land tenure in Thailand, and such is also not reported in annual reports.
- Thailand is currently undergoing a series of activities to establish certification schemes for timber (FSC and PEFC) and FSC national standards process is kicked off in July 2018 with the prospect of delivering final draft to FSC International in May 2020.
- Thailand is also in the process of undertaking a partnership with the European Union to develop FLEGT licensing system. It has just completed a Draft Legality Definition. Details of the FLEGT activities and the relevant reference material published has been used as source material for this draft of the Risk Assessment. Material is available through the Thai-European FLEGT Secretariat Office (TEFSO).
- In 2016 a Risk Assessment for Thailand was undertaken by NEPCON (an environmental consultancy and certification body) that works closely with FSC: NEPCON also maintains its own Legality verification scheme. The NEPCON Risk Assessment as a source for this draft risk assessment. The NEPCON Risk Assessment is very comprehensive. Wherever possible this Risk Assessment attempts to add new material rather than taking the NEPCON information and simply re-wording it and presenting it again. In one case (section 1.17 Transport and Trade) the NEPCON text has simply been copied and pasted as this represents the most complete (and appropriately presented) information currently available on the Overview. However, the section on risks has been substantially modified, although the risk conclusions remain the same.
- Another key information source has been the EU website on risks and due <u>diligence by country</u>.
- Information has also come from literature searches of reports, legislation (such as the long list of Legislation produced for the draft Legality Definition of FLEGT), news items, and internet searches. A limited number of discussions were also undertaken with local stakeholders and international consultants.
- The normative framework FSC STD 60 002a also list sources, which are all used throughout the CNRA.
- Finally, it is important to note that Thailand is undergoing significant legislative changes under the current government. Importantly land tenure, forest and timber resources are the focus of considerable attention and it is likely that over the next 3-4 years the legislative framework will be significantly altered. This will have a profound impact on the risk profiles or many of the subjects covered in the current Risk Assessment.

For a much more detailed overview of the forest sector in Thailand see category 3 in this CNRA.

Sources of legal timber in Thailand

In 2017 there was 16 345 016 ha (16,3 million) of forest, resulting in a 31,5% forests cover. This measurement was done by satellite images. From this total around 10 854 494 hectares are protected (zone C below) and 3 986 000 hectares are plantations. The remaining falls into zones E (Economic forests) and zone A (Forest suitable for agriculture, that are in fact degraded forests).

Forest classification type		Permit/license type	Main license requirements (forest management plan, harvest plan or similar?)	Clarification
State: Conservation forest areas (Zone C), fully protected park where no harvesting is allowed. Thus, in principle no wood can enter the market.	Legally conservation area and cabinet resolution	Harvesting permit or ministerial authorization.	Because of logging ban no FMP's are required.	Category A restricted species require an Royal Forest Department (RFD)-issued permit, while harvesting of 'Category B restricted species' requires ministerial authorization.
	Forest reserves	Harvesting permit or ministerial authorization.	Nothing.	See above
	Plantations in Forest reserves	Harvesting permit	Annual Operating Plan and annual Plantation Management Report.	
State: Economic forest areas (Zone E)	Natural forest development areas	Harvesting permit or ministerial authorization.	Nothing.	See above
	Forest resources development area. These are governmental plantations outside Zone C areas.	Harvesting permit	Nothing.	
	Community forestry development areas	Harvesting permit or ministerial authorization.	Nothing.	See above
	Other natural resources development areas	Harvesting permit or ministerial authorization.	Nothing.	See above
State: Forest area that suitable for agriculture	Forest areas that are capable of soil suitable for farming	Harvesting permit or ministerial authorization.	Nothing.	See above
(Zone A)	Suitable area for agriculture according to the cabinet resolution on the definition of watershed class and the land use classification in mangrove areas	Harvesting permit or ministerial authorization.	Nothing.	See above

Private Plantations	Farm land	Only in case of 3 species a	No requirements.
		Harvesting permit is needed. For	Special permits need to
		the rest nothing is required.	come from RFD.

Risk assessment

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
		Legal rights to harve	st
1.1 Land tenure and management rights	Applicable laws and regulations Forest Act B.E 2484 (1941) various sections including section 54 http://thailaws.com/law/t_laws/tlaw0108.pdf (https://new.forest.go.th/economy/wp- content/uploads/sites/86/2016/08/1.pdf) National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (2015), Section 16 bis, 16 tres, 20 (http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/prb 2.pdf) www2.austlii.edu.au/~graham/AsianLII//National %20Reserve%20Forest%20Act.pdf Land Code Promulgating Act, B.E. 2497 (1954) https://www.thailandlawonline.com/thai-real-estate-law/thai-land-law-land-code-act Land Code Application Act B.E. 2497 (1954) (http://web.krisdika.go.th/data/law/law4/%BB02/%BB02-20-9999-update.pdf) Amended Act related to Land Code (11th Edition) B.E. 2551 (2008) (http://library2.parliament.go.th/giventake/content_I	NEPCON. Risk Assessment, 2017 https://www.nepcon.org /sites/default/files/librar y/2017-06/NEPCon- TIMBER-Thailand- Risk-Assessment-EN- V1.pdf Giné, Xavier. Cultivate or Rent Out? Land Security in Rural Thailand. World Bank Policy Research Working Paper 3734, October 2005. http://documents.world bank.org/curated/en/87 3971468117277143/pd f/wps3734.pdf	Overview of Legal Requirements Designation of Land (below section is based on NEPCON 2017). In Thailand, land is classified into private land and public land. The Forest Act B.E. 2484 (1941) states that forest estates and forest resources are owned by the State. In reality, a 'forest' recognized under the law may not be a natural forest, as Section 4.1 of the Forest Act B.E. 2484 (1941) defines 'forest' as land that has not been legally acquired by any person under the Land Code B.E. 2497 (1954). Furthermore, as the National Forest Reserves Act B.E. 2507 (1964) was passed, various areas around the country have been declared as forest reserves. Local communities were not required to approve the proposed demarcation. In the mid-1980s, it was estimated that a fifth of the land officially designated as forest reserve was permanently occupied and cultivated by farmers (Giné 2005). As such, the legal definition of forest expanded to cover the land demarcated on a map as forest reserve. The Land Code B.E. 2497 (1954) contains procedures for the issuance of documents recognizing title to land in non-forest areas and the maintenance of the land register. It defines different types of documents depending on whether the owner can claim occupancy, utilization, or legal possession of the land, e.g. full legal title (NS 4), Certificate of Use (NS 3) and "Exploitation Testimonial" (NS-K). A full legal title (NS 4) enables the owner to sell, transfer and legally mortgage the land. Both the NS -3 and NS 3K enable legal transfer by sale or will. There are other documents defined in the Code that support ownership. The NS-2 document is a "Pre-emptive Certificate" which authorizes temporary occupation of the land. It does not

aw/law060251-50.pdf)

Agricultural Land Reform Act B.E. 2518 (1975) Amended June 2017 by Order of the Head of the National Council for Peace and Order (NCPO) No. 31/2560 (2017) Re: the Utilisation of Agricultural Land under the Laws on Agricultural Land Reform for the Utmost Benefits on Farmers and Public Interests. Section 44

https://www.lexology.com/library/detail.aspx?g=f72af475-57f0-4cc5-9ad4-0ecd19159040

Plantation Act B.E. 2535 (1992) (Amendment B.E. 2558 (2015)), Section 4

(https://new.forest.go.th/economy/th/พระราชบัญญัติสว นป่า-พ-ศ-2535/)

(http://library2.parliament.go.th/giventake/content_n la2557/law44-260558-1.pdf)

National Park Act, B.E. 2504 (1961) http://www.thailawforum.com/database1/national-park-act.html

Allotment of Land for Living Act B.E. 2511 (1968), Section 23, 24 (http://e-

service.cpd.ao.th/elib/pdf file/3041 2511.pdf)

Government reports and assessments of compliance with related laws and regulations. Thai Parliament. Example of claim, 2018 (http://library2.parliament.go.th/giventake/content_law/law060251-50.pdf)

Agricultural Land Reform Office. Summary of illegal land claims, 2016

https://www.alro.go.th/alro_th/ewt_news.php?nid=1

FLEGT process and related dialogues have generated much useful information which is available through the EU FLEGT website and the TEFSO website, 2018(www.tefso.org)

Forest Legality Alliance. Thailand search on website. 2018. https://forestlegality.org

/search/node/thailand

Chatham House Illegal Logging portal. Indicators Country Report Card, 2018 https://www.illegallogging.info/regions/tha iland

Chatham House.
Article about illegal logging in Thailand, 2017
https://www.illegal-logging.info/content/no-let-
thailand%E2%80%99s-

relentless-violentsiamese-rosewoodallow legal transfer of the land except by inheritance and cannot be used as collateral. National forest reserves, protected areas and land reform areas are classified as public land.

In the 1980s, the Royal Forest Department (RFD) introduced a program to recognize the rights of farmers inside forests, with a "Usufruct License" (STK) that could be renewed if the land had been continuously cultivated. The STK certificate program ended in the 1990s when the degraded forests were transferred to the Agricultural Land Reform Office (ALRO), an agency established under the Agricultural Land Reform Act B.E. 2518 (1975), for redistribution of land for farming and residential uses. Legislation covering land tenure and management rights are reviewed below.

Private land:

Land with an official document recognized by the Land Code B.E. 2497 (1954) is not considered 'forest' under the Forest Act B.E. 2484 (1941). Timber on private land, whether naturally grown or planted, is considered private property of the owner and is not under the jurisdiction of forestry law. However, according to section 7 of the Forest Act B.E. 2484 (1941), teak (*Tectona grandis*), yang (*Dipterocarpus alatus*), and rosewood (*Dalbergia spp.*) are placed under nationwide restriction. A person is required to comply with sections 11-42 of the Act when it comes to harvesting, transporting, processing, or trading these species from private land. Essentially, this means a person can freely grow trees of any species on private land, but is required to obtain permission to harvest, remove, process, and trade these three restricted species.

Registered plantation under forest plantation act:

The Forest Plantation Act B.E. 2535 (1992) and the Forest Plantation Act (No. 2) B.E. 2558 (2015) allow private and state operators to register their plantations with the Royal Forest Department. To be eligible for registration, applicants must meet the species and landholding requirements. No plantation management plan is required. Successful applicants receive Plantation Certificate Sor Por 3. In terms of species requirements, under the Forest Plantation Act B.E. 2535 (1992), only plantations that were growing restricted species were allowed to register. From 2015, with the Forest Plantation Act (No. 2) B.E.2558(2015), the species requirement has changed; only plantations that grow one or more of the 58 timber species listed in the Annex are allowed to apply. In terms of landholding

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Agricultural Land Reform Office. Illegal action declaration, 2009

(https://www.alro.go.th/krabi/ewt_news.php?nid=15 3&filename=index)

Legal Authority

Agricultural Land Reform Office, Ministry of Agriculture and Cooperatives (https://www.alro.go.th)

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Department of Lands, Ministry of Interior (http://www.dol.go.th)

Department of Social Development and Welfare, Ministry of Social Development and Human Security

http://www.dsdw2016.dsdw.go.th

Department of National Parks, Wildlife and Plant Conservation (DNP) website http://portal.dnp.go.th/

Legally required documents or records Land title documents.

RFD templates for complying with the plantation act.

http://www.ratchakitcha.soc.go.th/DATA/PDF/2561/E/154/6.PDF

Registration of new plantations:

poaching

Chatham House. Study about illegal imported timber, 2014. https://indicators.chathamhouse.org/sites/files/reports/Lawson Thaila

nd SK India PP 2014

0%281%29 1.pdf

Interpol. LEAF project.
Website, 2018
http://www.interpol.int/
Crimeareas/Environmentalcrime/Projects/ProjectLEAF

FSC. Public summaries of FSC forest management certification reports, 2018 https://info.fsc.org/ requirements, the applicant must be in possession of a land document to demonstrate land ownership, possessory rights, occupancy rights, leasehold, plantation licence, or use rights. Plantation estates can be located on private land or public land, including in National Forest Reserve (NFR) areas. Section 4 of the Forest Plantation Act (No. 2) B.E. 2558 outlines the types of landholding eligible to register:

- a) Land with ownership title or a certificate for utilisation under the Land Code:
- b) Land with an official certificate that such land may be registered for ownership title or certificate for utilisation under the Land Code based on the fact that it is possessed and utilised under the Law on Land Consolidation for Agriculture or the Law on Land Allocation for Livelihood;
- c)Land within a land reform area under the Law on Land Reform for Agriculture. In this case, evidence of permission, hire or hire-purchase, transfer, or inheritance is required;
- d)Land which is permitted under the National Forest Reserves Act to be utilised and dwelt on, reforested, or perennial plant plantation in an improved area of a National Forest Reserve, or to be improved land, forest plantation, or perennial plant plantation in a degraded forest;
- e) Land permitted by forestry law to be licensed as forest plantation;
- f) Land used for forest plantation by a government agency, state enterprise, or other state agency.

The Royal Forest Department (RFD), under the Ministry of Natural Resources and Environment, is the legal authority responsible for enforcement of and compliance with these Acts. For plantations outside Bangkok, the RFD assigns local and regional offices of the Ministry of Natural Resources and Environment as competent authorities.

The government is in the process to formalize and digitalize plantation registration. That is good news because it forces all actors to comply with the laws and there is no space to manoeuvre around the regulations. The following is already in place:

There are now <u>RFD templates</u> and guidelines for local offices to follow the plantation act.

Registration of plantation can be done online. Any other type of land that not

http://nsw.forest.go.th/rfdforest/#

Online maps for registered plantations (under development):

http://forestinfo.forest.go.th/fCon_map.aspx

Online register of registered plantations: http://forestinfo.forest.go.th/fCon_Res.aspx listed in the 6 types of land eligible for registration cannot be registered.

After the registration, as mentioned in plantation act Section 7 Local officers must conduct on-site visit to inspect the compliance of location, land title type, area, existing trees on land, and the detailed information on the piece of land for plantation registration before issuing the Sor Por 3. This is to ensure that the only 6 types of land are accepted.

In the future the <u>map of registered plantations</u> will be available online but currently is still under development.

The <u>public data currently available online</u> is the area of registered plantation per province.

Licensed plantation in national forest reserve estate (NFR)

The government permits settlement and occupation in a national forest reserve estate (NFR), as well as forest or tree plantations to be established in degraded forest areas of the NFR. An ever-evolving series of legislation has outlined the criteria for plantation establishment, land occupation and management rights in NFRs. The latest amendment to the National Forest Reserves Act B.E. 2507 (1964), called the National Forest Reserves Act (No. 4) B.E. 2559 (2016), was passed in 2016. Discussion with RFD officials revealed that the subsidiary regulations are being updated (as of November 2016) to reflect the changes made in the amendment of the new Act. One of the relevant changes is in section 11 of the National Forest Reserves Act (No. 4) B.E. 2559 (2016), stipulating that a plantation estate exceeding 160 ha shall be authorized by the cabinet. Another change is the introduction of the "National Committee to Oversee Utilization in National Forest Reserves." under section 13/2. The national committee has the authority to determine the criteria and conditions for permission related to land use or settlement in a national forest reserve estate, and for permission related to the establishment of a forest or tree plantation in degraded forest area of the NFR.

Furthermore, a new committee at provincial level called a "Provincial Committee to Regulate and Conserve National Forest Reserves" is to be set up in every province where national forest reserves are situated. The provincial committee is to implement policy directives given by the RFD Director-General. In the Royal Forest Department Regulation on the

Permission to Establish Forest Plantation or Tree Plantation in National Forest Reserves B.E. 2548 (2005) by virtue of Section 20 of the National Forest Reserves (No. 3) B.E. 2528 (1985), a plantation licence (Por Sor 31 Plantation License) is obtained through the Royal Forest Department. The plantation size is limited to 320 ha per operator. A plantation operator applying for a permit over an area of degraded forest exceeding 16 ha is required to submit a project document including details of start time, objective, goal and costs. I n 1985, the National Forest Reserves Act B.E. 2507 (1964) was amended to add a provision concerning the grant of usufruct rights in degraded restricted forest. Section 6 granted temporary occupation rights on areas of up to 3.2 ha to a household living in degraded forest for a period of five years but for TEFSO (Thai-FLEGT no more than 30 years in total. With the permission of the RFD, a resident office); legal summary may establish a forest plantation or tree plantation of up to 5.6 ha per of 17 possible land titles, 2016 household. The household for a period of 10 year. http://tefso.org/downloa d/legality-definition-The criteria for determining when forest is degraded is outlined under clause doc-en/LD-Matrix-9 of the Royal Forest Department Regulation on the Permission to Establish Draft-29Feb2016-V2-Forest Plantation or Tree Plantation in National Forest Reserves B.E. 2548 final-draft-ENG 2.pdf (2005): a) The area is not a conservation forest classified as 'Watershed Classification 1A' according to the Cabinet Resolutions dated 28 May B.E. 2528, 21 October B.E. 2529, 12 July B.E. 2531, 7 May B.E. 2532, 19 May B.E. 2534 and 21 February B.E. 2538; b) The area is not in dispute with local communities and nearby communities, and the project must be approved by the local council or the elected Tambon Administration Organisation; c) The area meets the criteria of a 'degraded forest' outlined in clause 4 of the Regulation: d) All or part of the area is in National Forest Reserve and has little valuable vegetation left (valuable species determined by RFD), and is unlikely to regenerate by itself: e) The forest contains less than 20 two-metre shrubs or taller per rai (equivalent 0.16 ha); OR The forest contains less than eight trees with a diameter of between 50 and 100 centimetres per rai (measured at 130 cm

above the ground); OR The forest contains the equivalent of less than two trees with a diameter exceeding 100 centimetres per rai (measured at 130 cm above the ground): OR The forest has the flora listed in a special annex combined and a total of less than 16 trees or shrubs per rai. Licensed plantation in a forest or on public land outside national forest reserves: Under clause 5.5, 9, 12, 17, 23, 24 of the Ministerial Regulation on the Request and Permission to Utilize Forest Estate B.E. 2558 (2015) (RFD), a forest regeneration project or a forest plantation can be established in a forest or public land under a 30 year lease, with approval from the Royal Forest Department. A concise summary of land types and the related rights and obligations related to forestry and land use has been included as an annex of a recent FLEGT report. In summary: land tenure and management rights for public and private

lands.

Legislation also establishes types of ownership, tenure and use of private land through 2 principal pieces of legislation: The Land Code Promulgating Act and the Agricultural Reform Act. Amendments to these Acts have been made previously but more significant changes and amendments have been over the last 3 years - and are continuing to be introduced - by the new government through the National Council for Peace and Order (NCPO) which is also making changes to Thailand's fundamental constitution. Sections 30 and 44 of the Land Reform Act have been recently amended (2017) and extend the types of land use which leaseholders are permitted to adopt on state land leased from the Government.

The result is a complexity of land ownership and leasing systems from outright ownership with title deed (Chanote) to temporary occupation for short-term agricultural production (a range of Sor Por Kor leases).

In Thailand, the legality of forest industry depends on person status and right of land possession. There are two types of the rights of land, public and private, possession as follows:

Rights on public land are specified and granted through the 3 Acts principally related to forest use (Forest Act, National Reserved Forest Act

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and Plantation Act) plus the equivalent agricultural act (Agricultural Reform Act) as well as other regulations some of which have formal status (such as the Allotment of Land for Living) and some which are ad hoc or temporary and issued by the Regulating Agencies to cover local or short term situations. These offer a range of benefits (for instance the Certificates of Utilization which are issued for settlement schemes under Nor Kor 3 and for cooperative settlements under Kor Sor Nor 5) or rights of occupation (under Sor Tor Kor) which can complicate the issues of legality in relation to land use and forest products. Similarly, the rights to undertake agricultural activities under various tenure agreements (Sor Por Kor) have been stretched by leaseholders to cover long term tree crops, and this continues to cause confusion and problems. Where trees in plantations are registered and covered by the Plantation Act B.E. 2535 (1992) the legal obligations are clearer, but registration is often not adopted by the leaseholders or land users, even when trees are the crop selected by the occupier/owner. Rights on private land are in accordance with Land Code Application Act and its amendments. These are effectively divided into two types: right of land ownership and possessory right. Right of land ownership is a title deed (principally Chanote or Nor Sor 4) which are able to be purchased, sold, exchanged or given within such land. Possessory right is a right of land utilization without freely change or transfer of the right such as Nor Sor 3, pre-emptive certificate (Nor Sor 2), certificate of utilization (Nor Sor 5) and claim certification (Sor Kor 1). **Description of Risk** Risk 1: Documentation relates to land tenure. The risk is that the documentation (when available) may adequately

describe the ownership of the land but this does not automatically convey ownership (or legality) of any of the products derived from that land. This because some land titles could actually be possessory right (with private owners) or long-term leaseholders (and other types) within public lands. Such land title constructions might include restriction to ownership of products from these lands. The current system assumes that the products from the land are *de facto* the property of the owner or leaseholder of that land. But this may not be the case and the presentation of documents of land tenure may not ensure the legality of any product – especially the trees,

timber or products derived from the trees, such as oils, gums, resin or fuelwood/chips/pellets. Risk 2: Documentation related to land ownership is missing, incomplete or of variable reliability. Documentation related to land ownership and tenure is frequently missing. incorrect or not easily available. Where it is available it is usually available in Thai – unless it relates to land for property development by expatriates. The quality and completeness of the documentation tends to be related to the level of ownership. Chanote (equivalent to full title deed) requires the land to be surveyed by an authorized surveyor and mapped at an appropriate scale etc. Sor Por Kor leaseholds may have simple certificates issued by local provinces with no maps or details of extent and boundaries and may not be able to demonstrate ownership with sufficient evidence to support claims of legality. Risk 3: Temporary documentation or use rights. In cases where ownership is unproven or unprovable, temporary permits or documentation may be issued. For owners or occupiers such a document Transparency International, CPI index may be sufficient to permit them to continue occupying or farming the land: consequently, a more formal and structured proof of ownership is not 2017 considered necessary or pursued. Problems only arise when the crops are https://www.transparen cv.org/country/THA harvested or changed: in the case of forest crops this may mean that shortterm solutions may have persisted for a long time but remain unresolved. Corruption barometer Over time the temporary documents may be lost, but even if they survive these may be out of date or the authorizing officers moved on, so the figures: underlying issue may remain unresolved in law. https://www.transparen Even though it may not have caused a problem for many years the legality cv.org/whatwedo/public ation/people and corr of the ownership – and the legality of the products derived from that land – uption asia pacific glo may be very difficult to prove once the land starts to be harvested or bal corruption barome generates products that require proof of ownership, title or legality. ter Risk 4: Incompetence or corrupt practices. This risk relates to the provision of goods and services which provide significant social benefits (ownership and/or use of land for productive purposes) and have significant value. Officials charged with providing this service may seek to take advantage of this situation in order to benefit themselves. This is a common risk which occurs when the value of the benefit or service is significantly greater than the work required by the

Thai PBS news. Article about illegal resorts, 2012

https://news.thaipbs.or. th/content/136140

OK Nation. Article about illegal land occupation, 2012 (http://oknation.nationtv.tv/blog/loongjame/201 2/01/26/entry-1)

Local expert, contributing to the CNRA cat 1.2018

EFI-FLEGT. Baseline study 5, Thailand,
Overview of Forest law enforcement,
Governance and
Trade, 2011.
http://www.euflegt.efi.in
t/documents/10180/233
08/Baseline+Study,%2
0Thailand++Overview+of+Forest+
Law+Enforcement,%20
Governance+and+Trad
e/7c17fe68-eed3-47378019-68880142e490

officials responsible for issuing the service or their personal remuneration, and there is weak oversight and controls.

In this case the principal risk is that the document or service provided does not provide the legal assurance, but this assurance is subsequently relied upon by other officials or the general public. The illegal nature of the process (of issuing the document or providing the service) invalidates its legality.

There are many examples and one is provided below (Thai Parliament. Example of claim, 2018

(http://library2.parliament.go.th/giventake/content_law/law060251-50.pdf)

This example claim for certification of Sor Kor 1 land is provided as evidence showing possession of land issued by Department of Land. It identifies the length and directions but with no survey information. However, S.K.1 certificates can be used to request a title deed or Certificate of Utilization (under Nor Sor 3 and others). This can provide an opportunity for corruption between government officials and the entrepreneur by colluding to show that the title refers to another piece of land or a larger area. It can also be used to make claims on land that may be part of the Reserved Forest or a National Park. The risk is that even land with a certificate cannot provide an assurance that the land (irrespective of the crop) is legitimate.

Thailand has a high perception of corruption according to the Corruption Perceptions Index (CPI) by Transparency International. Scoring 38/100 in 2014 and 2015, 35 in 2016 and 37 in 2017. In this score the lower the figure the more corruption is in place.

Risk 5: Illegal possession of public land and wrong purpose of public land utilization.

Land designated for Sor Por Kor and agriculture under the Land Reform Act cannot be sold or transferred, except heritage. However, it has been found that there are plenty of S.P.K. land selling, including building weekend houses and resorts. That means wrong purpose of using land, especially Wang Nam Khiew District, Nakhon Ratchasima. There are 108 people who build resorts or 121 plots.

Furthermore, other important tourist attractions of Thailand, e.g. Krabi, Phuket, Surat Thani, are discovered as well. See Agricultural Land Reform Office cases 2016 in left column and OK Nation and Thai PBS news articles in middle column. Both sources are handling about cases of illegal

possession of public land and wrong purpose of public land utilization. Illegal encroachment. There is a considerable disconnect between official policies and local land use realities, and risks may be related to unclear tenure rights. Many areas declared as legal forest land are not actually populated with trees, but rather consist of smallholder agricultural plots. Furthermore, not all types of legal forest (NFRs, PAs, and un-demarcated forest) have been mapped or demarcated on the ground. About 20% of the country's rural villages are located within NFRs, and some 10-15 million people are living within NFRs (EFI 2011). People starting illegal plantations of Rubberwood and oil palm in many places. In 2012 about 6 952 ha was lost to illegal encroachment. In 2013 this was 7 950 ha, in 2014 it was 13 113 ha, 17 000 ha in 2016 and 8 360 ha in 2017 (Source: RFD General Statistics, annual reports). Almost all of these encroachments are taking place in already degraded Forest Reserves. Summary of risks Revisions of the law and the application of laws are currently in process (2018). New directives from the National Council for Peace and Order to control the possessor of land covered by possessory agreements (Sor Por Kor) are in process and may address the issues raised above. But the scope and impact of these and other proposed measures cannot yet be assessed objectively. Currently there are clear risks related to legality of land ownership and tenure. Even where documentary evidence exists and is available to interrogation by the general public (and this is much more difficult), documentary evidence is frequently insufficient to demonstrate legality of

ownership with consistent reliability.

Risk Conclusion

authorities.

The issue is one that occurs at a national level and the risk can be considered homogenous. There is no clear data to demonstrate that there are differences in risk that are attributable to specific regions or provinces.

Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant

1.2 Concession licenses

Applicable laws and regulations

Forest Act B.E. 2484, (1941) Section 63 specifies that the government has the power to grant logging concessions in a forest

(https://new.forest.go.th/economy/wp-content/uploads/sites/86/2016/08/1.pdf)

Termination of concessions:

Cabinet Resolution 17 January B.E. 2532 (1989) on the Termination of All Logging Concessions with the exception of Logging Concessions in Mangroves.

http://www.forest.go.th/service/images/stories/file/service_center(Matra7&9)/Matra9(7)/9-71-041.pdf

According to the latest official data released by the Department of Marine and Coastal Resources, all logging concessions in mangrove forests have expired as of 2002

National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Section 16 bis, 16 tres, 20

(http://www.dnp.go.th/wildlifednp/เอกสาร/กฏหมาย/pr b2.pdf) (http://www.fisheries.go.th/mf-emdec/mainweb/fisherylaw/lawfiles/done/พระราชบัญ ญัติป่าสงวนแห่งชาติ%20(ฉบับที่%203)%20พ.ศ.%20252 8.pdf)

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), Section 4

(https://new.forest.go.th/economy/th/พระราชบัญญัติส วนป่า-พ-ศ-2535/)

(http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf)

Legal Authority

FIO. Annual report,2016: http://www.fio.co.th/web/docs/2560/Annual-report-27-03-16.pdf

Sankha Saen Sadi Foundation. Report about concessions, 2017 (https://www.seub.or.th/ seub/บทความ/ส้มปหานป่า ไม้-บทเรียนจา/

Local expert, contributing to the CNRA cat 1.2018

TEFSO (Thai-FLEGT office); legal summary,2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG 2.pdf

Transparency
International, CPI index
2017
https://www.transparen

cv.org/country/THA

Overview of Legal Requirements

Logging concessions (in terrestrial forest) were terminated by directive of Ministry of Agriculture and Cooperative No. 32/2532 on 17th January 2532 (1989). Since 1989 logging concessions in state owned forested land are no longer considered legal.

One exception relates to the Forest Industries Organization (FIO) – a State Owned Enterprise (SOE). Even though FIO is an SOE it is considered as a national concession owner, and consequently bound to adhere to the requirements of the 3 main Acts (National Reserved Forest act, Plantation Act, Forest Act) and their conditions relating to use and occupation of the land; environmental and social obligations and conditions; harvesting and transport of timber, and all documentary requirements that relate to these activities. FIO is also a timber processor.

As an SOE FIO is exempt from certain regulations and requirements as its own internal structure and by-laws are considered equivalent. A clear example is that the FIO is not governed by or required to demonstrate adherence to Labor Laws and Health and Safety requirements regulated and administered by other Ministries. FIO internal regulations and processes are deemed equivalent or superior to these rules. It is effectively self-regulated (internally regulated) with respect to Labor Laws and Occupational Health and Safety in the workplace (which includes the forest plantations).

Once concessions of logging were previously operated under Forestry Act B.E. 2484 (1941), Section 63. In B.E. 2490 (1947), Forest Industry Organization (FIO) was established instead of Mai Thai Company Limited in order that FIO could continue to operate a concession-based forest enterprise for the government.

FIO is the only remaining concession that is permitted. Plantations of other concessionaires (except Thai plywood company Limited, which belongs to government) were no longer legal after 17 January 1989.

FIO is one of a number of State-Owned Enterprises but the major one operating in forestry. FIO uses 3 main economic species: Teak, Eucalyptus and rubberwood (*Hevea brasiliensis*) plus a number of other species. Most of plantations are located in areas of National Reserved Forest. Hence, any operations must be followed the laws and regulations relating to the Forestry

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Legally required documents or records Concession license.

Corruption barometer figures:

https://www.transparen cy.org/whatwedo/public ation/people_and_corru ption_asia_pacific_glob al_corruption_baromete r_ Act and National Reserved Forest Act and where applicable the Plantation Act.

FIO has managed economic plantations and followed sustainable plantation management as FIO's standards and international standard (FSC). Thanks to participation of local communities, economic plantation management is sustainable in terms of economics, society and environment. The plantations are divided into the following 6 groups by a cost and objectives of area delivering from government:

Plantation Project 1: Plantation planted by FIO's cost

Plantation Project 2: Plantation planted for compensation as FIO's conditions of concession

Plantation Project 3: Plantation planted for compensation as provincial logging company's conditions of concession

Plantation Project 4: Plantation that FIO received from RFD planted by provincial logging company

Plantation Project 5: Plantation planted RFD and deliver to FIO with the government's budget

Plantation Project 6: Plantation planted with Thai plywood company's budget (Thai Plywood Company was held 100% of shares by FIO).

When the cabinet approved the resolution on 28th February B.E. 2555 (2012) that Thai Plywood Company was terminated, FIO incorporated the company's plantations to continue operating.

FIO operates nationally although its plantation base reflects the geographic distribution of the species it manages: so teak plantations occupy the northern provinces where there is little rubberwood. Rubberwood is grown principally in the south and central provinces, where there is less teak.

Description of Risk

There is no facility or legal instrument similar to a logging concession in Thailand. Not a single new logging concession was issued since 1989. No timber or forest products, including charcoal, are derived from logging concessions others than from FIO. Thus, only FIO will need to be assessed.

FIO concession licenses/ or governmental mandates are issued by law and thus there is no doubt about the legality and correctness of such

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			concessions. Such is also confirmed by the fact that a substantial amount of FIO forest/plantations are FSC certified. In 2018 Thailand listed 90 021 ha of certified forest, in 17 FMU's. Besides that, there are 139 COC's. The Forest Industry Organization (FIO) is certified with 19 419 ha in two certificates (about 10% of their area). Thailand has a high perception of corruption according to the Corruption Perceptions Index (CPI) by Transparency International. Scoring 38/100 in 2014 and 2015, 35 in 2016 and 37 in 2017. In this score the lower the figure the more corruption is in place. Nevertheless, this score is not of great influence with the concessions of FIO as they are declared by law. Risk Conclusion All together the risk with regards to this indicator are low. Low risk thresholds (1): 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.
1.3 Management and harvesting planning	Applicable laws and regulations National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Section 16, 16b and 20 http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/prb 2.pdf http://www.fisheries.go.th/mf- emdec/mainweb/fisherylaw/lawfiles/done/พระราชบัญ ญัติป่าสงวนแห่งชาติ%20(ฉบับที่%203)%20พ.ศ.%20252 8.pdf Amendments: Logging in National Forest Reserve, section 6 and Ministerial Regulation No. 24 on Restricted Timber Harvesting B.E.2518 (1975), by virtue of the Forest Act B.E. 2484 Ministerial Regulation No. 24 on Restricted Timber Harvesting B.E.	The centre for People and forests. Website, 2018 https://www.recoftc.org Stakeholder consultation and local expert. 2018 TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG_2.pdf FAO. country report	Overview of Legal Requirements The rules related to the management and harvesting planning is determined largely by the ownership of the land on which they are grown (principally state land or private). Legal requirements for management planning only apply to plantations in National Forest Reserves. All other forest types and ownership does not require management or harvesting planning. Such is Organized in the National Forest Reserves Act and various amendments. In this Act, article 20, establishment of forest plantations in forest reserves are allowed with RFD permission. Article 16 of the same Act explains that it does not require management and harvesting planning, but only an annual operating plan (see below). In National Forest Reserves, before a licence for a new plantation is approved, the authority will conduct a forest inspection to assess the type of forest, the conditions (which must fit the description of a degraded forest) and will conduct a species count/type in a sample plot of no less than 5% of the plantation's total size. The field inspection officer will conduct a forest inventory for trees that are 50 cm in diameter or greater (measured at 1.5

2518 (1975), by virtue of the Forest Act B.E. 2484

Royal Forest Department Regulation on Logging Permission in National Forest Reserve B.E. 2529, in Royal Forest Department Handbook on permission related to Timber and Forest Product (2008), pp. 60-63.

Royal Forest Department Regulation on the Permission to Establish Forest Plantation or Tree Plantation in National Forest Reserves B.E. 2548 (2005), section 11, 15 and 20.

Forest Act B.E. 2484, Section 63 https://new.forest.go.th/economy/wpcontent/uploads/sites/86/2016/08/1.pdf

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), Section 4

https://new.forest.go.th/economy/th/พระราชบัญญัติสว นป่า-พ-ศ-2535/

http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf

Handbook of operation on the granting of timber and forests to FIO. RFD, 1998. https://new.forest.go.th/goods/wp-content/uploads/sites/13/2014/07/2-1.pdf

Legal Authority

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Legally required documents or records for

Thailand (with graphics), 2018 http://www.fao.org/faost at/en/#country/216

FAO. Asia-pacific forestry sector outlook. Thailand forestry outlook study, 2009 http://www.fao.org/docrep/014/am617e/am617eo0.pdf

Global Forest Watch, Country profile, 2018 http://www.globalforest watch.org/country/THA metres above the ground). Following this, the officer will verify whether the location is in an area designated as 'declared' under the logging ban (1989) or in a protected area.

Approved annual operating plan: as a condition of the licence to operate a plantation in National Forest Reserves, item 11 of the condition and terms of the Royal Forest Department Regulation (Regulatory Authority) on the Permission to Establish forest Plantation or Tree Plantation in National Forest Reserves B.E.2548 (2015), requires the licence holder to submit an annual operating plan to a competent authority for approval at least 6 months before the operation commences.

Annual report: item 15 of the condition and terms requires the licence holder to submit a Plantation Annual Management Report Por Sor 32. The annual report must contain inventories and information about the management of the plantations over the previous year. This is to be submitted to the local competent authority within 60 days of the year-end operation, and the local authority must submit it to the Royal Forest Department within 30 days of receipt of the report. The annual report is to contain information on plot size, species, quantity, survival rate, demarcation, maintenance, weeding, path building and maintenance, pest control, and fire breaks.

Maps showing harvesting areas and harvesting inventories: clause 6 of Ministerial Regulation No. 1106 B.E. 2528 (1985) on the Logging in National Forest Reserve and Ministerial Regulation No. 24 on Restricted Timber Harvesting B.E. 2518 (1975) outline harvesting practices in National Forest Reserves. Licensed plantation operators are required to submit a map showing harvesting areas to a competent agency when they request permission to harvest timber from the plantations.

The actions of the Regulatory Authority (in this case the RFD) can be described as principally one of monitoring rather than active regulation, until the point at which the trees reach the age of harvesting when regulatory control becomes effective through the actions required to gain a harvesting permit (see 1.4 below).

Other acts, like the Forest Act and the Plantation act merely stating that further forest management planning is not required. In principle this is not strange for public lands, as there is a logging ban on public forests (forest

plantations in National Forest Reserves.

Approval and license for plantation.
Approved annual operating plan
Annual operating plan.
Map.

Local expert, contributing to the CNRA cat 1.2018

Bangkok Biz news. Result of an inspection of a forest area, 2018 (http://www.bangkokbiz news.com/news/detail/ 763023)

Khaosod news. About conflict between RFD and other public organisation, 2018(http://daily.khaosod.co.th/view_news.php?newsid=TUROd01EVXhNVEEyTURRMU9RPT0=§ionid=TURNek5RPT0=&day=TWpBeE5pMHdOQzB3Tmc9PQ==)

Daily news. Article about the Forest Act 1992 and its problems with forest management, 2018 (https://www.dailynews.

reserves).

The Handbook of operation on the granting of timber and forests to FIO contains the RFD regulations on the granting of the FIO to maintain and use the forest plantations that are grown using the RFD budget. The document contains various articles that FIO should follow.

Forest concessions (and the management by concession) are no longer permitted by the directive of Ministry of Agriculture and Cooperative No.32/2532 1989 and so large-scale management and harvesting driven by the management plans of commercial concession holders no longer exists.

More information about land ownership can be found in indicator 1.1.

Description of Risk

Risk 1: Incomplete or flawed process to establish the state of the land (inventory) prior to releasing it for new plantation purposes in forest reserves. This could result in land (or trees) which might constitute a valuable resource – either for protection or conservation purposes – being converted to inappropriate forest or tree plantations.

Risk 2: Insufficient monitoring of plantation activities could permit inappropriate management activities to take place which have significant environmental or social impacts – even if the activities themselves have been accurately presented in an annual report which is read and analysed by a competent officer. Key performance indicators are frequently based on receipt or issuance of specific documents and consequently this process may overlook or ignore the impact of key activities that are included (or may not be presented) in the report.

Even though an annual operating plan is required for licensed plantations in National Forest Reserves, the required content and procedures are not clearly outlined or defined in the law. Maps showing harvesting areas and harvesting inventories are required when applying for harvesting permission for plantations in National Forest Reserves. There is no publicly available information or literature discussing forest management planning in Thailand. It is not clear whether field inspection is performed by the authority prior to the approval of harvesting permits. There is no evidence that this policy is well implemented.

This ambiguity, and weak legal requirement, may be a risk factor for this

co.th/article/281346)

RFD. E-tree registration ('single window') system to certify origin of trees, 2018 (https://nsw.forest.go.th/rfdtree/Home.aspx)

Transparency
International, CPI index
2017
https://www.transparency.org/country/THA

Corruption barometer figures:

https://www.transparency.org/whatwedo/publication/people_and_corruption_asia_pacific_global_corruption_barometer_

Chatham House Illegal Logging portal. Indicators Country Report Card, 2018 https://www.illegallogging.info/regions/thai land

Chatham House.Article about illegal logging in Thailand, 2017 https://www.illegal-logging.info/content/no-let-thailand%E2%80%99s-

indicator, particularly when the boundary of the plantation is not clearly demarcated, or when the transfer of plantation/forest management rights is not transparent. There are cases in which the plantation harvesting activities of the Forest Industry Organisation (FIO) have been questioned by local communities (Manager Online). In 2007, villagers in Surin Province filed a complaint that the FIO had illegally logged conservation plantation forest, while the FIO claimed that the area was largely degraded and had been classified as National Forest Reserve Zone E (economic), the management rights of which were transferred from the Royal Forest Department. The FIO further argued that they had notified local leaders in the community prior to the harvesting operation.

Risk Conclusion

This indicator has been evaluated as specified risk for licensed plantations in National Forest Reserves. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities. N/A for other categories

Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

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		I	
		relentless-violent- siamese-rosewood- poaching	
		Chatham House. Study about illegal imported timber, 2014. https://indicators.chathamhouse.org/sites/files/reports/Lawson_ThailandSK_India_PP_2014_0%281%29_1.pdf	
1.4 Harvesting Permits	Applicable laws and regulations Forest Act B.E. 2484 (1941), Section 63 https://new.forest.go.th/economy/wp- content/uploads/sites/86/2016/08/1.pdf Amendments: Leader of National Council for Peace and Order's Order No. 31/2559 on the Amendment of the Forest Act dated 21 June B.E. 2559 (2016). http://library2.parliament.go.th/giventake/content_n cpo/ncpo-head-order31-2559.pdf Ministerial Regulation on the Request and Permission to Utilize Forest Estate B.E. 2558 (2015), by virtue of Section 54 Paragraph 2 and Section 58 Paragraph 1 of Forest Act B.E. 2484 (1941) (Fifth Revision B.E. 2518) and Section 75 Paragraph 1 of Forest Act B.E. 2484 (1941). Ministerial Regulation No. 24 (B.E. 2518) on Restricted Timber Harvesting, in Royal Forest Department Handbook on Permission related to Timber and Forest Products 2008, pp. 21-22.	The centre for People and forests. Website, 2018 https://www.recoftc.org Stakeholder consultation and local expert. 2018 TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG_2.pdf EFI, Study on Timber Flows and their control in Thailand, , 2012 http://www.euflegt.efi.int/documents/10180/233	Overview of Legal Requirements Harvesting permits and the regulations related to them are determined by the source of the timber: whether from state land, registered plantations on or off state land, from reserved forest etc. Harvesting permits, regulations and conditions are also determined by species. Restricted species (which has now been extended to cover another 18 species) or unrestricted or unregulated. Harvesting permit rules are determined by the 3 main pieces of legislation: The Forest Act, the National Reserved Forest Act and the plantation act The Forest Act B.E. 2484 (amended 2014) arranges the harvesting permits in state and private lands. The act requires operators to request permission for felling, harvesting and transport of all restricted species irrespective of whether they are on state or private land. The principal species for which major species for which this Act had been designed were the high value commercial species generated by Thailand's natural forests of pre- and post-war: this included species such as teak, rosewoods and dipterocarps. But it also included plantings of the same species – if or when they were established as plantations or by farmers. Logging under this act is also applicable to unregistered plantation. In later amendments details and species were changed. Unrestricted species, such as rubber, eucalyptus and acacia, does not
	Ministerial Order No. 17 (B.E. 2530) on the	08/Timber+Flows+and+ their+Control+in+Thaila	require a harvesting permit.

permission of Teak and Yang Timber on Private Land, in Royal Forest Department Handbook on Permission related to Timber and Forest Product, 2008, pp. 35-36.

National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Section 16 bis, 16 tres, 20

http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/prb 2.pdf) (http://www.fisheries.go.th/mfemdec/mainweb/fisherylaw/lawfiles/done/พระราชบัญ ญัติป่าสงวนแห่งชาติ%20(ฉบับที่%203)%20พ.ศ.%20252 8.pdf

Amendments:

Royal Forest Department's Memo Tor Sor 1602.2/116871168 dated 29 January B.E. 2557 (2014) on the Implementation Guideline on Logging in National Forest Reserve (referred to in the public's handbook on logging permission in National Forest Reserve).

Royal Forest Department Regulation on Logging Permission in National Forest Reserve B.E. 2529, in Royal Forest Department Handbook on permission related to Timber and Forest Product (2008), pp. 60-63. http://www2.suratthani.go.th/onre/download/233.pd

Royal Forest Department Regulation on the Permission to Establish Forest Plantation or Tree Plantation in National Forest Reserves B.E. 2548 (2005), by virtue of section 20 of National Forest Reserves Act B.E. 2507 amended by National Forest Reserves Act (No.3) B.E. 2528 (1985). Clause 14. nd/89cd6bcf-9a41-411b-915ad7bee45f310d The National Reserved Forest Act B.E deals with all issues regarding National Reserves. In these regulations, and its' amendments the required harvesting permits are stipulated

Operators on National Reserved Forest (including registered or unregistered plantations in such Reserves) requires operators to request harvesting permits for both restricted and unregulated species. Unregulated species are species such as rubberwood, eucalyptus and acacia. Even though these may not subsequently be tracked, they do require permission to be harvested and permission has to be given by a competent person of the appropriate authority (the RFD or Provincial Governor).

Further regulations can be found in the Plantation Act that handles about everything related to plantations. Sections 4 outline the permission process for harvesting of timber and non-timber forest products in registered plantations.

The Plantation Act B.E. 2535 (1992) with its 2nd Edition B.E. 2558 (2015) were introduced as a measure to support people to create an economic forest on both public and private land. Under the Plantation Act certain activities regulations (especially for unregulated species) were waived to make the management less onerous and easier for smallholders and farmers to administer.

The purpose of this Act is that the government can protect the right of planted timber, in particular the restricted species. Moreover, timber from plantation can be track and traced and legally verified.

On private land plantation owners who are planting and harvesting restricted species (teak, rosewood and *Dipterocarpus spp*) are also required to gain permission to harvest and transport. Private owners do not need any other documents for any other, non-restricted, species.

The public plantations registered under the Plantation acts are required to obtain a Certificate of Cutting/Felling Notification.

Plantations established by or under the Forest Plantation Act require the permission of the Registrar of Plantations. Such register is <u>online publicly</u> available. See also indicator 1.1.

Further regulations can be found in the Royal Decree on Restricted Timber Species, where such species are listed.

Harvesting can only be done by registered chainsaw operators and such is

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http://www.forest.go.th/chiangrai_2/images/stories/file/7%284%29/Matra7%284%29-2-015.pdf

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), Section 4

https://new.forest.go.th/economy/th/พระราชบัญญัติสว นป่า-พ-ศ-2535/

http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf

Royal Decree on Restricted Timber Species B.E. 2530 (1987). Published in Government Gazette Vol. 104 Section 220 dated 2 November 1987. http://forestinfo.forest.go.th/Content/file/forest2530.pdf

Ministerial Regulation on the Request and Permission to Utilize Forest Estate B.E. 2558 (2015).

Chainsaw Act, 2002, Section 4, https://new.forest.go.th/economy/th/wระราชบัญญัติเลื่อยโช/

Legal Authority

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Legally required documents or records

The forest or tree plantation Written Permit on National Reserved Forest land (P.S.31) Utilizing or living Written Permit on National Reserved Forest land (P.S.23)

The Written Permit for utilizing and living on deteriorated National Reserved Forest (Sor Tor Kor

Transparency International, CPI index 2017

https://www.transparency.org/country/THA

Corruption barometer figures:

https://www.transparency.org/whatwedo/publication/people_and_corruption_asia_pacific_global_corruption_barometer_

Chatham House Illegal Logging portal. Indicators Country Report Card, 2018 https://www.illegallogging.info/regions/thai land

Chatham House. Article about illegal logging in Thailand, 2017
https://www.illegal-logging.info/content/no-let-thailand%E2%80%99s-relentless-violent-siamese-rosewood-poaching

Chatham House. Study about illegal imported timber, 2014. https://indicators.chatha

arranged in the Chainsaw Act, 2002, Section 4.

On 10 August 2015, a new legislation was passed to prescribe the guidelines for forest conversion: Ministerial Regulation on the Request and Permission to Utilize Forest Estate B.E. 2558 (2015). In the legislation, "utilization" is defined as an act of mining, petroleum exploration, shelter or agriculture, afforestation or forest plantation, use as rest area, use as livestock grazing, use as religious site, use as research and study, and use by government agencies. The area does not overlap the boundary of the forest prohibited for utilisation declared by the Cabinet. Only the Forest Industry Organisation (FIO) is permitted to harvest and sell timber from forest land permitted for conversion. Under clause 24 of the regulation, the licence holder must notify the Royal Forest Department (RFD) should forest clearance be required, and that only the FIO is allowed to fell and remove logs in accordance with the RFD regulations.

The regulatory bodies (principally the RFD and provincial Offices maintain competent officers to conduct inspections, collect fees and issue appropriate documentation related to felling, harvesting and transporting of timber. Permission to harvest must be sought and gained from the appropriate competence officer of the Royal Forest Department or provincial Secretariat.

Restricted species

Restricted species comprise the majority of Thailand's native tree species (158 listed) - with a few exceptions. Since 2017 the list of restricted species has been extended - through an amendment to the Forest Act and Plantations Act – to include an additional 17 species and this now leaves very few native species as unrestricted. Importantly, 'Unrestricted species' includes a number of exotic species which have been widely planted by private owners and state institutions, as commercial tree crops: these may be grown for timber, for fruit or for products such as gums, latex or essential oils. The most important of these are rubberwood (Hevea brasiliense); various species of eucalyptus; and acacia, together with some tree species with multiple purposes such as Leuceana spp (fuelwood and fodder and shade trees). These species are not regulated in the same way as restricted species or even by the same Regulatory Agency. Rubberwood was regulated and actively supported by the government but through the Ministry of Agriculture as it was considered an agricultural crop: rubberwood was considered an agricultural by-product and is, therefore, not subject to forest regulations overseen by the RFD even though it has now become a key

1 A, Sor Tor Kor 2 A) The Written Permit to do forest or tree plantation on deteriorated National Reserved Forest (Sor Thor Kor 1 B) from RFD Acknowledged Certificate from the Registrar of Plantations (Sor Por 13)

Acknowledged Letter of Timber account from registered forest plantation (Sor Por 15)

Teak logging in forest Written Permit (permit 1) Restricted Timber logging except Teak in forest Written Permit (permit 2)

Logging written permit in reserved forest (P.S.2)
An RFD Transportation Certificate for round logs and transformed timber, or a Confirmation Letter of Transformed Timber or Timber Products/ a Confirmation Letter of Transformed RubberwoodTimber or Timber Products.
Category A species (Restrict species), an RFD Harvesting Permit.

Category B species (Restrict species), a Ministerial Authorization.

Chainsaw possessing permit (Lor Zor 3)
Certificate of Permission for Possession of Land for
Activity within Forest Area (under Section 54 of the
Forestry Act) and/or Certificate of Permission from
other government agencies

Online register of registered plantations: http://forestinfo.forest.go.th/fCon Res.aspx mhouse.org/sites/files/r eports/Lawson Thailan d SK India PP 2014 0%281%29 1.pdf

Bangkok Biz news. Result of an inspection of a forest area, 2018 (http://www.bangkokbiz news.com/news/detail/ 763023)

Khaosod news. Article about conflict between RFD and other public organisation, 2018 (http://daily.khaosod.co.th/view_news.php?newsid=TUROd01EVXhNVEEyTURRMU9RPT0=§ionid=TURNek5RPT0=&day=TWpBeE5pMHdOQzB3Tmc9PQ==)

Daily news. Article about the Forest Act 1992 and its problems with forest management, 2018 (https://www.dailynews.co.th/article/281346)

RFD. E-tree registration ('single window') system to certify origin of trees,2018 (https://nsw.forest.go.th/rfdtree/Home.aspx

element of Thailand's domestic timber market. Thus in principle legal requirements under CNRA category 1 are not applicable for rubberwood.

Regulations related to the management of restricted species are limited and largely relate permissions and fees for specific activities and details of when and where such species may or may not be harvested. They can be separated in two groups: category A (normal restrictions) and B (heavy restrictions).

All restricted species require a permit to harvest authorized by a competent officer of the RFD or provincial Office (Category A restricted species' require an Royal Forest Department (RFD)-issued permit, while harvesting of 'Category B restricted species' requires ministerial authorization). Once harvested and transported all restricted species require complex and well-structured procedures to monitor their transport with detailed monitoring (by Thailand's National Single Window system) together with supporting documentation. A more detailed description of harvesting permits is provided under section 1.4.

Non-restricted species

The three most important examples of non-restricted species are rubberwood; eucalyptus and acacias which form the bulk of the country's pulp, paper and particleboard industries.

As the name implies these species are not 'regulated' in the forestry sense as they were considered more as an agricultural crop. Rubberwood was regulated and actively supported by the government but through the Ministry of Agriculture and not forestry. Rubberwood was considered a by-product and not subject to forest regulations overseen by the RFD.

To summarise, restricted species are covered by the full weight of the legal requirements and must have a range of permissions from competent officers together with supporting documentation which is verified and checked throughout the delivery process.

Description of Risk

Risk 1: Combination of illegal and legal timber and smuggling of cutting over the area being harvested in accordance with Forest Act and National Reserved Forest Act.

That is to request for a permission for logging in highway area whose trees are in under the authority of the RFD (Royal Forest Department of Thailand, the responsible regulatory authority). Any agency that wants to conduct a

project must inform RFD. Logging in 2 sides of highway is operated by FIO. However, FIO hires a contractor for logging, then it causes cutting or smuggling over the permitted area, including smuggling to combine illegal timber into high value restricted species such as rosewood species. Risk 2: Bribe requested by government officials for permissions required under Plantation Act and Forest Act. Plantation registration and permission for felling according to Plantation Act B.E. 2535 (1992) and 2nd Edition B.E. 2558 (2015) and Forestry Act B.E. 2484 (1961) was found that the government officials of district or Provincial Natural Resources and Environment Office request bribes in each step and operate like a one stop service. As a possible mitigation measure the RFD is trying a system of etransaction registration or registration through the National Single Window tracking system to identify and track timber and identify timber from unknown sources. Especially tree registration system, to certificate a source of timber. Additionally, utilization requesting such as felling, transporting, selling, guaranteeing, plantation registering can be operated through E-tree application. To date the success of these measures is unknown. Special note about the system of restricted and un-restricted species For restricted species the system contains more requirements and permissions and contains a more comprehensive system of checks and external verification. The value of the timber justifies the additional expenditure of time and resources and this is helped by the lower volume of timber. Paradoxically, the two biggest risks relate to the domestic supply chains of rubberwood (although not applicable under this CNRA category), eucalyptus and acacia from private owners. These have no requirements for verified chain of custody documentation or externally verified harvesting permission. unless sourced from Reserved Forest or Government land. Consequently, once harvested this timber can effectively move anywhere in a series of uncontrolled or unsupervised sales, purchases or transfers. The Permit to Harvest therefore generates no benefit because the absence of a chain of custody (for unrestricted species) means that it is impossible to connect the timber to the original permission to the origin and consequently the permission to harvest.

The material is considered to be inherently 'low risk' because it is low in value and there is no risk of it being confused (or mixed) with material from Thailand's natural forest. However, a risk still exists that this material could come from a non-legal source and the absence of a system for identifying the source and tracking the material once it has been harvested poses a clear risk. The risk is not restricted to any specific geographic region and is this applicable for the whole country but does relate to 'unregulated' or unrestricted species, principally rubber, eucalyptus and acacia. It will also relate to sources that are the suppliers of fibre, recycled products and fuelwood The risk applies nationally and should be considered a specified (and constant and ever present) risk. Nevertheless, it is NA for this indicator because harvesting permits are not needed. International opinions There is some evidence that supervision and monitoring of harvesting operations is inconsistent. According to a report by EFI, the volume of legally produced logs from natural forest is remarkably small (EFI, 2012). Most of the timber exported comes from domestic plantations which are at a lower risk of being illegal (Chatham House). Discussions with RFD officials suggests that the risk related to illegal issuing of harvesting permission is low from the authority's point of view, as timber harvesting in National Forest Reserves is only approved in designated areas permitted for utilisation (such as for infrastructure), and for licensed plantations. For plantations, risk may arise when a contractor fells trees outside the boundary of the permitted area; for example, in September 2016, an FIOhired contractor illegally cut down 37 teak trees from a villager's plantation (Thairath). The FIO claimed that it hired a contractor to harvest the logs from an FIO plantation, and that the contractor was given a map with GPS coordinates, but since the two plantations were separated by a road, the contractor might have made a mistake. There is little evidence that this is a common occurrence, with only a few reported cases. Based on an EFI report, in Thailand "there is no evidence of this being a systematic threat of widespread illegality". There may be risks related to harvesting being carried out without a permit. Within Thailand, illegal logging and illegal encroachment remain a serious issue.

			International sources like Transparency International, EFI (FLEGT) and Chatham house are not positive about the level of illegal logging and corruption in Thailand. The same can be said from local media. Thailand has a high perception of corruption according to the Corruption Perceptions Index (CPI) by Transparency International. Scoring 38/100 in 2014 and 2015, 35 in 2016 and 37 in 2017. In this score the lower the figure the more corruption is in place. Risk Conclusion Based on the above 6 larger risk categories can be listed: Non-restricted species 1. Non-restricted species including rubber, eucalyptus and acacias outside forest reserves. These are N/A because no harvesting permit is needed. 2. Non-restricted species (as per annex in plantation act) in registered plantation. These are N/A because no harvesting permit is needed. 3. Non-restricted species including rubber, eucalyptus and acacias inside forest reserves: specified risk Restricted species 4. Restricted species in registered plantation: specified risk 5. Restricted species in unregistered plantation: specified risk 6. Restricted species in forest reserves: specified risk. Specified risk' thresholds:(2) Identified laws are not upheld consistently by
			all entities and/or are often ignored, and/or are not enforced by relevant authorities.
		Taxes and fees	
1.5 Payment of	Applicable laws and regulations		Overview of legal requirements
royalties and harvesting fees	Forest Act B.E. 2484 (1941), Section 75 (https://new.forest.go.th/economy/wp-content/uploads/sites/86/2016/08/1.pdf)		Specific payments and charge rates are determined by the 2 main pieces of legislation: The Forest Act and the National Reserved Forest Act.
	Amendments: Ministerial Regulation no23 (1975) issued under Forest Act – fee rates	TEFSO (Thai-FLEGT office); legal summary, 2016	The Forest Act B.E. 2484 (amended 2014), Sections 9, 14, 15, 25, 26 set procedures for royalty and other fees for timber and forest product generated from public land, private land, and exemption; Annex in the Act

Royal Forest Department Regulation on the Calculation, Sealing, Collection of Royalty for Timber, Firewood Logs or Charcoal Logs B.E. 2510 (1967), Clause 14 of the forest act.

Leader of National Council for Peace and Order's Order No. 31/2559 on the Amendment of the Forest Act dated 21 June B.E. 2559 (2016). http://library2.parliament.go.th/giventake/content_ncpo/ncpo-head-order31-2559.pdf

Ministerial Regulation No. 26 on the Transport of Timber or Forest Product B.E. 2528 (1985), issued under the Forest Act B.E. 2484, Clause 2.

National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Section 5 (http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/prb2.pdf) (http://www.fisheries.go.th/mfemdec/mainweb/fisherylaw/lawfiles/done/พระราชบัญญัติป่าสงวนแห่งชาติ%20(ฉบับที่%203)%20พ.ศ.%20252 8.pdf)

Amendments:

2016)'s Annex provides updated rates for royalty and other fees.

http://www.ratchakitcha.soc.go.th/DATA/PDF/2559/A/046/12.PDF

Ministerial Regulation No. 1221 on Fees, Royalty and Forest Maintenance Fee B.E. 2531 (1988) Clause 3 outlines fees for timber generated from National Forest Reserve http://www2.suratthani.go.th/onre/download/309.P DF

Royal Forest Department Regulation on the

http://tefso.org/downloa d/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-finaldraft-ENG_2.pdf outlines permit and licence fees. A further Ministerial Regulation (No. 23 on Fees B.E. 2518 (1975) by virtue of Forest Act B.E, declares more information on fees. Other amendments are arranging things like the calculation, Sealing, Collection of Royalty for Timber, Firewood Logs or Charcoal Logs and in the latest 2016 amendment some regulations are updated and the royalty requirement for certain restricted species grown on private is lifted. There is also a special amendment about transport of timber.

The National Reserved Forest Act B.E deals with all issues regarding National Reserves. In this regulation, and its' amendments the fees and royalties are stipulated, as well as transport of timber from these sources.

Further regulations can be found in the Plantation Act that handles about everything related to plantations, including fees (Section 14 and 14/1 exempted timber and forest products harvested from registered plantations from royalty and forest maintenance fees).

In general:

In some cases, fees, royalties and management fees must be paid by operators for trees to be harvested. Fee rates are determined by land ownership (Reserved Forest, Registered Plantation, leased land, private ownership etc) and species, quantity, and volume. Because of the different types of forests and ownership the following is applicable:

Operators responsible for plantations established and registered under the Plantation Act are exempt from maintenance fees and royalties.

For operators on private land: Forest Act - Section 75 and Ministerial Regulation no 23 (1975). Royalties only to be paid when harvesting 3 species. All others are free of any regulations.

For logs harvested from public land outside registered plantations (forest reserves), operators are required to pay a royalty and forest maintenance fees. But because of the logging ban this is in principle not happening. For Restricted species grown on public land outside forest reserves the operator must pay a royalty.

For registered plantations payment of royalty may be exempted (as per the Amendment of the Forestry Act made under the National Council for Peace

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Permission to Establish Forest Plantation or Tree Plantation in National Forest Reserves B.E. 2548 (2005), by virtue of section 20 of National Forest Reserves Act B.E. 2507 amended by National Forest Reserves Act (No.3) B.E. 2528 (1985). Clause 14.

http://www.forest.go.th/chiangrai_2/images/stories/file/7%284%29/Matra7%284%29-2-015.pdf

Royal Forest Department Regulations on the Transport of Timber and Forest Product B.E. 2552 (2009), Clause 16.

http://www.forest.go.th/forest_checkpoint/images/st ories/1212.pdf

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), Section 4 Section 14 and 14/1 exempted timber and forest products harvested from registered plantations from royalty and forest maintenance fees.

https://new.forest.go.th/economy/th/พระราชบัญญัติสว นป่า-พ-ศ-2535/

(http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf

Legal Authority

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Legally required documents or records

Receipt issued by RFD or local administrative offices at district or provincial levels.

Packing list (quantity, species and volume) with record of royalty payment

dated 21 June B.E. 2559 (2016). Such depend on many different things.

For non-registered public plantations (not registered under the Plantation

and Order, Order No. 31/2559 related to the Amendment of the Forest Act

For non-registered public plantations (not registered under the Plantation Act) on National Reserved Forests: Forest Act - Sections 14, 15 and sections 21 and 75 National Reserved Forest Act Section 5 and Ministerial Regulation no 1221 are applicable. Payment of royalty may be exempted.

Fee rates may be modified, and changes are detailed under Ministerial Regulations issued by the responsible Ministry, the Ministry of Natural Resources and Environment (MNRE).

Harvesting permits are only issued after fees have been paid, if such is the case.

Processors and manufacturers are also responsible for paying fees. The 2 main payments are Timber/Manufacturing Permit which is issued by the RFD with fees as determined by the Forest Act Section 75. There is also a transport fee (covered under 1.17).

For timber that does not legally require harvesting permission, a forest checkpoint fee will be collected when the timber is transported through the first forest checkpoint. According to sections 25 and 26 of the Forest Act, a transportation operator must pay a fee for transporting Non-restricted timber generated from public land (outside NFRs) through the first forest checkpoint, unless the timber is for personal use. This fee is not referred to as royalty but is called a forest checkpoint fee.

Records of royalty payments must be submitted when applying for a Removal Pass or other transport documents. Royalty collection records must be presented at forest checkpoints, sawmills, and/or processing and trading facilities, in the form of a royalty seal marked on timber, a receipt, or record of payment specified in a packing list, transport document, or Sawn Timber Certificate. Forest checkpoint officials sample check (at least 20% of each vehicle load) and ensure that the royalty has been fully and correctly paid (Clause 16, RFD Regulation of transport of Timber and Forest Products, BE 2552).

Chatham House Illegal Logging portal. Indicators Country Report Card, 2018 https://www.illegallogging.info/regions/thai land

Illegal logging. A2017 article about illegal logging in Thailand, 2017 https://www.illegal-logging.info/content/no-let-thailand%E2%80%99s-

relentless-violent-

Harvesting permit with record of royalty payment made by the competent officer

Record of royalty exemption

Underlying documents required when applying for a permit, depending on the ownership and forest class.

The forest or tree plantation Written Permit on National Reserved Forest land (P.S.31) Utilizing or living Written Permit on National Reserved Forest land (P.S.23)

The Written Permit for utilizing and living on deteriorated National Reserved Forest (Sor Tor Kor 1 A, Sor Tor Kor 2 A) The Written Permit to do forest or tree plantation on deteriorated National Reserved Forest (Sor Thor Kor 1 B) from RFD Acknowledged Certificate from the Registrar of Plantations (Sor Por 13)

Acknowledged Letter of Timber account from registered forest plantation (Sor Por 15)

Teak logging in forest Written Permit (permit 1) Restricted Timber logging except Teak in forest Written Permit (permit 2)

Logging written permit in reserved forest (P.S.2) An RFD Transportation Certificate for round logs and transformed timber, or a Confirmation Letter of Transformed Timber or Timber Products/ a Confirmation Letter of Transformed Rubberwood Timber or Timber Products.

Category A species (Restrict species), an RFD Harvesting Permit.

Category B species (Restrict species), a Ministerial Authorization.

Chainsaw possessing permit (Lor Zor 3)
Certificate of Permission for Possession of Land for
Activity within Forest Area (under Section 54 of the
Forestry Act) and/or Certificate of Permission from

siamese-rosewoodpoaching

Chatham house. Study about illegal imported timber. 2014.

https://indicators.chatha mhouse.org/sites/files/r eports/Lawson_Thailan d_SK_India_PP_2014_ 0%281%29_1.pdf

NEPCON. Risk Assessment, 2017 https://www.nepcon.org /sites/default/files/librar y/2017-06/NEPCon-TIMBER-Thailand-Risk-Assessment-EN-V1.pdf

Local expert, contributing to the CNRA cat 1. 2018

Description of Risk

Risk 1: Permits issued without observing due process.

Risk 2: Permits copied, swapped or transferred and used to describe and permit harvesting of illegal sites or illegal timber.

Risk 3: Illegal harvesting avoids paying of any fees or payments are diverted to illegal operators. See indicator 3.1 for a full assessment of this.

Issuing of permits is dependent on the existence of receipts and permits from the preceding steps (the underlying documents as presented in the left column). The Royal Forest Department has a cascading series of permits and the first permit is the permit to harvest. However, it is the transport permit which is the key document as the timber cannot be transported without this document and the check procedures are more rigorous than for the issuing of harvesting permits and subject to more frequent scrutiny during transport.

Failures in the issuing of harvest permits should be captured during the process of issuing the transport permit. However, this process may not always check whether the permit issuing has followed due process; the existence of the permit indicates fees have been paid, and this may be insufficient evidence of due process.

In general – and at a National level – the RFD (the responsible agency) has a robust system of permit issuance and revenue collecting and the national risk is classified as low.

However, there are numerous examples of the failure of the existing system to fully capture the revenue from royalties and even the payment of harvesting fees can be avoided. This is mostly due to illegal harvesting that simply avoids any legitimate payments completely and this poses an unspecified level of risk. But the risks associated with payment of royalties and harvest fees in the normal, legal, market can still be considered low. This also because harvesting permits are only issued after fees have been paid. This is confirmed by local experts.

International sources do not contradict this assessment, although not much public information is available about the payment of royalties and fees.

	other government agencies		Risk conclusion Low risk thresholds (1): Identified laws are upheld. Cases where law/regulations are violated are efficiently followed up via preventive actions taken by the authorities and/or by the relevant entities.
1.6 Value Added Taxes and other sales taxes	Applicable laws and regulations Thailand Revenue Code Chapter 4 https://www.thailandlawonline.com/table-of-contents/thailand-tax-law-revenue-code	NEPCON. Risk Assessment, 2017 https://www.nepcon.org /sites/default/files/librar y/2017-06/NEPCon-	Overview of Legal Requirements Value Added Tax (VAT) is covered by Chapter 4 of the Thailand Revenue Code. VAT is 7% on all purchases in Thailand. Such is managed by the Thailand Revenue Department. Small businesses with annual sales volume not
	Legal Authority Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th) Thailand Customs Department Thailand Tax department.	TIMBER-Thailand-Risk- Assessment-EN-V1.pdf TEFSO (Thai-FLEGT office); legal summary,2016http://tef	exceeding 1,8 million baht (approx. 45,000 Euros) do not need to submit their VAT balance, but they still pay VAT. Those eligible must register to be a VAT registered person or entity. Timber, wood and wood related products are not exempt from VAT. The time of supply of goods or services determines when a registered person should account for VAT. The time of supply is usually deemed to be the time of delivery, when ownership of goods is transferred, when payment is made, or when a tax invoice is
	Legally required documents or records VAT declaration. Tax invoice where VAT is mentioned as well as the goods sold, or the services provided, and also the amount of VAT due.	so.org/download/legalit y-definition-doc-en/LD- Matrix-Draft- 29Feb2016-V2-final- draft-ENG_2.pdf	A VAT registered person or entity is required to issue tax invoices every time transactions are made, showing details of the nature and value of the goods sold or the services provided, and also the amount of VAT due. A tax invoice is used as evidence for claiming an input tax credit.
	amount of vivi due.	Deloitte (2015). Taxation and Investment in Thailand, 2015 https://www2.deloitte.co m/content/dam/Deloitte/ global/Documents/Tax/ dttl-tax-thailandguide-	Description of Risk The revenue code described above provides a comprehensive legal framework, including a verification system pertaining to payment of all VAT on all commodities in Thailand. No publicly available record can be found of illegal avoidance of sales tax in the forestry industry. 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.
		2017.pdf Local expert, contributing to the	Risks related to avoidance of payment, incorrect payments and deliberate or fraudulent practices are unknown although there are cases of tax avoidance reported frequently, but no further summarizing figures or public reports are available. There is no evidence to suggest that the forest or timber industry

		CNRA cat 1. 2018	present an enhanced risk in relation to illegal activities. Local experts consider this topic also low risk for the timber sector. Risk conclusion Risks associated with failure to pay the sales tax are negligible at a national level. Classification of risk is low. Low risk thresholds (1): 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.
1.7 Income and profit taxes	Applicable laws and regulations Thailand Revenue Code Chapter 3 https://www.thailandlawonline.com/table-of-contents/thailand-tax-law-revenue-code Thaiembassy.org. Chapter 2: Taxation in Thailand. Business Guide to Thailand, 2014. http://www.thaiembassy.org/dakar/contents/files/business-20150617-174649-498796.pdf	NEPCON. Risk Assessment, 2017 https://www.nepcon.org /sites/default/files/librar y/2017-06/NEPCon- TIMBER-Thailand-Risk- Assessment-EN-V1.pdf	Overview of Legal Requirements Payment of income (persons) and profit tax (companies) are covered by sections 40-65 and 65-76 respectively of Chapter 3 of the Thailand Revenue Code. General provisions are detailed in sections 38-39. The same rules apply for the forest sector. For business the required documents to use are the: Corporate Income Tax: Company Tax Returns (Form CIT 50), Tax Prepayment (Form CIT 51), and Invoice issued by the Revenue Department.
	Legal Authority Thailand Tax department. Legally required documents or records Income declaration	Deloitte (2015). Taxation and Investment in Thailand, 2015 https://www2.deloitte.co m/content/dam/Deloitte/ global/Documents/Tax/ dttl-tax-thailandguide- 2017.pdf Local expert, contributing to the CNRA cat 1. 2018	In Thailand, there is no specific legislation regulating income and profit taxes on profits derived from the sale of timber and forest products, and from harvesting activities. The Revenue Code specifies the rates for personal income and corporate income as follows: Personal Income Tax rates apply to taxable income above 150 000 baht, then a minimum of 5% for net income not exceeding 300 000 baht and a maximum of 35% for net income exceeding 4 million baht. Corporate Income Tax is a direct tax levied on a juristic company or partnership carrying out business in Thailand or overseas but deriving certain types of income from Thailand. The rate of Corporate Income Tax in Thailand is 20% on net profit. However, the rates vary depending on the type of taxpayer. For example, a small company (referring to any company with paid up capital of less than 5 million baht at the end of each accounting period) with a net profit from 150 000 to 3 million baht pays a 20% rate.

			Description of Risk The revenue code described above provides a comprehensive legal framework, including a verification system pertaining to payment of the income/profit tax in Thailand. No publicly available record can be found of illegal avoidance such tax in the forestry industry. 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. Risks related to avoidance of payment, incorrect payments and deliberate or fraudulent practices are unknown although there are cases of tax avoidance reported frequently, but no further summarizing figures or public reports are available. There is no evidence to suggest that the forest or timber industry present an enhanced risk in relation to illegal activities. Local experts consider this topic also low risk for the timber sector. Risk conclusion Risk is nationally considered to be low. Low risk thresholds (1): 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.
1.8 Timber Harvesting Regulations	Applicable laws and regulations Forest Act B.E. 2484 (1941), Section 54 (https://new.forest.go.th/economy/wp- content/uploads/sites/86/2016/08/1.pdf) Ministerial Regulation no23 (1975) issued under Forest Act – fee rates http://web.krisdika.go.th/data/outsitedata/outsite21/ file/ministerial_regulations_no43_be_2537_(1994)_issued_under_the_act_promulgating_the_land_c ode_be_2497_(1954).pdf National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Amended sections 16, 6 bis 16 tres and 20. http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/prb	TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG_2.pdf	Overview of Legal Requirements The current laws and regulations (Forest Act, Plantation Act, National Reserved Forest Act) focus almost exclusively on establishing the legality of land ownership and contains almost no provisions, requirements or legally binding conditions related to forest management planning, harvesting techniques, sustainability of harvesting operations or the minimization of environmental or social impacts of harvesting and related activities. In part this is due to the logging ban, thus no timber from natural forests can be harvested anyway. The focus is more on forest plantations but until harvesting age (which is dependent on species) there are no specific legal requirements. The most difficult and environmentally damaging forest operations were carried out as concessions in natural forest, and with effect from 1989 these

2.pdf

http://www.fisheries.go.th/mf-

emdec/mainweb/fisherylaw/lawfiles/done/พระราชบัญ ญัติป่าสงวนแห่งชาติ%20(ฉบับที่%203)%20พ.ศ.%20252 8.pdf

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), and amended sections 11, 12 and 13

<u>https://new.forest.go.th/economy/th/พระราชบัญญัติสว</u> <u>นป่า-พ-ศ-2535/</u>

http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf

Chainsaw Act, 2002, Section 4,

https://new.forest.go.th/economy/th/พระราชบัญญัติเลี่ อยโซ/

Electrical Saw Act 2002 (B.E. 2545)

https://data.opendevelopmentmekong.net/laws_record/4de84a59-7fe1-41a8-b194-9a92cd995d5c

Legal Authority

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Legally required documents or records

The forest or tree plantation Written Permit on National Reserved Forest land (P.S.31)
Utilizing or living Written Permit on National Reserved Forest land (P.S.23)
The Written Permit for utilizing and living on deteriorated National Reserved Forest (Sor Tor Kor 1 A, Sor Tor Kor 2 A) The Written Permit to do

have been banned. The remaining forest activities are principally in the form of tree cropping systems and plantations, either in the form of mixtures or mono-cultures. Teak, rubberwood, eucalyptus, agarwood, fruit trees (or trees with multiple purpose such as durian and jak fruit are the most commonly planted.

Thailand has a history of owners and farmers investing in – or actively growing - tree crops for sale to industrial processes such as pulp, paper, chip and fibre board and increasingly for fuelwood and pellets. The species are fast growing exotics, including rubberwood. A number of owners and operators are also growing more valuable tree species such as rosewood, teak, dipterocarps and trees for fruits, oils and other non-timber products, although timber may often be a useful by-product and income source.

However, for all these species and cropping systems there are no legal requirements related to 'good harvesting practice". The legal references all relate to ensuring that operators have complied with the regulatory framework in terms of ownership, leasing, acquisition of permits and payment of fees.

Harvesting with chainsaws is covered by the very specific laws (Chainsaw Act, 2002 and Electrical Saw Act 2002) relating to the purchase and use of chainsaws. Processing of Timber by saw also has specific regulations and different levels of fee rates for processing of wood by saws is dependent on the size of the saw – as determined by horsepower rating. The laws relating to ownership and use of chainsaws and the license to own and operate saws for converting and milling timber are frequently confused in documentation in Thailand.

However, there are a number of harvesting systems and options open to operators including harvesting with animals, mechanical extraction, harvesting and extraction by small-scale agricultural tractors and vehicles all of which are feasible but have no specific codes of practice or rules – other than those related to the legality of ownership and operating. Codes related to appropriate standards (and risks) associated with using animals to harvest timber (elephants and buffalo) are completely absent.

Official harvesting guidelines does not seem to exist. There are some informal manuals for plantations, like the one for teak.

	forest or tree plantation on deteriorated National Reserved Forest (Sor Thor Kor 1 B) from RFD Acknowledged Certificate from the Registrar of Plantations (Sor Por 13) Acknowledged Letter of Timber account from registered forest plantation (Sor Por 15) Teak logging in forest Written Permit (permit 1) Restricted Timber logging except Teak in forest Written Permit (permit 2) Logging written permit in reserved forest (P.S.2) An RFD Transportation Certificate for round logs and transformed timber, or a Confirmation Letter of Transformed Rubberwood Timber or Timber Products/ a Confirmation Letter of Transformed Rubberwood Timber or Timber Products. Category A species (Restrict species), an RFD Harvesting Permit. Category B species (Restrict species), a Ministerial Authorization. Chainsaw possessing permit (Lor Zor 3) Certificate of Permission for Possession of Land for Activity within Forest Area (under Section 54 of the Forestry Act) and/or Certificate of Permission from other government agencies		Description of Risk In spite of the absence of specific legislative requirements related to harvesting practices, controls and procedures, harvesting appears to function effectively. However, there are risks related to negative environmental and social impacts resulting from inappropriate harvesting practices — even though these may be legal. There are also the risks of negative impacts on animals used to carry out harvesting. This has been a very high risk in the past with reports of animals being subjected to overwork and poor standards of welfare including the use of drugs to prolong working hours. Local customary practices appear to act as an effective countermeasure to seriously bad practices — for instance harvesting in heavy rain and destroying roads to villages or damaging water courses, but there are no legal requirements that stipulate that these customary rules are mandatory. Risks associated with harvesting are consequently many and relate principally to negative environmental and social impacts of inappropriate or insensitive harvesting, not to the regulations. Such is also discussed in cat 3 of this CNRA assessment. The environmental and social risks are at a national level, but the severity of the environmental risks is likely to increase with higher altitude, more severe topography and higher rainfall. Risk conclusion Following the CNRA methodology this leads to NA (3.1.1 'When there are no relevant laws or regulations for a given indicator, the indicator shall be considered as 'not applicable' for the area under assessment').
1.9 Protected species and sites	Applicable laws and regulations 63 Key Environmental Legislation https://chacrit.wordpress.com/2015/05/30/key- environmental-legislation-of-thailand/ Wild Animal Preservation and Protection Act B.E. 2535 (1992) and as amended B.E. 2557 (2014) http://thailaws.com/law/t_laws/tlaw0317.pdf	TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-doc-	Overview of Legal Requirements In 2015 Chacrit Sitdhiwej of the Faculty of Law, Thammasat University, listed 63 key pieces of legislation related to protection of animals, plants and the environment. Of these 14 are directly relevant for forests although many are later versions of, or replacements for, earlier pieces of legislation. So, the legislative base for protection and conservation is limited. Nevertheless, Thailand has a comprehensive network of declared protective

National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Amended sections 16, 6 bis 16 tres and 20.

http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/prb 2.pdf

http://www.fisheries.go.th/mf-

emdec/mainweb/fisherylaw/lawfiles/done/พระราชบัญ ญัติป่าสงวนแห่งชาติ%20(ฉบับที่%203)%20พ.ศ.%20252 8.pdf

National Park Act B.E. 2504 (1961) and amendment 1989

http://thailaws.com/law/t_laws/tlaw0180.pdf http://www2.austlii.edu.au/~graham/AsianLII/Thai_ Translation/National%20Park%20Act.pdf

Enhancement and Conservation of National Environmental Quality Act B.E. 2535 (1992) http://portal.mrcmekong.org/assets/documents/Thai-Law/Enhancement-and-Conservation-of-National-Environmental-Quality-Act-(1992).pdf

Forest Act B.E. 2484 (1941), Section 54 (https://new.forest.go.th/economy/wp-content/uploads/sites/86/2016/08/1.pdf)

Ministerial Regulation No. 19 on Harvesting Restricted Forest Product B.E. 2517, by virtue of Forest Act B.E. 2484

Ministerial Regulation No. 24 on Restricted Timber Harvesting B.E. 2518, by virtue of the Forest Act B.E. 2484.

http://law.longdo.com/law/372/sub23710

Royal Decree on Restricted Timber Species B.E. 2530 (1987) by virtue of Forest Act B.E. 2484 (Fifth Revision B.E. 2518), Clause 7, 27 and 28 http://forestinfo.forest.go.th/Content/file/forest2530.

en/LD-Matrix-Draft-29Feb2016-V2-finaldraft-ENG_2.pdf

NEPCON. Risk Assessment, 2017 https://www.nepcon.org /sites/default/files/librar y/2017-06/NEPCon-TIMBER-Thailand-Risk-Assessment-EN-V1.pdf areas. National Parks, Marine and Terrestrial wildlife sanctuaries, RAMSAR sites, Forest Parks and other protected areas make up the area that comprise Thailand's protected area network: the legacy, in part, of the decision to ban forest concessions in Thailand's natural forests. See cat 3 of this CNRA for a summary of all protected areas.

Thailand ratified 'The Convention on Biological Diversity' (CBD) in 1994. The Ministry of the Environment and Spatial Planning has responsible for its implementation. The CBD is implemented by National Biodiversity Strategy and Action Plan. CBD actions plans are made. The current action plan is running from 2015-2021. The Fifth national report was published in 2011. More information can also be found under indicator 3.1.

The Office of Natural Resources and Environmental Policy and Planning (a part of MNRE (the Ministry of Natural Resources and Environment) has classified Thailand's Protected Areas into 12 categories:

National Parks
Wildlife Sanctuaries
Forest Parks
No-Hunting Areas
Botanical Gardens
Arboreta
Biosphere Reserves
World Heritage sites
Watershed Classification 1 sites
Conservation Mangrove Forests
Natural Conservation Areas
RAMSAR Sites

Section 6 of the Forest Act classifies restricted timber species into Category A (158 species) and Category B (13 species), listed in the Royal Decree on Restricted Timber Species B.E. 2530. Harvesting, transporting, and trading Category A timber species from a forest requires permission, and only standing timber marked by a seal of a competent officer is allowed to be logged. Category B timber species are described as rare species that are prohibited from logging from a forest unless a person holds a ministerial authorization.

On private land, restricted species are not controlled, however, permission

pdf

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), and amended sections 11, 12 and 13

https://new.forest.go.th/economy/th/พระราชบัญญัติสว นป่า-พ-ศ-2535/

http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf

Thailand's Protected Area Network http://chm-

thai.onep.go.th/chm/protected/protected_thai.htm

Convention on Biological Diversity (CBD) 2018, Country profile.

https://www.cbd.int/countries/default.shtml?country
=th

National CHM (Clearing House Mechanism) website, Ministry of the Environment and Spatial Planning

http://www.onep.go.th/

Direct link to 5th National report

https://www.cbd.int/doc/world/th/th-nr-05-en.pdf

Direct link to National Biodiversity Strategy and action plan 2015-2021

https://www.cbd.int/doc/world/th/th-nbsap-v4-en.pdf

Legal Authority

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Department of National Parks, Wildlife and Plant Conservation (DNP) website http://portal.dnp.go.th/

is required for harvesting, processing, transporting, and trading teak (*Tectona grandis*), yang (*Dipterocarpus alatus*), and rosewood (*Dalbergia spp.*), as specified in section 7 of the Forest Act (amended 2014):

Commercial harvesting of any volume of restricted forest products requires permission but harvesting for domestic consumption not exceeding the specified volume in the Forest Act BE 2484 (amended 2014) does not require permission. In 2014, the Forest Act was amended to include *Dalbergia spp.* as a restricted species nationwide. Harvesting, processing, transporting and in trading *Dalbergia spp.* requires a permit. The same counts for a group of other species.

Registered plantations (Plantation Act) contain a requirement to monitor, but no mandatory actions to protect or conserve animals, plants, or significant environmental features.

Rubberwood

For private tree and plantation owners there is no specific environmental legislation and no guidelines or conditions that they are expected to follow for protecting or conserving general environmental features or specific examples of flora and fauna that may exist.

Description of Risk

Thailand's protected area system is relatively well managed and resourced in terms of management effort. As felling and harvesting of timber is strictly illegal in protected areas, the risks regarding potential impact of forest management activities in protected areas mainly relate to illegal logging and illegal encroachment. Despite a nationwide logging ban and protected area networks. Thailand's remaining forests are increasingly threatened by pervasive illegal logging, and the major driver of this crime is the rosewood trade. The Thai government has made significant efforts to address illegal logging. It recognises that the laundering of rosewood from natural forest is a problem and is developing a national inventory of rosewood in natural forests. Thailand has made some success with finding illegal timber and prosecuting those responsible (including forest authorities) through conventional policing activities. Although the Thai authorities are determined to combat illegal logging and encroachment with increased funding from the government, the laws are not consistently enforced. Thai government recognizes that protected areas are under threat due to illegally

Legally required documents or records

The forest or tree plantation Written Permit on National Reserved Forest land (P.S.31)
Utilizing or living Written Permit on National Reserved Forest land (P.S.23)
The Written Permit for utilizing and living on deteriorated National Reserved Forest (Sor Tor Kor 1 A, Sor Tor Kor 2 A) The Written Permit to do forest or tree plantation on deteriorated National Reserved Forest (Sor Thor Kor 1 B) from RFD

Plantations (Sor Por 13)
Acknowledged Letter of Timber account from registered forest plantation (Sor Por 15)

Acknowledged Certificate from the Registrar of

Teak logging in forest Written Permit (permit 1) Restricted Timber logging except Teak in forest Written Permit (permit 2)

Logging written permit in reserved forest (P.S.2) An RFD Transportation Certificate for round logs and transformed timber, or a Confirmation Letter of Transformed Timber or Timber Products/ a Confirmation Letter of Transformed RubberwoodTimber or Timber Products. Category A species (Restrict species), an RFD Harvesting Permit.

Category B species (Restrict species), a Ministerial Authorization.

Chainsaw possessing permit (Lor Zor 3)
Certificate of Permission for Possession of Land for Activity within Forest Area (under Section 54 of the Forestry Act) and/or Certificate of Permission from other government agencies

Local expert, contributing to the CNRA cat 1.2018. encroachment and illegal logging.

Risk 1 - High value of products (rosewood, ivory, natural agarwood) and non-timber products that occupy forest areas (gemstones and the value of the land for agriculture) pose pressures that drive a range of illegal activities such as poaching (timber and other flora and fauna); mining and conversion together with encroachment and permanent human settlement by land occupation and capture

Risk 2 – the associated risk is that the products and the land itself retains such a high value that it can drive a range of illegal and corrupt practices, even from within the agencies established to regulate and control them. Such is also the conclusion with various other indicators under category 1 that were leading to specified risk because of corruption.

Risk 3 – Failure to identify (no Environmental Impact Assessments or inventories available or required for all forest owners) and safeguard areas that possess important environmental or conservation values or which harbour rare, threatened or endangered species.

The failure to develop and incorporate clear and relevant regulations may mean that the current plantations are failing to contribute to Thailand's environment and in fact are helping contribute to its decline. Important areas of biodiversity or rare, threatened and endangered habitats may be missed or overlooked, or converted to plantations or agriculture.

Visiting small- and large-scale plantations – especially of short rotation exotic monocultures - reveals that operators rarely adopt environmental protection measures, or specie protection, into the planning or regular management of tree crops and plantations. Large areas of the country are planted with rubberwood and fast-growing exotic species but there is no comprehensive planning framework to minimizing their negative impacts at a local or landscape level or to protect species in general.

CBD implementation and protected areas.

Since the fourth national CBD report was prepared the area of native habitat managed primarily for biodiversity conservation across terrestrial, and inland aquatic environments in Thailand has increased substantially (see CNRA cat 3). All forest areas that are critical to conservation are now designated as protected areas at national level. Thailand continues to implement the National Biodiversity Strategy, based on the international CBD

			requirements. And this national strategy is properly converted into laws and regulations. There are no further gaps in laws and regulations with regards to protected areas. Risk conclusion The Thailand protected area network is complex, representative and well developed. But the failure to incorporate basic measures to protect and to assess (inventory) and conserve key environmental features within the tree plantations and forest reserves means that the strategy is incomplete. This is also in line with cat 3 of this CNRA where similar risks are identified. Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.
1.10 Environmental Requirements	Applicable laws and regulations 63 Key Environmental Legislation Summary: https://chacrit.wordpress.com/2015/05/30/key- environmental-legislation-of-thailand/ Wild Animal Preservation and Protection Act B.E. 2535 (1992) and as amended B.E. 2557 (2014) http://thailaws.com/law/t_laws/tlaw0317.pdf Enhancement and Conservation of National Environmental Quality Act B.E. 2535 (1992) http://portal.mrcmekong.org/assets/documents/Tha i-Law/Enhancement-and-Conservation-of-National- Environmental-Quality-Act-(1992).pdf Announcement of Ministry of Natural Resources and Environment on setting the type and size of the project or activity must prepare a report on the environmental impact assessment regulations and procedures and guidelines for the preparation of the environmental impact assessment Clause 4	TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/downloa d/legality-definition-doc- en/LD-Matrix-Draft- 29Feb2016-V2-final- draft-ENG_2.pdf	Overview of Legal Requirements From the 63 key pieces of legislation related to protection of animals, plants and the environment 14 are directly relevant for forests although many are later versions of, or replacements for, earlier pieces of legislation. This indicator lists the Environmental requirements for forest owners, operators and other actors operating on forested land. In addition, there are a number that concentrate on specific elements of the environment – such as the use of dangerous or hazardous chemicals, pollution etc. These are covered below under section 1.11 Health and Safety. In general adherence with regulations related to use, storage and application of dangerous chemicals and hazardous substances is very erratic, a conclusion drawn from the recent FLEGT Field Testing exercise of the draft Legality Definition. Such is outlined in the Hazardous Substance Act. Registered plantations (Plantation Act) contains a requirement to monitor, but no mandatory actions to protect or conserve, animals, plants and significant environmental features. The protection of water resources is prescribed in the Forest Act and the National Reserved Forest Act. Besides that, there are various other policies

Regulation No. 2 (1984) issued under the Enhancement and Conservation of National Environmental Quality Act, 1975 Clause 3, 4

Forest Act B.E. 2484 (1941), Section 54 (https://new.forest.go.th/economy/wp-content/uploads/sites/86/2016/08/1.pdf)

Factory Act, B.E. 2535 (1992) and amendments. http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang =en&p_isn=68794

http://www.thailand-lawyer.com/factories-act-thailand.html

National Park Act B.E. 2504 (1961) and amendment

http://thailaws.com/law/t_laws/tlaw0180.pdf http://www2.austlii.edu.au/~graham/AsianLII/Thai_ Translation/National%20Park%20Act.pdf

National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Amended sections 16, 6 bis 16 tres and 20.

(http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/pr b2.pdf) (http://www.fisheries.go.th/mf-emdec/mainweb/fisherylaw/lawfiles/done/พระราชบัญ ญัติป่าสงวนแห่งชาติ%20(ฉบับที่%203)%20พ.ศ.%20252 8.pdf)

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), and amended sections 11, 12 and 13

(https://new.forest.go.th/economy/th/พระราชบัญญัติส วนป่า-พ-ศ-2535/)

(http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf)

and instruments to protect water sources. For more details please read indicator 3.4.

The Wild Animal Preservation and Protection Act and the National Park Act B.E. 2504 (1961) are mainly listing species and locations, but no Environmental Requirements.

For forest and plantation areas that are currently designated for production (mainly forest plantations and tree cropping systems because all other forests are under the logging ban) irrespective of the ownership there a few environmental regulations and guidelines that seek to minimize the environmental –or social – impacts of their activities and the need to conduct Environmental Impact Assessments is (with the exception of the construction of large pulp mills) left to the discretion of the minister (See Clause 4 of the Enhancement and Conservation of National Environmental Quality Act 1992 Act).

For private tree and plantation owners there is no further specific environmental legislation and no guidelines or conditions that they are expected to follow for protecting or conserving general environmental features or specific examples of flora and fauna that may exist.

In factories, sawmills, timber processors and manufacturers the Factory Act together with its numerous amendments contains a significant number of requirements and regulations that are related to environmental impacts and safety e.g. limits on emissions of noise, smoke, particulates and waste; requirements for monitoring workers' health and requirements for safe working environment and adoption of safe working practices means that the Factory Act represents a major piece of environmental legislation in its own right. The Factory Act should not be overlooked as a key mechanism through which the environment can be regulated, in spite of its more 'industrial' focus.

Description of Risk

Visiting small- and large-scale plantations – especially of short rotation exotic monocultures - reveals that operators rarely adopt environmental protection measures into the planning or regular management of tree crops and plantations. Large areas of the country are planted with rubberwood and fast-growing exotic species but there is no comprehensive planning framework to minimizing their negative impacts at a local or landscape level.

	Thailand's Protected Area Network http://chm- thai.onep.go.th/chm/protected/protected_thai.htm Hazardous Substance Act, 1992 Clause 16 https://www.jetro.go.jp/thailand/e_activity/pdf/hazsubact2535.pdf Announcement of Ministry of Industry on Storage Hazardous Substance, 2008 Announcement of the Department of Industry Works on Storage Hazardous Substance Handbook, 2007 Legal Authority Royal Forest Department, Ministry of Natural Resource and Environment https://www.forest.go.th Ministry of the Environment Office of Natural Resources and Environmental Policy and Planning (ONEP) Department of Industrial Works (DIW) of Ministry of Industry Legally required documents or records No special additional documents required.	Environmental Investigation Agency. Thailand report, 2018 (check for 'Thailand'): http://www.eia- international.org Local expert, contributing to the CNRA cat 1.2018	Because there are hardly any regulations it is not possible to say what, and if, there is environmental damage with regards to soil protection, the use of chemicals, waste, construction and use of forestry roads, construction and maintenance of recreational facilities. International sources like the Environmental Investigation Agency does not list any environmental problems, except for illegal harvesting and its consequences. A number of risks are posed through the largely unregulated activities of farmers, owners and operators in relation to growing trees and timber. There is a clear absence of law and regulations with this respect. Because of that there is also no clear penalty, monitoring and inspection system that controls, and avoid, environmental damage in forestry. Risk conclusion Following the CNRA methodology this leads to NA (3.1.1 'When there are no relevant laws or regulations for a given indicator, the indicator shall be considered as 'not applicable' for the area under assessment').
1.11 Health and Safety	Applicable laws and regulations Factory Act, B.E. 2535 (1992) and amendments. http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang en&p_isn=68794 http://www.thailand-lawyer.com/factories-act-thailand.html	ILO. summary of Thailand, 2018 http://www.ilo.org/safew ork/countries/asia/thaila nd/langen/index.htm	Overview of Legal Requirements ILO provides an excellent summary of the legislation relating to Health and Safety (H&S) at work and the section Applicable Laws and Regulations is drawn largely from this summary and the TEFSO Legality Definition. Most regulations are designed for workplaces – implicitly referencing buildings, factories or industrial locations. Consequently, most of the regulations related to health and safety are relevant to these situations but

Occupational Safety, Health and Environment Act, 2011 Sections 8, 9, 11

http://web.krisdika.go.th/data/outsitedata/outsite21/file/OCCUPATIONAL_SAFETY,_HEALTH,_AND_ENVIRONMENT_ACT,B.E. 2554.pdf

Ministerial Regulation on Safety, Health and Environmental Standards in Work related to Heat, Light, and Noise B.E. 2559 (2016), Clause 13, 14, 15, 16, 17

http://www.ratchakitcha.soc.go.th/DATA/PDF/2559/A/091/48.PDF

Announcement of Department of Labor Protection and Welfare on Personal Protective Equipment Standards B.E. 2554 (2011).

http://www.labor.go.th/th/doc/law/07-10-54-1.pdf Ministerial Regulation on the Guidelines of Staff Health Checks and Submission of Results to Labor Inspection Officer B.E. 2547 (2004).

http://medinfo2.psu.ac.th/commed/occmed/images/ TIS18001/tisp4/law%20safety/i mages/law/Health/Rule%20check-up47.pdf

Labor Protection Act B.E. 2541 (1998) – Chapter 8 and Sections 92-107 and sections 112-115 http://www.labor.go.th/th%20/doc/law/labor_protection_2541_new.pdf

Ministerial Regulation on Labor Protection in Agricultural Work 2014 Clause 4

http://extwprlegs1.fao.org/docs/pdf/tha160104.pdf
http://www.krisdika.go.th/wps/wcm/connect/63aa05
0041e628e9b43bb597a6c96100/MINISTERIAL+R
EGULATION+ON+++THE+PROTECTION+OF+LA
BOR+IN+AGRICULTURAL+WORK%2C+B.E.+255
7+%282014%29.pdf?MOD=AJPERES&CACHEID
=63aa050041e628e9b43bb597a6c96100

ILO. key stats, 2018 http://www.ilo.org/gate way/faces/home/ctryHo me?locale=EN&country Code=THA& adf.ctrlstate=onyq77xah_67

TEFSO (Thai-FLEGT office); legal summary, 2016
http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-

draft-ENG 2.pdf

Human rights. Thailand report (US government), 2016. https://www.state.gov/j/drl/rls/hrrpt/2006/78792.htm

they do not adequately reflect the situation of workers' safety in a forestry environment. Mills, particularly sawmills, have specific issues and problems and these may require specific counter-measures that are not particularly well covered by the legislation: this situation applies in Thailand.

Relevant regulations are the Factory Act, Occupational Safety, Health and Environment Act and the Labor Protection Act. But almost nothing is listed about the H&S in a forestry environment.

Consequently, health and safety issues in forest operations still represent a significant risk to health that is not fully offset by the mitigation measures mandated by the legislation. Visits to the forest reveal very patchy use of Personal Protective Equipment, inadequate signage and preventive measures, lack of first aid equipment etc. In general, the State-Owned Enterprises (SOE) appear much better at adhering to – and enforcing – the necessary regulations, especially with respect to the wearing of PPE. In general adherence with regulations related to use, storage and application of dangerous chemicals and hazardous substances is very erratic, a conclusion drawn from the recent FLEGT Field Testing exercise of the draft Legality Definition. Such is outlined in the Hazardous Substance Act.

The Chainsaw Act regulates the ownership, use and transport of chainsaws.

Description of Risk

Due to the complexity of laws relating to the ownership and use of chainsaws (Chainsaw Act) regulations most chainsaw operations are contracted out to owner/operators who are employed under contract and within a specific location to conduct felling, firewood harvesting, or primary (rough) processing in the field. Transporting chainsaws is covered by specific regulations which mean that much of the contracting remains local.

A 2012 report 'National profile on occupational safety and health of Thailand (Occupational Safety and Health Bureau, Department of Labor Protection and Welfare Ministry of Labor, table 5). Listed the following number of accidents over the years in the forest and timber products sector:

Chainsaw Act, 2002, Section 4,

https://new.forest.go.th/economy/th/พระราชบัญญัติเลื่อยโซ/

Ministerial regulation on characteristic of chainsaw and chainsaw composition, 2012 Clause 2 Ministerial regulation on principle, method, and condition of possessing, producing, or importing chainsaw permission and license, and adjusting chainsaw to increase its power including the qualification and disqualification of applicant, 2008, Clause 1,2,5

Requiring valid Chainsaw permit (Lor Zor 3 – possession of saw); Lor Zor 7 – permit for import for trade combined with accounts and records Lor Zor 7/1, Lor Zor 7/1 A, Lor Zor 7/2 and 7/2 C.

Hazardous Substance Act, 1992 Clause 16 https://www.jetro.go.jp/thailand/e_activity/pdf/hazsubact2535.pdf

Announcement of Ministry of Industry on Storage Hazardous Substance, 2008
Announcement of the Department of Industry Works on Storage Hazardous Substance

Works on Storage Hazardo Handbook, 2007

Legal Authority

Ministry of Labor, Department of Labor Protection and Welfare

Royal Forest Department, Ministry of Natural Resource and Environment https://www.forest.go.th

Department of Industrial Works (DIW) of Ministry of Industry

HSE, UK government, people killed in forestry, 2018.

http://www.hse.gov.uk/ agriculture/pdf/ag-fatal-1617.pdf

SciELO. Study that compares fatal accidents in forestry throughout the world. 2014

http://www.scielo.cl/pdf/ cyt/v16n51/art02.pdf

ILO. National profile on occupational safety and health of Thailand 2012:

http://www.ilo.org/wcms p5/groups/public/--asia/---ro-bangkok/--sro-

bangkok/documents/policy/wcms 192111.pdf

2003	2004	2005	2006	2007	2008	2009	2010	2011
1398 3	1340 3	1150 1	1000 8	8706	4978	5838	5637	4471

Unfortunately, there is no recent data. Thus, the figures above and below should be accepted with caution.

It is somewhat difficult to extract the number of fatal accidents in forestry. But an average figure learns that in 2011 there were 590 fatal incidents on 129 632 accidents in total for all sectors (not only forestry). Which is 0,455%. In 2011 there were 4 471 accidents in the forest sector. This means (average) 0,455 x 4 471 = 20 fatal accidents in 2011 in the forest and timber sector. As can be seen in the table above the trend is declining, which is good news.

In literature these numbers are usually calculated by the number of fatal accidents/million m3 harvested in the country.

If we calculate 20 / 0,3 million m3 harvested (2016 figure, which is only the plantation timber from public land, other figures are not know) = 66 fatal/million. To compare here are some figures from other countries:

COUNTRY	Fatal Cases/Million M3 (2010–2012 Average)
Germany	0
Belgium	0
Finland	0.0064
Australia	0.01
Sweden	0.04
New Zealand	0.16
Canada (Province of BC)	0.17
Spain	0.18
Chile	0.21
USA	0.22
United Kingdom	0.23
Austria	0.30
Italy	2.05

(Source: Occupational Accidents Footprint – SciELO (see left column).

It can be seen that the number in Thailand is high. Even we assume that the real harvesting figures are higher (because of small private plantations not

	Legally required documents or records Chainsaw possessing permit (Lor Zor 3)	Local expert, contributing to the CNRA cat 1.2018.	counted in the national figures), then the number is still too high. Risk 1: Most H&S regulations are designed for workplaces – implicitly referencing buildings, factories or industrial locations. Consequently, most of the regulations related to health and safety are relevant to these situations but they do not adequately reflect the situation of workers' safety in a forestry environment. The only real Act is the Chainsaw Act. It means that not all practical operating conditions in the field are covered by legal requirements that reflect the dangers and risks inherent in conducting these operations (harvesting, transport, primary conversion etc) and these represent a real and specified risk to workers. The risks are enhanced for the smaller-scale operators, particularly community based and SME's (Small and Medium sized Enterprises) where regulations are considered a burden and add significantly to the cost of the work: consequently, these regulations are frequently ignored, even at the expense of worker and operators' own safety. There are too many fatal accidents in the forest sector, when compared to other countries. This is confirmed by local experts. Risk conclusion The risks are clear and evident and continue to persist – in spite of the (limited) legislation. Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.
1.12 Legal Employment	Applicable laws and regulations Labor Protection Act, 1998 Sections 44, 45, 108, 112-115, 123-124, http://www.ilo.org/dyn/natlex/docs/WEBTEXT/4972 7/65119/E98THA01.htm The Establishment of Labor Court and Procedure Act, 1979 Sections 8, 53 http://asean.org/storage/2016/08/Thailand031.pdf Alien Working Act, 2008 Sections 7, 9, 11 http://ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=81025&p_country=THA&p_count=441 Social Security Act B.E. 2533 (1990), Section 34,	TEFSO (Thai-FLEGT office); legal summary,2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG_2.pdf ILO. Website Thailand with signed	Overview of Legal Requirements Thailand has ratified and/or been a signatory to a number of important international conventions and regulations related to employment and workers' rights; child labor, slavery, forced and bonded labor; trafficking; migrant labor etc. Information is available through the ILO website. Thailand has comparable domestic legislation covering these issues, many of which are relevant to the forest and timber processing industries. An operator who employs 10 or more employees is required to register with, and be bound by, the rules specified in the Labor Protection Act which is administered by the Department of Labor Protection and Welfare.

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http://www.ilo.org/dyn/travail/docs/1017/Social%20 Security%20Act%20BE%20253 3%201990.pdf State Enterprise Labor Relations Act B.E. 2543 (2000), Article 25. Including Minimum Standards of Employment Conditions in State Enterprises, Article 53, 55, 58

http://thailaws.com/law/t_laws/tlaw0266_7.pdf http://www.krisdika.go.th/wps/wcm/connect/180c72 804b9e9ba788abfdea72b7e938/STATE+ENTERP RISE+LABOR+RELATIONS+ACT%2C+B.E.+2543 +%282000%29.pdf?MOD=AJPERES&CACHEID= 180c72804b9e9ba788abfdea72b7e938

Labor Relation Act B.E. 2518 (1975). http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=14497

Legal Authority

Ministry of Labor, Department of Labor Protection and Welfare

Department of Industrial Works (DIW) of Ministry of Industry

Legally required documents or records Labor contracts conventions, 2018 http://www.ilo.org/dyn/no rmlex/en/f?p=1000:1120 0:0::NO:11200:P11200_ COUNTRY ID:102843

PANWA. Summary of labor laws and employment, 2018 http://www.panwagroup .net/business/index2.ht ml

ILO. Rights at Work: country profile, 2018 http://www.ilo.org/gate way/faces/home/ctryHome?locale=EN&country Code=THA& adf.ctrl-state=19vpbs7ael_9

ELDIS. Country profiles, 2018http://www.eldis.org/search?country=A1214

The Labor Protection Act is the principal piece of legislation and covers a range of topics including child labor (Sections 44 and 45) which limit the minimum working age to 18 and within the Forest Industry this is respected for most organisations. Mills, factories, processors and manufacturers who occupy industrial or commercial premises, employ more than 10 people and who are subject to inspection by Labor Inspectors, appear to adhere to the minimum age regulations rigorously; however, CBOs and SmEs make use of (even if they do not formally employ) children below this age.

For operators employing less than 10 people labor contracts are still required and social security charges need to be paid. Such small companies are checked less frequently by labor inspectors.

The Alien Working Act designed to regulate the employment of foreign migrant workers. It is allowed to employ migrant workers in the forest sector.

Social security is arranged in the Social Security Act and the State Enterprise Labor Relations Act. It is mandatory to pay social security charges for all employees in service by an employer.

The Labor Relation Act prescribes the rights to establish labor association and labor union for acquiring and protecting employees' interests relating to the Conditions of Employment. See indicator 2.2 for more information.

Description of Risk

Risk 1: A number of risks related to community-based operations (CBOs) using their own (not registered and not officially employed) labor and SMEs using workers who are not formally employed or number less than 10. Such small companies are checked less frequently by labor inspectors, this while there are many of such companies counted.

Risk 2: The Alien Working Act appears to be less rigorously adhered to by operators and examples of unregulated (illegal) alien workers has been widely reported (particularly from Myanmar). Even small-scale operators seek to contract (and arrange for) the short-term employment of migrant workers and this has been encountered frequently in the timber sector. Of the 3 million migrant workers, reports indicate that up to 50% may be illegal and unregulated or inaccurately reported. Problems are significant, particularly in those provinces that share a common border with Myanmar.

		Local media. Various articles 2018: http://www.scmp.com/week-asia/politics/article/2137480/http://www.samuitimes.com/thailands-fairytale-economy-reliant-migrant-workers/http://www.nationmultimedia.com/detail/national/30345561	Risk 3: Membership of Unions is actively or effectively discouraged within large commercial companies and the capacity of workers to raise complaints, bargain collectively and negotiate effectively with employers is limited. Union membership is stated but frequently confused with the membership of a company run scheme. The Thai press frequently reports companies who have been found guilty of infractions of the labor, employment and immigration laws and the situation is closely monitored by a range of local and international NGOs. In addition, many companies who source goods and services from Thailand (seafood, agricultural products, palm oil, rubberwood and timber-related products) maintain their own systems of due diligence which monitor these issues closely. The 3 examples referenced in the middle column are taken from 2018. A special Labor court was established by the Establishment of the Labor Court and Procedure Act. Risk conclusion For many aspects of the Labor and Employment remains subject to a range of risks and weaknesses which are proven and continue to be exploited. Currently in spite of the legislation, the control measures appear weak and labor and employment issues remain a risk at a national level. Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.
		Third parties' rights	
1.13 Customary Rights	Applicable laws and regulations Ministry of Social Development and Human Security (2014). Master Plan on the Development of Ethnic Groups in Thailand 2015-2017 http://www.chatipan.dsdw.go.th/pdf/F001.pdf Office of Ethnic Studies, Department of Social Development and Welfare (N.Y.). Ethnic Groups in Thailand according to Habitation	NEPCON. Risk Assessment, 2017https://www.nepco n.org/sites/default/files/library/2017- 06/NEPCon-TIMBER- Thailand-Risk- Assessment-EN-V1.pdf	Overview of Legal Requirements The Thai government does not recognise customary rights in relation to forestry activities. The government recognises the existence of ethnic groups but has adopted pro-assimilation policies since the founding of the Thai nation-state, and has centralised forest resource management to the point of excluding indigenous peoples' rights. Indigenous and non-indigenous peoples that live in the forest are usually viewed as a threat instead of as custodians of the forest. There is also a clear absence of consensus on customary law and values and how these are, or can be,

http://www.chatipan.dsdw.go.th/chatipan03.html

National Park Act B.E. 2504 (1961) http://www2.austlii.edu.au/~graham/AsianLII/Thai Translation/National%20Park%2 0Act.pdf

Legal Authority N/A

Legally required documents or records N/A

The centre for People and forests. Website 2018

https://www.recoftc.org

TEFSO (Thai-FLEGT office); legal summary,2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG 2.pdf

IWGIA Indigenous peoples in Thailand 2018 (news items). https://www.iwgia.org/en/thailand

Network of Indigenous

Peoples in Thailand (NIPT). With facts and figures and recommendations, 2016 http://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/THA/INT_CCPR_ICO_THA

Newmandala. Report about IP in national parks, 2010 http://www.newmandal

23570 E.pdf

incorporated into formal laws. Independent information and reasoning on laws related to Customary Rights is largely unavailable. Some studies were done (Ethnic Groups in Thailand according to Habitation) and a master plan was written (Master Plan on the Development of Ethnic Groups in Thailand 2015-2017). The National Park Act states about the fact that nobody can live inside national parks.

At this moment (2016) there are 9 874 community forest management organisations registered with RFD and in total they should manage 4 727 470 ha of forests. For the moment there is no law or regulation that recognizes these organisations, although debates taking place for years. In 2007, Thailand passed a Community Forest Bill after more than 15 years of consultations between the RFD and civil society groups. However, in 2009 the Constitutional Court ruled that the 1961 National Park Act took precedence, and the Community Forest Bill never became law. Because of this no formal management can take place by these organisations. As of mid-2016, there is thus still no legislation related to commercial logging/harvesting of timber generated in community forests. Verification of legal timber from community forests would follow the procedures of the Forest Act.

There are also no other laws that regulate Customary Rights in general.

In the meantime, customary rights are not guaranteed. Forest communities' access to forest resources, particularly those in protected areas, whether for domestic or commercial use, depends on the relationship between local forestry officials and local communities, which can vary significantly from one area to another.

Many rural communities in Thailand continue to lobby for their customary use rights of forest areas to be legally recognised. After almost two decades of campaigning, this has yet to happen. Local people continue to be evicted from areas where they claim to have customary rights that preceded to the establishment of protected forest areas. While customary rights are recognised in some areas, they are still not guaranteed to all.

The Department of National Parks has estimated that as of 2016 there are around 450 000 households living inside the forest reserves. Part of these forest reserves are classified as national parks, wildlife sanctuaries, and non-hunting areas. However, section 16 of the National Park Act prohibits

a.org/wpcontent/uploads/2010/0 6/ChATSEA-WP-8-Leblond.pdf

Reuters. Article 2018 https://www.reuters.co m/article/us-thailandlandrights-protestsanalysis/anger-overland-rights-spills-intostreet-protests-inthailandidUSKCN1II01E land-holding and harvesting of forest resources in national parks. There have been cases of arrests, incarceration, forced eviction and other violations by forestry and national park officials. One of the most recent cases was the forced relocation of Karen indigenous peoples from Kaeng Krachan National Park in May-July 2011. The National Park Act does not allow occupancy within parks, despite of the existence of evidence that an indigenous peoples' settlement has existed long before the demarcation of the protected area. A consistent theme emerging from research on Thailand's forests relates to community perceptions that local forest resources have been taken over by the RFD's rapid expansion of protected areas. Most protected areas in Thailand are surrounded or partially occupied by a local population who feel that their legitimate property rights have been appropriated.

Description of Risk

Because the Thai government does not recognise customary rights in relation to forestry activities, there continues to be a risk in terms of community dissatisfaction and refusal to respect the relevant laws or decisions based on them.

A clear example is evident in the recent Reuters press report of 17 May 2018 where communities perceive the government's rules related to land use are unacceptable and do not respect traditional Thai values.

Risk conclusion

The absence of a clear consensus on customary law and values and how these are, or can be, incorporated into formal laws represents a significant and continuing problem that Thai's existing legislation in relation to occupation and use of forest areas will not be respected. This represents an on-going problem at a National level.

Even though, following the CNRA methodology this leads to NA (3.1.1 'When there are no relevant laws or regulations for a given indicator, the indicator shall be considered as 'not applicable' for the area under assessment').

1.14 Free, Prior	Applicable laws and regulations		Overview of Legal Requirements
and Informed	N/A	NEPCON. Risk	In Thailand, there is no special law covering "free prior and informed
Consent		Assessment,	consent".
	Legal Authority N/A	2017https://www.nepcon.org/sites/default/files/l	It is not possible to establish with any assurably at what level laws, and their
	N/A	ibrary/2017-	It is not possible to establish with any accuracy at what level laws, and their application in practice, are applied through a process requiring free and
	Legally required documents or records	06/NEPCon-TIMBER-	informed consent of individuals or the community.
	N/A	Thailand-Risk-	and the content of marriagate of the community.
		Assessment-EN-V1.pdf	The situation has been complicated by the promulgation of new laws and
			regulations by the military government which are superseding or amending
			the previous legislation but with even more limited opportunities for
		TEFSO (Thai-FLEGT	discussion and debate by Thai society.
		office); legal summary,2016	The news report referenced in indicator 1.13 above also reflects the disquiet
		http://tefso.org/downloa	of sections of Thai community with the way that new legislation is being
		d/legality-definition-doc-	enacted and applied.
		en/LD-Matrix-Draft-	
		29Feb2016-V2-final-	Description of Risk
		draft-ENG_2.pdf	N/A
			Risk conclusion
			N/A
1.15 Indigenous	Applicable laws and regulations	NEDGON D'A	Overview of Legal Requirements
People's Rights	Amendment to the Nationality Act 2008 http://www.thailawforum.com/database1/Amendme	NEPCON. Risk	In 2007 Thailand voted in favour of the United Nations Declaration on the
	nts-to-the-nationality-act.html	Assessment, 2017 https://www.nepcon.org	Rights of Indigenous Peoples.
	nto to the nationality actinim	/sites/default/files/librar	Between 207 and 2015 the Thai Government enacted a number of laws that
	The Community Land Title Deeds Regulation, 2010		are generally beneficial to Indigenous Peoples in Thailand: Amendment
	http://www.unpan.org/PublicAdministrationNews/ta	TIMBER-Thailand-Risk-	were made to the Nationality Act 2008 and the Community Land Title Deeds
	bid/115/mctl/ArticleView/ModuleID/1467/articleId/2	Assessment-EN-V1.pdf	Regulation 2010.
	2144/Default.aspx	III. Co. I NI. C.	The Property of the death of the control of the con
	Logol Authority	United Nations.	The difficulty is that the current government, which came to power in 2014
	Legal Authority N/A	Declaration on the Rights of Indigenous	through a military coup, is enacting a raft of new legislative measures, many of which are directed at land ownership, tenure and usage and rights and
	I W/C	Peoples, 2018	obligations related to the access and use of the country's forest resources. It
I	Legally required documents or records	http://unbisnet.un.org:8	is uncertain what impact these will have in the immediate future and in the
	N/A	080/ipac20/ipac.jsp?pro	long term.

file=voting&index=.VM &term=ares61295

TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/downloa

http://tefso.org/downloa d/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-finaldraft-ENG_2.pdf

The centre for People and forests. Website, 2018

https://www.recoftc.org

IWGIA Indigenous peoples in Thailand, 2018 (news items). https://www.iwgia.org/en/thailand

The Asian Pacific
Human Rights
information Center.
With a good summary
of human rights in
Thailand, 2010
https://www.hurights.or.
jp/archives/focus/sectio
n2/2010/12/indigenouspeoples-ofthailand.html

Network of Indigenous Peoples in There are continuing reports of discrimination against Indigenous Peoples and it is unclear whether the new government will be seeking to redress outstanding issues or enact new legislation which might make the situation worse.

Indigenous peoples of Thailand

The indigenous peoples of Thailand are commonly referred to as "hill tribes," and sometimes as "ethnic minorities." The ten officially recognized groups are usually called "chao khao" (meaning hill/mountain people or highlanders). These and other indigenous peoples live in the north and north-western parts of the country, a few other groups live in the northeast. while indigenous fisher communities and a small population of huntergatherers inhabit southern Thailand. According to the Department of Social Development and Welfare (2002), the total of the officially recognized "hilltribe" population is 9 258 252 and they are distributed across twenty provinces in the north and west of the country. There are still no figures available for the indigenous groups in the south and northeast. The indigenous peoples of Thailand belong to five linguistic families: Tai-Kadai (e.g., the various Tai groups in the North, the Saek, or Shan, also called Thai Yai,), Tibeto-Burman (e.g., the Akha, Karen, Lahu, Lisu), Mon-Khmer (e.g., Lua, Khmu, Kui, Mlabri), Hmong-Mien (Hmong, Mien), and Malavo- Polynesian (Moken).

The ten ethnic groups that are officially recognized as "hill people" living in the north and west of the country are: The Akha, Hmong, H'tin, Karen, Khmu, Lahu, Lisu, Lua, Mien and Mlabri. There are however several other small groups that reside in the North: several so-called local Tai groups (Tai Lue, Tai Khuen, Tai Yong), Kachin and Shan (source: The Asian Pacific Human Rights information Center).

The Thai government does not recognise indigenous peoples' rights in relation to forestry activities. The government recognises the existence of ethnic groups but has adopted pro-assimilation policies since the founding of the Thai nation-state, and has centralised forest resource management to the point of excluding indigenous peoples' rights. Indigenous and non-indigenous peoples that live in the forest are usually viewed as a threat instead of as custodians of the forest.

At this moment (2016) there are 9 874 community forest management organisations registered with RFD and in total they should manage 4 727

Thailand (NIPT), With 470 ha of forests. For the moment there is no law or regulation that recognizes these organisations, although debates taking place for years. In facts and figures and recommendations. 2007, Thailand passed a Community Forest Bill after more than 15 years of consultations between the RFD and civil society groups. However, in 2009 2016. the Constitutional Court ruled that the 1961 National Park Act took http://tbinternet.ohchr.o rg/Treaties/CCPR/Shar precedence, and the Community Forest Bill never became law. Because of ed%20Documents/THA this no formal management can take place by these organisations. As of /INT CCPR ICO THA mid-2016, there is thus still no legislation related to commercial 23570 E.pdf logging/harvesting of timber generated in community forests. Verification of legal timber from community forests would follow the procedures of the Forest Act. In the meantime, customary rights are not guaranteed. Forest communities' access to forest resources, particularly those in protected areas, whether for domestic or commercial use, depends on the relationship between local forestry officials and local communities, which can vary significantly from one area to another. Many rural communities in Thailand continue to lobby for their customary use rights of forest areas to be legally recognised. After almost two decades of campaigning, this has yet to happen. Local people continue to be evicted from areas where they claim to have customary rights that pre-date the establishment of protected forest areas. While customary rights are recognised in some areas, they are still not guaranteed to all. Newmandala. Report

Newmandala. Report about IP in national parks, 2010 http://www.newmandal a.org/wpcontent/uploads/2010/0 6/ChATSEA-WP-8-Leblond.pdf

The Department of National Parks has estimated that as of 2016 there are around 450 000 households living inside the forest reserves. Part of these forest reserves are classified as national parks, wildlife sanctuaries, and non-hunting areas. However, section 16 of the National Park Act prohibits land-holding and harvesting of forest resources in national parks. There have been cases of arrests, incarceration, forced eviction and other violations by forestry and national park officials. One of the most recent cases was the forced relocation of Karen indigenous peoples from Kaeng Krachan National Park in May-July 2011. The National Park Act does not allow occupancy within parks, despite of the existence of evidence that an indigenous peoples' settlement has existed long before the demarcation of the protected area. A consistent theme emerging from research on Thailand's forests relates to community perceptions that local forest resources have been taken over by the RFD's rapid expansion of protected areas. Most protected areas in Thailand are surrounded or partially occupied by a local population who feel that their legitimate property rights

		Reuters. Article 2018 https://www.reuters.co m/article/us-thailand- landrights-protests- analysis/anger-over- land-rights-spills-into- street-protests-in- thailand- idUSKCN1II01E	have been appropriated. Description of Risk The Government's refusal to acknowledge Indigenous People's Rights with respect to forest resources continues to pose risks in terms of community dissatisfaction and refusal to respect the relevant laws or decisions based on them. A clear example is evident in the recent Reuters press report of 17 May 2018 where communities perceive the government's rules related to land use are unacceptable and do not respect traditional Thai values. Risk conclusion The absence of a clear consensus on Indigenous People's Rights and how these are, or can be, incorporated into formal laws represents a significant and continuing problem that Thai's existing legislation in relation to occupation and use of forest areas will not be respected. This represents an on-going problem at a National level. Even though, following the CNRA methodology this leads to NA (3.1.1 'When there are no relevant laws or regulations for a given indicator, the indicator shall be considered as 'not applicable' for the area under assessment').
		Trade and Transpor	t
1.16 Classification of species, quantities, qualities	Applicable laws and regulations Royal Decree on Restricted Timber Species B.E. 2530 - 26 October 1987. http://forestinfo.forest.go.th/Content/file/forest2530. pdf Forest Act B.E. 2484 (1941), Section 54 (https://new.forest.go.th/economy/wp- content/uploads/sites/86/2016/08/1.pdf) Ministerial Regulation No. 25 B.E. 2519 issued under the Forest Act B.E. 2484 on the Processing and Possession of Timber:	TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-	Overview of Legal Requirements Key classification is the identification of Species Classified as restricted which determines how they are to be managed, monitored and reported under the Forest Act. The 1987 Royal Decree on Restricted Timber Species establishes that 158 species are to be classified as Type A and a further 13 as Type B. The 171 species (or groups of species) represent the majority of commercial timber species at the time. Restricted species are the subject of special rules as laid out in the 3 main forest acts (Forest Act, National Reserved Forest Act and Plantation Act).

http://www2.suratthani.go.th/onre/download/136.pd f

Ministerial Regulation No. 27 B.E. 2530 issued under the Forest Act B.E. 2484 on the Trade and Commercial Possession of Wood Products from Restricted Species [online].

http://www2.suratthani.go.th/onre/download/140.pdf

Ministerial Regulation No. 24 on Restricted Timber Harvesting B.E. 2518:

http://law.longdo.com/law/372/sub23710

National Peace and Order Maintaining Council Announcement No. 106/2557 on the Revision of Forest Act. Government Gazette Vol. 131 Special Section 143 Ngor, pp.15-16, 30 July 2014:

http://library2.parliament.go.th/giventake/content_ncpo/ncpo-annouce106-2557.pdf

Announcement of National Council for Peace and Order No. 106/2557 on amendment of Forestry Laws (2014)

https://www.tci-

thaijo.org/index.php/ejChophayom/article/view/88921

National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (1985), Section 16 bis, 16 tres, 20

(<u>http://www.dnp.go.th/wildlifednp/เอกสาร/กฎหมาย/pr</u> <u>b2.pdf</u>)

www2.austlii.edu.au/~graham/AsianLII/.../National %20Reserve%20Forest%20Act.pdf

Plantation Act B.E.2535 (1992) and Amendment B.E.2558 (2015), and amended sections 11, 12 and 13

(https://new.forest.go.th/economy/th/พระราชบัญญัติส วนป่า-พ-ศ-2535/) draft-ENG_2.pdf

EFI. Study on Timber Flows and their control in Thailand, 2012 http://www.euflegt.efi.int/documents/10180/233 08/Timber+Flows+and+their+Control+in+Thailand/89cd6bcf-9a41-411b-915a-d7bee45f310d

See also sources mentioned under 1.3 and 1.5

Two species were accorded the top status of protection (teak and the most valuable dipterocarp (*Dalbergia.elatus* or Yang).

In 2014 a further 15 species were added to this 'top list' of the ultimately restricted species (Announcement of National Council for Peace and Order No. 106/2557 on amendment of Forestry Laws (2014).

Dalbergia oliveri Gamble (7 different vernacular name)
Dalbergia cultrata Graham ex Benth (5 different vernacular names)
Dalbergia cochinchinensis Pierra (3 different vernacular names)

The species not listed in 3 main forest acts are thus **not restricted.** They are small in number of species and comprise mostly exotics: but they also include the most important domestic timber species in Thailand and providing the bulk of the domestic market: rubberwood (*Hevea brasiliense*); Eucalyptus (various species principally *E. camaldulensis*, *E. pellita* and a range of hybrids) and Acacia species. These are widely planted by smallholders, farmers and large-scale commercial pulp and fibre processors with their own dedicated resources. Rubberwood is treated as an agricultural crop and is therefore under the authority of the Ministry of Agriculture, even though the rubberwood is considered as an agricultural byproduct it makes up a large proportion of the timber that is grown domestically.

Description of Risk

Rubber, eucalyptus and acacias are considered inherently low risk and as a consequence under the Plantation Act requirements for monitoring their movement once harvested have been removed. On private land there is no requirement for a harvesting permit (only for species grown on Reserved Forest Land). Consequently, the initial stages of custody chains (identifying origin of the timber) are lost and there is no way that a rigorous chain of custody can be established for these species.

This has proved to be a considerable disadvantage to many companies exporting their final product as their customers are conducting due diligence and demanding proof of sources and rigorous chains of custody. Larger companies who maintain their own resource base have a clear advantage whilst other companies have established sources based on outsourcing or purchases from contracted suppliers with assured ownership.

(http://library2.parliament.go.th/giventake/content_nla2557/law44-260558-1.pdf)
http://thailaws.com/law/t_laws/tlaw0055.pdf /
http://extwprlegs1.fao.org/docs/pdf/tha70240.pdf

Legal Authority

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Ministry of Agriculture and Cooperatives (including the RubberwoodAuthority of Thailand (RAOT) http://www.raot.co.th/raot_en/ewt_w3c/main.php?filename=index

Legally required documents or records

The forest or tree plantation Written Permit on National Reserved Forest land (P.S.31) Utilizing or living Written Permit on National Reserved Forest land (P.S.23) The Written Permit for utilizing and living on deteriorated National Reserved Forest (Sor Tor Kor 1 A, Sor Tor Kor 2 A) The Written Permit to do forest or tree plantation on deteriorated National Reserved Forest (Sor Thor Kor 1 B) from RFD Acknowledged Certificate from the Registrar of Plantations (Sor Por 13) Acknowledged Letter of Timber account from registered forest plantation (Sor Por 15) Teak logging in forest Written Permit (permit 1) Restricted Timber logging except Teak in forest Written Permit (permit 2) Logging written permit in reserved forest (P.S.2) An RFD Transportation Certificate for round logs and transformed timber, or a Confirmation Letter of Transformed Timber or Timber Products/ a Confirmation Letter of Transformed

When it comes to the classification and registering of quantities and qualities of species there are thus only rules for restricted species. Although such species are low in numbers and various means are in place to control transport (and checking transport documents) of such species, indicator 1.17 gives a specified risk for the possibility of falsified documents, corruption etc.

For all the unrestricted species no regulations are in place for monitoring.

Following the CNRA methodology this leads to NA (3.1.1 'When there are no relevant laws or regulations for a given indicator, the indicator shall be considered as 'not applicable' for the area under assessment').

Risk conclusion

Specified risk for Restricted species NA for unrestricted species.

Specified risk' thresholds for <u>restricted species</u>:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

			T
	RubberwoodTimber or Timber Products. Category A species (Restrict species), an RFD Harvesting Permit. Category B species (Restrict species), a Ministerial Authorization. Chainsaw possessing permit (Lor Zor 3) Certificate of Permission for Possession of Land for Activity within Forest Area (under Section 54 of the Forestry Act) and/or Certificate of Permission from		
	other government agencies		
1.17 Trade and	Applicable laws and regulations	This section copied	Overview of Legal Requirements
Transport	Timber from registered plantation:	mostly from: NEPCON	Timber from registered plantation:
		Risk Assessment	Following the Plantation Act the Operator ensures that all round logs, sawn
	Forest Plantation Act B.E. 2535 (1992), Section 13,	Thailand, 2017.	timber, wood products, or other parts of the tree, are clearly marked or
	21. and Forest Plantation Act (No. 2) B.E. 2558	https://www.nepcon.org	tagged, with the private seal of the Licensed Entrepreneur who has been
	(2015), Section 10, 14/1. http://thailaws.com/law/t_laws/tlaw0055.pdf /	/sites/default/files/librar y/2017-06/NEPCon-	registered with the authority. The timber mark shall also include the number, in sequential order beginning from 1, and the B.E. year. The
	http://extwprlegs1.fao.org/docs/pdf/tha70240.pdf	TIMBER-Thailand-Risk-	Operator ensures that all logs' length and circumference are measured and
	Tittp://extwpriegs1.lao.org/docs/pdi/tita/0240.pdi	Assessment-EN-V1.pdf	correctly entered into the Packing List. The Transportation Operator must be
	Royal Forest Department Regulation on the	7.000001110111 ETV TIPUI	in possession of a copy of the Certificate of Cutting/Felling Notification Sor
	Transportation of Log, Sawn Timber, or Product	TEFSO (Thai-FLEGT	Por 13 and the Plantation Timber Packing List Sor Por 15. The packing list
	generated from Forest Plantation B.E. 2535 (1992)	office); legal summary,	contains species, quantity, size, volume, seal or tag, and individual
	issued under the Forest Plantation Act 1992,	2016	sequential number of each log. Timber and forest products from registered
	Clause 13	http://tefso.org/downloa	plantations are exempt from royalties, thus there is no requirement that
		d/legality-definition-doc-	royalty collection be recorded.
	Royal Forest Department Regulation on the	en/LD-Matrix-Draft-	Timb on form all other accounts and lie land, all according with table
	Issuance of Certificate of Cutting/Felling Notification, Storage of Certificate, Packing List,	29Feb2016-V2-final- draft-ENG 2.pdf	<u>Timber from all other sources - public land: all species, private land: teak</u> (<u>Tectona grandis</u>), yang (<u>Dipterocarpus alatus</u>), and rosewood (<u>Dalbergia</u>
	and Proof of Legality from Timber harvested from	diait-Live 2.pui	spp.); and imported
	Forest Plantation B.E. 2535 issued under the		Under section 7 of the Forest Act (amended 2014), and Clause 12 of the
	Forest Plantation Act B.E. 2535, Clause 11, 15, 16		Royal Forest Department Regulation on the Transport of Timber and Forest
	and 21.		Product B.E. 2552 (2009), a transport document with a packing list is required for each lorry load of timber and forest products leaving a
	Non-restricted timber leaving a forest outside NFR:		harvesting site on public land, as well as for teak (<i>Tectona grandis</i>), yang (<i>Dipterocarpus alatus</i>), and rosewood (<i>Dalbergia spp.</i>) grown on private
	Letter Kor Sor 0704.3/540 dated 23 January 2003, signed by Director-General of Royal Forest		land. An operator notifies the district chief in their locality and submits proof of land ownership (in case of private land), record of harvesting permit (if

Department

All species from private land:

Letter Sor Ror 0203/14622 dated 25 August B.E. 2522 (1979), signed by the Secretariat of the Cabinet

Letter Kor Sor 0704(3)/Wor 36952 dated 9 December B.E. 2530 (1987), signed by Deputy Director-General, acting Director-General of Royal Forest Department, Clause 1.3

Letter Kor Sor 0704(3)/4244 dated 16 February B.E. 2530 (1987), signed by Deputy Permanent Secretary, acting Permanent Secretary of Ministry of Agriculture and Cooperatives

Private land planted Teak (*Tectona grandis*), yang (*Dipterocarpus alatus*), and rosewood (*Dalbergia spp.*):

Letter Kor Sor 0704 (3)/Wor 36952 dated 9 December 1987, signed by Deputy Director-General, acting Director-General of Royal Forest Department, Clause 2

Timber from all other sources:

Ministerial Decree No. 17 on the Permission of Teak and Yang on Private Land B.E. 2530. http://www2.suratthani.go.th/onre/download/233.pd f

Forest Act B.E. 2484 (amended 2014), Section 38-42, 48, 53.

http://www.fio.co.th/institution/human/download/58 0714-1.pdf

applicable), a map showing the location of the harvesting site, and a packing list stating species and quantity.

The district chief verifies the documents and proof of land ownership with the Department of Land (in the case of private land). The district chief informs the Provincial Governor's office where a forestry officer of level 5 or higher is sent out to inspect the timber and the harvesting site. The officer checks the packing list, ensures that the site is not in an NFR or protected area, or in a steep area, and ensures that harvesting does not risk erosion or landslide. Once the application is approved, the officer uses their personal seal to affix a **timber mark** on each item (of timber or forest product), along with the sequential number, year, and removal seal. In the event that affixation or marking cannot be performed, a written announcement on the timber/forest product inventory accompanying the consignment is required.

A **Removal Pass** signed by the district chief or the Provincial Governor is issued to the operator. On the back of the Removal Pass is a **packing list**. The transportation operator must carry the Removal Pass and the verified packing list. The Removal Pass is valid from the harvesting site to the first forest checkpoint. All approvals must be reported to the RFD. With regard to imported timber or imported forest products, a forest checkpoint will issue a **Removal Pass** upon verifying the tariff receipt and/or customs clearance; packing list/bill of lading; invoice; Certificate of Origin, and/or the export licence from the exporting country.

Timber leaving primary processing and trading facilities:

With regard to sawn timber and wood products dispatched from processing or trading facilities, a **White-form Sawn Timber Certificate** is issued onsite by the licensed processing or trading operators and is valid for up to 24 hours. On the back page, the Sawn Timber Certificate carries a record of the type/species, quantity, size, volume, and of the seal or mark. A **Yellow-form Sawn Timber Certificate** is issued solely for sawn timber and wood chips dispatched from a mechanical processing facility licensed to process rubberwood and 13 plantation timber species and is valid for up to 7 days. Licensed restricted wood product traders shall issue a **Restricted Wood Product Certificate**, which is valid for up to 2 days. On the back of the Certificates is a **packing list** recording the type/species, size, quantity, volume, and the timber mark.

Ministerial Regulation No. 26 on the Transport of Timber or Forest Product B.E. 2528 (1985), issued under the Forest Act B.E. 2484, Clause 3

Royal Forest Department Regulation on the Transport of Timber and Forest Product B.E. 2552 (2009), Clause 8, 9, 6

Ministerial Regulation No. 25 on the Processing and Possession of Sawn Timber B.E.

2519 (1976), by virtue of the Forest Act B.E. 2484, Clause 8. Available at:

http://www2.suratthani.go.th/onre/download/136.pd f

Ministerial Regulation No. 27 on the Trading or Possession for commercial purpose of Restricted Wood Products B.E. 2530 (1987), Clause 6

<u>Trading permit and transport document from primary processing or trading facility:</u>

Forest Act B.E. 2484 (amended 2014), Section 48-53. Available at:

http://www.fio.co.th/institution/human/download/58 0714-1.pdf

Ministerial Regulation No. 25 on Ministerial Regulation No. 25 on the Processing and Possession of Sawn Timber B.E. 2519 (1976), by virtue of the Forest Act B.E. 2484, Clause 6, 7, 8.: http://www2.suratthani.go.th/onre/download/136.pd f

Ministerial Decree No. 18 on the Control of Timber Processing B.E. 2532, Clause 8, 9 Ministerial Decree No. 19 on the Control of Timber Processing B.E. 2539

<u>Timber arriving and leaving forest checkpoint with expired transport</u> documents:

The authority responsible for the issuance of transport documents is the Forest Checkpoint Bureau under the Royal Forest Department. The RFD has set up 39 forest checkpoints nationwide, 38 of which are referred to as 'Category 1' checkpoints and are located in the 38 outer provinces. These operate 24 hours a day. The Bangkok forest checkpoint is referred to as belonging to 'Category 2' and has 4 operating branches in the city that are open during office hours.

When a transportation operator enters a forest checkpoint territory they must present a transport document with a packing list to the official on-site within five days. A Removal Pass may have an attachment that is a record of royalty collection, and this carries information on the type/species, size, volume, seal or mark on the logs, the sequential numbers on the logs, and the rate of royalty.

Under Clause 16 of the RFD Regulation on the Transportation of Timber and Forest Products B.E. 2552, forest checkpoint officials will verify the documents, see if the transport document is still valid, and whether or not the royalty has been fully and correctly paid. If it is, they will sample check a minimum of 20% of the load. If the royalty has not been fully collected, the remainder will be collected. Once verified, Forest Checkpoint officials will stamp their personal seal and a removal seal on the sample items (i.e. not necessarily every item in the load) and sign the transport document. If the original transport document has expired, Ministerial Regulation No. 26 (B.E. 2528) on the Transportation of Timber or Forest Products, by virtue of the Forest Act (Vol. 5 B.E. 2518) requires that forest checkpoint officials issue a new **Removal Pass**, and use their discretion to determine the expiry date, up to a maximum of 30 days from the date of issue.

During transit the progress of the timber over its predetermined route (specific in the Transport Permit) is monitored at the RFD checkpoints who can verify that the correct route has been taken with no unnecessary delays or deviations by utilising the tracking facility provided by the National Single Window system.

Processing and trading operator:

All logs and timber products entering facilities must be recorded in the facility's inventory system (specifying size, volume, quantity, quality, and timber mark). Timber processing facilities are required to check the origin of logs before they enter the facilities. They are to keep 3 log books containing

Ministerial Decree No. 11 on the Control of Rubberwood Processing Facility using Mechanical Equipment B.E. 2525, issued under the Fifth Forest Act B.E. 2518 Sections 48 and 58

Ministerial Regulation No. 27 on the Trade and Commercial Possession of Wood Products derived from Restricted Timber Species B.E. 2530 (1987). issued under the Forest Act B.E. 2484

Announcement of Royal Forest Department on Authorizing Licensed Operators of Mechanized Sawmill for Rubberwood or Timber Trading Facility to Issue Sawn Timber Certificate dated 23 January B.E. 2546. Clause 2-5

Announcement of Royal Forest Department on Authorizing Licensed Operators of Sawmill and Timber Trading Facility to Issue Sawn Timber Certificate dated 10 January B.E. 2546

Letter Kor Sor 0702.3/537 dated 23 January B.E. 2546 on Announcement of Royal Forest Department on Authorizing Licensed Operators of Mechanized Sawmill for Rubberwood or Trading Facility to Issue Sawn Timber Certificate

Legal Authority and Legally required documents or records

Transport documents:

Forest Checkpoint Bureau, Royal Forest Department in Bangkok Forest Checkpoints, in Bangkok and outer provinces

District Chief and Provincial Governor, in outer provinces (Ministry of Interior)

Removal Pass

Chatham House Illegal Logging portal. Indicators Country Report Card, 2018 https://www.illegallogging.info/regions/thai land

Illegal logging Article about illegal logging in Thailand, 2017 https://www.illegallogging.info/content/noletthailand%E2%80%99srelentless-violentsiamese-rosewoodpoaching

Chatham House, Study about illegal imported timber, 2014. https://indicators.chatha mhouse.org/sites/files/r eports/Lawson Thailan d SK India PP 2014 0%281%29 1.pdf

records of:

- round logs stored,
- processed timber, and

overall inventory of the operation. They must also produce a book of annual operations including figures of timber receipts, processed timber. dispatches, and the current stock. The RFD sets up the monitoring system by checking the aforementioned documents when a Licensed Operator submits a licence renewal application.

Licensed Operators shall issue a Sawn Timber Certificate and a Restricted Wood Product Certificate, with a packing list, to accompany each consignment as they are dispatched. These certificates expire within 24 hours of the time of issue, or within up to 7 days in the case of rubberwood and plantation timber products. The sawmill operator is required to register the book of certificates with the authority before use. The certificate book cover must show the signatures and seals of competent officers, stamped by the RFD. The sawmill operator is to keep two carbon copies of each certificate that they issue. The first copy is to be kept at the facility for a minimum of two years, and the second copy is to be collected. compiled and submitted to the licensing authority once a month.

Description of Risk

Risk 1: There is a risk of illegally sourced timber and wood products from outside the country entering the supply chain while the certificate of origin is falsified. In such a case imported timber will be mixed with native timber. With some species this might be possible as some of them are also growing in neighbouring countries. According to a Chatham House report (Chatham House), Thailand is among the most important destinations for timber and wood product exports from some of the countries in the region most badly affected by illegal logging, and thus is among the world's principal importers of illegally sourced timber and wood products. Chatham House estimates that, between 2000 and 2012, an average of 1,7 million m3 of illegally sourced timber and wood products were imported into Thailand. In a 2013 study, it was assessed that about one fifth of Thailand's wood imports had been illegally sourced (Chatham House). Since 2013 no new data was collected or published, unfortunately. There is no evidence that such 'mixing' is actually happening on a larger scale. But the risk is in place when looking at other identified risks below.

Restricted Wood Product Certificate

Processing and trading operator's license:

Permission Bureau, Royal Forest Department, in Bangkok (Ministry of Natural Resources and Environment)

Provincial offices of Natural Resource and Environment Management, in outer provinces (Ministry of Natural Resources and Environment)

Provincial offices of Forest Resource Management in outer provinces (Ministry of Natural Resources and Environment)

Sawn Timber Certificate and a Restricted Wood Product Certificate

Transparency International, CPI index 2017

https://www.transparency.org/country/THA

Corruption barometer figures:

https://www.transparen cy.org/whatwedo/public ation/people_and_corru ption_asia_pacific_glob al_corruption_baromete r_

Local expert, contributing to the CNRA cat 1.2018 Risk 2: There is also a risk of illegally sourced wood from within the country entering the supply chain and/or being smuggled out of the country. Within Thailand, illegal logging and illegal encroachment remain a serious issue. Between October 2014 and September 2015, there were 4 248 offences related to illegal logging, and 3 607 offences related to illegal encroachment, covering 23 500 ha. In the same year, the volume of confiscated round logs and sawn timber was 7 731 m3. Illegally cut wood being smuggled out of the country is a serious problem, particularly luxury timber such as rosewood. While the volume of illegally sourced wood from within Thailand remains unknown, there is still a risk that illegal timber could enter the supply chain.

Risk 3: There is a risk of transport documents and trading permits being falsified or obtained through bribery. There have been media reports of illegal wood being transported and accompanied by falsified trading permits and transport documents. Processing facilities have also been found to be complicit, such as by willingly processing illegal wood, or by being in possession of illegal wood.

Risk 4: Corruption and bribery has been recognised by the authorities in the issuance of transport documents. In letter Kor Sor 0713/4947 dated 18 March B.E. 2525 (1982) signed by the Director-General of the Royal Forest Department, cases of corruption and bribery involved in the transport document issuance, and in the collection of other fees, were brought up to the Office of the Public Sector Anti-Corruption Commission by rubberwood farmers and private operators of timber species other than *Tectona grandis* and *Dipterocapus alatus* (RFD 2008:301-302). Extortion by law enforcement officials has been reported in cases related to the transport of restricted timber.

Thailand has a high perception of corruption according to the Corruption Perceptions Index (CPI) by Transparency International. Scoring 38/100 in 2014 and 2015, 35 in 2016 and 37 in 2017. In this score the lower the figure the more corruption is in place.

Risk 5: It is important to note that RFD and police have come under increasing threats and physical violence – including death – in trying to carry out their legitimate duties and the protection of forest resources. The risks posed and the impact on even highly committed staff is significant; the impact on less committed staff or staff with families or in remote locations

			cannot be underestimated and represents a significant and frequently overlooked risk. Risk 6: Timber which has been seized by an appropriate authority is impounded (at a secure location) and recorded as seized. New transport documentation may need to be issued to permit its transport to a suitable secure site. Once a decision has been made related to the legality and ownership of the timber it is either returned to the owner (with or without the appropriate penalty) or declared illegal and confiscated by the appropriate authority (Customs Department – for imported or exported timber - or Royal Forest Department for timber seized in transit across Thailand). This timber is then disposed of. Currently teak, rosewood and other high value timbers are destined for use in the National Museum. But subsequently it is uncertain what will happen to this timber. The danger of this timber reentering the domestic or international markets poses a specified risk. Risk conclusion Given the risks of illegally sourced wood being imported, as well as of illegally logged wood within the country entering the supply chain, and the risks of transport documents and trading permits being falsified or obtained through bribery, the risk for this category has been assessed as specified. Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.
1.18 Offshore Trading and Transfer pricing	Applicable laws and regulations Revenue Departmental Instruction No. Por.113/2545 (2002) on Corporate Income Tax - Determination of Transfer Price based on the Market Price http://www.rd.go.th/publish/fileadmin/download/Tra nsferPricing_en.pdf Revenue Department's Booklet on Determination of Market Price for Multinational Enterprises (2002) http://www.rd.go.th/publish/fileadmin/download/Tra nsferPricing_en.pdf	TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-	Overview of Legal Requirements Transfer pricing is a commonly encountered business practice with companies that trade internationally. Thailand is a country which forms an international hub on the global timber trade and consequently has developed guidelines related to acceptable practices (Determination of Transfer Price based on the Market Price); however, it does not have specific legislation. The latest amendment of the Revenue Code (2016) gives some guidelines as well.
	Revenue Code, Section 65 Bis (4), (7), Section 65	draft-ENG_2.pdf	Thailand is actively framing new legislation relating to Transfer Pricing and a

	Ter (13), (14) and (15): http://www.rd.go.th/publish/37748.0.html The Amendment of Revenue Code Act (No. 41) B.E. 2559 (2016). http://www.rd.go.th/publish/fileadmin/user_upload/k ormor/newlaw/prb41.pdf Legal Authority Ministry of Finance. The Revenue Department http://www.rd.go.th/publish/37748.0.html Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th) Legally required documents or records No special documents required.	The revenue Department, Transfer pricing, 2018. http://www.rd.go.th/publ ish/9459.0.html WSJ. Article about companies taken to court, 2016 https://www.wsj.com/art icles/thailand-charges- philip-morris-with-tax- evasion-1453192615 NEPCON Risk Assessment, various references,2017 https://www.nepcon.org /sites/default/files/librar y/2017-06/NEPCon- TIMBER-Thailand-Risk- Assessment-EN-V1.pdf EY. New legislation about Transfer Pricing, 2018 http://www.ey.com/gl/e n/services/tax/internatio nal-tax/alertthai- cabinet-approves-draft- transfer-pricing-act	draft law was presented to cabinet in January 2018. This will supersede the current guidelines published in 2016. The impact of the new regulation has yet to be determined. In spite of the lack of regulations companies are charged with unacceptable practices related to transfer prices, and they have been taken to court. Description of Risk Risks related to transfer pricing are internationally recognised and it is surprising that Thailand has not developed specific legislation previously. However, the Revenue Department still actively monitors international companies. International sources do not state Offshore Trading and Transfer pricing as a problem in Thailand. Risk conclusion Currently the risk related to transfer pricing is considered low. How the level of risk will change in response to the new legislation has yet to be determined as the new law has not yet come into force. Following the CNRA methodology this leads to NA (3.1.1 'When there are no relevant laws or regulations for a given indicator, the indicator shall be considered as 'not applicable' for the area under assessment'). Note: when the new regulation will be in force this indicator could be reassessed as long as the CNRA is not finalized and published.
1.19 Customs regulations	Applicable laws and regulations For importers Customs Act 1926 Section 10 http://en.customs.go.th/data_files/f21821f72b074e4 8bc03872e22be4c8a.pdf	TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-doc-	Overview of Legal Requirements The Customs Act and Export and Import of Goods Act lay down the terms and conditions of importing and exporting wood and timber products from round logs to sawn timber and semi-finished products (boards, fibre etc). The Plant Act lists plants that have restrictions to import and export.

Export and Import of Goods Act BE 2522 (1979) http://www.wipo.int/wipolex/en/text.jsp?file_id=185 575

Plants Act 1975

http://thailaws.com/law/t_laws/tlaw0502.pdf

The Customs Tariff Decree 1987 Section 4 http://www.customs.go.th/data_files/88691df20853 d143a73b669fd134065f.pdf

For exporters

Customs Act, 1926, Section 10

http://en.customs.go.th/data_files/f21821f72b074e48bc03872e22be4c8a.pdf

The Customs Tariff Decree, 1987, Section 4 http://www.customs.go.th/data_files/88691df20853 d143a73b669fd134065f.pdf

Other rules and announcements

Rule of Ministry of Commerce on criteria, methods and conditions for exporting of timber and transformed timber to outside the Kingdom, 2006 Clause 3

Announcement of National Council for Peace and Order No. 106/2557 on amendment of Forestry Laws (2014)

https://www.tci-

thaijo.org/index.php/ejChophayom/article/view/889

Announcement of Ministry of Commerce on the timber is permitted to export to outside the Kingdom, 2012 Clause 3,4 Rule of Ministry of Commerce on the documentation and evidence to apply for charcoal exporting permit, 2006, Clause 3 Announcement of Ministry of Commerce on the Charcoal is permitted to export to outside the

en/LD-Matrix-Draft-29Feb2016-V2-finaldraft-ENG_2.pdf

NEPCON Risk Assessment, various references, 2017 https://www.nepcon.org /sites/default/files/librar y/2017-06/NEPCon-TIMBER-Thailand-Risk-Assessment-EN-V1.pdf

Department of National Parks, Wildlife and Plant Conservation (DNP). Draft results of preventative measures and addressing the problems of corruption in the illegal logging and trading of rosewood, 2016.http://www.dnp.go_th/info_protect/ร่างสรุปผลการด_าเนินการเกี่ยวกับมาตรการป้องกันและแก้ไขบือ.docx

Chatham House Illegal Logging portal. Indicators Country Report Card, 2018 https://www.illegallogging.info/regions/thai land Imported material can only enter the country on production of a series of documents including:

Certificate of origin

Bill of Lading c/w

Packing List

Valid Customs Import Declaration - Application

Payment of Import Fee

Valid CITES certificate (where applicable)

Commercial Invoice

Material is subjected to a physical inspection by Customs together with representative of the Regulatory Authority (RFD and Ministry of Agriculture) and only then is material permitted to enter.

Fees are charged to the importer based on the appropriate Customs Tariff Decree schedule. Tariffs are updated, and the Decree regularly amended.

Copies of documentation are required to acquire a transport permit which will then allow the timber to be transported from the Customs Regulated area. Completion of the Entry process and a valid Customs Import Declaration triggers the release process and the Transport Permit process which is the responsibility of the RFD checking officers.

Timber which has entered legally will be accompanied by copies of all relevant documentation together with receipts for fees paid.

In addition, the processes relating to the import of fuelwood and the application of rules and regulations in practice, appears less rigorously applied and represents a potential loophole for the import of other species or timber which could be subsequently converted into other products.

For exporters the process is relatively simple. The exporter has to prepare documentation related for the export and international transport:

Certificate of origin (optional depending on the type of product exported).

Bill of Lading c/w

Packing List

Valid Customs Export Declaration - Application

Payment of Export Fee

Valid CITES certificate (where applicable)

Kingdom, 2006, Clause 4
For CITES species (see 1.20 below)
Rule of RFD on Certificate timber, timber product
and charcoal for exportation, 2009

Guidelines for importers and exporters
Handbook on Issuance of Certificate of Wood,
Wood Product, and Charcoal for Export
http://forestinfo.forest.go.th/Content/file/manualand
doc/02.pdf Issued by the Permission Bureau,
Royal Forest Department (2013).
Presentation on How to Apply for Certificate of

Origin for Exported Goods

http://www.dft.go.th/Portals/0/ContentManagement/Document Mod784/6

Handbook on Export of Wood and Sawn Timber [online]. Available at:

http://onestopservice.ditp.go.th/download/export/ex 5-5.pdf Department of International Trade

Promotion, Ministry of Commerce

Ministry of Commerce's regulations on exporting round log, sawn timber, and charcoal (summary) http://www.forest.go.th/forest_checkpoint/images/stories/export%20wood.pdf

Royal Forest Department

Department of Foreign Trade, Ministry of Commerce Procedures, Documentation and Legislations for Round log and Sawn Timber Exporters

https://www.moc.go.th/images/7 PDF/63.pdf
Department of International Trade Promotion,

Ministry of Commerce, (2005). Procedures, Documentation and Legislations for Charcoal Exporters

http://onestopservice.ditp.go.th/download/export/ex
_11-2.pdf

Department of International Trade Promotion, Ministry of Commerce, (2014). Procedures, Documentation and Legislations for Charcoal Illegal logging. Article about illegal logging in Thailand, 2017

https://www.illegallogging.info/content/nolet-

thailand%E2%80%99srelentless-violentsiamese-rosewoodpoaching

Chatham house. Study about illegal imported timber, 2014.

https://indicators.chatha mhouse.org/sites/files/r eports/Lawson_Thailan d_SK_India_PP_2014_ 0%281%29_1.pdf

Transparency International, CPI index 2017

https://www.transparen cy.org/country/THA Corruption barometer figures:

https://www.transparen cy.org/whatwedo/public ation/people and corru ption_asia_pacific_glob al_corruption_baromete Commercial Invoice

Department of Foreign Trade Export permit

Receipt for export fees paid (where required)

In order to export round logs, sawn timber or charcoal derived from any species, an operator must apply to the DG of Foreign Trade Department for a DFT Trade Export permit.

Timber arriving at the point of export must be accompanied by the appropriate and valid transport documentation which is verified by the RFD before the timber enters the customs area.

The timber undergoes a risk assessment and if containerised is X-rayed before departure.

Export fees are paid based on the Customs Tariff decree and a formal receipt.

Description of Risk

Current processes are recognised as weak, particularly related to the veracity of the accompanying Certificate of Origin.

The principal risks relate to the higher value species where the value of the timber justifies elaborate systems to circumvent the law by avoiding the declaration of species or value. The risks include false declarations; fraudulent and forged documentation; bribes and corruption of officials; misidentification of species.

The value of the timber and potential rewards means that export and reimport of timber (in order to mask the identity or true origin or ownership of the timber) is common.

There are many examples and articles in national and international that list the illegal trade of Rosewood and other species. It seems that the situation is not fully under control. Besides that, the corruption level is substantial which means official documents cannot always be trusted.

See also earlier indicators. We will not repeat the earlier mentioned sources here.

Import and export of timber (in any form and including firewood, pellets and

Briquette Exporters.

http://onestopservice.ditp.go.th/download/export/ex_11-4.pdf

Department of International Trade Promotion,
Ministry of Commerce, (2005). Procedures,
Documentation and Legislations for Wood
Furniture and Parts Exporters

 $\frac{\text{http://onestopservice.ditp.go.th/download/export/ex}}{12\text{-}1.pdf}$

Department of International Trade Promotion, Ministry of Commerce, (2005). Procedures, Documentation and Legislations for Wood Product Exporters

http://onestopservice.ditp.go.th/download/export/ex_24-18.pdf

Legal Authority

Customs Department

Commercial Invoice

Department of Foreign Trade (Ministry of Commerce)

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

Legally required documents or records

Imported material can only enter the country on production of a series of documents including: Certificate of origin
Bill of Lading c/w
Packing List
Valid Customs Import Declaration - Application
Payment of Import Fee
Valid CITES certificate (where applicable)

fibre) represents a risk of a high order.

Thailand has a high perception of corruption according to the Corruption Perceptions Index (CPI) by Transparency International. Scoring 38/100 in 2014 and 2015, 35 in 2016 and 37 in 2017. In this score the lower the figure the more corruption is in place.

Risk conclusion

Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

	For exporters the process is relatively simple. The exporter has to prepare documentation related for the export and international transport: Certificate of origin (optional depending on the type of product exported). Bill of Lading Packing List Valid Customs Export Declaration - Application Payment of Export Fee Valid CITES certificate (where applicable) Commercial Invoice Department of Foreign Trade Export permit Receipt for export fees paid (where required)		
1.20 CITES	Applicable laws and regulations Plants Act 1975 (under the Department of Agriculture, Ministry of Agriculture and Cooperatives) Announcement of Ministry of Agriculture and Cooperatives on Protected Flora according to Plant Act B.E. 2518 (amended 2012) Section 5 of Plant Act B.E. 2518 and Section 29 bis of Plant Act (No. 2) B.E. 2535. http://www.doa.go.th/ard/FileUpload/export/1.4.3.2 %20QAMOA/QAMOAEX13T.pdf Wild Animal Preservation and Protection Act B.E. 2535 (1992) and Wild Animal Preservation and Protection Act (No. 3) B.E. 2557. http://thailaws.com/law/t_laws/tlaw0317.pdf https://data.opendevelopmentmekong.net/dataset/83cb0c01-e6e2-4e8f-8fd4-820fd3b3cc35/resource/b0cd3793-3e93-4cc5-9bc8-cddda6b1278b/download/wild-animal-preservation-and-protection-act-no3-b.e2557.pdf	TEFSO (Thai-FLEGT office); legal summary, 2016 http://tefso.org/download/legality-definition-docen/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG_2.pdf CITES. News with new species listed (including Thai species). 2017. https://www.cites.org/eng/new_CITES_trade_rules_come_into_effect_as_2017_starts_02012_017	Overview of Legal Requirements Thailand is a signatory of CITES with ratification in 1983. There are CITES species occurring in Thailand. There are 86 species listed in Appendix 1 and about 1600 species in Appendix 2. Aquilaria spp. (Agarwood), Rauvolfia serpentine (Serpentine wood) and Dalbergia spp. (Rosewood) are on the CITES Appendix II list. Under section 29 of the Plant Act B.E. 2518 (amended 1992), import or export of protected flora is under the authority of the Department of Agriculture (Ministry of Agriculture and Cooperatives) and requires permission from the Director-General of the Department of Agriculture. Under the Wild Animal Preservation and Protection Act all things related to trade and protection of fauna is regulated. For importers wishing to import a CITES-listed species the importer is required to register that they are intending to import a CITES-listed species as part of the documentation that will be submitted in support of the Customs Entry Declaration. A CITES import certificate must be obtained from the Director General of the Ministry of Agriculture (under the Plants Act 1975. Incoming timber imports must then be accompanied by the appropriate (and

Legal Authority

Ministry of Agriculture and Cooperatives

Royal Forest Department, Ministry of Natural Resource and Environment (https://www.forest.go.th)

CITES office of Department of National Parks, Wildlife and Plant Conservation, Ministry of Natural Resources and Environment Customs Department

Legally required documents or records

Certificate of origin (optional depending on the type of product exported).

Bill of Lading c/w
Packing List
Customs Entry Declaration

Payment of Export/Import Fee
Valid CITES import or export certificate

Commercial Invoice

Department of Foreign Trade Export permit Receipt for export fees paid (where required)

Traffic. CITES implementation in Thailand. Report 2016 (about problems to regulate) http://www.trafficj.org/publication/16_CITES_Implementation_in_Thailand.pdf

matching) CITES Export Certificate (from the exporting country) together with a valid Certificate of Origin. These are checked by customs on entry and when the timber is inspected. Once the Customs have issued a valid Customs Entry Declaration certificate the importer must procure the appropriate transport certificate from the RFD. All documentation must accompany the transported shipment.

However, this relies heavily on the importer declaring a CITES species in the first instance. If undeclared then it is uncertain whether timber will be recognised as a CITES species, especially if it imported as another species. The inspection teams at the point of import are not sufficiently trained (Traffic report 2016) to be able to recognise timber with sufficient accuracy to establish whether or not it is a CITES species, and there are many species which resemble one another. This poses a risk.

Thailand possesses a limited number of species which are CITES listed and which grow naturally in Thailand and consequently this poses a risk for transfer of certificates and documentation. Rosewood is clearly the principal species in this regard, and timber that may be legitimately grown in Thailand in plantations can be used to generate documentation that could be used to cover imported species. Mahogany is another, so considerably more rigour is required to establish the true origin of timber that could be sourced from Thailand or re-imported having been illegally logged and exported.

Although not applicable as 'native species' CITES also lists foreign timber which are imported legitimately, and which may then be re-exported (as timber rather than a finished product). They must be accompanied by a CITES re-export certificate.

For CITES-listed timber being exported the process is very similar. The exporter must procure from the DG of Ministry of Agriculture a CITES certificate for conservation species and this document must be part of the package of documents submitted with the Customs Export Declaration.

Description of Risk

Risk 1: No prosecutions. A 'Traffic' Report from 2016 state that not all CITES listed species are protected sufficiently because this law is not covering all species and is not updated regularly. This report also concludes that there are hardly any (less than most EU countries) cases of prosecution

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of illegal trade in CITES species in Thailand. This is a clear sign that something is not working.
Risk 2: Falsifying documents of origin. In Thailand Agarwood is one of the most important CITES-listed species. The most threatened is agarwood from natural forest sources but the quantity of plantation-grown agarwood is considerable: the danger for confusion, accidental or deliberate mixing or substitution of plantation-grown with natural forest agarwood exists. Currently there are no specific verification processes which seek to ensure that agarwood from natural forest sources (and which are CITES-listed under Appendix 2) can be identified, tracked and kept segregated from plantation-derived agarwood.
Risk 3: Knowledge with inspectors. Rosewood (an Appendix 1-listed species) is currently strictly controlled with the current trade ban in Thailand extended to cover a greater range of species than in the CITES Appendixes – although the ban has met with limited success. The CITES process alone needs to be supported by strong and active policing and monitoring and even this is not sufficient.
Risk 4: Weak documents. The proven weakness of the Certificates of Origin provided by a number of exporting countries also enhances the risk and place undue reliance on the CITES certificates.
The current system for CITES-listed species is strongly reliant on these species being correctly identified or declared in the first instance: either in the import declaration; the supporting documentation or the application submitted through the NSW.
But there is no sure way of identifying CITES-listed species which are NOT declared. For import inspection RFD is the expert party and co-inspector but there is no clear methodology which currently enables species to be identified confidently and objectively.
Risk conclusion The current system for identifying and handling CITES listed species into, within and out of Thailand has been found to be weak and does not provide the assurances required for these endangered species. The high value of some of the CITES-listed species in Thailand represents a

			significant risk. Consequently, CITES-listed species and the management thereof, constitute a specified risk of a high order. Specified risk' thresholds:(2) Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.
	Du	e Diligence/due care pro	cedures
1.21 Legislation requiring due diligence/ due care procedures	Applicable laws and regulations N/A	The Thai-European FLEGT Secretariat Office (TEFSO). Website, 2018. http://tefso.org/en/home page/ TEFSO explanation of 'supply chain control' with a map and list of all rules and regulations applicable, 2018 http://tefso.org/en/supply-chain-control-2/	Overview of Legal Requirements Thailand has no legislation governing the obligation of due diligence, therefore the risk assessment for this category is not applicable. However, Thailand is in the process of undertaking a partnership with the European Union to develop FLEGT licensing system. It has just completed a Draft Legality Definition. Details of the FLEGT activities and the relevant reference material published has been used as source material for this draft of the Risk Assessment. Material is available through the Thai-European FLEGT Secretariat Office (TEFSO). For the moment this is in the early stages of development. Practical actions for due diligence and traceability of timber still have to be developed under the FLEGT framework. Description of Risk N/A Risk conclusion N/A.

Recommended control measures

The recommended control measures here are only indicative in nature and are not mandatory. Recommended control measures might not have been provided for all the risks that have been identified in this risk assessment. Organizations shall evaluate and devise appropriate control measures to mitigate the risks identified in this risk assessment as applicable.

Indicator	Recommended control measures
1.1 Land tenure and management rights	Currently there are clear risks related to legality of land ownership and tenure and current. Even where documentary evidence exists and is available to interrogation by the general public (and this is much more difficult) documentary evidence is frequently insufficient to demonstrate legality of ownership with consistent reliability.
	Recommended control measures: When buying from private forest owners and un-restricted species the land titles should be approved by government and the owner should have the following documents to proof his ownership (the land size, below or above 5 ha, will not make a difference in this CNRA): 1) A copy of the official land title document 2) Copy of the sales agreement (of the land) 3) Map location: Check if your timber comes indeed from within the borders as specified in the land title document. 4) Copy of the ID card of the owner to check if he is indeed the owner. These documents are, for the moment, good enough for the Thai government to legalize the timber. Such land titles can be listed in the following documents: Land Title, NOR SOR 3, SOR POR KOR, SOR KOR, NOR KOR.
	For restricted species, besides the above, request: The harvesting permit.
	For <u>public forest owners</u> : check if your timber comes indeed from within the borders of the specific land. Request the usual documents required. For a complete summary of all options and documents check this page: http://tefso.org/en/supply-chain-control-2/ If requested documentation cannot be provided; don't buy.
	User rights There is also a risk is that the documentation (when available) may adequately describe the ownership of the land but this does not automatically convey ownership (or legality) of any of the products derived from that land. This because some land titles could actually be possessory right (with private owners) or long-term leaseholders (and other types) within public lands. Such land title constructions might include restriction to ownership of products from these lands. The current system assumes that the products from the land are de facto the property of the owner or leaseholder of that land. But this may not be the case and the presentation of documents of land tenure may not ensure the legality of any product – especially the trees, timber or products derived from the trees, such as oils, gums, resin or fuelwood/chips/pellets. In any case 'user rights' can be confirmed (POR BOR TOR 5), and this document should be in place amongst the others mentioned above.
	 Potential documents you might need: The forest or tree plantation Written Permit on National Reserved Forest land (P.S.31) Utilizing or living Written Permit on National Reserved Forest land (P.S.23) The Written Permit for utilizing and living on deteriorated National Reserved Forest (Sor Tor Kor 1 A, Sor Tor Kor 2 A) The Written Permit to do forest or tree plantation on deteriorated National Reserved Forest (Sor Thor Kor 1 B) from RFD Acknowledged Certificate from the Registrar of Plantations (Sor Por 13)

Indicator	Recommended control measures
	Acknowledged Letter of Timber account from registered forest plantation (Sor Por 15)
	Teak logging in forest Written Permit (permit 1)
	Restricted Timber logging except Teak in forest Written Permit (permit 2)
	Logging written permit in reserved forest (P.S.2) A DED T
	 An RFD Transportation Certificate for round logs and transformed timber, or a Confirmation Letter of Transformed Timber or Timber Products/ a Confirmation Letter of Transformed Rubberwood Timber or Timber Products.
	 Transformed Timber of Timber Products. Category A species (Restrict species), an RFD Harvesting Permit.
	 Category A species (Restrict species), a Ministerial Authorization.
	Chainsaw possessing permit (Lor Zor 3)
	Certificate of Permission for Possession of Land for Activity within Forest Area (under Section 54 of the Forestry Act) and/or Certificate of
	Permission from other government agencies
1.3 Management and harvesting planning	Overall the operations in plantations in forest reserves constitute a specified risk due to the lack of evidence of proper implementation of the
	rules and regulations. There is no public evidence or records that can be used as evidence for proper implementation. All other types of forest management and ownership is NA because no forest management planning is required.
	Recommended control measures:
	In principle the risk with regards to this indicator is difficult to mitigate. It is advised not to buy timber from plantations that are located in forest reserves unless the following steps could be taken:
	Ask the plantation owner for the full inventory that was made prior to releasing it for new plantation purposes in forest reserves. Consult with an independent forest expert if there is no conflict with any other CNRA indicator.
	Ask for the plantation permit and registration documents. Ask for the maps showing harvesting areas (such are required when applying for harvesting permission for plantations in National Forest Reserves).
	Ask for the annual operating plans since the establishment of the plantation.
	Consult with an independent forest expert if the content of these annual reports guarantees that there are no risks with any CNRA indicator.
	Ask for field inspection reports that supposed to be done before harvesting.
	Consult with an independent forest expert if the content of these field inspection reports guarantees that there are no risks with any CNRA indicator.
	Ask for the harvesting permit.
	If any of the above is not available, don't buy.
1.4 Harvesting Permits	Overall the operations in registered and unregistered plantations constitute a specified risk due to the absence of clear rules and requirements related to tree and plantation management and the risk is enhanced by the failure of many farmers and operators to respect rules that do exist.
	Recommended control measures: There are 6 larger risk categories that are listed, and each have their own recommended control measure.

Indicator	Recommended control measures
	Non-restricted species 1. Non-restricted species including rubber, eucalyptus and acacias outside forest reserves. These are N/A because no harvesting permit is needed. 2. Non-restricted species (as per annex in plantation act) in registered plantation. These are N/A because no harvesting permit is needed. 3. Non-restricted species including rubber, eucalyptus and acacias inside forest reserves. Recommendation: check the harvest permit and map which can only be issued after the use right has been checked.
	Restricted species 4. Restricted species in registered plantation. Recommendation: Check Sor Por 13 and Sor Por 15 which can only be issued after Sor Por 3 on land use rights has been verified. 5. Restricted species in unregistered plantation. Recommendation: Check logging permit/RFD harvesting permit/a ministerial authorization together with verifying document on legal land titles to ensure the type of logging permit aligns with the type of land tenure. The following are required and should be asked for: Permit 3 – Restricted timber logging except teak in forest Permit 1 – Teak logging in forest 6. Restricted species in forest reserves. Can only be harvested with special permits. The following are required and should be asked for:
	Permit 1 – Teak logging in forest
1.9 Protected species and sites	The Thailand protected area network is complex, representative and well developed. But the failure to incorporate basic measures to protect and to assess (inventory) and conserve key environmental features within the tree plantations and forest reserves means that the strategy is incomplete. This is also in line with cat 3 of this CNRA where similar risks are identified.
	Recommended control measures: As a timber buyer do the following:
	 Make sure you do comply with the normal regulations (see indicator 1.1). Make sure you respect the list with restricted species, the red list of Thailand and the CITES regulations (see 1.20). Do not trade such species or follow the regulations.
	 If requested documentation cannot be provided; don't buy. Discuss with your supplier what he does to identify protected species and if he adjusts his scheduled forest management activities. This is voluntary step but can also be used to promote your company as an entity that works on his Social & Environmental Responsibility and thus make a difference in the market. Certainly, EU customers are very focused on this.
1.11 Health and safety	Practical operating conditions in the field are not fully covered by legal requirements that reflect the dangers and risks inherent in conducting these operations (harvesting, transport, primary conversion etc) and these represent a real and specified risk to workers. The risks are enhanced for the smaller-scale operators, particularly community based and SmE where regulations are considered a burden and add significantly to the cost of the work: consequently, these regulations are frequently ignored, even at the expense of worker and operators' own safety. There are too many fatal accidents in the forest sector, when compared to other countries.
	Recommended control measures: This is what you can do:

Indicator	Recommended control measures
	Respect all H&S regulations and implement them in your own company.
	Expect the same from your suppliers and state such in the contracts.
	Inspect things in the field with regards to H&S and work with a penalty system when things are not according to law.
	Promote your company in the market as an enterprise that cares and addresses H&S.
1.12 Legal employment	For many aspects of the Labor and Employment remains subject to a range of risks and weaknesses which are proven and continue to be exploited. Risks related to community-based operations (CBOs) using their own labor, SMEs using workers who are not formally employed, and the registration of alien workers (particularly from Myanmar) are the biggest risks. Currently in spite of the legislation, the control measures appear weak and labor and employment issues remain a risk at a national level.
	Recommended control measures:
	This is what you can do: Respect all legal employment regulations and implement them in your own company.
	 Respect all legal employment regulations and implement them in your own company. Expect the same from your suppliers and state such in the contracts. Especially take care when you buy from community-based
	operations (CBOs), small SMEs and companies working with alien workers (particularly from Myanmar). If you encounter this ask your supplier for the labor contracts of his workforce.
	• Inspect things in the field (ask people in the field if they have a labor contract or a work permit (in case of foreigners)) with regards to legal employment and work with a penalty system when things are not according to law.
	Promote your company in the market as an enterprise that cares and addresses legal employment.
1.16 Classification of species, quantities, qualities	Rubber, eucalyptus and acacias are considered inherently low risk and as a consequence under the Plantation Act requirements for monitoring their movement once harvested have been removed. On private land there is no requirement for a harvesting permit (only for species grown on Reserved Forest Land). Consequently, the initial stages of custody chains (identifying origin of the timber) are lost and there is no way that a rigorous chain of custody can be established for these species. This has proved to be a considerable disadvantage to many companies exporting their final product as their customers are conducting due diligence and demanding proof of sources and rigorous chains of custody. Larger companies who maintain their own resource base have a clear advantage whilst other companies have established sources based on outsourcing or purchases from contracted suppliers with assured ownership.
	Recommended control measures: When buying from private forest owners and restricted species request: 1) A copy of the official land title document 2) Check if your timber comes indeed from within the borders as specified in the land title document. 3) Request a copy of the ID card of the owner to check if he is indeed the owner. 4) The harvesting permit.
	These two documents are, for the moment, good enough for the Thai government to legalize the timber.
	For unrestricted species this indicator is NA. For public forest owners: check if your timber comes indeed from within the borders of the specific land. Request the usual documents required. For a complete summary of all options and documents check this page: http://tefso.org/en/supply-chain-control-2/
	For potential documents you might need, see indicator 1.1

Indicator	Recommended control measures
1.17 Trade and Transport	Given the risks of illegally sourced wood being imported, as well as of illegally logged wood within the country entering the supply chain, and the risks of transport documents and trading permits being falsified or obtained through bribery, the risk for this category has been assessed as substantial. Recommended control measures: Do the following: If you follow the normal trade regulations, you will be able to comply with this indicator. Ask the requested documents from your suppliers as well and make no exceptions. If requested documentation cannot be provided; don't buy. For potential documents you might need, see indicator 1.1.
1.19 Customs regulations	Current processes are recognised as weak, particularly related to the veracity of the accompanying Certificate of Origin. The principal risks relate to the higher value species where the value of the timber justifies elaborate systems to circumvent the law by avoiding the declaration of species or value. The risks include false declarations; fraudulent and forged documentation; bribes and corruption of officials; misidentification of species. The value of the timber and potential rewards means that export and re-import of timber (in order to mask the identity or true origin or ownership of the timber) is common. Recommended control measures: Do the following: If you follow the normal trade regulations, you will be able to comply with this indicator. Pay special attention to the Certificate of Origin. Ask the requested documents from your suppliers as well and make no exceptions. If requested documentation cannot be provided; don't buy. For potential documents you might need, see indicator 1.1.
1.20 CITES	The current system for identifying and handling CITES listed species into, within and out of Thailand has been found to be weak and does not provide the assurances required for these endangered species. The high value of some of the CITES-listed species in Thailand represents a significant risk. Consequently, CITES-listed species and the management thereof, constitute a specified risk of a high order. Recommended control measures: Do the following: If you follow the normal trade regulations, you will be able to comply with this indicator. Pay special attention to the CITES documents you need and check if they are complete. Ask the requested documents from your suppliers as well and make no exceptions. If requested documentation cannot be provided; don't buy. For potential documents you might need, see indicator 1.1.

Controlled wood category 2: Wood harvested in violation of traditional and human rights

Risk assessment

The assessment presented below is a summary of a more detailed assessment that follows further down below.

Indicator	Sources of Information	Functio nal scale	Risk designation and determination
2.1. The forest sector is not associated with violent armed conflict, including that which threatens national or regional security and/or linked to military control.	The sources used are the required ones as advised by the NRA framework. Additional sources are also used. We advise the reader to read the detailed analyses below, which lists all sources used.	Country	In Thailand no violent armed conflicts threatening national and regional security are taking place. Thailand is not considered as a source of conflict timber. As a result, Thailand is not mentioned in any case by UN Security council or any other bans on timber export. Nevertheless, Thailand is ranking low on other relevant aspects such as stability, governance, freedom for citizens and press and justice system. In the future this could create conflict timber, but for the moment there is none. The following low risk thresholds apply: (1) The area under assessment is not a source of conflict timber¹; AND (2) The country is not covered by a UN security ban on exporting timber; AND (3) The country is not covered by any other international ban on timber export; AND (4) Operators in the area under assessment are not involved in conflict timber supply/trade; AND (5) Other available evidence does not challenge 'low risk' designation.
2.2. Labor rights are respected including rights as specified in ILO	The sources used are the required ones as advised by the NRA framework. Additional sources are also used. We advise the reader to read the detailed analyses below, which lists all	Country	Specified risk Indicator 2.2 covers four aspects of rights at work: forced labor, child labor, discrimination and freedom of association/collective bargain. The following could be said about each:

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¹ "Conflict timber" limited to include "timber that has been traded at some point in the chain of custody by armed groups, be they rebel factions or regular soldiers, or by a civilian administration involved in armed conflict or its representatives, either to perpetuate conflict or take advantage of conflict situations for personal gain - conflict timber is not necessarily illegal. Please refer to FSC-PRO-60-002a V1-0.

Fundamental Principles and	sources used. A list with laws and regulations is also included.	Forced labor. There are no sources, national or international that indicate that forced labor is happening in Thailand. As such a 'low risk' is justified.
Rights at work.		Child labor. Laws are upheld and in place. No national and international sources state otherwise. There are some doubts by international sources about 'informal' child labor, but such is difficult to control. With respect to Child labor a 'low' risk is justified.
		Discrimination. There are special regulations in place that handles about equal opportunities between all genders. All people in Thailand are treated equally in Thailand, as IPs are not recognized. The country is scoring reasonably positive on 'equality' between genders. There are no sources, national or international that indicate that discrimination is an issue in Thailand. As such a 'low risk' is justified.
		Freedom of association/collective bargain. Thailand has ratified 17 ILO Conventions, including 5 out of 8 fundamental conventions (a 6th one, C111, will be in force in 2018). What is of significance from the point of view of workers is that despite Thai trade Unions long-standing demand and public commitments of the Government, the ratification of C 87 (Freedom of Association and Protection of the Right to Organize Convention) and C 98 (Right to Organize and Collective Bargaining Convention) is yet to happen.
		The Alien Working Act – designed to regulate the employment of foreign migrant workers - appears to be less rigorously adhered to by operators and examples of unregulated alien workers has been widely reported. Even small-scale operators seek to contract (and arrange for) the short-term employment of migrant workers and this has been encountered frequently in the timber sector. Of the 3 million migrant workers, reports indicate that up to 50% may be unregulated or inaccurately reported.
		There are national and international sources that state that social rights are not covered by the relevant legislation.
		Membership of Unions is actively or effectively discouraged within large commercial companies and the capacity of workers to raise complaints, bargain collectively and negotiate effectively with employers is limited. Union membership is stated but frequently confused with the membership of a company run scheme.
		The Thai press frequently reports companies who have been found guilty of infractions of the labor, employment and immigration laws and the situation is closely monitored by a range of local and international NGOs.

ILO estimated that about 2% of the workforce is organized into trade unions and the Government's data shows that less than half percent of private enterprises in Thailand had unions (2015). This low trade union density is a result of combination of factors such as restrictive laws, resistance from employers and lack of enforcement of workers' rights that in the end also weakens trade unions capacities to represent workers effectively. Unions exists in about 34 provinces out of total of 76, which gives rise to the question as to who is representing workers in the tripartite committees at the provincial level in these provinces. The UN and Thailand's major allies urged the junta to respect human rights and return the country to democratic civilian rule through free and fair elections. During the Human Rights Committee's review of Thailand's obligations under the ICCPR in March, the Office of the UN High Commissioner for Human Rights (OHCHR), as well as many foreign governments and human rights groups, expressed concerns regarding violations of fundamental rights and freedoms since the coup. Indicator 1.12 (legal employment) stated the following: For many aspects of the Labor and Employment remains subject to a range of risks and weaknesses which are proven and continue to be exploited. Currently in spite of the legislation, the control measures appear weak and labor and employment issues remain a risk at a national level. It is clear from the many sources and reports that this part of the Labor rights is not respected. And although 46% of the sources list a 'specified risk' (see detailed assessment below) this is serious enough to issue a specified risk for the complete indicator. The following specified risk thresholds apply: (13) Applicable legislation for the area under assessment covers all ILO Fundamental Principles and Rights at Work but the risk assessment for relevant indicators of Category 1 confirms 'specified risk'; AND/OR (15) There is substantial evidence of widespread violation of the ILO Fundamental Principles and Rights at Work.

2.3. The rights of	The sources used are the required ones as	Country	Specified risk
Indigenous and	advised by the NRA framework. Additional		Indigenous and Traditional Peoples are not recognized in Thailand, nor are there any
Traditional	sources are also used. We advise the reader to		laws or regulations dealing with IP. Although the United Nations Declaration on the
Peoples are	read the detailed analyses below, which lists all		Rights of Indigenous Peoples (UNDRIP) was signed the implementation is far from
upheld.	sources used.		finished. The rights of Indigenous and Traditional Peoples are therefore not upheld.
			Therefore, the following 'specified risk' thresholds apply: (23) The presence of indigenous and/or traditional peoples is confirmed or likely within the area. The applicable legislation for the area under assessment contradicts indicator requirement(s);
			And
			(26) There is evidence of conflict(s) of substantial magnitude pertaining to the rights of indigenous and/or traditional peoples. Laws and regulations and/or other legally established processes do not exist that serve to resolve conflicts in the area concerned, or, such processes exist but are not recognized by affected stakeholders as being fair and equitable.

Recommended control measures

The recommended control measures here are only indicative in nature and are not mandatory. Recommended control measures might not have been provided for all the risks that have been identified in this risk assessment. Organizations shall evaluate and devise appropriate control measures to mitigate the risks identified in this risk assessment as applicable.

Indicator	Recommended control measures
2.1	N/A
2.2	Any buyer willing to comply with this indicator should make his own assessment and base this on clear evidence that the supplier has policies in place that guarantee core labor rights. It is clear from many sources and reports that 'freedom of association and collective bargain' is often not respected with many companies. Also, the rights of alien workers are not always guaranteed. A specified risk for these topics is the result. Thus, you have to assess if these topics are respected with your supplier. You will need to check if: • Employees are allowed to be members of Unions. • Alien workers, if any, have the correct permits and paperwork.
	Although there is a low risk for other labor right issues you might do a check on the following when you expect further risks. Employees have labor contracts according to the regulations (check contracts). • Employees are following child labor regulations (check age in ID cards). • Equal gender policy is in place (request policy).
2.3	Any buyer willing to comply with this indicator has the following choices (and expect the same from his suppliers):

Indicator	Recommended control measures			
	Clear evidence that a forest operation is not taking place in traditional territories of indigenous or traditional peoples (maps, permits etc).			
	 Clear evidence that the FMU is managed by the governance structures of indigenous or traditional peoples (ask for written documents that they have these rights, which is almost impossible at the moment in Thailand) 			
	Clear evidence that the involved indigenous or traditional peoples have freely ceded their territorial and/or use rights in an agreement or settlement with the government (ask for written documents and maps),			
	 Conduct a Free Prior Informed consent (FPIC) agreement with the involved indigenous or traditional peoples with customary forest rights in the forest management unit, after a fair, transparent, cultural appropriate and inclusive procedure. 			
	Option 4 is the safest and most efficient way at the moment in case you buy directly from the forest owners. If you do not buy directly, but from other wood suppliers you will need to:			
	 Ask for evidence that shows where the wood is coming from (traceability). See CNRA cat 3 for a complete picture how to do this. If the wood is coming from traditional territories of indigenous or traditional peoples, you will need to request the FPIC documents. If such is not in place, do not buy. 			

Detailed analysis

This detailed assessment start with a general context part where the most renown sources are consulted. In many cases the 'scoring' of the country on various lists is presented.

After the general part the main indicators (2.1/2.2/2.3) are discussed and for each of them specific sources are consulted. In this case the consultation of each specific source will result in a low or specified risk. It means that, with each indicator, there can be many low or specified risks identified and we have to draw an overall conclusion for the complete indicator. The following will be the result:

< 30% of the sources indicate specified risk	The indicator will list 'low risk'.
Between 31-49% of the sources list specified risk	It will depend on the seriousness and impact of the topic if a specified risk is
	issued. If so this is explained in the summary table at the start of this
	assessment.
'> 50% of the sources indicate specified risk	The indicator will list 'specified risk'

Sources of information	Evidence	Scale of risk assessment	Guidance for risk indication ²
Context (the following are indicators that help to contextualize the information from ot • Searching for data on: level of corruption, governance, lawlessness by or in the country, etc.	her sources) , fragility of the State, freedom of journalism, freedom of speech, peace, human righ	ts, armed or viole	
World Bank: Worldwide Governance Indicators - the WGIs report aggregate and individual governance indicators for 215 countries (most recently for 1996–2016), for six dimensions of governance: Voice and Accountability; Political Stability and Absence of Violence; Government Effectiveness; Regulatory Quality; Rule of Law; Control of Corruption http://info.worldbank.org/governance/wgi/index.aspx#reports	(select and click on able view tab and select - Thailand) In 2016 (latest available year). Thailand scores between 45 (for Control of Corruption) and 55 (for Rule of Law) on the percentile rank among all countries for all six dimensions (the scores range from 0 (lowest rank) to 100 (highest rank) with higher values corresponding to better outcomes).		
World Bank Harmonized List of Fragile Situations: http://siteresources.worldbank.org/EXTLICUS/Resources/511777-1269623894864/Fragile_Situations_List_FY11_%28Oct_19_2010%29.pdf	Thailand does not feature on this list		
Committee to Protect Journalists: Impunity Index CPJ's Impunity Index calculates the number of unsolved journalist murders as a percentage of each country's population. For this index, CPJ examined journalist murders that occurred between January 1, 2004, and December 31, 2013, and that remain unsolved. Only those nations with five or more unsolved cases are included on this index. http://cpj.org/reports/2014/04/impunity-index-getting-away-with-murder.php	Thailand does not feature on this list		
Carleton University: Country Indicators for Foreign Policy: the Failed and Fragile States project of Carleton University examines state fragility using a combination of structural data and current event monitoring http://www4.carleton.ca/cifp/ffs.htm https://carleton.ca/cifp/failed-fragile-states/country-ranking-table/	According to methodology used by Carleton University (https://carleton.ca/cifp/failed-fragile-states/data-and-methodology/) Thailand scores med- low on State fragility map 2012. It ranked between China and Bosnia. High means a very fragile country on this map.		
Human Rights Watch: https://www.hrw.org/world-report/2018/country-chapters/thailand	Thailand is featured in the World Report 2018 of Human Rights Watch. The UN and Thailand's major allies urged the junta to respect human rights		

² A risk indication is provided for each source analysed, except in the first part that addresses the general country context as that is not a risk indicator. A cumulative risk assessment for each risk indicator is provided in the row with the conclusion on each risk indicator, based on all the sources analysed and evidence found.

US AID: www.usaid.gov Search on website for [Thailand] + 'human rights' 'conflicts' 'conflict timber' For Africa and Asia also use: http://pdf.usaid.gov/pdf_docs/pnact462.pdf	and return the country to democratic civilian rule through free and fair elections. During the Human Rights Committee's review of Thailand's obligations under the ICCPR in March, the Office of the UN High Commissioner for Human Rights (OHCHR), as well as many foreign governments and human rights groups, expressed concerns regarding violations of fundamental rights and freedoms since the coup. Some information found on work done by USAID after searching Thailand + 'human rights' 'conflicts' 'timber conflicts'. The main information found is about 'conflict timber' that is entering the country from the neighbouring countries. To further information found about human rights.	
Global Witness: www.globalwitness.org Search on website for [country] + 'human rights' 'conflicts' 'conflict timber'	Some information found on specified risks after searching Thailand + 'human rights' 'conflicts' 'timber conflicts'. The information found is mainly about the illegal trade of timber from Cambodia to Thailand, and the other way around.	
On the WWF website concerning the illegal logging http://wwf.panda.org/about_our_earth/about_forests/deforestation/forest_illegal_logging/	Thailand is not mentioned in article, but reference is made to other sites where Thailand is mentioned because of illegal logging.	
WWF: publication Failing the Forests Europe's illegal timber trade http://d2ouvy59p0dg6k.cloudfront.net/downloads/failingforests.pdf	Thailand doesn't import wood from problematic supplying regions as shown in the table on site 5 of the report.	
Transparency International Corruption Perceptions Index http://cpi.transparency.org/cpi2013/results/	Thailand has a high perception of corruption according to the Corruption Perceptions Index (CPI) by Transparency International.: Scoring 38/100 in 2014 and 2015, 35 in 2016 and 37 in 2017. In this score the lower the figure the more corruption is in place.	
Freedom House is a NGO that works to defend human rights and promote democratic change, with a focus on political rights and civil liberties as a catalyst for freedom through a combination of analysis, advocacy, and action. http://www.freedomhouse.org/ http://www.freedomhouse.org/report-types/freedom-net#.U-3hUvl_sV http://www.freedomhouse.org/report-types/freedom-press#.U-3hkvl_sVc	The status of Thailand on the Freedom in the World index is 'not free' (score of 31 out of max 100 where 100 is totally free). The status of Thailand on the Freedom on the Net is 'not free' (score of 67 out of max 100 where 100 is not free at all). Trend is going down.	
	The status of Thailand on the Freedom of the Press is 'not free' (score of 77 out of max 100 where 100 is not free at all).	
Reporters without Borders: Press Freedom Index https://rsf.org/en/thailand	In World Press Freedom Index 2017 Thailand was ranked 140 out of 180 assessed countries. This were number 1 gives the most freedom.	

Fund for Peace - The Fragile State Index (formerly Failed States Index) is an index calculated by the Fund for Peace, which is a US-based non-profit research and educational organization that works to prevent violent conflict and promote security. The Failed States Index is an annual ranking, first published in 2005, of 177 nations based on their levels of stability and capacity http://fundforpeace.org/fsi/2017/05/14/fragile-states-index-2017-annual-	Fragile states index. Ranks Thailand 77 out of 178 countries. Where 178 is less fragile. It is also on the 'warning' list.		
report/			
The Global Peace Index. Published by the Institute for Economics & Peace, This index is the world's leading measure of national peacefulness. It ranks 162 nations according to their absence of violence. It's made up of 23 indicators, ranging from a nation's level of military expenditure to its relations with neighbouring countries and the level of respect for human rights. Source: The Guardian: http://economicsandpeace.org/research/iep-indices-data/global-peace-indexhttp://economicsandpeace.org/reports/ http://visionofhumanity.org/app/uploads/2017/06/GPI17-Report.pdf	Global peace index report for 2017 ranks Thailand 120 out of 163 countries, where 163 is least peaceful.		
Indicator 2.1. The forest sector is not associated with violent armed con-	flict, including that which threatens national or regional security and/or linked to	n military contr	ol.
Guidance	mot, mordaning that which threatens hational of regional security and/or mined to	o mintary contr	OI.
 Is the country covered by a UN security ban on exporting timber? Is the country covered by any other international ban on timber expo 			
Are there individuals or entities involved in the forest sector that are Compared up of United Nations Council Council Continue Lists		- country	L avv rials
Compendium of United Nations Security Council Sanctions Lists https://scsanctions.un.org/fop/fop?xml=htdocs/resources/xml/en/consolidat	There is no UN Security Council ban on timber exports from Thailand.	country	Low risk
ed.xml&xslt=htdocs/resources/xsl/en/consolidated.xsl	Thailand is not covered by any other international ban on timber export.		
	There are no individuals or entities involved in the forest sector in Thailand that are		
US AID: www.usaid.gov	There are no individuals or entities involved in the forest sector in Thailand that are facing UN sanctions.		
US AID: www.usaid.gov Global Witness: www.globalwitness.org			
		-	-
Global Witness: www.globalwitness.org	facing UN sanctions. not available	-	-

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www.usaid.gov http://pdf.usaid.gov/pdf_docs/pnact462.pdf Conflict Timber is defined by US AID as: - conflict financed or sustained through the harvest and sale of timber (Type 1), - conflict emerging as a result of competition over timber or other forest resources (Type 2) Also check overlap with indicator 2.3	No information found on specified risks after searching Thailand + 'conflicts' 'timber conflicts'	country	Low risk
Global Witness is independent, not-for-profit NGO campaigning to end environmental and human rights abuses driven by the exploitation of natural resources and corruption, by hard-hitting investigations, exposure of abuses, and campaign for change. www.globalwitness.org/campaigns/environment/forests	Some information found on specified risks after searching Thailand + 'human rights' 'conflicts' 'timber conflicts'. The information found is mainly about the illegal trade of timber from Cambodia to Thailand, and the other way around. Nothing about violent armed conflict and forest sector.	country	Low risk
Human Rights Watch: http://www.hrw.org/	Thailand is featured in the World Report 2018 of Human Rights Watch. The UN and Thailand's major allies urged the junta to respect human rights and return the country to democratic civilian rule through free and fair elections. During the Human Rights Committee's review of Thailand's obligations under the ICCPR in March, the Office of the UN High Commissioner for Human Rights (OHCHR), as well as many foreign governments and human rights groups, expressed concerns regarding violations of fundamental rights and freedoms since the coup. Nothing mentioned about Thailand being a source of conflict timber. The illegal harvesting currently happening is decreasing because of the more rigorous military checks and controls.	country	Low risk
Amnesty International Annual Report: The state of the world's human rights -information on key human rights issues, including: freedom of expression; international justice; corporate accountability; the death penalty; and reproductive rights https://www.amnesty.org/download/Documents/POL1067002018ENGLISH.PDF http://www.amnesty.org/en/annual-report/2011 http://amnesty.org/en/annual-report/2013/	No direct information on conflict timber related to Thailand is found, but the following can be found in the 2018 (page 358 report): Thailand's military government continued its systematic suppression of dissent, preventing people from speaking or assembling peacefully, and criminalizing and targeting civil society. Dozens of human rights defenders, pro-democracy activists and others faced investigation and prosecution under draconian laws and decrees, many facing lengthy, unfair proceedings before military courts. Activists, journalists, politicians, human rights lawyers and human rights defenders were arrested, detained and prosecuted for peacefully expressing opinions about the government and monarchy. The government maintained systematic and arbitrary restrictions on human rights, including the rights to freedom of expression, peaceful assembly and association. It failed to fulfil its promise to pass a law prohibiting torture and enforced disappearances. Refugees and asylum-seekers continued to be denied formal legal status; they were vulnerable to arrest, detention and deportation.	country	Low risk

World Bank: Worldwide Governance Indicators - the WGIs report aggregate and individual governance indicators for 213 economies (most recently for 1996–2012), for six dimensions of governance: Voice and Accountability; Political Stability and Absence of Violence; Government Effectiveness; Regulatory Quality; Rule of Law; Control of Corruption	Although this does not say anything about Thailand being a source of conflict timber, it is still something that could influence forest management (and create conflict timber) in the future. In 2016 (latest available year) Thailand scores 18 out of 100 for Political Stability and Absence of Violence/ on the percentile rank among all countries (where 100 is most stable).	country	Low risk
http://info.worldbank.org/governance/wgi/index.aspx#reports The 'Political Stability and Absence of Violence/Terrorism' measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism. By measuring individual variables from each data source used to construct this measure in the Worldwide Governance Indicators Greenpeace: www.greenpeace.org	No information on conflict timber related to Thailand found.	country	Low risk
Search for 'conflict timber [country]'	No information on conflict timber related to mailand found.	Country	LOWIISK
CIFOR: http://www.cifor.org/; http://www.cifor.org/publications/Corporate/FactSheet/forests_conflict.htm	Thailand is not mentioned in this document about Forests and conflict.	country	Low risk
Google the terms '[country]' and one of following terms or in combination 'conflict timber', 'illegal logging'	No information found on Thailand as a source of conflict timber	country	Low risk
From national CW RA	not available		
		0 out of 8 specified risk	0% specified risk
Indicator 2.2. Labor rights are respected including rights as specified in Guidance • Are the social rights covered by the relevant legislation and enforce			
 Are rights like freedom of association and collective bargaining uph Is there evidence confirming absence of compulsory and/or forced Is there evidence confirming absence of discrimination in respect o Is there evidence confirming absence of child labor? Is the country signatory to the relevant ILO Conventions? Is there evidence that any groups (including women) feel adequate Are any violations of labor rights limited to specific sectors? 	eld? labor? f employment and/or occupation, and/or gender? ly protected related to the rights mentioned above?		
general sources from FSC-PRO-60-002a V1-0 EN	information found and specific sources		
Legal sources: Thailand Constitution 1932, last updated 2017.	Constitution The Thailand Constitution is established in 1932 and the last update is from 2017.	country	Specified risk

http://www.krisdika.go.th/wps/wcm/connect/d230f08040ee034ca306af7292cbe309/CONSTITUTION+OF+THE+KINGDOM+OF+THAILAND+%28B.E. +2560+%282017%29%29.pdf?MOD=AJPERES&CACHEID=d230f08040ee034ca306af7292cbe309

National human rights commission act b.e. 2542 (1999) http://www.thailawforum.com/database1/national-human-right.html

Labor Protection Act, 1998 Sections 44, 45, 108, 112-115, 123-124, http://www.ilo.org/dyn/natlex/docs/WEBTEXT/49727/65119/E98THA01.htm

The Establishment of Labor Court and Procedure Act, 1979 Sections 8, 53 http://asean.org/storage/2016/08/Thailand031.pdf

Alien Working Act, 2008 Sections 7, 9, 11 http://ilo.org/dyn/natlex/natlex4.detail?p lang=en&p isn=81025&p country =THA&p count=441

Social Security Act B.E. 2533 (1990), Section 34, 36. http://www.ilo.org/dyn/travail/docs/1017/Social%20Security%20Act%20BE%20253 3%201990.pdf

State Enterprise Labor Relations Act B.E. 2543 (2000), Article 25. Including Minimum Standards of Employment Conditions in State Enterprises, Article 53, 55, 58 http://thailaws.com/law/t_laws/tlaw0266_7.pdf

http://www.krisdika.go.th/wps/wcm/connect/180c72804b9e9ba788abfdea72b7e938/STATE+ENTERPRISE+LABOR+RELATIONS+ACT%2C+B.E.+2543+%282000%29.pdf?MOD=AJPERES&CACHEID=180c72804b9e9ba788abfdea72b7e938

Labor Relations Act B.E. 1975 http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=&p_isn=14497

Thailand Gender Equality Act, 2015 https://www.hrw.org/news/2015/09/21/thailand-gender-equality-act

The Anti-Trafficking in Persons Act, 2008 http://www.thailawforum.com/database1/thailand-anti-human-trafficking-act.html

The 1997 Constitution of Thailand, often called the "people's constitution", was considered a landmark in terms of the degree of public participation involved in its drafting as well as the democratic nature of its articles. It stipulated a bicameral legislature, both houses of which were elected. Many human rights were explicitly acknowledged for the first time, and measures were established to increase the stability of elected governments.

The 2007 Constitution of Thailand promulgated in 2007, replacing the 2006 interim constitution promulgated after the army-led September 2006 Thailand coup. The 2007 Constitution was written by a group of drafters appointed by the army-led Council for National Security but was approved by a public referendum. Prior to the referendum, the military junta passed a law making it illegal to publicly criticize the draft. Controversial features in the constitution included a partly-appointed Senate and amnesty for the leaders of the 2006 coup.

On 20 May 2014, there was a partial repeal of the 2007 constitution and a 2014 interim constitution was published. The most recent Constitution went into effect on April 6, 2017.

National human rights commission act

Thailand has ratified and/or been a signatory to a number of important international conventions and regulations related to employment and workers' rights; child labor, slavery, forced and bonded labor; trafficking; migrant labor etc.

Thailand has ratified 17 ILO Conventions, including 5 out of 8 fundamental conventions (a 6th one, C111, will be inforce in 2018).

Thailand has comparable domestic legislation covering these issues, many of which are relevant to the forest and timber processing industries. But nevertheless, not all fundamental ILO conventions are signed and thus not all required legislation is in place. The following is in place at the moment (2018):

Labor Protection Act and Labor court

An operator who employs 10 or more employees is required to register with, and be bound by, the rules specified in the Labor Protection Act which is administered by the Department of Labor Protection and Welfare.

The Labor Protection Act is the principal piece of legislation and covers a range of topics including child labor (Sections 44 and 45) which limit the minimum working age to 18 and within the Forest Industry this is respected for most organizations. Mills, factories, processors and manufacturers who occupy industrial or commercial premises, employ more than 10 people and who are subject to inspection by Labor Inspectors, appear to adhere to the minimum age regulations rigorously; However, CBOs and SmEs make use of (even if they do not formally employ) children below this age.

Other sources:

TEFSO (Thai-FLEGT office) 2016; legal summary http://tefso.org/download/legality-definition-doc-en/LD-Matrix-Draft-29Feb2016-V2-final-draft-ENG 2.pdf

PANWA 2018, summary of labor laws and employment: http://www.panwagroup.net/business/index2.html

Various articles in local media, 2018. About human rights: http://www.scmp.com/week-asia/politics/article/2137480/

http://www.samuitimes.com/thailands-fairytale-economy-reliant-migrant-workers/

http://www.nationmultimedia.com/detail/national/30345561

The Announcement of the National Council for Peace and Order (NCPO) No. 106/2557 on 21st July 2014, Amendment to the Forest Act 1941 ('Teaks, Dipterocarps, Ching-Chung, Ged-Daeng, E-Meng, Payoong-Glaeb, Krapee, Daeng-Chin, Kayoong, Krasik, Krasib, Payoong, Makplu-Taktaen, Krapee-Kaokwai, Ged-Dum, E-Thao, and Ged-Kaokwai are reserved timber species under category (A) regardless of where they grow http://library2.parliament.go.th/giventake/content_ncpo/ncpo-annouce106-2557.pdf)

ILO article 2017: International Labor Standards and Thai Trade Unions Agenda for Labor Law Reforms

http://www.ilo.org/asia/countries/thailand/WCMS 546209/lang-en/index.htm

A special Labor court was established by the Establishment of Labor Court and Procedure Act.

Alien Working Act

The Alien Working Act – designed to regulate the employment of foreign migrant workers - appears to be less rigorously adhered to by operators and examples of unregulated alien workers has been widely reported. Even small-scale operators seek to contract (and arrange for) the short-term employment of migrant workers and this has been encountered frequently in the timber sector. Of the 3 million migrant workers, reports indicate that up to 50% may be unregulated or inaccurately reported.

Social Security Act

Social security is arranged in the Social Security Act. and the

State Enterprise Labor Relations Act and Labor relation act

Labor relations and Unions (in State companies) are organized in the State Enterprise Labor Relations Act (SELRA). This act also including Minimum Standards of Employment Conditions in State Enterprises.

In the Labor relation act (LRA) this is organized for the private sector.

The LRA allows private-sector workers to form and join trade unions of their choosing without prior authorization, to bargain collectively, and to conduct legal strikes with a number of restrictions.

Legal definitions of who may join a union and requirements that the union represent at least one-fifth of the workforce hampered collective bargaining efforts. Under the law only workers who are in the same industry may form a union. For example, despite working in the same factory, contract workers who are classified under the "service industry" may not join the same union as full-time workers who are classified under the "manufacturing industry." This restriction often diminished the ability to bargain collectively as a larger group. Labor advocates claimed companies exploited this required ratio to avoid unionization by hiring substantial numbers of temporary contract workers. The law also restricts formal affiliations between unions of state-owned enterprises (SOE) and private-sector unions because two separate laws govern them.

The law allows employees in private enterprises with more than 50 workers to establish "employee committees" to represent workers' collective requests and to negotiate with employers and "welfare committees" to represent workers' welfare-related collective requests. Employee and welfare committees may give suggestions to employers, but the law bars them from submitting labor demands or conducting legal strikes. The law prohibits employers from taking adverse employment actions against workers for their participation in these committees

and from obstructing the work of the committees. Therefore, union leaders often joined employee or welfare committees.

The SELRA allows one union per SOE. SOEs in the country included state banks, trains, airlines, airports, marine ports, and postal services. Under the law civil servants, including teachers at public and private schools, university professors, soldiers, and police, do not have the right to form or register a union; however, civil servants (including teachers, police, and nurses), and self-employed persons (such as farmers and fishers) may form and register associations to represent member interests. If a SOE union's membership falls below 25 percent of the eligible workforce, labor relations regulations require dissolution.

Thailand Gender Equality Act

This act handles about equal opportunities between all genders.

The Anti-Trafficking in Persons Act

This act handles about stricter controls and regulations for Anti-Trafficking of people.

Enforcement of laws.

There is no evidence that laws are not enforced, neither in local or in international sources. The NCPO announcement 106/2557 made new 15 reserved timber species even though they have been grown inside the private sectors' lands. This announcement is not congruent with fundamental rights of people and rights of property.

Are all social rights covered by the relevant legislation?

There are many sources that state that this is not the case. See left column for some examples of articles.

Membership of Unions is actively or effectively discouraged within large commercial companies and the capacity of workers to raise complaints, bargain collectively and negotiate effectively with employers is limited. Union membership is stated but frequently confused with the membership of a company run scheme.

The Thai press frequently reports companies who have been found guilty of infractions of the labor, employment and immigration laws and the situation is closely monitored by a range of local and international NGOs. In addition, many companies who source goods and services from Thailand (seafood, agricultural products, palm oil, rubberwood and timber-related products) maintain their own systems of due diligence which monitor these issues closely. The 3 examples referenced in the middle column are taken from 2018.

ILO state the following in a 2017 report:

	It is estimated that about 2% of the workforce is organized into trade unions and the Government's data shows that less than half percent of private enterprises in Thailand had unions (2015). This low trade union density is a result of combination of factors such as restrictive laws, resistance from employers and lack of enforcement of workers' rights that in the end also weakens trade unions capacities to represent workers effectively. Unions exists in about 34 provinces out of total of 76, which gives rise to the question as to who is representing workers in the tripartite committees at the provincial level in these provinces. At the same time, a number of challenges face workers and unions in the exercise of the rights to organize and collective bargaining and industrial relations situation is often conflictual. Lack of respect for workers' rights and weaknesses in the disputes resolution machinery also adversely affects the migrant workers who often suffer from serious labor rights abuses. Violation of FoA rights are also reflected in the cases filed with ILO's Committee on Freedom of Association (CFA). The Ministry of Labor (MOL)'s Working Committee to Amend Labor Laws has been working on the reforms for quite some time and it is hoped that reforms will address the concerns of workers organizations and ILO's CFA recommendations. Indicator 1.12 (legal employment) stated the following: For many aspects of the Labor and Employment remains subject to a range of risks and weaknesses which are proven and continue to be exploited. Currently in spite of the legislation, the control measures appear weak and labor and employment issues remain a risk at a national level.		
Status of ratification of fundamental ILO conventions: http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200 COUNTRY_ID:102843	Thailand has ratified 17 ILO Conventions, including 5 out of 8 fundamental conventions (a 6 th one, C111, will be in force in 2018). What is of significance from the point of view of workers is that despite Thai trade Unions long-standing demand and public commitments of the Government, the ratification of C 87 (Freedom of Association and Protection of the Right to Organize Convention) and C 98 (Right to Organize and Collective Bargaining Convention) is yet to happen. Fundamental Conventions: 6 of 8 Governance Conventions (Priority): 1 of 4 Technical Conventions: 11 of 177 Out of 18 Conventions ratified by Thailand, of which 16 are in force, 1 Convention has been denounced; 1 has been ratified in the past 12 months	country	specified risk
ILO Country profile for Thailand: http://www.ilo.org/gateway/faces/home/ctryHome?locale=EN&countryCode=THA&_adf.ctrl-state=ek72onckb_9	There is no mention of Thailand in the Review of annual reports under the follow- up to the ILO Declaration on Fundamental Principles and Rights at Work issued 2015. Thus, Thailand is not following this up.	country	specified risk

	<u></u>		
ILO Declaration on Fundamental Principles and Rights at Work. Country			
reports.			
http://www.ilo.org/declaration/langen/index.htm			
Source of several reports. Search for 'racial discrimination', 'child labor',			
'forced labor', 'gender equality', 'freedom of association'			
ILO Child Labor Country Dashboard:	Thailand is mentioned in the ILO Child Labor Country Dashboard with many	country	Low risk
http://www.ilo.org/ipec/Regionsandcountries/Asia/langen/index.htm	articles and reports.	Country	LOW HOR
http://www.no.org/ipeo/regionsandcodntnes/Asia/idingen/index.htm	and reports.		
	Children can work in various sectors starting at a young age. Laws exists to		
www.ilo.org/ipec/Regionsandcountries/langen/index.htm	prevent working them in hazardous environments. A good summary provides this		
	ILO report. The report concludes the following:		
Country dashboard			
http://www.ilo.org/ipecinfo/product/searchProduct.do?userType=3&type=no	The Committee notes the Home Workers Protection Act adopted in 2011 which		
rmal&selectedSortById=4&selectedPublicOrIntranet=1&selectedCountries	provides for protection of conditions of employment, minimum wages and safe		
=350&createdMonthFrom=-1	working environment for children 15 years of age and over, as well as the National		
	Policy and Plan to Eliminate the Worst Forms of Child Labor for 2009-2014.		
	However, the Committee remains concerned that the State party's legislation does		
	not provide protection to informal workers in agriculture, tourist industry, begging		
	and domestic service, where children aged below 15 years, especially foreign		
	children and children in street situations, are mostly involved.		
	The Committee recommends that the State party study and provide, in its next		
	periodic report, information on the employment of children in the informal sector,		
	such as in agriculture, tourist industry, begging and domestic service, and take		
	measures to reinforce the labor inspection system to monitor and detect children		
	working in these sectors. It urges the State party to amend its legislation to prohibit		
	involvement of children in informal sectors with particular attention to vulnerable		
	groups of children such as foreign children and children in street situations. It		
	recommends that the State party consider ratifying the ILO Convention N°189		
	(2011) concerning decent work for domestic workers.		
	(· ·) · · · · · · · · · · · · · · · ·		
	Nevertheless, laws are upheld and in place. No national and international sources		
	state otherwise.		
Global March Against Child Labor: http://www.globalmarch.org/	No references about Thailand connected n to child labor or child trafficking.	country	Low risk
Office of the United Nations High Commissioner for Human Rights	On the website of OHCHR there is no mention of Thailand connection to instances	country	Low risk
(OHCHR), Committee on Rights of the Child:	of child labor.	Country	LOW HOR
http://www.ohchr.org/EN/HRBodies/CRC/Pages/CRCIndex.aspx	of office tabor.		
http://www.onchr.org/EN/countries/AsiaRegion/Pages/THIndex.aspx			
nttp://www.onciii.org/ετν/countries/Asiakegion/Pages/+πindex.aspx			
ILO Helpdesk for Business on International Labor Standards:	No information found on serious violations of labor rights in Thailand. See above	country	Low risk
http://www.ilo.org/empent/areas/business-helpdesk/langen/index.htm	ILO report about the status.	,	
	1		
Human Rights Watch: http://www.hrw.org/	Thailand is featured in the World Report 2018 of Human Rights Watch.	country	specified
	· · · · · · · · · · · · · · · · · · ·		

	The UN and Thailand's major allies urged the junta to respect human rights and return the country to democratic civilian rule through free and fair elections. During the Human Rights Committee's review of Thailand's obligations under the ICCPR in March, the Office of the UN High Commissioner for Human Rights (OHCHR), as well as many foreign governments and human rights groups, expressed concerns regarding violations of fundamental rights and freedoms since the coup.		risk
Child Labor Index 2014 produced by Maplecroft. http://maplecroft.com/portfolio/new-analysis/2013/10/15/child-labor-risks- increase-china-and-russia-most-progress-shown-south-america- maplecroft-index/	Thailand scores 'medium risk' on the Child Labor Index 2014	country	Low risk
The ITUC Global Rights Index ranks 139 countries against 97 internationally recognised indicators to assess where workers' rights are best protected, in law and in practice. The Survey provides information on violations of the rights to freedom of association, collective bargaining and strike as defined by ILO Conventions, in particular ILO Convention Nos. 87 and 98 as well as jurisprudence developed by the ILO supervisory mechanisms. https://survey.ituc-csi.org/?lang=en 2014 report https://www.ituc-csi.org/new-ituc-global-rights-index-the?lang=en	Thailand does appear in this report and the index. There are also many articles listed about workers' rights. The country is listed as a category 4 country: Systematic violations of rights. (last update is 2011).	country	Specified risk
Google the terms '[country]' and one of following terms 'violation of labor rights', 'child labor', 'forced labor', 'slave labor', 'discrimination', 'gender gap labor', 'violation of labor union rights' 'violation of freedom of association and collective bargaining' https://www.state.gov/documents/organization/265686.pdf	Thailand 2016 human rights report- United States Department of State • Bureau of Democracy, Human Rights and Labor https://www.state.gov/j/drl/rls/hrrpt/humanrightsreport/index.htm#wrapper Executive summary of the report Thailand is a constitutional monarchy, with a king serving as head of state. King Maha Vajiralongkorn Bodindradebayavarangkun ascended to the throne in December 2016, following the death of his father King Bhumibol Adulyadej. In a 2014 bloodless coup, military and police leaders, taking the name National Council for Peace and Order (NCPO) and led by then army chief general Prayut Chanocha, overthrew the civilian government administered by the Puea Thai political party, which had governed since 2011 following National Assembly lower house elections that were generally considered free and fair. The 2017 constitution sets a framework for a return to elected government, but as of year's end, no elections had been formally scheduled, and the NCPO and Prime Minister Prayut Chanocha continued to govern the country. The military-led NCPO maintained control over the security forces and all government institutions.	country	Specified risk

An interim constitution, promulgated by the NCPO in 2014, was in place until April, when the king promulgated a new constitution, previously adopted by a popular referendum in August 2016. The 2017 constitution stipulates the NCPO remain in office and hold all powers granted by the interim constitution until establishment of a new council of ministers and its assumption of office following the first general election under the new charter. The 2017 constitution also stipulates that all NCPO orders are "constitutional and lawful" and are to remain in effect until revoked by the NCPO, an order from the military-appointed legislative body, the prime minister, or cabinet resolution. The interim constitution granted immunity to coup leaders and their subordinates for any coup or post-coup actions ordered by the ruling council, regardless of the legality of the action. The immunity remains in effect under the 2017 constitution. Numerous NCPO decrees limiting civil liberties. including restrictions on freedoms of speech, assembly, and the press, remained in effect during the year, NCPO Order No. 3/2015, which replaced martial law in March 2015, grants the military government sweeping power to curb "acts deemed harmful to national peace and stability." In addition to limitations on civil liberties imposed by the NCPO, the other most significant human rights issues included: excessive use of force by government security forces, including harassing or abusing criminal suspects, detainees, and prisoners; arbitrary arrests and detention by government authorities; abuses by government security forces confronting the continuing ethnic Malay-Muslim insurgency in the southernmost provinces of Yala, Narathiwat, Pattani, and parts of Songkhla; corruption; sexual exploitation of children; and trafficking in persons. Authorities took some steps to investigate and punish officials who committed human rights abuses. Official impunity, however, continued to be a problem, especially in the southernmost provinces, where the Emergency Decree on Public Administration in the State of Emergency (2005), hereinafter referred to as "the emergency decree," and the 2008 Internal Security Act remained in effect. Insurgents in the southernmost provinces committed human rights abuses and attacks on government security forces and civilian targets. Discrimination. There are special regulations in place that handles about equal opportunities between all genders. All people in Thailand are treated equally, as IPs are not recognized. The country is scoring reasonably positive on 'equality' between genders. There are no sources, national or international that indicate that discrimination is an issue in Thailand. Forced labor. There are no sources, national or international that indicate that forced labor is happening in Thailand. World Economic Forum The Global Gender Gap Report 2013, World Economic Forum country Low risk

https://www.weforum.org/ https://www.weforum.org/reports/the-global-gender-gap-report-2017	Thailand ranks nr. 75 on the Global Gender Gap Index 2013 which lists 144 countries with a score of 0,69 of 0 – 1 scale. In this gap a score of 1 means equal salaries.		
UN, CETAW, Human Rights Committee, Consideration of reports submitted by States parties under article 40 of the Covenant, Third periodic reports of States parties due in 2010: Thailand, http://www.refworld.org/publisher,HRC , THA,,,0.html	hese source in the left columns stating more information about equality between nan and woman. But no further index, measurable figures or trends can be bserved. These sources mainly explain the current situation and the laws nplemented.	country	Low risk
UN. CETAW: Committee on the Elimination of Discrimination against Women Consideration of reports submitted by States parties under article 18 of the Convention, Fifth and sixth periodic reports of States parties due in 2013, http://www.ohchr.org/EN/HRBodies/CEDAW/Pages/CEDAWIndex.aspx			
Additional general sources	Additional specific sources		
No other sources found	<u>'</u>		
From national CW RA	not available		
		6 out of 13 specified risk	46% specified risk
Indicator 2.3. The rights of Indigenous and Traditional Peoples are upho	eld.		
 Guidance: Are there Indigenous Peoples (IP), and/or Traditional Peoples (TP) Are the regulations included in the ILO Convention 169 and is UND 	present in the area under assessment? RIP enforced in the area concerned? (refer to category 1)		
 Guidance: Are there Indigenous Peoples (IP), and/or Traditional Peoples (TP) Are the regulations included in the ILO Convention 169 and is UND Is there evidence of violations of legal and customary rights of IP/TI Are there any conflicts of substantial magnitude [footnote 6] pertain with traditional rights? 	present in the area under assessment? RIP enforced in the area concerned? (refer to category 1) by ing to the rights of Indigenous and/or Traditional Peoples and/or local communities		
 Guidance: Are there Indigenous Peoples (IP), and/or Traditional Peoples (TP) Are the regulations included in the ILO Convention 169 and is UND Is there evidence of violations of legal and customary rights of IP/TI Are there any conflicts of substantial magnitude [footnote 6] pertain with traditional rights? 	present in the area under assessment? RIP enforced in the area concerned? (refer to category 1) 2? ing to the rights of Indigenous and/or Traditional Peoples and/or local communities in place to resolve conflicts of substantial magnitude pertaining to TP or IP rights egulations identified above? (refer to category 1)		
 Guidance: Are there Indigenous Peoples (IP), and/or Traditional Peoples (TP) Are the regulations included in the ILO Convention 169 and is UND Is there evidence of violations of legal and customary rights of IP/TI Are there any conflicts of substantial magnitude [footnote 6] pertain with traditional rights? Are there any recognized laws and/or regulations and/or processes and/or communities with traditional rights? What evidence can demonstrate the enforcement of the laws and respectively. 	present in the area under assessment? RIP enforced in the area concerned? (refer to category 1) 2? ing to the rights of Indigenous and/or Traditional Peoples and/or local communities in place to resolve conflicts of substantial magnitude pertaining to TP or IP rights egulations identified above? (refer to category 1)		

http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200 COUNTRY ID: 102843

- United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Was signed by Thailand. Implementation status:

http://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/THA/INT CCPR ICO THA 23570 E.pdf

UNDRIP was signed. The states of implementation (2016) can be found in a special document (see left column) and reads as follows:

1. Right to Identity and Participation in Decision Making (UNDRIP Articles 3, 18):

The Thai Constitution does not recognize indigenous peoples – let alone their rights as per the UNDRIP. As a result, their right to participate in the constitution drafting process, which would affect their rights, has not been respected while indigenous peoples and their rights are rendered invisible in the national laws and policies.

2. Rights to Lands, Territories and Resources, Traditional Livelihoods and Access to Justice (UNDRIP Articles 8, 10, 11, 19, 22, 25, 26, 28, 29, 38, 46): The Regulation of the Prime Minister's Office on the Issuance of Community Land Title Deeds 2010 does not provide legal recognition to traditional land tenure and resource management systems by indigenous peoples. It only allows communities to collectively manage and use State-owned land for their living while the State still retains its claim to ownership of these lands. The Cabinet Resolutions on Restoration of the Traditional Practices and Livelihoods of Karen and Sea Gypsies in Thailand also do not fully meet the aspirations of the indigenous peoples.

Indigenous peoples have been struggling with expulsion from or restrictions of access to their ancestral lands. Recent legal reforms and policies such as NCPO Order No. 64/2014 and the subsequent Forestry Master Plan have resulted in judicial actions against members of indigenous communities within protected forests. Indigenous leaders and activists opposing such injustices have faced harsh reprisals, including enforced disappearances and harassments.

Traditional knowledge of the indigenous peoples on the use of their lands and resources is also being challenged with adverse laws.

3. Right to Nationality & Access to Basic Services (UNDRIP Articles 6, 21, 24, 33):

Indigenous peoples have been struggling for decades to secure citizenship in Thailand. Citizenship will help indigenous peoples ensure their rights to land, education, and freedom of movement.

Indigenous peoples are also facing oppression from government officials, many of whom still view indigenous peoples as foreign and dangerous. It is for these reasons that the plan to give indigenous people gain access to citizenship has slowed, and over 100 000 indigenous persons are estimated to be without citizenship. Resolving the citizenship issue will also help resolve many of the other problems faced by indigenous peoples in Thailand. The existing policy on the nationality verification process and implementation thereof have failed in many

	cases due to a lack of knowledge and understanding of both indigenous peoples and officials about the registration and verification systems. 4. Right to Quality and Culturally Relevant Education (UNDRIP Articles 14, 15): From Thailand's review of their own human rights situation in first cycle of UPR, the government asserts that all children, including "non-Thais, those without a clear legal status, including ethnic groups are entitled to 15 years of free education." However, they also acknowledge they still face "language, cultural and geographic barriers" where health and education is concerned. Against such acknowledgement, the Thai government continues to implement a monolingual and monoculture system of education in national language and a majority religion/culture, despite the multilingual and multicultural nature of the State.		
Survival International: http://www.survivalinternational.org/ Human Rights Watch: http://www.iwgia.org/ Amnesty International http://www.iwgia.org/regions United Nations Special Rapporteur on the rights of indigenous peoples http://www.ohchr.org/en/issues/ipeoples/srindigenouspeoples/pages/sripeoplesindex.aspx UN Human Rights Council Universal Periodic Review http://www.ohchr.org/EN/HRBodies/UPR/Pages/Documentation.aspx UN Human Rights Committee http://www.ohchr.org/EN/HRBodies/CCPR/Pages/CCPRIndex.aspx search for country Also check: UN Committee on the Elimination of All Forms of Racial Discrimination http://www.ohchr.org/EN/HRBodies/CERD/Pages/CERDIndex.aspx Intercontinental Cry http://www.ohchr.org/EN/HRBodies/CERD/Pages/CERDIndex.aspx Intercontinental Cry <a "chao="" "ethnic="" "hill="" "hill-tribe"="" (2002),="" (e.g.,="" (hmong,="" (meaning="" (moken).="" (source:="" (tai="" 252="" 258="" 9="" a="" according="" across="" akha,="" also="" and="" are="" are:="" as="" asian="" available="" belong="" by="" called="" center).="" communities="" country="" country,="" country.="" department="" development="" distributed="" ethnic="" families:="" few="" figures="" fisher="" five="" for="" groups="" h'tin,="" highlanders).="" hill="" hmong,="" hmong-mien="" however="" href="http://inte</td><td>Indigenous peoples of Thailand The indigenous peoples of Thailand are commonly referred to as " human="" hunter-gatherers="" in="" independent="" indigenous="" information="" inhabit="" is="" kachin="" karen,="" khao"="" khmu,="" khuen,="" kui,="" lahu,="" linguistic="" lisu),="" lisu,="" live="" living="" local="" lua,="" lue,="" malayo-="" mien="" mien),="" minorities."="" mlabri),="" mlabri.="" mon-khmer="" mountain="" no="" north="" north,="" north-western="" north:="" northeast,="" northeast.="" of="" officially="" or="" organisations.<="" other="" pacific="" parts="" people="" people"="" peoples="" polynesian="" population="" provinces="" recognized="" reside="" rights="" saek,="" several="" shan="" shan,="" small="" so-called="" social="" sometimes="" south="" southern="" still="" tai="" tai-kadai="" td="" ten="" thai="" thailand="" thailand.="" that="" the="" there="" these="" they="" tibeto-burman="" to="" total="" tribes,"="" twenty="" usually="" various="" welfare="" west="" while="" world="" yai,),="" yong),=""><td>country</td><td>Specified risk</td>	country	Specified risk	

- African Commission on Human and Peoples' Rights
- African Court on Human and Peoples' Rights
- European Court of Human Rights

An Asian-Pacific Court of Human Rights court does not exist.

Data provided by National Indigenous Peoples', Traditional Peoples organizations;

Data provided by Governmental institutions in charge of Indigenous Peoples affairs;

Data provided by National NGOs; NGO documentation of cases of IP and TP conflicts (historic or ongoing);

National land bureau tenure records, maps, titles and registration (Google) Relevant census data

- Evidence of participation in decision making; (See info on implementing ILO 169 and protests against new laws)
- Evidence of IPs refusing to participate (e.g. on the basis of an unfair process, etc.); (See info on implementing ILO 169 and protests against new laws)

National/regional records of claims on lands, negotiations in progress or concluded etc.

Cases of IP and TP conflicts (historic or ongoing).) Data about land use conflicts, and disputes (historical / outstanding grievances and legal disputes)

Social Responsibility Contracts (*Cahier des Charges*) established according to FPIC (Free Prior Informed Consent) principles where available

Google the terms 'Thailand]' and one of following terms 'indigenous peoples organizations', 'traditional peoples organizations', 'land registration office', 'land office', 'indigenous peoples', 'traditional peoples', '[name of IPs]', 'indigenous peoples+conflict', 'indigenous peoples+land rights'
Thailand

Indigenous peoples in Thailand, IWGIA 2018 (news items). https://www.iwgia.org/en/thailand

Network of Indigenous Peoples in Thailand (NIPT) with facts and figures and recommendations http://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/THA/INTCPR ICO THA 23570 E.pdf

Newmandala report about IP in national parks:

At this moment (2016) there are 9 874 community forest management organisations registered with RFD and in total they should manage 4 727 470 ha of forests. For the moment there is no law or regulation that recognizes these organisations, although debates taking place for years. In 2007, Thailand passed a Community Forest Bill after more than 15 years of consultations between the RFD and civil society groups. However, in 2009 the Constitutional Court ruled that the 1961 National Park Act took precedence, and the Community Forest Bill never became law. Because of this no formal management can take place by these organisations. As of mid-2016, there is thus still no legislation related to commercial logging/harvesting of timber generated in community forests. Verification of legal timber from community forests would follow the procedures of the Forest Act.

In the meantime, customary rights are not guaranteed. Forest communities' access to forest resources, particularly those in protected areas, whether for domestic or commercial use, depends on the relationship between local forestry officials and local communities, which can vary significantly from one area to another.

Many rural communities in Thailand continue to lobby for their customary use rights of forest areas to be legally recognised. After almost two decades of campaigning, this has yet to happen. Local people continue to be evicted from areas where they claim to have customary rights that pre-date the establishment of protected forest areas. While customary rights are recognised in some areas, they are still not guaranteed to all. Mr. Pholachai Rakchongcharoen, Karen activist to defend human rights, is believed to have been the victim of an enforced disappearance in Thailand's largest national park in April 2014 (see Amnesty International article in left column).

The Department of National Parks has estimated that as of 2016 there are around 450 000 households living inside the forest reserves. Part of these forest reserves are classified as national parks, wildlife sanctuaries, and non-hunting areas. However, section 16 of the National Park Act prohibits land-holding and harvesting of forest resources in national parks.

There have been cases of arrests, incarceration, forced eviction and other violations by forestry and national park officials. One of the most recent cases was the forced relocation of Karen indigenous peoples from Kaeng Krachan National Park in May-July 2011. The National Park Act does not allow occupancy within parks, despite of the existence of evidence that an indigenous peoples' settlement has existed long before the demarcation of the protected area. A consistent theme emerging from research on Thailand's forests relates to community perceptions that local forest resources have been taken over by the RFD's rapid expansion of protected areas. Most protected areas in Thailand are surrounded or partially occupied by a local population who feel that their legitimate property rights have been appropriated.

http://www.newmandala.org/wp-content/uploads/2010/06/ChATSEA-WP-8-Leblond.pdf Reuters 2018 https://www.reuters.com/article/us-thailand-landrights-protests-analysis/anger-over-land-rights-spills-into-street-protests-in-thailand-idUSKCN1II01E Amnesty International https://www.amnesty.org/download/Documents/ASA3914662015ENGLISH_pdf	Current situation The Thai government does not recognise customary rights in relation to forestry activities. The government recognises the existence of ethnic groups, but has adopted pro-assimilation policies since the founding of the Thai nation-state, and has centralised forest resource management to the point of excluding indigenous peoples' rights. Indigenous and non-indigenous peoples that live in the forest are usually viewed as a threat instead of as custodians of the forest. There is also a clear absence of consensus on customary law and values and how these are, or can be, incorporated into formal laws. Independent information and reasoning on laws related to Customary Rights is largely unavailable. Some studies were done (Ethnic Groups in Thailand according to Habitation) and a master plan was written (Master Plan on the Development of Ethnic Groups in Thailand 2015-2017). The National Park Act says something about the fact that nobody can live inside national parks. No further laws or regulations are in place. Various international sources state problems with IP in Thailand (see last 4 sources in left column).		
Additional general sources for 2.3	Additional specific sources		
no other sources found			
From national CW RA	not available		
		2 out of 2 specified risk	100% specified risk

Controlled wood category 3: Wood from forests in which high conservation values are threatened by management activities

Overview

Forest history and current objectives (lit 3,6,7)

Geographical and political conditions are more or less the same throughout Thailand and there is no need to divide the country is sub-regions because of the HCV risk assessment.

Before the establishment of the Royal Forest Department (RFD) in 1896, forestland was managed by autonomous local fiefdoms, many of whom profited from logging contracts with European companies. The central government reorganized the forestland administration by establishing the Royal Forest Department which was charged with managing all forest area in Thailand. Since then, forest management strategies have evolved along with the socio-economic and political conditions in the country. In 1899 all forests were declared government property and all logging without payment to the Royal Forest Department was prohibited.

During 1896-1953 forestland was managed primarily for commercial timber extraction to meet both domestic and foreign consumption. The Forest Industry Organization (FIO) was established in 1947 as a public forest enterprise for timber and wood, and the Thai Plywood Company was established in 1952 to promote in-country wood processing. During this phase, forest and agricultural land were abundant and population densities were still low. Until 1953, about 60 percent of the total land area was still forested.

The period of 1954-1967 saw a push to use forestland to support national economic development. There was a large shift in forest use in Thailand. Deforestation began to increase, but not due to the commercial uses of teak forests in the north, but rather increased agricultural exports from the south. In 1954, agricultural land was allocated to small farmers under the Land Act 1954 which provided the legal basis for land classification and private ownership. In 1961, the first national social and economic development plan (1961-1966) was launched. Fifty percent of forestland was to remain forested, but by the second national plan the target was reduced to 40 percent. Forestland was quickly cleared by logging concessions which were granted on a large scale to provincial timber companies, by other governmental organizations which cleared land for dams and road construction, and by landless farmers who settled in these opened, frontier areas. In 1962 the Thai government began to establish national parks and other forest conservation areas, their management under the jurisdiction of the Royal Forest Department. Transformation of the landscape accelerated during this period, and by 1967, forest cover was reduced to 48 percent of the kingdom while the farm land increased to 26 percent.

Between 1968 -1980 forests became under increasing pressure. In 1968, the government decided to extend long-term harvesting concessions. The program resulted in more than 500 concessions being granted, covering half the country. There were many disputes between forest officers and migrants who settled in the logged over areas. This led to an amnesty in 1974 for those residing in reserved forestland. Reflecting the political events of the time, the RFD began playing a more active role in working with communities. In 1975, the National Forestland Management Division (NFLMD) was created within the RFD to administer the Forest Village Program. This and other rural development programs are generally recognized as having stabilized forest encroachment by setting limits for how much land households could claim. A military coup in 1976 led to political instability. The military began to clear forests to suppress rebel forces who had settled in the forests for protection. By 1980, reserved forest area covered 36 percent of the kingdom, with national parks and wildlife

sanctuaries covering six percent. Most of these areas were also under timber concessions, although minor withdrawals were made for national security considerations in highly sensitive areas. Deforestation accelerated, leaving only 32 percent of the kingdom under forest cover.

Between 1981-1990, the government began recognizing the magnitude of forest loss. During this period there was increasing recognition that local participation in forest management could assist in forest conservation as well as in stabilizing agricultural encroachment into forestland. Thus, the RFD initiated the National Forestland Allotment (STK) Project, which provided land usufruct certificates to households occupying degraded reserved forest areas before 1982. STK land-use rights were similar to those issued under the Forest Village Project, but the program did not include infrastructure development and government services. Also in 1981, the RFD initiated village woodlots. These woodlots were aimed at increasing forest production for local needs by communities outside forest reserves. In 1985, The National Forest Policy targeted 40 percent of the country to be under forestland and stressed the need to involve local communities, the private sector, academia, and other agencies concerned with forest management. In 1988, serious flooding and landslides in the South generated public concern and an outcry for more conservation-oriented policies. A rising urban middle class, with increasing environmental awareness, pressed for action to halt forest degradation. This led to the 1989 national logging ban. The logging ban pointed towards a shift in national forest management policies toward local participation and forest conservation.

The period of 1991 and 2000 saw an increase in community involvement in Forest Management. Forestry policies in the 1990s have echoed the concern raised by the general public. In 1979, Thailand had only 16 national parks covering an area of 935 700 ha. By 1996, this had increased to 81 national parks covering an area of 41 738 000 ha. In addition, a number of programs were initiated to encourage people's participation in forest management. In 1991, the RFD began a process to develop a Community Forestry Bill to involve local communities in managing communal forest areas. The Reforestation Act of 1992 was initiated to promote tree farming on the private lands. Private plantation cooperatives were organized in 1996. Forestland was also reclassified into three use zones: conservation forests, economic forests and agricultural lands. Ecotourism has become a popular and economically viable form of tourism. In 1997, the RFD began ecotourism projects in a number of national parks and wildlife sanctuaries. The RFD has tried to include local communities living in or near these areas in ecotourism activities, so they will benefit from, and help to ensure, forest conservation. In addition, the Eighth National Economic and Social Development Plan (NESDP,1997-2001) emphasizes human resource development as its main thrust. Many of the strategies in the plan focus on people's participation in national resource management. See for all NESDP plans literature 13.

Between 2001 and 2018 further NESDP plans were made (the 9th, 10th and 11th). The focus remained on people's participation in national resource management. The <u>Twelfth Plan</u> runs from 2017-2021. Strategy 4 in the NESDP handles about natural resources and forests and reads "Strategy for Environmentally Friendly Growth for Sustainable Development'. Some interesting targets and indicators that can be mentioned are:

Target 1: Conserve and restore the stock of natural resources: increase the area of forest for conservation and commercial use, and reverse mangrove forest depletion; curb biodiversity loss; solve the problem of public land encroachment and provide the poor with common rights to use land.

- Indicator 1.1 Forty percent of the country is forest area, classified into forest for conservation (25 percent), and commercial forest (15 percent). The mangrove forest area is enlarged from 244 800 to 252 800 ha (or 1.53 to 1.58 million rai, where 1 rai is 0,16ha). Watershed restoration areas also grow substantially.
- Indicator 1.2 A smaller number of species and populations of living organisms with threatened status or nearly extinct.

• Indicator 1.3 A complete demarcation map of public land (One Map Project) which is formally announced to the public. The number of land plots being allocated to communities for common use.

To realize the targets a so called 'flagship project' will be executed between 2017-2021. The main content of this project will be to promote the growing of long-term economic value trees: develop afforestation procedures and the sustainable management of forest plantations. Create a high-value timber industry in the entire supply chain. In a supportive role, the government should set incentive measures, designate the suitable areas with potential in the ecological landscape and establish a central timber market. The logistics system for transporting timber should be developed. Introduce new financial mechanisms such as forest bonds, tree banks, and forestation funds. Support the study of and research into the genetic improvement of tree varieties. Create innovations that add new value to wood and timber. Restore the use of wood in conservation, construction of houses, temples and other buildings, as well as wood carving as a national art. The project aims to increase the economic forest to 15 percent of the country's total area, while forest for conservation will grow to around 25 percent. The economic forest plantations, with a long-term harvesting period, will therefore create several co-benefits including revenue generation, ecosystem restoration, and greenhouse gas sequestration. As a result, this project can contribute to green growth not only at the national but also the global level. Project implementation will be done by the RFD and other public organisations.

Further details are specified in the Forestry Master Plan (2014)(lit 15) and the Master Plan on Integrated Biodiversity Management (2015-2021)(lit 14). The 'Forestry Master Plan' (FMP) was issued by Thailand's Internal Security Operations Command (ISOC) and the Ministry of Natural Resources and Environment. The Forestry Plan aims to "resolve the problems of forest destruction, trespassing of public land and sustainable management of natural resources". The over-arching goal of this plan is to "increase the forest cover" in Thailand to 40% within 10 years. The three stated objectives of the FMP are:

- To stop forest degradation and reclaim illegally used forest lands as stated in the goal within one year.
- To establish efficient, effective and sustainable forest management systems within two years
- To re-establish healthy forests in the country during the next 2-10 years.

There is a lot of criticism on the Forestry Master Plan as there was no consultation with the public or civil society before the drafting of this plan, nor was there any kind of referendum or public consultation after the plan was finalized (see lit 16 for several articles).

On 22 May 2014, the Royal Thai Armed Forces, launched a coup d'état, against the caretaker government of Thailand, following six months of political crisis. The military established a junta called the National Council for Peace and Order (NCPO) to govern the nation. The Council of the European Union concluded on 23 June 2014 that the EU and its member states will not sign the partnership and cooperation agreement with Thailand, until a democratically elected government is in place, and that other agreements will also be affected as appropriate.

Forest cover

Table 1: Forest cover over the years.

Rai	Ha (1 Rai= 0,16 ha)	% of total land	year	
191.566.875	30.650.700	60,0%	1953	
153.299.875	24.527.980	48,0%	1967	
138.566.875	22.170.700	43,4%	1973	
124.010.625	19.841.700	38,8%	1976	
109.515.000	17.522.400	34,3%	1978	
97.875.000	15.660.000	30,7%	1982	
94.291.250	15.086.600	29,5%	1985	
89.876.875	14.380.300	28,1%	1988	
89.635.625	14.341.700	28,1%	1989	
85.436.250	13.669.800	26,8%	1991	
83.471.250	13.355.400	26,1%	1993	
82.178.125	13.148.500	25,7%	1995	
81.076.250	12.972.200	25,4%	1998	
106.319.239	17.011.078	33,3%	2000	
104.744.360	16.759.098	32,8%	2004	
100.625.813	16.100.130	31,5%	2005	
99.157.869	15.865.259	31,1%	2006	
107.241.031	17.158.565	33,6%	2008	
102.119.538	16.339.126	32,0%	2013	
102.285.400	16.365.664	31,6%	2014	
102.240.982	16.358.557	31,6%	2015	
102.174.805	16.347.969	31,5%	2016	
102.156.350	16.345.016	31,5%	2017	

Sources: Lit 3 (RFD (annual report 2017, page 20) and 6 (FAO). In the missing years there was no measurement.

In 2017 there was thus 16 345 016 ha (16,3 million) of forest, resulting in a 31,5% forests cover. This measurement was done by satellite images.

The definition of forest cover used in the RFD 2014-2017 (satellite) survey is "land with a tree canopy cover an equivalent of 0,5 ha or larger, including surrounding natural grass and rocks". The definition "excludes eucalyptus plantations, or trees planted primarily for non-timber use such as agroforestry systems, fruit orchards, rubberwood and palm plantations" (Lit 3). The densest forest lands lie in the northern region (6,2 million ha) and the western region (3,2 million ha).

Following FAO (2015, Lit 6) Thailand has approximately 41% primary forest, 34% naturally regenerated forest, and 25% of planted forest.

Forest types in Thailand (lit 6)

There are two main types of forests in Thailand: Evergreen Forest and Deciduous Forest.

Evergreen forest. The Evergreen Forest is subdivided into the Tropical Evergreen Forest, the Pine Forest, the Mangrove Forest and the Beach Forest.

Tropical evergreen forest. The Tropical Evergreen Forest is found all over the moist parts of the country. This type of forest is also subdivided into the Tropical Rain Forest, the Semi-evergreen Forest and the Hill Evergreen Forest.

- The tropical rain forest is characterized by a very rich flora diversification and very dense undergrowth. This type of forest is commonly found in the Southern and the Eastern regions where rainfall is above 2,000 millimetres. It is also found along rivers and/or in valleys in other parts of the country. The predominant species (the top storey species) are, for example, *Dipterocarpus spp, Hopea spp, Lagerstroemia spp*, and *Shorea spp*, whereas the lower storey species are bamboos, palms and rattans.
- The semi-evergreen forest is scattered all over the country where the rainfall is between 1,000-2,000 millimetres. The predominant species are *Dipterocarpus spp, Hopea spp, Diospyros spp, Afzelia spp, Terminalia spp*, and *Artocarpus spp*. The main undergrowth species consist of bamboos and rattan.
- The hill evergreen forest is found on the highland parts (above 1,000 metres from the sea level) of the country where the climatic condition is the Humid Subtropical type. The presence of mosses and lichens on trees and rocks is the indicator of this forest type. The predominant species are oaks and chestnuts, or *Castanopsis spp, Quercus spp*, and *Lithocarpus spp*.

Pine forest. There are two species of tropical pines in Thailand. They are *Pinus merkusii* locally called Son Song Bi (the two-needle pine) and *Pinus kesiya* locally called Son Sam Bi (the three-needle pine). *Pinus merkusii* is found in the Northern and the western part of the Central regions, where the soil is poor gravel, lateritic and podzolic. *Pinus kesiya* is found only on the highlands of the Northern and North-eastern regions.

Mangrove and beach forests. Mangrove and Beach forests occur along the coastal areas of the Eastern, Central and Southern regions. The Mangrove forest is scattered along the estuaries of rivers and muddy seashores where the soil is muddy and influenced the tide. The predominant species are *Rhizophora spp, Xylocarpus spp, Avecennia spp, Bruguiers spp, Nypa spp.* The Beach Forest occurs along the sandy coastal plains especially in the eastern coast of the Southern regions. The main species in this type of forest are *Diospyros spp, Croton spp, Lagerstroemia spp* and *Casuarina spp.*

<u>Deciduous forest</u>. The Deciduous Forest is commonly found throughout the country. It is broadly subdivided according to the species composition into the Mixed Deciduous Forest (with and without teak) and the Dry Dipterocarp Forest.

Mixed deciduous forest. The Mixed Deciduous Forest is among the most commercially valuable forest of Thailand. In the Northern Region, this type of Forest is named as the Teak (*Tectona grandis*), *Xylia kerrii*, *Pterocarpus macrocarpus*, *Afzelia xylocarpus* and *Dalbergia spp* (rose wood).

Dry dipterocarp forest. The Dry Dipterocarp Forest is commonly found in the dry area (rainfall below 1,000 millimetres) where the soil condition is infertile and sandy or gravelly lateritic soil. The predominant species are mainly in the family of *Dipterocarpaceae* such as *Dipterocarpus tuberculatus*, *Dipterocarpus obtusifolius*, *Shorea obtusa*, *Shorea siamensis*, with the presence of other species such as *Dalbergia spp*, *Lagerstroemia spp*, *Terminalia spp*.

Growing stock (lit 3,6,18)

Lacking recent inventories, little is known about the growing stock, including the relatively large areas planted over the last 20 years in forest reserves (lit 6). The last measurement was done in 2004 (lit 18, page 33), based on sample plots, and showed an average stock of 88,8 m3/ha and a total growing stock of 1 385 million m3. The annual harvest over 2016 was 324 034 m3.

A FAO/RFD report from 2015 (lit 6) list the growing stock as a whole as 1 291 million m3 in 1990 and 1 506 million m3 in 2015.

Forest landownership (lit 3,17,87)

In Thailand, land is classified into private land and public or government land. The Land Code (1954) defines different types of documents depending on whether the owner can claim occupancy, utilization, or legal possession of the land. Ownership can be separated from use rights. Usufruct certificates have been given to households that were living and continue to live in National Forest Reserves before those reserves were demarcated.

All natural forests are owned by the public. Around 2.7 million ha is designated to be National Forest under the control of the Royal Forest Department. As logging is banned, no part of the forest estate is designated as production forest. Some public forests are co-managed as 'community forests'. There are also public forests (and protected areas) co-managed by municipalities.

The forest management enterprise (FME) of Forest Industry Organization (FIO) consists of 245 forest plantations covering 185 280 ha (2016 annual report FIO, lit 25) distributes all over Thailand. Most of the plantations in the north are Teak, but there is also Scot pine. The plantations in the northeast are primarily Eucalyptus, while those in the south are Rubberwood trees for parawood. Approximately 50% of the plantations are teak, 20% eucalyptus, 9% rubberwood and 21% various mixed species.

Private owners can be found in the plantation sector only. Between 2006 and 2016 a total of 61 384 ha were newly planted (lit 3), mostly with subsidies. FAO/RFD reported in 2015 (lit 6) that there was the following amount of plantations:

Table 2; Plantation

	1990	2000	2005	2010	2015
Plantations	2.668.000	3.111.000	3.444.000	3.986.000	3.986.000

Sources: Lit 3,6

The figure in 2015 represents around 24% of the national forest cover.

In general, it can be assumed that 84% of the forest is owned by public organisations and 16% by private people (lit 6). No further data exists about land tenure in Thailand, and such is also not reported in annual reports.

Management zones in Thailand (lit 19).

In 1989, 23.6 million hectares (45.9% of the total area) were gazetted as National Forest Reserves and classified into 3 zones as follow:

Forest area that suitable for Agriculture (**Zone A**) (public and private). Designated as suitable for agriculture and for allocation to landless farmers by the Agricultural Land Reform Office. Under this zone the following land classifications can be found:

- Public Forest areas that are capable of soil suitable for farming and suitable areas for agriculture according to the cabinet resolution on the definition of watershed class and the land use classification in mangrove areas. These can be national forest reserves (see above. Often depleted) where the capacity for agricultural land or high potential for agricultural development is available. This according to the results of land classification of the Department of Land Development. Such lands cannot be classified as a conservation area or a plantation area. Managed by the Royal Forest Department (RFD), Department of Marine and Coastal, Land Development Department and the Agricultural Land Reform Office.
- Private Plantations. Economic forest plantation, non-natural or semi-natural forest, owned by private owners.

The **C-Zone**, **C**onservation Forest consists of areas formerly designated as protected forests and natural forests where human activities are minimal. Thus in principle no wood can enter the market. Under this zone the following land classifications can be found:

- Legally conservation area and cabinet resolution. These are Wildlife Sanctuary, National Park, Watershed Class 1 and Mangrove forest areas. These are state owned lands managed by the Department of National Parks, Wildlife and Plant Conservation, Office of the National Environment Board and the Department of Marine and Coastal.
- Forest reserves. These are the regular forests (for various purposes) that are managed by the Royal Forest Department (RFD), Ministry of Defence or the Fine Arts Department.

Economic forest areas (**Zone E**) (public). These forests are set aside for plantations or for landless farmers. Under this zone the following land classifications can be found:

- Natural forest development areas. These are sites assigned by special regulations. Like the 'wood project' and the community forest projects where communities are allowed to do part of the management. These are managed by the RFD and the Community Forest Board.
- Forest resources development area. These are governmental <u>plantation</u> areas managed by the RFD, FIO, the Rubberwood Authority of Thailand and Sub-District Administration Organizations (provincial level authorities).

- Community forestry development areas. In these sites community forestry is developed according several regulations, acts and projects: Royal projects area
- Development area for security, Forest village project area and Forest area for land rights. They are managed by the RFD and the Ministry of Defence.
- Other natural resources development areas. These are Mineral areas, Rock and stone extraction sites and allowed areas for government and private use in various activities. Managed by RFD, Department of Mineral Resources and Royal Irrigation Department.

Community forestry (lit 3 annual reports)

Involving communities in forest management (outside protected areas) is a strategic objective of the government. RFD's Bureau of Community Forest Management is in charge of this

Programme. Community forests in Thailand are classified into two types: 1) natural and 2) rehabilitated or developed. They can be established on three categories of land: national reserved forest or public and overgrown areas; land under the jurisdiction of other government agencies (e.g. monasteries, educational institutes, military areas); and private locations.

- 1) The first type consists of natural forests where people in nearby communities join together to protect them in order to benefit from their productive capacity and to maintain their norms and culture. They include forests and trees in non-hunting areas, around monasteries, in cemeteries, in sacred sites, in head waters, in paddy fields, for multiple uses (i.e., fuel wood, edible and medicinal plants).
- 2) The second type is a degraded forest that has been rehabilitated or developed for land and water conservation, food security, recreation, amenities and other purposes. They include forest plantations for community purposes, forest plantations within educational and religious institutions, forest plantations under Royal Initiative Projects and urban community forests.

The main idea is to establish community forest management 'organisations', register them and recognize them by law. Once a community forest has been approved and established, it will be recognized by the government and receive full RFD support in terms of budget, technical assistance, empowerment and manpower. Government agencies will also recognize community forest committees which can then acquire funding from these organizations for development, using the forest as the resource base. At this moment (2016) there are 9 874 organisations registered with RFD and in total they should manage 4 727 470 ha of forests. For the moment there is no law or regulation that recognizes these organisations, although debates taking place for years. In 2007, Thailand passed a Community Forest Bill after more than 15 years of consultations between the RFD and civil society groups. However, in 2009 the Constitutional Court ruled that the 1961 National Park Act took precedence, and the Community Forest Bill never became law. Because of this no formal management can take place by these organisations.

Forest Managers and key organisations (3,19,23)

- The Office of the National Economic and Social Development Board (NESDB) is responsible for developing the National Economic and Social Development Plans (NESDP).
- The Ministry of Natural Resources and Environment (MNRE) website is responsible for everything related to natural resources. They also produce Strategic Plans.

- The Royal Forest Department (RFD) is part of the MNRE and is responsible for actively managing the forest reserves in the various *zones* (see above). The RFD oversees permission related to timber harvesting, transporting, processing and trading. It manages National Forest Reserves and Permanent Forest Estates.
- The Department of National Parks, Wildlife and Plant Conservation (<u>DNP</u>) is responsible for managing the protected areas (see below). The Department oversees approvals related to protected areas and protected species, including import/export of CITES species.
- The Office of Natural Resources and Environmental Policy and Planning (<u>ONEP</u>), Ministry of Natural Resources and Environment, is responsible for the Master Plan for Integrated Biodiversity Management and everything related to the Convention on Biological Diversity (CBD).
- The government owned enterprise the Forestry Industry Organisation (FIO) is managing many plantations on behalf of the public.
- The Department of Marine and Coastal Resources manages mangroves. All three of these government departments are under the Ministry of Natural Resources and Environment.
- Department of Special Investigation has the jurisdiction and has investigated illegal timber smuggling operations, sometimes in cooperation with National Anti-Corruption Commission that probes smuggling cases.
- Provincial Administrative Organizations (PAO): There are 75 provinces in Thailand, each with a PAO that includes representatives from the MNRE and provincial representatives of the RFD.

Categories of protection:

A true HCV definition does not exist in Thailand, nor is it used. Thailand is protecting and managing areas especially worthy of protection for its excellent ecosystem and abundant biodiversity by designating them as protected areas.

Please note that many international protection classes mentioned below overlap with others. This means that a piece of forest can belong to a National Forest Reserve and is listed at the same time as an international Biosphere Reserves, for example. Forest Management always remains with the initial forest owner, in this case RFD.

Table 3: protected areas in Thailand.

Туре	Number of sites	Number of hectares	Managed by
National Forest Reserves (2016 figures)			Around 450 000 households are living inside these reserves.
North region of Thailand	257	11 187 504	Royal Forest Department (RFD)
North-eastern region of Thailand	353	5 533 340	RFD
Central and East of Thailand	143	3 488 906	RFD
South of Thailand	468	2 818 314	RFD
Total forest reserves	1 221	23 028 064 (16 345 016)	Please note that the forest reserves are <u>listing</u> 23,0 million ha of forests, while the forest <u>cover</u> (see above) measured by satellite is 16,3 million ha in 2017.
			The balance between 23 and 16 million are degraded forests that does not

			longer comply with the definition of forest. But the land-use is still 'forest reserve'. Both figures are used in various governmental documents and statistics, although the latest (2017) annual RFD report clearly only state the 16 million). This is in line with what is stated in the FAO/RFD 2015 report (lit 6), page 52) where a total of 6 137 180 ha is listed with reduced canopy cover (FAO definition: Forest that has undergone a reduction of canopy cover of more than 20% between the years 2000 and 2010 within the forest canopy cover range of 30-80% as detected by the MODIS VCF sensor). These were 2015 FAO figures and are not yet updated to 2017.
Protected Areas (2016 figures)			These are <u>in</u> National Forest Reserves Areas, thus overlap with forest reserves above.
National Park	129	6 246 274	Department of National Parks, Wildlife and Plant Conservation (DNP)
Forest Park	119	145 581	DNP
Wildlife sanctuary	59	3 702 777	DNP
Non-Hunting Area	65	505 645	DNP
Botanical Garden	18	4 768	DNP
Arboretum	53	3 916	DNP
Mangrove Forest	All	245 533	Department of Marine and Coastal Resources (DMCR)
Total protected:		10 854 494	(which is 66% of all forests, 16,3 million ha).
Historical Park	10	13 391	Fine Arts Department (FAD)
International sites (overlap with the above)			
RAMSAR	14	339 714	14 sites designated as Wetlands of International Importance
Biosphere Reserves	4	158 800	4 sites: Sakaerat (82 100 ha), Hauy tak teak (4 700), Mae sa-kog ma (42 064) and Ranong (29 936)
Unesco world heritage	5		See below for info.

Sources: Lit 3,4,19

Cultural Heritage Sites (lit 66).

The conservation and management of cultural heritage is the responsibility of the <u>Fine Arts Department</u>, under the framework of the Act on Ancient Monuments, Antiques, Objects of Art and National Museums (1961). Under the law, the Department has authority to manage and protect sites like ancient monuments, antiques and objects of art of significant artistic, historical or archaeological value. It is also responsible for operating national museums for the safekeeping of such artefacts. As of September 2015, the Department lists 5 678 ancient monuments, 2 087 of which have officially been registered (including 10 historical parks. It operates 43 national museums throughout the country. Some of <u>these historical parks</u> also contain forests.

Several other institutions are also involved in the field, including universities, professional organizations, and public and private museums. A Register of archaeological Heritage is available online with the *Sirindhorn Anthropological institute* (lit 66).

The UNESCO (United Nations Educational, Scientific and Cultural Organization) has designated <u>five World Heritage Sites</u> in the Thailand. Two of these sites are forest related:

- Thungyai-Huai Kha Khaeng Wildlife Sanctuaries is forest related. The Thungyai-Huai Kha Khaeng Wildlife Sanctuaries encompass almost all kinds of
 forests from Southeast Asia. With 622 000 ha situated on the border with Myanmar, the wildlife sanctuaries are home to a vast array of fauna,
 including several endangered species. This site is covering the areas of two adjacent wildlife sanctuaries: Thung Yai Naresuan and Huai Kha Khaeng.
 They cover areas in Kanchanaburi, Tak and Uthai Thani, and form a large part of Thailand's Western Forest Complex.
- The Dong Phayayen-Khao Yai Forest Complex is a 615 000 ha, protected tropical forest located on the border with Cambodia. Especially important for the preservation of fauna, it is key to the long-term survival of several endangered animal species. The site covers the areas of five protected areas in the Dong Phaya Yen Mountains and Sankamphaeng Range, namely Khao Yai, Thap Lan, Pang Sida and Ta Phraya National Parks, and Dong Yai Wildlife Sanctuary.

6 more sites are on the Tentative List for Thailand, meaning that the government intends to consider them for nomination in the future.

Laws, regulations, international agreements and status of implementation (lit 21, 83, 89)

The Forest Act (1941) defines forest as "land which has not been taken up or acquired by any other means under the Land Code". Forestry laws apply to any piece of land that is not private property, or where no person has possessory rights. Under the law, 'forest' is a legal territory that can include, but does not limit to, natural forests, tree plantations, nature strips, roadside verges, farmland, and land reform areas occupied by farmers but not yet received titles. All forest resources on such territories, naturally grown and planted timber included, belong to the state. For example, when a person is granted the permission to establish a plantation on forest land, they may still be required to obtain a harvesting permit as the law recognizes planted timber as a forest resource. Similarly, a tree plantation farmer whose land has not yet received title may require a permit to harvest the trees on their land.

The Forest Act defines "restricted species". These sections prescribe that harvesting restricted timber species in a forest requires permission. The restricted species are declared in The Royal Decree on Restricted Timber Species (1987) and the Royal Decree on Restricted Forest Products (1987). In National Forest Reserves (NFRs), harvesting all species requires permission. Felling of trees in protected areas is prohibited.

Considering the current legislation in Thailand the main laws currently active are:

- Forest Law (1941)
- Forestry Act 1947, amended 1989.
- National Park Act (1961)
- Forest Reserve Act (1964)
- Environmental Quality Act (1964) and Enhancement and Conservation of the National Environmental Quality Act (1992)
- Forest Plantation/ Reforestation Act (1992)
- Wildlife Conservation and Protection Act (1992)
- Wild Animal Preservation and Protection Act (1992) (WARPA)(CITES)
- Wildlife Sanctuary Act (1985)
- Watershed classification Act (1994)
- Local Administration Act (1994)
- Logging Ban (1989)
- Safety Act (1992)
- Labor Protection Law (1998)
- Constitution of Thailand (1991)
- Land use and planning: Land Reform for Agriculture Act 1975
- Archaeological Sites, Antiques, Art Objects and National Museum Act (1961)

Thailand ratified 'The Convention on Biological Diversity' (CBD) in 1994. The Ministry of the Environment and Spatial Planning has responsible for its implementation. The CBD is implemented by National Biodiversity Strategy and Action Plan. CBD actions plans are made. The current action plan is running from 2015-2021. The Fifth national report was published in 2011 (lit 83). Thailand also signed Forced Labor (and the Abolition) Convention (1930/1957) and the equal Remuneration Convention (1951), several ILO conventions, CITES and ITTA (International Tropical Timber Agreement) in 1994.

There are CITES species occurring in Thailand. There are 86 species listed in Appendix 1 and about 1600 species in Appendix 2. There are Intact Forest Landscapes as mapped by Greenpeace and other organisations (lit 84). *Aquilaria spp.* (Agarwood), *Rauvolfia serpentine* (Serpentine wood) and *Dalbergia spp.* (Rosewood) are on the CITES Appendix II list.

Intact forest landscape (IFL) (lit 84) are defined as a seamless mosaic of forest and naturally treeless ecosystems with no remotely detected signs of human activity and a minimum area of 50 000 ha. These areas must be undisturbed by human activities; they cannot be traversed by roads or deforested or harbour industrial operations. When any of these conditions apply, the ecosystems cease to be considered "intact". As of 2000 Thailand had 1 940 000 ha of IFL, amounting to 7% of its forested landscape. Over the period 2000-2013, 7,8% of Thailand's natural, intact forest landscape disappeared.

Forest operations and felling permits (Lit 19,20)

There are two sources of domestic timber in Thailand: planted timber and natural forest. The majority of domestic timber in the country is sourced from plantations. Such can come from private or public owners. Public plantations can be found inside National Forest Reserve (NFR), in degraded areas, or outside such NFR areas. <u>Legal requirements for management planning only apply to public plantations in National Forest Reserves.</u>

The volume of legally produced logs from natural forest in Thailand is small. Official statistics record no timber production from natural forest areas, though it is believed that small volumes may become available through legal conversion. In addition, confiscated illegal logs are sold by the Forest Industry Organization (FIO). Logging concessions are no longer allowed in the country. This is largely due to 1989 logging ban. The logging ban, however, still allows the felling of trees in forest plantations, and allows the clearing of forests for infrastructure projects. Concessions are no longer used in Thailand (the last expired in 2002 and concessions are not prolonged).

Private land

Timber grown on private land is considered to be the private property of the owner and is not under the jurisdiction of forestry law. A person can start a plantation, and harvest, transport, process and trade timber grown on private land without permission. However, permission related to harvesting, transporting, processing and trading of teak (*Tectona grandis*), yang (*Dipterocarpus alatus*), and rosewood (*Dalbergia spp.*) are legally required under the Forest Act. According to section 7 of the Forest Act, these woods are under nationwide restrictions.

Public land

On <u>any</u> public land (National Forest Reserve (NFR) or plantation), a harvesting permit is required for all restricted species, regardless of whether they are planted or from a natural forest. Restricted species are declared in The Royal Decree on Restricted Timber Species (1987) and the Royal Decree on Restricted Forest Products (1987) where they are classified into two categories: 'A' and 'B'. Section 3 of the Forest Act specifies that harvesting of 'Category A restricted species' require an RFD-issued permit, while harvesting of 'Category B restricted species' requires ministerial authorisation.

Applications for establishing forest or tree plantations in a National Forest Reserve are reviewed by the RFD and approved by the Ministry of Natural Resources and Environment. Licenses are granted only for areas determined to be degraded forest. Applications for plantations exceeding 160 ha require cabinet approval per section 20 of the National Forest Reserves Act (amended 2016).

A royalty is applied to all timber generated from public land, with an exception made for non-restricted species grown in a forest outside the NFRs. However, a forest checkpoint fee will be collected at the first checkpoint for timber in this category.

Permits and licenses for registered forest plantation

Between 1992 and 2015, commercial plantations growing restricted species were allowed to register under the Forest Plantation Act (1992). In 2015, the Forest Plantation Act was amended to allow plantations growing 58 timber species specified in the Annex to register under the Forest Plantation Act (No. 2) (2015). Plantation estates can be on private or public land, including land in NFRs for which there is official land documentation to prove occupancy, leasehold, concession, or use rights. Licensed operators can be individuals, businesses (such as cooperatives or limited companies), state agencies, or state-owned enterprises (such as the Forest Industry Organisation).

Public plantations outside National Forest Reserves

- A harvesting permit is required for all species coming from public plantations. Plantation certificate holders follow a permission system under the Forest Plantation Act. Before leaving a plantation, timber from a registered plantation is marked by the private seal of the plantation operator. The transportation operator must be in possession of the Plantation Timber Packing List, along with a copy of a Certificate of Cutting/Felling.
- Before harvesting the timber, the plantation operator must: Register their private seal, submit Notification of cutting/felling and register the plantation timber packing list
- Transportation Operators must be in possession of the Plantation Timber Packing List and a copy of a Certificate of Cutting/Felling Notification when they transport round logs, sawn wood, and forest products generated from registered plantations.

Public plantations <u>inside</u> National Forest Reserves (with forest management requirements)

In addition to the above the plantation manager should have an approved Annual Operating Plan and draft a yearly Plantation Annual Management Report. Both maps should contain detailed maps and should be approved by the RFD.

Private plantations

A person can start a plantation, and harvest, transport, process and trade timber grown on private land without permission. However, permission related to harvesting, transporting, processing and trading of teak (*Tectona grandis*), yang (*Dipterocarpus alatus*), and rosewood (*Dalbergia spp.*) are legally required under the Forest Act. According to section 7 of the Forest Act, these woods are under nationwide restrictions.

Permits and licenses for all other (public) timber sources.

- No further forest management planning (like Forest Management Plans) is required. This is also because of the logging ban; in principle no timber could be extracted. It is left to individual offices of protected areas and national forest reserves to make FMP's or not. A FAO/RFD report from 2015 (lit 6) explains this (page 63) and lists 13 311 520 ha under FMP, of which 2 931 200 ha is production forests and 10 380 320 ha is for conservation. There is no public access to these FMP's, nor are there any legal requirements, laws or guidelines about the process to establish them or the content of the plans. Legal requirements for FMP's only apply for public plantations (see also indicator 1.3, which state a specified risk for Forest Management Planning.
- Category A restricted species' require an RFD-issued permit, while harvesting of 'Category B restricted species' requires ministerial authorisation.
- For logs or forest products harvested from public land <u>outside</u> registered plantations, operators are required to pay a royalty and forest maintenance fees. Once the fees are collected, a receipt is issued, and each and every item will be marked with the royalty seal, the personal seal of the officer, the sequential number, and the year.
- Before transport, the transportation operators must obtain a Removal Pass.
- The officer will verify the timber mark, proof of royalty collection, proof of forest checkpoint fee payment (in case of Non-restricted timber where a harvesting permit and royalty are not required), the sale receipt (in case of timber sold by state agencies). In the case of imported timber and forest

- products, the officer will verify the timber mark, the import duty receipt, the packing list/bill of lading, the invoice, and the Certificate of Origin and/or export licence from the exporting country.
- After verification, the officer will mark each and every item of the shipment with their personal seal as proof of inspection. In the event that this cannot be performed, written notification on the packing list accompanying the consignment is required.
- The packing list carries information on the type/species, the quantity and volume, and the number on each log, as well as the officer's seal. The authority responsible for issuance of a transport document is the Forest Checkpoint Bureau under the Royal Forest Department. The RFD has set up 39 forest checkpoints nationwide, 38 of which are referred to as 'Category 1' checkpoints, are located in 38 outer provinces, and operate 24 hours. The Bangkok forest checkpoint is referred to as a 'Category 2' checkpoint and has four operating branches in the city that are open during office hours.
- Each lorry that carries timber and forest products must be in possession of a transport document, which will be verified at forest checkpoints. Removal Passes can be re-issued at a forest checkpoint if the original removal pass has expired. Other types of transport documents are issued by licensed sawmills, licensed timber traders, district chiefs, or provincial governors. On the back of the transport document is a packing list. A record of royalty payment, where applicable, is attached to the transport document.
- Forest checkpoint officials will verify the documentation, and ensure that the transport document is still valid and that the royalty has been fully and correctly paid. Upon verification they will sample check a minimum of 20% of the load. Once verified, Forest Checkpoint officials will place their personal seal on the sample items (but not necessarily every item in the load), and sign off the transport document.

Forest conversion.

On 10 August 2015, a new legislation was passed to prescribe the guidelines for forest conversion: Ministerial Regulation on the Request and Permission to Utilize Forest Estate (2015). In the legislation, "utilization" is defined as an act of mining, petroleum exploration, shelter or agriculture, afforestation or forest plantation, use as rest area, use as livestock grazing, use as religious site, use as research and study, and use by government agencies. Clause 12 of the regulation prescribes the criteria of forest land permitted for conversion: i) The area is deemed unfit for 'prime forest'; ii) The area is not deemed suitable for preserving as a wildlife habitat; or iii) The area does not overlap the boundary of the forest prohibited for utilisation declared by the Cabinet.

Only the Forest Industry Organisation (FIO) is permitted to harvest and sell timber from forest land permitted for conversion. Under clause 24 of the regulation, the licence holder must notify the Royal Forest Department (RFD) should forest clearance be required, and that only the FIO is allowed to fell and remove logs in accordance with the RFD regulations. Special permission from RFD is thus always required.

Products

With regards to products only Timber is taken into account as there are no cases, reports or proof that other products are commercially harvested or collected.

Main threats to HCVs from forest management activities

Following the 5th National Report to the Convention on Biological Diversity (2011-2020) (Lit 83) the main causes of biodiversity loss are demand for agricultural land. Because of the growing population there is also a growing demand for water, food, residence and medicine, which is putting more pressure on the natural resources. Agricultural land increased from 21% of the total land areas in 1962 to 46% in 2011. Many forest ecosystems, including their water source systems, are thus disappeared over time.

Encroachment is also a problem as people starting illegal plantations of Rubberwood and oil palm in many places. In 2012 about 6 952 ha was lost to illegal encroachment. In 2013 this was 7 950 ha, in 2014 it was 13 113 ha and 17 000 ha (lit 3, <u>table 12</u>). Almost all of these encroachments are taking place in already degraded Forest Reserves (zone A areas) (source: local expert). Because the total forest area (table 1) did not change much over the last 5 years as degraded areas are no longer counted in the annual RFD satellite assessment. During the last years, strict military controls have resulted in more discoveries and legal prosecutions of encroachment.

Fires are happening in Thailand. 2016 counted 1708 cases of forest fires, and 10 114 ha was lost (0,06% of total forest area). 2015 counted 1 314 cases and 6 906 ha were lost. 2014 did see 1 088 cases with 2 420 ha lost. Humans are the main cause of forest fires (lit 3).

Forest certification (lit 87)

In 2018 in Thailand, 90 021 ha of forest, in 17 FMU's, are certified. Besides that, there are 139 COC's. The Forest Industry Organization (FIO) is certified with 19 419 ha in two certificates.

The term 'High Conservation Value Forest' in Thailand.

The term HCVF is not used in governmental, or any other, sources in Thailand. Therefore, we briefly assess if such areas, according to the FSC definition of HCVF, can be selected.

Classifications of forests and forest functions could be mapped in forest management plans in Thailand and could thus form a basis for defining HCVF. But Forest Management Planning is not done in a structural way. There is no public access to these FMP's, nor are there any legal requirements, laws or guidelines about the process to establish them or the content of the plans. Legal requirements for FMP's only apply for public plantations (see also indicator 1.3, which state a specified risk for Forest Management Planning).

Forests with protection functions (see above table) has to adapt its management in such a way that maintaining or improving this specific function will be a result. Some of these protection functions/classes can be directly linked to HCVF. All protected sites and natural heritage sites are administrated by the government.

Source types used in this CNRA

The CNRA analysis below is based on so called 'source types'. A source type is a timber/NFTP source with similar geographical and/or functional characteristics with a homogenous risk designation. These are potential sources from which timber could enter the market and end up in the supply chain of FSC certified timber processing companies. Such source types need to be defined because risks could be different with each of them.

During the analysis the following source types were identified that could, in theory, result in different risks in the assessment:

Table 4: Source types in Thailand.

Region/Area	Forest type	Legal Land Classification and management regime	Ownership	
	Conservation forest areas (Zone C),	Legally conservation area and cabinet resolution	State	
	fully protected park where no harvesting is allowed. Thus in principle no wood can enter the	Forest reserves	State	
	market.	Plantations in Forest reserves.	State	
	Economic forest areas (Zone E)	Natural forest development areas		State
		Forest resources development area. These are governmental plantations outside Zone C areas.	State	
All of Thailand		Community forestry development areas	State	
		Other natural resources development areas	State	
		Forest areas that are capable of soil suitable for farming	State	
	Forest area that suitable for agriculture (Zone A)	Suitable area for agriculture according to the cabinet resolution on the definition of watershed class and the land use classification in mangrove areas	State	
	Plantation	Farm land	Private	

Source; local expert (lit 19)

During the detailed assessment it became clear that state and private forest owners were subject to the same risks and a further separation was not needed. In the detailed assessment down below the risks were thus judged at 'country level'.

Each of the HCV classes mentioned below is thus assessed against these source types.

- HCV 1 Species diversity
- HCV 2 Landscape-level ecosystems and mosaics
- HCV 3 Ecosystems and habitats
- HCV 4 Critical ecosystem services
- HCV 5 Community needs
- HCV 6 Cultural values

Experts consulted

	Name	Organization	Area of expertise (category/sub-category)
1.	Narongchai Chonlapap	Forest Industry Organization (FIO)	HCV & Forestry expert. Cat 1-6

Risk assessment

Indicator	Sources of Information	HCV occurrence and threat assessment	Function al scale	Risk designation and determination
3.0	See literature list down below:	Assessment of indicator 3.0 remains general as there are many sources that could be mentioned here. We summarize the availability on country level. a) Are there data available, sufficient for determination of HCV presence and distribution within the area under	Country	Low risk The following thresholds are
	Thailand specific info:	assessment, according to the requirements of this document?		met: (1) Data
	lit 1-30.	In Thailand there is sufficient information and data available to draw conclusions about the HCV presence and distribution within the area under assessment. See introduction text above and literature list below. With		available are sufficient for
	Statistics: 31-32	each of the HCV categories below the relevant literature is mentioned. In the left column a summary of the literature list is presented.		determining HCV presence within the area under
	Laws & regulations: 36-43	b) Are there data available, sufficient for assessment of the threats to HCVs from forest management activities according to the requirements of this document?		assessment and (2) Data available are
		In Thailand there is sufficient information and data available to draw conclusions about the threats to HCVs		sufficient for

		Maps: 59-60 Cultural heritage: 66-69 General sources HCV: 73-92	from forest management activities. See introduction text above and literature list below. With each of the HCV indicators below the relevant literature is mentioned. In the left column a summary of the literature list is presented.		assessing threats to HCVs caused by forest management activities.
3.7	1 HCV	3,14,15,16, 20,21,22,73, 83,90,91,92 For maps see lit 59-62	Species diversity; Introduction Forests in Thailand contain HCV 1. As explained in the introduction text the main threats to HCVs from forest management activities are: 1. Demand for agricultural land. Agricultural land increased from 21% of the total land areas in 1962 to 46% in 2011. 2. Encroachment. People starting illegal plantations of Rubberwood and oil palm in many places. In 2017 8 360 ha of already degraded forest reserves were lost because of this. 3. Fires. 2016 counted 1708 cases of forest fires, and 10 114 ha was lost (0,06% of total forest area). Humans are the main cause of forest fires. The strategy behind this assessment. When HCV's are to be assessed there are 2 approaches possible: 1) We take the existing online, and publicly available, maps (or other data sources with GPS locations) of all protected areas and assume that all HCV's are centred in these locations. By doing so we assume that either no HCV's are present outside these areas, or their occurrence outside is negligible (in highly populated areas for example). 2) We assume that online maps and data sources cannot guarantee a complete coverage of all HCV's. This is the case when online maps are not complete, not available to the public or it cannot be guaranteed that all HCV's stay inside their protected areas. In this case we need to rely on Environmental Impact Assessments, that are carried out before any harvest takes place, to guarantee that HCV's are not damaged. In Thailand the second option was selected because of the following reasons: 1) There is no public access to good online forest maps for at least part of the forest areas. This means that commercial companies cannot judge if their timber comes from a protected site. 2) It is unrealistic to think that commercial companies can guarantee to study the available online maps and identify their borders in the field, as most of them are not marked in the field. This mean that commercial companies will not be sure where they are in the field when compared to the borders	Country	Specified risk The following thresholds are met: (8) HCV 1 is identified and/or its occurrence is likely in the area under assessment and it is threatened by management activities.

- 3) There is no guarantee that HCV's stay within the appointed protected areas. Certainly, in a country as big as Thailand we may assume that a substantial part of the HCV's is occurring outside the protected areas. It is impossible to tell how many exactly as such information is not available.
- 4) Laws for protection does not seems to be fully in line with international regulations, like the CITES law (Wild Animal Preservation and Protection Act (1992) (WARPA)). Some <u>sources state</u> that not all CITES listed species are protected sufficiently because this law is not covering all species and not updated (lit 20).

Because we assess this country as a whole we take the precautionary approach and assume that HCV 1 could occur anywhere in the country.

Methodology used

The system of assessment has a top-down approach: A) We first start on worldwide and country policy level to see what is agreed there, and what the status of implementation is in the country. B) After that, we check how the international and national laws are implemented on the field level (e.g. felling/harvesting licenses). C) To check if all laws are really enforced, we check the level of enforcement and illegal harvesting figures. D) Finally, we assess if biodiversity levels are maintaining or improving. We do this on the species level in indicator 3.1.

For each of the 4 analytical steps, we give an indication of a specified risk or low risk. In section E), this is summarized in one table, with the final conclusion for indicator 3.1.

A) Implementation of the International agreements (CBD) (lit 83)

CBD: Thailand signed 'The Convention on Biological Diversity' (CBD) in 1994 and the Ministry of the Environment and Spatial Planning is responsible for its monitoring and reporting in the country. The country developed a National Biodiversity <u>Strategy</u> and an updated action plan 2015-2021 where many strategic objectives and many operational objectives are specified that aim to reduce and prevent the causes of biodiversity loss in all regions of the country. The Strategy plan takes into account many signed (by the country) international agreements of which the CBD, RAMSAR and Cites are the most important for biodiversity. There are CITES species occurring in Thailands' forests. The Wild Animal Preservation and Protection Act (1992) (WARPA) was designed to cover the CITES requirements. But some sources state that not all CITES listed species are protected sufficiently because this law is not covering all species and is not updated regularly (lit 20).

Amendments in related protected area regulations and laws are introduced in the last 15 years in order to systematically categorize the designation of many protected areas which are now all included in the CBD planning.

There are 20 so called 'Aichi' targets under CBD, of which 2 are important for biodiversity.

Target 5

'By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought

close to zero, and degradation and fragmentation is significantly reduced.'

This target is more about habitats (see details under indicator 3.3. below), but for completeness we will include it here as well because a loss of habitat also means a loss of species. Thailand responded to target 5 by:

- Increase the effort to rule out illegal logging (and encroaching). There is now (2017) a cooperation between RFD and the military to take more drastic measures and increase controls in the field and by satellite. Besides the annual forest loss because of this, between 2009-2013 370 000 people were arrested because of such offences (lit 83).
- In 2014 the National Council for Peace and Order (NCPO) issued Order nr 64/2014 that gives them more freedom to arrest people and become stricter and stringent. There are 4 groups of encroachers defined and each group has its own measures to be followed up. Some people can stay in their places, others will be prosecuted. In some cases, the communities have to decide what to do. The new aim of the RFD is not to lose more then 32 000- 48 000 ha of forest per year. In the last year (2015-2016) there was a forest loss of 10 588 ha, or 0,06%. Thus it seems the new actions are working.
- In 2014 the <u>Master Plan</u> on National Forest Resources Protection (lit 15) was developed by the NCPO. The goal of the plan is to maintain at least a 40% forest cover in the country in the next 10 years. There is <u>substantial criticism</u> on the plan because it was developed <u>without any participative</u> procedure or stakeholder consultation (lit 16). Nevertheless, the plans show a clear plan to stop deforestation and improve forests both in quality as in quantity. For this 17 strategies, or points to address, were stipulated.
- Fragmentation is another result of the forest loss. Many roads are built in the last 20 years that are separating forests. This has negative results on fauna. There are more road accidents (with elephants) and road kills in general. International organisations like the World Heritage Committee recommended Thailand to start building ecological corridors to be able to re-connect important protected areas. There are plans for 12 corridors throughout the country and such sites are already identified.

Since the fourth national CBD report was prepared the area of native habitat managed primarily for biodiversity conservation across terrestrial, and inland aquatic environments in Thailand has increased substantially (see introduction text). All further information about habitats and target 5 is discussed in indicator 3.3. below.

Target 12

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. Thailand responded to this target in several ways:

• The Office of Natural Resources and Environmental Policy and Planning (ONEP) has developed a Thailand Red Data plan in 2010. This plan list special measures to restore 20 animal and 10 plant species. ONEP also continuously update its Thailand Red list, according to IUCN Red List categories. This is done on an almost bi-annual basis.

- For some of the 20 animal species selected special breeding programs have been established. And animals and birds have been released in nature again. This is combined with intensive awareness raising activities to stop hunting of these species.
- The remaining Elephants in the wild (about 3 000, out of 10 000 in the past) are better protected because of a special Elephant Habitat Restoration project and the Return of Elephants to the Wild project. Both projects have supported 1 900 wild elephants.
- With regards to flora all 10 plant species were propagated and re-planted and returned on large scale in several national parks or forests around the country.
- Thailand also developed the Master Plan on Integrated Biodiversity Management 2015-2021 (lit 14). This plan gives more tools to implement the strategies mentioned in the CBD reports.

All forest areas that are critical to conservation are now designated as protected areas at national level. Thailand continues to implement the National Biodiversity Strategy, based on the international CBD requirements. And this national strategy is properly converted into laws and regulations. Thus, there are no further gaps in laws and regulations, but there is a weak point in the CITES Act.

B) Daily practise in the field with felling/harvesting licenses

In the introduction text a clear explanation is presented about forest management and permits and licenses and when these are required.

NEPCon carried out a special study called 'Timber Legality Risk Assessment Thailand', in 2017 (lit 21). They summarize the law enforcement and the availability of illegal timber on the market as follows (indicator 1.3 and 1.4):

Forest Management Planning

Legal requirements for management planning only apply to public plantations in National Forest Reserves. Because of the logging ban no other public timber could enter the market (or by special permission). Timber grown on private land is considered to be the private property of the owner and is not under the jurisdiction of forestry law. A person can start a plantation, and harvest, transport, process and trade timber grown on private land without permission. However, permission related to harvesting, transporting, processing and trading of teak (Tectona grandis), yang (Dipterocarpus alatus), and rosewood (Dalbergia spp.) are legally required under the Forest Act. According to section 7 of the Forest Act, these woods are under nationwide restrictions.

Even though an annual operating plan is required for licensed public plantations in National Forest Reserves, the required content and procedures are not clearly outlined or defined in the law. Maps showing harvesting areas and harvesting inventories are required when applying for harvesting permission for plantations in National Forest Reserves. Conversations with officials from the Royal Forest Department revealed that they are not aware of forest management planning legal requirements. There is no publicly available information or literature discussing forest management planning in Thailand. It is not clear whether field inspection is performed by the

authority prior to the approval of harvesting permits. There is no evidence that this policy is well implemented.

This ambiguity, and weak legal requirement, may be a risk factor, particularly when the boundary of the plantation is not clearly demarcated, or when the transfer of plantation/forest management rights is not transparent. There are cases in which the plantation harvesting activities of the Forest Industry Organisation (FIO) have been questioned by local communities (Manager Online). In 2007, villagers in Surin Province filed a complaint that the FIO had illegally logged conservation plantation forest, while the FIO claimed that the area was largely degraded and had been classified as National Forest Reserve Zone E (economic), the management rights of which were transferred from the Royal Forest Department. The FIO further argued that they had notified local leaders in the community prior to the harvesting operation. Forest management has been evaluated as a risk for licensed plantations in National Forest Reserves. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

Forest permits and licenses

There is some evidence that supervision and monitoring of harvesting operations is inconsistent. According to a report by EFI (lit 22), the volume of legally produced logs from natural forest is remarkably small. Most of the timber exported comes from domestic plantations which are at a lower risk of being illegal (lit 73). Discussions with RFD officials suggests that the risk related to illegal issuing of harvesting permission is low from the authority's point of view, as timber harvesting in National Forest Reserves is only approved in designated areas permitted for utilisation (such as for infrastructure), and for licensed plantations. For plantations, risk may arise when a contractor fells trees outside the boundary of the permitted area; for example, in September 2016, an FIO-hired contractor illegally cut down 37 teak trees from a villager's plantation (Thairath). The FIO claimed that it hired a contractor to harvest the logs from an FIO plantation, and that the contractor was given a map with GPS coordinates, but since the two plantations were separated by a road, the contractor might have made a mistake. There is little evidence that this is a common occurrence, with only a few reported cases. Based on the EFI report, in Thailand "there is no evidence of this being a systematic threat of widespread illegality with regards to documentation and permits" (lit 22).

Besides the conclusions above there are several other issues related to forest management that can lead to risks:

- 1) There is no online publicly accessible system available where all forests, and its borders, can be assessed. Such GIS/GPS based system can help all forest actors a lot.
- 2) For private forest/plantation owners hardly any permits are required. Such timber can freely enter the market and it is impossible to tell if HCV's and species/habitats are harmed because of this.
- 3) There is no overall system of Environmental Impact Assessment before harvesting. Only public plantations in National Forest Reserves require some form of planning and inspecting, but it is not clear if HCV's are assessed in that process. No clear guidelines exist.
- 4) There is no online database, or maps, where HCV's are listed. Thus, it is not possible to tell where they are, or if they can only be found in protected areas.

Although National Forest Reserves are assigned it is still possible to convert them to plantations when they are degraded. Thailand could have made the choice to leave the natural regeneration and aim for a new natural forest ("close to nature management").

C) Law enforcement

The question to be assessed in this section is, 'is illegal harvesting happening, and to which scale?' Governmental regulations could be in place but, due to illegal harvesting, HCV 1 can still be threatened.

As there is a logging ban in Thailand itself (only timber from plantations can be used) Thailand has become a net importer of the more durable timber species. Such timber is mainly used for the national market. The timber coming from plantations in Thailand (Eucalyptus and Rubberwood) are mainly used to make furniture and exported as such.

NEPCon carried out a special study called 'Timber Legality Risk Assessment Thailand', in 2017 (lit 21). They summarize the law enforcement and the availability of illegal timber on the market as follows (page 109):

- There is a risk of illegally sourced timber and wood products from <u>outside</u> the country entering the supply chain. According to a Chatham House report (Lit 73), Thailand is among the most important destinations for timber and wood product exports from some of the countries in the region most badly affected by illegal logging, and thus is among the world's principle importers of illegally sourced timber and wood products. Chatham House estimates that, between 2000 and 2012, an average of 1,7 million cubic metres of illegally sourced timber and wood products were imported into Thailand. In a 2013 study, it was assessed that about one fifth of Thailand's wood imports had been illegally sourced. Another conclusion in this report is that legislation to prevent the import of illegal timber is limited. The government response thus far has been very poor with regards to this topic.
- There is a risk of illegally sourced wood from <u>within</u> the country entering the supply chain and/or being smuggled out of the country. Within Thailand, illegal logging and illegal encroachment remain a serious issue. Between October 2014 and September 2015, there were 4 248 offences related to illegal logging, and 3 607 offences related to illegal encroachment, covering 23 500 ha. In the same year, the volume of confiscated round logs and sawn timber was 7 731 m3 (Lit 3). In 2016 almost 17 000 ha was lost due to the same offences. Illegally cut wood being smuggled out of the country is a serious problem, particularly luxury timber such as rosewood (Lit 73). While the volume of illegally sourced wood from within Thailand remains unknown, there is still a risk that illegal timber could enter the supply chain.
- There is a risk of transport documents and trading permits being falsified or obtained through bribery. There have been media reports of illegal wood being transported and accompanied by falsified trading permits and transport documents (Manager Online). Processing facilities have also been found to be complicit, such as by willingly processing illegal wood, or by being in possession of illegal wood. Corruption and bribery have been recognised by the authorities in the issuance of transport documents. In letter Kor Sor 0713/4947 dated 18 March B.E. 2525 (1982) signed by the Director-General of the Royal Forest Department, cases of corruption and bribery involved in the transport document issuance,

and in the collection of other fees, were brought up to the Office of the Public Sector Anti-Corruption Commission by rubberwood farmers and private operators of timber species other than Tectona grandis and Dipterocapus alatus. Extortion by law enforcement officials has been reported in cases related to the transport of restricted timber (Meechai Thailand).

• Thailand has a high perception of corruption, scoring 38/100 according to the 2015 Corruption Perceptions Index (CPI) by Transparency International (TI).

Given the risks of illegally sourced wood being imported, as well as of illegally logged wood within the country entering the supply chain, and the risks of transport documents and trading permits being falsified or obtained through bribery, the risk for this category has been severe.

There are CITES species occurring in Thailands' forests. The Wild Animal Preservation and Protection Act (1992) (WARPA) was designed to cover the CITES requirements. But some sources state that not all CITES listed species are protected sufficiently because this law is not covering all species and is not updated regularly (lit 20). When reading the above-mentioned Chatham House report (Lit 73) it also becomes clear that hardly any offence cases with regards to CITES are recorded or reported. When reading the above this can only mean that either things are not well controlled, police and custom officers are not properly trained, or the legislation is not up to the requested level. The last is confirmed by Traffic, in a 2016 report (lit 20).

There are articles in national, but also in international media to be found (see this link for a summary), which confirms that the situation is not always under control. The RFD itself also reported on the illegal harvesting and trade of Siameser Rosewood (lit 23).

D) Biodiversity levels (lit 83)

By looking at the biodiversity level improvements over the last years we will decide if all implemented regulations and enforcement actually result in increased biodiversity levels. We realize that such levels only increase after some time, thus conclusions based on this assessment will only act as guidance. We also realize that, in most countries, it seems that climate change is having a bigger than average impact on the biodiversity. This means that species are replaced by other species because the country itself turns into a different climate (lit 83,90,91,92).

In theory, the best source of reporting about the status of species should be the CBD reports (lit 83). When comparing data and various CBD reports a conclusion can indeed be drafted.

Table 4: threatened and endangered species over the years

	2013			2005			1996		
Classification	Total species	Threatened	%	Total species	Threatened	%	Total species	Threatened	%

Mammals	336	118	35%	302	116	38%	292	114	39%
Birds	1010	168	17%	982	180	18%	938	168	18%
Reptiles	394	49	12%	366	41	11%	318	33	10%
Amphibians	157	18	11%	138	5	4%	123	26	21%
Fish	2825	202	7%	2820	202	7%	2279	187	8%
Total	4722	555	12%	4608	544	12%	3950	528	13%

Source: lit 83

The table above shows the overall group of 'threatened and endangered species'. There is some fluctuation over the years but overall the figures seem to be stable. 13% of all species were listed as threatened and endangered in 1996 and this was 12% in 2013. The mammals, amphibians, fish and birds group even decreased in their number of threatened and endangered species. Nevertheless, around 800 more species were measured in 2013, so some caution is needed while studying the figures.

No further reports, online statistics, or databases are available.

The above picture confirms indeed that Nature needs more time to recover, even with all protection measures in place. We realize that such levels only increase after some time, thus conclusions based on this assessment will only act as guidance. We should also take the climate change into account which is resulting in a new mix of species in every country. Rare species will become abundant while common species will migrate to other regions. This makes future HCV assessments a challenge (lit 90,91,92).

E) Conclusions and applicable to all source types?

All forest areas that are critical to conservation are now designated as protected areas at national level. Thailand continues to implement the National Biodiversity Strategy, based on the international CBD requirements. And this national strategy is properly converted into laws and regulations. Thus, there are no further gaps in laws and regulations, but there is a weak point in the CITES Act.

With regards to daily practice in the field with felling/harvesting licenses there are a lot of potential risk that can lead to damage to HCV.

Law enforcement is in place, but many cases of illegal activities are still reported, and these figures are not decreasing. Nevertheless, in the last years, law enforcement is intensified, thus that is good for HCV protection. There are also many articles in the local and international media to confirm that the situation is not 100% under control. Biodiversity losses seems to have reached an equilibrium, but not much data is available, and the biodiversity levels are not increasing.

The conclusion is based on the sub-assessments above. In case the score is 2-2 (there are 4 sub-assessment) the *D*) *species status* is given more importance and will thus influence the balance.

	A) CBD B) felling/harvesting licenses C) Law enforcement D) Species status E) Overall risk		
	Low risk Specified risk Specified risk Specified risk Specified risk		
	Based on the above sub-assessments we conclude that, for HCV 1, all of Thailand is considered Specified Risk.		
3.2 HCV 83,84 2		Country	Specified Risk The following thresholds are met: (12) HCV 2 is identified and/or its occurrence is likely in the area under assessment, and it is threatened by management activities.

	Intact Forest Landscape (IFL) (84) The international Intact Forest Landscape (IFL) website and organisations listed several forest areas in the country. Such can also be seen on interactive maps. In the year 2000 there was 1 900 000 ha listed as IFL. The same assessment was done in 2013 and the area was 7,8% smaller (or a decrease of 148 200 ha). The loss of IFL's follows the same pattern of forest losses because of fragmentation, encroachment and illegal harvesting (see introduction text). Therefore, the decrease of IFL is not surprising. Conclusion There is no general policy, law or regulation to stop the loss of IFL's or any other law that deals with landscape-level regulations. Due to forest management and infrastructural work fragmentation and deforestation takes place and this causes a clear loss in large scale landscape-level ecosystems and mosaics. We conclude with a specified risk.		
3.3 HCV 3,14,15,16, 20,21,22,73, 83,90,91,92 For maps: 59-62	Ecosystems and habitats The assessment below explains that forests in Thailand does contain HCV 3. The strategy behind this assessment. When HCV's are to be assessed there are 2 approaches possible: 1) We take the existing online, and publicly available, maps (or other data sources with GPS locations) of all protected areas and assume that all HCV's are centred in these locations. By doing so we assume that either no HCV's are present outside these areas, or their occurrence outside is negligible (in highly populated areas for example). 2) We assume that online maps and data sources cannot guarantee a complete coverage of all HCV's. This is the case when online maps are not complete, not available to the public or it cannot be guaranteed that all HCV's are located inside their protected areas. In this case we need to rely on Environmental Impact Assessments, that are carried out before any harvest takes place, to guarantee that HCV's are not damaged. In Thailand the second option was selected because of the following reasons: 1) There is no public access to good online forest maps for at least part of the forest areas. This means that commercial companies cannot judge if their timber comes from a protected site. It is not possible to identify: 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.	Country	Specified risk The following thresholds are met: (17) HCV 3 is identified and/or its occurrence is likely in the area under assessment and it is threatened by forest management activities;

- 2) It is unrealistic to think that commercial companies can guarantee to study the available online maps and identify their borders in the field, as most of them are not marked in the field. This mean that commercial companies will not be sure where they are in the field when compared to the borders of protected areas.
- 3) There is no guarantee that HCV's are located within the appointed protected areas. Certainly, in a country as big as Thailand we may assume that a substantial part of the HCV's is occurring outside the protected areas. It is impossible to tell how many exactly as such information is not available.

As explained under HCV 1 we assess this country on 'country level' we take the precautionary approach and assume that HCV 3 could occur anywhere in the country.

Methodology used

With regards to HCV 3, please see HCV 1 for the major sub-assessments (A-C), which are the same (and with the same conclusions) as for this indicator 3.3. The only difference in this indicator is the habitat improvement assessment (sub-assessment D). By looking at the habitat status trends over the last years we can decide if all implemented regulations and enforcement actually result in steady or increased habitat levels. We realize that such levels only increase after some time, thus conclusions based on this assessment will only act as guidance. For each of the 4 main sub-assessments below, the country can score a specified risk or a low risk indication. In section E this is summarized in one table, with the final conclusion for indicator 3.3.

In theory, the best source of reporting about the status of habitats should be the CBD reports (lit 83).

Habitat improvements following CBD Aichi targets.

Thailand signed 'The Convention on Biological Diversity' (CBD) in 1994 and the Ministry of the Environment and Spatial Planning is responsible for its monitoring and reporting in the country. The country developed a National Biodiversity Strategy and an updated action plan 2015-2021 where many strategic objectives and many operational objectives are specified that aim to reduce and prevent the causes of biodiversity loss in all regions of the country. In the last years these objectives are converted to 20 Aichi targets, which are the same for all countries that have signed the CBD. Out of these 20 there is one that can be used to assess habitat improvements directly.

Aichi target number 5 reads: 'By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced'. Studying the practical progress of the Aichi targets is another way to judge habitat improvements. In the latest CBD reporting document (5th National report, lit 83, page 67) Thailand introduces the following tools and measures to stop the loss of habitats:

• Increase the effort to rule out illegal logging (and encroaching). There is now (2017) a cooperation between RFD and the military to take more drastic measures and increase controls in the field and by satellite. Besides the annual forest loss because of this, between 2009-2013 370 000 people were

- arrested because of such offences (lit 83).
- In 2014 the National Council for Peace and Order (NCPO) issued Order nr 64/2014 that gives them more freedom to arrest people and become stricter and stringent. There are 4 groups of encroachers defined and each group has its own measures to be followed up. Some people can stay in their places, others will be prosecuted. In some cases, the communities have to decide what to do. The new aim of the RFD is not to lose more then 32 000- 48 000 ha of forest per year. In the last year (2015-2016) there was a forest loss of 10 588 ha, or 0,06%. Thus, it seems the new actions are working.
- In 2014 the <u>Master Plan</u> on National Forest Resources Protection (lit 15) was developed by the NCPO.
 The goal of the plan is to maintain at least a 40% forest cover in the country in the next 10 years. There is <u>substantial criticism</u> on the plan because it was developed <u>without any participative</u> procedure or stakeholder consultation (lit 16). Nevertheless, the plans show a clear plan to stop deforestation and improve forests both in quality as in quantity. For these 17 strategies, or points to address, were stipulated.
- Fragmentation is another result of the forest loss. Many roads are built in the last 20 years that are separating forests. This has negative results on fauna. There are more road accidents (with elephants) and road kills in general. International organisations like the World Heritage Committee recommended Thailand to start building ecological corridors to be able to re-connect important protected areas. There are plans for 12 corridors throughout the country and such sites are already identified.

Since the fourth national CBD report was prepared the area of native habitat managed primarily for biodiversity conservation across terrestrial, and inland aquatic environments in Thailand has increased substantially (see introduction text).

Nevertheless, the following is also true:

- There is still an annual forest loss: In the last years (2013-2017) there was a forest loss of 5 890 ha, or 0,03%. This amounts to 0,006% annual loss Degraded forests reserves may be converted to plantations.
- Growing stock (lit 3,6,18). A low growing stock points to overharvesting or degraded forests and non-sustainable forest management in general. Such management will automatically lead to loss of habitat. Lacking recent inventories, little is known about the growing stock, including the relatively large areas planted over the last 20 years in forest reserves (lit 6). The last measurement was done in 2004 (lit 18, page 33), based on sample plots, and showed an average stock of 88,8 m3/ha and a total growing stock of 1 385 million m3. The annual harvest over 2016 was 324 034 m3. An average growing stock of 88,8 m3/ha is very low, which means that many forests must be degraded. For example, countries like South Korea has an average stock of 145 m3/ha (see CNRA South Korea). FAO made an interesting map that shows the stock for many countries worldwide. Neighbouring country Malasia has a growing stock of > 200 m3/ha.

		Conclusions All forest areas that are critical to conservation are now designated as protected areas at national level. Thailand continues to implement the National Biodiversity Strategy, based on the international CBD requirements. And this national strategy is properly converted into laws and regulations. Thus, there are no further gaps in laws and regulations, but there is a weak point in the CITES Act (as explained in HCV 1). With regards to daily practise in the field with felling/harvesting licenses there are a lot of potential risk that can lead to damage to HCV. Law enforcement is in place, but many cases of illegal activities are still reported, and these figures are not decreasing. Nevertheless, in the last years, law enforcement is intensified, thus that is good for HCV protection. There are also many articles in the local and international media to confirm that the situation is not 100% under control. There is still an annual loss of forests and degraded forest can be converted to plantations. The growing stock in general is low, indicating that many forests are indeed degraded. The conclusion is based on the sub-assessments above (and under indicator 3.1). In case the score is 2-2 (there are 4 sub-assessment) the D) habitat status is given more importance and will thus influence the balance. A) CBD B) felling/harvesting licenses C) Law enforcement D) Habitat status E) Overall risk Based on the above sub-assessments we conclude that, for HCV 3, all of Thailand is considered Specified Risk.		
3.4 HCV 4	2,3,10,11, 12,13,39,83	Critical ecosystem services. Under HCV 4 we assess if there are forests present and classified as important for erosion control, preventing of flooding, barriers from destructive fire and clean water catchments. We also assess if forest management activities are threatening these areas. The assessment below explains that forests in Thailand does contain HCV 4. In Thailand forests are not categorized by the exact 'functions' as mentioned above. This means that we cannot judge officially, if there are forests present and classified as important for erosion control, preventing of flooding and barriers from destructive fire. Thus, we have to assess this in a more general way in some cases, one by one. In general forests in Thailand have multipurpose functions like production, protection education or research. Nevertheless, there are several Strategic documents handling about these topics. The Twelfth NESDP Plan runs from 2017-2021 (lit 13). Strategy 4 in the NESDP handles about natural resources and forests and reads "Strategy for Environmentally Friendly Growth for Sustainable Development'. Some interesting targets and indicators that can be mentioned are:	Country	Specified risk The following thresholds are met: (22) HCV 4 is identified and/or its occurrence is likely in the area under assessment and it is threatened by management activities.

Target 1: Conserve and restore the stock of natural resources: increase the area of forest for conservation and commercial use, and reverse mangrove forest depletion; curb biodiversity loss; solve the problem of public land encroachment and provide the poor with common rights to use land.

- Indicator 1.1 Forty percent of the country is forest area, classified into forest for conservation (25 percent), and commercial forest (15 percent). The mangrove forest area is enlarged from 1.53 to 1.58 million rai. Watershed restoration areas also grow substantially.
- Indicator 1.2 A smaller number of species and populations of living organisms with threatened status or nearly extinct.
- Indicator 1.3 A complete demarcation map of public land (One Map Project) which is formally announced to the public. The number of land plots being allocated to communities for common use.

The 20-year strategic plan for the ministry of natural resources and environment (2016–2036) (MNRE) lists the following relevant strategies (lit 2):

The Second Strategy (2): Water Management:

Goal: 1) Water resources and wetlands can be used sufficiently (conserve 19 653 water resources and wetlands / restore main water sources to support plumbing systems for 881 villages).

2) The amount of clean water is adequate for the consumption (develop 7 649 water sources for consumption/develop 480 water sources for drought relief /support clean drinking water for 4 744 schools / create groundwater banking for 878 districts (amphurs) / support groundwater to enhance agricultural activities for 26 424 areas / develop deep groundwater sources in 100 special economic zones.

Work Plan: 1) Work plan for conservation, restoration, and development of surface and ground water sources.

2) Work plan for management of water quality and improvement of wastewater problems.

The Fifth Strategy (5): Reduction of Effects of Climate Change and Natural Disasters

Goal: 1) Enhance effectiveness, develop mechanisms, create capacity for reducing the greenhouse gas, and adapt to climate change in the country (results of reducing greenhouse gas monitored).

2) Increase the effectiveness of the management to reduce the risk of disaster losses in lives and property caused by natural disasters (provide disaster forecasting and early warning systems and powerful management of natural disasters covering 100 percent of the landslide risk areas / establish surveillance networks in risk areas covering 100 percent of the 25 main river basin groups / cope with coastal erosion problems in the 200-kilometre sandbars and develop suitable models for 40 areas).

Work Plan: 1) Work plan for enhancement and support of capacity in reducing greenhouse gas. 2)

Work plan for enhancement and support of preparing for adaption to climate change. 3) Work plan for

administration, management, and monitoring on natural disaster warning.

Such objectives are also listed in the RFD Strategic management plan between 2016-2021 (lit 3).

All three plans mentioned above remain on a strategical planning level. Practical field measures are not identified or listed. Potential documents that explain the annual implementation progress could not be found.

Because there are hardly any Forest Management Plans required in Thailand, and there are no Environmental Impact Assessments or online forest map systems with functions it cannot be assessed if forest is set aside for any of the topics in this indicator.

Forests acting as protection against erosion and flooding (lit 3).

There are clear signs that deforestation has caused erosion and flooding.

In November 1988 heavy rains washed away the soil of newly deforested slopes, causing massive floods. Villages and agricultural land were swamped. Almost 400 people and thousands of domestic animals were killed. The Thai government banned logging on 14 January 1989, revoking all logging concessions. In June 2015, as a severe drought gripped north-eastern Thailand, Prime Minister Prayut Chan-o-cha urged farmers to forgo a second rice crop in order to save water. He attributed the drought to massive deforestation (source: the Nation, 2015). The prime minister was concerned about massive deforestation in watershed areas and had given a directive to Natural Resources and Environment Minister to instruct forestry and related agencies to develop a new strategy to tackle deforestation in such areas. There are many of such reports in the media, also in 2017 and 2018. Thailand now has to deal with a cycle of flooding and drought which has become a common feature of life in Thailand but can be found across much of South and Southeast Asia. This is partly caused by climate change, but the negative consequences are increasing because of the deforestation. A good local study about erosion in Thailand (lit 10, year 2000) also came to the same conclusions.

In principle the government responded to this threat with the measures and objectives mentioned above.

In the annual RFD report (2016, lit 3) there are no further cases of calamities listed (this while they are clearly there), nor are there any cases reported in the CBD reports (lit 83).

Active forest management is a clear threat to further flooding and erosion problems and such potential protecting forests are not identified, nor is there any regulation stating that such have to be identified.

Forests acting as barriers for destructive fire (lit 3)

Officially there are no special forests classified as acting as barriers for destructive fire. Nevertheless, we need to assess if there is a potential problem with forest fires and if there is a risk of forest management contributing to this problem.

The number of fires are reported by RFD in their annual reports (lit 3):

Table 5: number of fires over the years

Year	ha	% of total forest	frequency
1992	1.940.872	11,87%	
1993	1.459.617	8,93%	
1994	763.648	4,67%	
1995	643.805	3,94%	
1996	490.303	3,00%	
1997	660.208	4,04%	
1998	1.145.452	7,01%	
1999	294.901	1,80%	
2000	93.324	0,57%	
2001	76.189	0,47%	
2002	139.389	0,85%	
2003	32.281	0,20%	
2004	30.284	0,19%	
2005	8.622	0,05%	
2006	18.783	0,11%	
2007	18.783	0,11%	
2008	11.330	0,07%	
2009	9.773	0,06%	
2010	13.308	0,08%	6884
2011	4.078	0,02%	2492
2012	5.475	0,03%	5079
2013	2.530	0,02%	2191
2014	2.422	0,01%	1088
2015	6.906	0,04%	1314
2016	10.013	0,06%	1708

Source: lit 3 annual reports

The average loss to fire over the last 10 years is 0,05%, which is reasonable when compared to other countries. Furthermore, there is no clear trend, which means that the fire danger is not that severe and mostly under control.

All together the annual amount of forests lost to forest fires is not small, but still below 1%. There are no special forests classified and acting as barriers for destructive fire, and for the moment there is no need to appoint such forests. There is no danger that any forest management will reduce or damage such potential barrier forests and thus contribute to any further increase of forest fires.

Forests acting as clean drinking water catchments and protection of water quality (lit 39).

The policy focus of watershed rehabilitation has been an evolving process. In the late 1970s the national focus was on watershed rehabilitation through reforestation of abandoned areas, and through relocations of hill tribe villages from forestry catchments. In 1980s, the policy shifted toward integrated watershed management, which promoted land use planning, soil and water conservation measures, forest fire control and promotion of agricultural extension. In 1990s, the policy shifted towards participatory watershed management, with an emphasis on local people's participation, village committees and watershed networks. From 2000 onwards, policy focused on "watersheds for the people", which calls for greater community participation and benefit sharing. In the last 20 years, the government strategy on watershed management has concentrated on maintaining and building a protective forest cover for the protection of soil and water quality/quantity. Over this period, "top-down" planning and implementation of costly large-scale reforestation have been substituted by more diversified approaches such as low density planting to minimize costs and maximize restoration impacts (particularly useful in degraded lands), alternative land-use and agricultural practices (introduced to discourage shifting cultivation) and landscape-level approaches.

There is now a <u>watershed policy</u> in place that explains the following: According to the cabinet's decree, the watershed area in Thailand covered the area of 13 585 898 ha or 26,4% of the country area.

The watershed areas in Thailand <u>have been classified into five numeric classes</u> (i.e. watershed class 1 to watershed class 5) according to the important features and significant degree of the watershed.

- WSC1 Protected or conservation forest and headwater sources. This class is divided into two subclasses: WSC1A: Watershed protection forest: protected forest areas, including the headwaters of rivers, usually at high elevations and on very steep slopes. Should remain as permanent forest cover and WSC1B: Disturbed WSC1: areas with similar physical and environmental features to class 1A, but with portions cleared for agriculture and consequently requiring special soil conservation measures. Where possible, these areas should be replanted as forest or maintained as permanent agroforestry. Slope >50%. Strictly preserved, no activities allowed.
- · WSC2: Commercial forest: for protection and/or commercial forest, with mining and logging allowed

- within certain boundaries, usually at high elevations with steep to very steep slopes. May be used for grazing or crop production, with soil conservation measures. Slope 35-50% some useful activities allowed such as mining.
- WSC3: Fruit tree plantations: uplands with steep slopes and less erosive land forms. May be used for commercial forests, grazing, fruit trees or certain agricultural crops, with soil conservation measures. Slope 25-35% plantation, mining and logging allowed.
- WSC4: Upland farming: area with gentile slopping land suitable for row crops, fruit trees and grazing, with moderate need of soil conservation measures. Slope 6- 25% deteriorated forest found, cultivation area.
- WSC5: Lowland farming: gentle slopes or flat areas needed for paddy fields or other agricultural uses, with few restrictions. Slope <6% deforestation, farming and other activities.

The DNP is responsible for watersheds. The Watershed Conservation Management Office (WCMO) has over 30 years of experience in watershed rehabilitation through reforestation, development of land use patterns that reduce shifting cultivation, and conflict management. Participatory approaches to integrated watershed management including developing the economic welfare of people in watersheds are now being used as one of the key strategies by this office. As of 2000, the WCMO has worked jointly with over 600 villages in northern Thailand. There are 10 regional offices in operation.

There is also a water catchment area online portal. The <u>Water Crisis Centre</u> of the Department of Water Resources, Ministry of Natural Resources and Environment is responsible for it maintenance (lit 12). This is mainly to warn the people and see where the potential problems are. The portal does not say anything about the catchment areas itself, or the forest management.

In annual reports of the RFD or DNP or the WCMO there are no special cases reported where forest management is causing problems for water catchment and protection of water quality. Such is also not reported to CBD. Nevertheless, it is clear from all the new policies, regulations and special projects that there is a problem, and it is not solved yet.

This means that forest management could result in vegetation loss closely around streams, rivers or lakes, disrespecting buffer zones (if these are set), pollution due to forest actions (machines), blocking waterways, erosion etc.

Because there are hardly any real Forest Management Plans required in Thailand, and there are no Environmental Impact Assessments or online map systems with functions it cannot be assessed if forest is set aside for any of the topics in this indicator. There is also no data, maps or reports about the progress made with the implementation of all the plans. Therefore, we have to be careful and take a pre-cautionary approach.

With regards to the presence of forests acting as a source for clean drinking water, and if these are potentially threatened by forest management activities, the conclusion is that they are present in the area under

		assessment, and it could not be assessed if they are effectively protected from threats caused by management activities. Overall conclusions: Conclusions can best be summarized in the table below Erosion and floods Fire Water Overall						
		Specified risk	Low risk	Specified risk	Specified risk			
			essments we conclude	that, for HCV 4, all of Tha	niland is considered a specified risk.			
3.5 HCV	3,21,24,26	Community needs				Country	Low risk	
5	ONDA 4	The assessment below expla	ins that this HCV does	appear in the country.			The fellowine	
	CNRA cat 1 (1.13 & 1.15) and cat 2 (2.3).	people live in, or nearby, fore There is a need for unique, medicines or fuel and other respectively. However, these rights and resulting needs. Thus, there are no ladeveloped over the last decay have been seen as encroach. Because the RFD and the Emanagement is decreasing to	ests and these forests a /main sources of water non-timber forest produ- needs are not recognizates that guarantee acceded does not provide sters. ONP are managing all the availability of basic	are fundamental to meeting or for drinking, irrigation of cts for local consumption. Zed in Thailand nor is the cess to them. The communication of the comm	e that many indigenous and other to the basic needs of these people. In food crops and access to food, are any law confirming these basic unity forest management programs or claiming their community needs is a clear danger that active forest or closely around forest. Because us not covered in any plan either.		The following thresholds are met: (26) HCV 5 is identified, and/or its occurrence is likely in the area under assessment and it is threatened by management activities.	
			g or irrigation, medicine		evant documents. Thus, access to mption are addressed at the same			
		total they should manage 4 fundamental needs. But for although debates taking place years of consultations betwee ruled that the 1961 National Because of this no formal manage 4.	the moment there is the moment there is the for years. In 2007, The the RFD and civil all Park Act took precent an agement can take plant.	ts. Such forest managem no law or regulation that Thailand passed a Commusociety groups. However ace by these organisations	isations registered with RFD and in ent should also take into account at recognizes these organisations, unity Forest Bill after more than 15 r, in 2009 the Constitutional Court lity Forest Bill never became law. is. unities' access to forest resources,			

the framework of the Act on Ancient Monuments, Antiques, Objects of Art and National Museums (1961). Under the law, the Department has authority to manage and protect sites like ancient monuments, antiques and objects of art of significant artistic, historical or archaeological value. It is also responsible for operating national under				
inside the forest reserves, and often have fundamental needs with regards to drinking water, food, medicines, fuel etc. Part of these forest reserves are classified as national parks, wildlife sanctuaries, and non-hunting areas. Most protected areas in Thailand are surrounded or partially occupied by a local population who feel that their legitimate property rights and fundamental needs have been appropriated. Conclusion International sources agree that many indigenous and other people live in, or nearby, forests and these forests are fundamental to meeting the basic needs of these people. However, these rights and needs are not recognized in Thailand nor is there any law confirming their basic needs. Because there are hardly any forest management plans, such community needs are thus not covered in any plan either. Because the RFD and the DNP are managing all forests in Thailand there is a clear danger that active forest management is decreasing the availability of basic needs for people living in or closely around forest. See also the CNRA cat 1 (indicator 1.13 & 1.15) and cat 2 (indicator 2.3) assessment (see above). For HCV 5, all of Thailand is considered a Specified Risk. 3.6 HCV 66,67,68,69 81 Cultural values and Cultural Heritage Sites. The assessment below explains that HCV 6 is present in the area under assessment and all significant cultural features created intentionally by humans are identified. Examples of cultural sites found in forests (such as archaeological sites, monuments etc) are rarely considered critical to local community's traditional cultural intensive the framework of the Act on Ancient Monuments, Antiques, Objects of Art and National Museums (1961). Under the law, the Department has authority to manage and protect sites like ancient monuments, ancient monuments, ancient monuments, and public and for the safekeeping of such artefacts. As of September and protects its like ancient monuments, ancient monuments, ancient monuments, ancient monuments, ancient monuments, ancient monume		relationship between local forestry officials and local communities, which can vary significantly from one area to		
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		public and private museums. A Register of archaeological Heritage is available online with the Sirindhorn		by management

The UNESCO (United Nations Educational, Scientific and Cultural Organization) has designated <u>five World Heritage Sites</u> in the Thailand. Two of these sites are forest related:

- Thungyai-Huai Kha Khaeng Wildlife Sanctuaries is forest related. The Thungyai-Huai Kha Khaeng Wildlife Sanctuaries encompass almost all kinds of forests from Southeast Asia. With 622 000 ha situated on the border with Myanmar, the wildlife sanctuaries are home to a vast array of fauna, including several endangered species. This site is covering the areas of two adjacent wildlife sanctuaries: Thung Yai Naresuan and Huai Kha Khaeng. They cover areas in Kanchanaburi, Tak and Uthai Thani, and form a large part of Thailand's Western Forest Complex.
- The Dong Phayayen-Khao Yai Forest Complex is a 615 000 ha, protected tropical forest located on the border with Cambodia. Especially important for the preservation of fauna, it is key to the long-term survival of several endangered animal species. The site covers the areas of five protected areas in the Dong Phaya Yen Mountains and Sankamphaeng Range, namely Khao Yai, Thap Lan, Pang Sida and Ta Phraya National Parks, and Dong Yai Wildlife Sanctuary.

6 more sites are on the Tentative List for Thailand, meaning that the government intends to consider them for nomination in the future.

In Thailand the <u>National Commission</u> for UNESCO (Bureau of International cooperation, ministry of Education) is responsible for all UNESCO matters. There are no Thai sites on the UNESCO 'danger' list of '<u>World Heritage sites in Danger</u>'.

Thailand itself did report some problems with protection in their official 'cycle 1 & 2' report to UNESCO (lit 81). Flooding affected Thailand including the area around the Historic City of Ayutthaya is reported to be a negative factor currently and potentially affecting many properties in the sub-region. The Historic City of Ayutthaya identified flooding as the major risk in the first cycle of Periodic Reporting, too. Illegal activities such as looting, theft, illegal excavations, and mining have been reported by several properties through the State of Conservation report and the first cycle of Periodic Reporting too (lit 81, cycle 2 report, page 37). It is also reported that some sites do not have an annual action plan, or management plan.

A special 2015 study (lit 68), 'A Review on Historic Monument Conservation in Thailand: Problems of Modern Heritage' reported the following conclusions:

- Since the FAD was established in 1911, Pre-Modern monuments (built before 1909) have been well preserved.
- Modern monuments (built between 1909 and 1979) have received less attention and are increasingly demolished.
- The reason that more modern monuments are not well protected is because there is no clear definition of modern in the laws, and thus such monuments are not well registered.
- Destruction or the loss of monuments is not related to forest management, its mainly caused by new

infrastructural plans and illegal activities.	
Another 2012 study (lit 69) 'Siam's Threatened Cultural Heritage', explains that Cultural Heritage in Thailand mainly focus on buildings and that the current laws are not strong enough to do much more. It is also stated that there is a lack of community consultation and participation and suppression of diversity (focussing on Thai culture, and not others). But all this is not caused by forest management.	
There are no further cases in literature, press or international reports to be found where heritage sites seem to be threatened by forest management. There are also no economic incentives that would lead to, and no well-known cases of, forest managers causing damage or disturbing sites or features of national cultural significance. For HCV 6, all of Thailand is considered Low Risk.	

Recommended control measures

The recommended control measures here are only indicative in nature and are not mandatory. Recommended control measures might not have been provided for all the risks that have been identified in this risk assessment. Organizations shall evaluate and devise appropriate control measures to mitigate the risks identified in this risk assessment as applicable.

Indicator	Recommended control measures
3.0	N/A
3.1 HCV 1	The below Recommended Control Measures (RCM) are based on lit 21 (Timber Legality Risk Assessment Thailand. NEPCon 2017).
 1. Fully map your supply chain Public timber sources: Establish a source table, just like in this CNRA assessment. When you know where your timber is coming from continue with step 2. Private timber sources: Timber grown on private land is considered to be the private property of the owner and is not under the jurisdiction of forestry law. A can start a plantation, and harvest, transport, process and trade timber grown on private land without permission. However, permission related to harvesting transporting, processing and trading of teak (Tectona grandis), yang (Dipterocarpus alatus), and rosewood (Dalbergia spp.) are legally required under the F According to section 7 of the Forest Act, these woods are under nationwide restrictions. Besides these special permits NO further documents are needed with buying from private owners. Third party certification (for example FSC certification) can provide strong assurances of the legality of the products they cover. Companies seeking to mitigation in the product of sourcing illegal timber should seek to purchase third party certified materials wherever possible. While the European Timber Regulation does not include an automatic "green lane" for certified products, it does recognize the value of certification as a toc assessment and mitigation. The European Commission says that companies "may rate credibly certified products as having negligible risk of being illegal, if for placing on the market with no further risk mitigation measures, provided that the rest of the information gathered and the replies to the risk assessment of do not contradict such a conclusion." 	
	2. Obtain and verify documents
	Forest level documents
	 Approved annual operating plans, where the harvesting takes place in National Forest Reserves

- Harvesting plans approved by competent authorities
- Harvesting permits (clearly defining harvesting limits)
- Certification of Timber, Wood Products and Charcoal for Export

Trade and transport documents

- Certificate of Cutting/Felling Notification Sor Por 13 (for timber and wood products from registered plantations)
- Plantation Timber Packing List Sor Por 15 (for timber and wood products from registered plantations)
- Timber mark/tag/seal marked by the Licensed Entrepreneur's registered seal (for timber and wood products from registered plantations)
- Transport documents (removal pass, packing list) signed by the authorities, with proof of receipt of royalties and tariffs (for timber and wood products from other sources)
- Restricted Wood Product Certificate with Packing list (for wood products made from restricted species)
- Sawn Timber Certificate with a packing list (for timber and wood products leaving processing and/or trading facilities)
- Invoice, packing list, quotation, air waybill, bill of lading, truck receipt
- · Removal passes, RFD-issued certificates of charcoal from private land, or other transport documents
- Certificates of Origin. Although these are voluntary, they can help provide evidence of legality in combination with other trade and transport documents
- CITES permits (for CITES-listed species)

3. Consult stakeholders

- Confirm that land tenure rights are clear in areas with land ownership conflicts
- · Authorities confirm the validity of harvesting permit, removal passes and sawn timber certificates

All interviews with staff should be conducted without the presence of the police. Translators may be required for migrant workers.

4. Carry out on-site verification

- Confirm that maps provided in documents are accurate
- Confirm that harvesting plans are adhered to in the field
- Confirm that information regarding area, species, volumes and other information given in the harvesting permit are correct and within limits prescribed in the legislation
- Confirm that there is mark/tag/seal on all logs:
 - -from National Forest Reserves
 - -on restricted timber grown elsewhere on public land
 - -of teak (Tectona grandis), vang (Dipterocarpus alatus), and rosewood (Dalbergia spp.) grown on private land

5. Conduct targeted timber inspections

• Conduct timber inspections on samples of purchased material to verify the species or origin of timber, where appropriate

6. Avoid / do not buy

• Avoid buying products at the factory gate (offering on the spot) and/or open-markets.

3.2 HCV 2 Legislation and field implementation of laws with regards to landscape-level ecosystems and mosaics is not strong enough in Thailand. This is not something individual companies can change.

Therefore, it is not advisable to buy from areas that are internationally regarded as Intact Forest Landscapes (IFL). Such areas can be identified at the IFL website (lit 84). Do not buy from such areas.

3.3 HCV 3	See above under 3.1, they are same.
3.4 HCV 4	See above under 3.1
	In addition to that please take note of the following RCM's:
	A) When your timber comes from areas where there is no zonation (or no forest management plan) that identifies forests acting as <u>protection against erosion and flooding</u> , request confirmation from your supplier (preferably before he will start to harvest) that timber is NOT harvested in a Watershed class area WSC 1.
	B) When your timber comes from areas where there is no zonation (or no forest management plan) that identifies forests acting as <u>clean drinking water catchments and protection of water quality</u> , request confirmation from your supplier (preferably before he will start to harvest) that timber is NOT harvested in a Watershed class area WSC 1.
	C) Preferably do not buy any burned timber. It might come from illegal sources (people burning forest to start agricultural activities).
3.5 HCV 5	Legislation and field implementation of laws with regards to community needs is not strong enough in Thailand. This is not something individual companies can change. Therefore the RCM advice is to comply with the RCM mentioned above under 3.1. When complying with this the applicable laws and regulations are followed and thus the problem in HCV 5 should not increase because of your actions.
3.6 HCV 6	N/A

Information sources

No.	Source of information	Relevant HCV category and indicator
	Thailand specific	
1	Ministry of Natural Resources and Environment (MNRE) 2018, website http://www.mnre.go.th/en/index	All
2	MNRE 2016, 20-year strategic plan for the ministry of natural resources and environment (2016–2036) http://www.mnre.go.th/en/about/content/1065 Main aim to bring forest cover back to 40%.	All
3	Royal Forest Department (RFD) 2018, website (Department of MNRE) (translation required for all webpages below) http://www.forest.go.th/index.php?lang=en (main landing page) http://forestinfo.forest.go.th/55/Default.aspx (Forest info)	All
	General Statistics, annual report etc. http://forestinfo.forest.go.th/55/Content.aspx?id=1	

	Statistics per year	
	http://forestinfo.forest.go.th/55/Content.aspx?id=9	
	1221 national forest areas with PDF and GPS map online	
	http://forestinfo.forest.go.th/55/National Forest.aspx	
	RFD Strategic management plan between 2016-2021	
	http://forestinfo.forest.go.th/Content/file/forest%20strategy%2059_64.pdf	
	nttp://torestimo.torest.go.th/content/me/torest/020strategy/02055_04.pdr	
	Forest management in Theiland, introduction in Forelish, 2014	
	Forest management in Thailand, introduction in English. 2011	
	http://www.forest.go.th/foreign/images/stories/FOREST%20MANAGEMENT%20IN%20THAILAND.pdf	
4	Department of National Parks, Wildlife and Plant Conservation (DNP) 2018, website	All
	http://portal.dnp.go.th/	
5	Brown et al. 2014. A study on the definition of high value conservation areas (HCV) in Krabi, Trang,	All
	and Surat Thani in Thailand. Proforest. (in Thai). This list the various habitats available and the main species in southern of	
	Thailand.	
	https://www.proforest.net/en/publications/hcv-common-guidance-pdfs/proforest_hcv_report_thailandthai.pdf	
	The position of the publication	
6	FAO 2018, country report Thailand (with graphics)	All
	http://www.fao.org/faostat/en/#country/216	Zui
	Tittp://www.tao.org/taostat/en/#country/210	
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	http://www.fao.org/docrep/014/am617e/am617e00.pdf	
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	forest management and poverty reduction? A case study from Thailand	
	http://www.fao.org/forestry/10809-09f8870885bd8d85106e0a87cd906b784.pdf	
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	FAO 2001, National forest products statistics, Thailand http://www.fao.org/docrep/005/ac778e/AC778E21.htm	

	FAO 1998, Forest Resources in Thailand	
	http://www.fao.org/docrep/003/x2649e/X2649E03.htm	
7	Thailand's World 2018. National parks and history of forest. Website.	All
	http://www.thailandsworld.com/en/national-parks/north-thailand-parks/royal-forest-department/index.cfm	
	The first term of the first te	
	Thailand's World 2018, Main ecosystems in Thailand	
	http://www.thailandsworld.com/en/national-parks/ecosystems/index.cfm	
	intp://www.thallandsworld.com/en/hational-parks/ecosystems/index.cim	
_	ITTO 0040 The ileast executive and ile	All
8	ITTO,2018 Thailand country profile	All
	http://www.itto.int/partner/id=12450000	
9	RECOFTC-The Center for People and Forests 2018. NGO active in promoting sustainable community-based forest	All
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10	Mahidol University 2000, Erosion in Thailand, complete assessment.	4
	http://www.ldd.go.th/Lddwebsite/web_ord/Technical/HTML/Technical06037.html	
11	Forest department RFD 2018, with data about risks for forest fires.	4
	http://www.dnp.go.th/forestfire/risk_map/fire_risk.htm	'
	ntp.//www.dnp.go.tr/rorestire/nsk map/ire nsk.ntm	
12	Water Crisis Center Department of Water Resources Ministry of Natural Resources and Environment 2018. Water catchment	4
12		4
	area online portal.	
	http://tele-pwps.dwr.go.th/Ps_Default.aspx	
4.0	TI N.C. LE	All
13	The National Economic and Social Development Plan (NESDP), Office of the National Economic and Social Development	All
	Board 2018. Website with all 12 plans this far:	
	http://www.nesdb.go.th/nesdb_en/ewt_w3c/main.php?filename=develop_issue	
14	Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and Environment	All
	2018. Master Plan for Integrated Biodiversity Management (2015-2021)	
	https://www.cbd.int/doc/world/th/th-nbsap-v4-en.pdf	
	THE POST THE TOWN THE	
15	National Forestry Master Plan (2014) Ministry of Resources Nature & Environment	All
13	http://www.dnp.go.th/info_protect/%E0%B9%81%E0%B8%9C%E0%B8%99%E0%B9%81%E0%B8%A1%E0%B9%88%E0%	/ WI
	B8%9A%E0%B8%97/%E0%B9%81%E0%B8%9C%E0%B8%99%E0%B9%81%E0%B8%A1%E0%B8%8E0%B8%9A%E0	
	%B8%97%E0%B8%9E%E0%B8%B4%E0%B8%97%E0%B8%B1%E0%B8%81%E0%B8%A9%E0%B9%8C%E0%B8%97%E0%B8%97%E0%B8%B1%E0%B8%B1%E0%B8%B1%E0%B8%A9%E0%B9%8C%E0%B8%97%E0%B8%B1%E0%B8%B1%E0%B8%B1%E0%B8%A9%E0%B9%8C%E0%B8%97%E0%B8%B1%E0%B8%B1%E0%B8%B1%E0%B8%A9%E0%B9%8C%E0%B8%B1%E0%B8%B1%E0%B8%B1%E0%B8%A9%E0%B9%8C%E0%B8%B1%E0%B8%B1%E0%B8%B1%E0%B8%B1%E0%B8%A9%E0%B9%8C%E0%B8%B1%E0%B1%B1%B1%B1%B1%B1%B1%B1%B1%B1%B1%B1%B1%	
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	https://www.iwgia.org/en/thailand	
25	Forest Industry Organization (FIO) 2018, website	
	http://www.fio.co.th/fiopage/index.html	
	Annual report 2016: http://www.fio.co.th/web/docs/2560/Annual-report-27-03-16.pdf	
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26	The Asian Pacific Human Rights information Center 2018, website:	5
20	https://www.hurights.or.jp/archives/focus/section2/2010/12/indigenous-peoples-of-thailand.html	
	nttps://www.ndngnts.or.jp/archives/rocds/section2/2010/12/indigenous-peoples-or-trialiand.ndm	
	Statistics	
31	Department of National Parks, Wildlife and Plant Conservation 2018, annual report with stats in Excel format.	All
	http://www.dnp.go.th/statistics/dnpstatmain.asp (translation required)	
	Laws, regulation and policies	
36	Department of National Parks, Wildlife and Plant Conservation (Wildlife Conservation Office) 2018. General overview	All
	http://www.dnp.go.th/wildlifednp/index.php?option=com_content&view=article&id=30&Itemid=6 (translation required)	
37	Institute of Water Resources Information and Agriculture 2018. Thailand water related laws, a summary.	All
	http://hydrolaw.thaiwater.net/web/ (translation required)	
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	required)	
	required)	
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33	http://www.dnp.go.th/watershed/gov1.htm	7
	nttp://www.dnp.go.tr/watersned/gov1.ntm	
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	W	
50	Maps Circ Court 2010 Court Held C	4.0
59	Marine Gis Centre 2018. Central database for marine and coastal resources	1,3
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60	Global Forest Watch 2018	All
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61	Land Development Department 2018, online maps with all provinces and land use. But it generates PDF style maps and is not	
٥.	based on a true online GIS/GPS system with topographical maps.	
	http://www.ldd.go.th/www/lek_web/web.jsp?id=17868	
62	EIS 2018. Land Use Monitoring System (Present Land use Monitoring), linked to Google Earth. Good system, but does not	
	say anything about forest uses, types or owners.	
	http://eis.ldd.go.th/lddeis/PLM.aspx#	
	Cultural heritage	
66	Sirindhorn Anthropological Center 2018, with archaeological database.	6
00	https://sac.or.th/databases/archaeology/%E0%B9%80%E0%B8%81%E0%B8%B5%E0%B9%88%E0%B8%A2%E0%B8%A7	
	%E0%B8%81%E0%B8%B1%E0%B8%9A%E0%B9%80%E0%B8%A3%E0%B8%B2 (translation required)	
	//2007/0007/0007/0007/0007/0007/0007/00	
67	Fine Arts Department, Ministry of Culture 2018, website	6
	http://www.finearts.go.th/ (translation required)	
68	Waeovichian Abhichartvorapan, 2015.A Review on Historic Monument Conservation in Thailand: Problems of Modern	6
	Heritage.	
	http://www.u-tokai.ac.jp/academics/undergraduate/engineering/kiyou/pdf/vol_40_001e/03.pdf	
69	Journal of the Siam Society, Vol. 100, 2012. Introduction: Siam's Threatened Cultural Heritage,	6
00	http://www.siamese-heritage.org/jsspdf/2011/JSS 100 0b Stent Introduction.pdf	
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73	Chatham House Illegal Logging portal 2018. Indicators Country Report Card.	1,3
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	Article about illegal logging in Thailand, 2017	
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	Study about illegal imported timber, 2014.	
	https://indicators.chathamhouse.org/sites/files/reports/Lawson_Thailand_SK_India_PP_2014_0%281%29_1.pdf	
74	Greenpeace Intact Natural Forest Landscapes, 2018. General	3
74	http://www.intactforests.org/world.map.html	3
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75	IUCN Red List 2018, Country info	1
, 0	http://www.iucnredlist.org/about/summary-statistics#Tables_5_6	'
76	World Resource Inst. 2018, General Atlas of Forest and Landscape Restoration	3
	http://www.wri.org/resources/maps/atlas-forest-and-landscape-restoration-opportunities	
77	HCV network 2018, General website	All
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78		All
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	https://www.hcvnetwork.org/resources/folder.2006-09-29.6584228415/2013_commonguidancev5	
79	Proforest 2018, HCV Toolkit	All
	http://www.proforest.net/en/publications/high-conservation-value-forest-toolkit	
80	Ramsar 2018, Ramsar sites. Thailand currently has 14 sites designated as Wetlands of International Importance (Ramsar	All
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	http://www.ramsar.org/wetland/thailand	
81	UNESCO 2018, Biosphere sites	6
01	http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/asia-and-the-	
	pacific/thailand/	
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	UNESCO cultural heritage	
	http://whc.unesco.org/en/statesparties/TH (international summary)	
	http://www.bic.moe.go.th/newth/ (local site, need translation). Bureau of International cooperation, ministry of Education.	
	https://whc.unesco.org/archive/2012/whc12-36com-10A-en.pdf Cycle 2 report	
	UNESCO World Heritage sites in Danger (list)(not mentioned on list)	
	http://whc.unesco.org/en/danger/	
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	National CHM (Clearing House Mechanism) website, Ministry of the Environment and Spatial Planning	
	http://www.onep.go.th/	
	Direct link to 5th National report	
	https://www.cbd.int/doc/world/th/th-nr-05-en.pdf	
	Direct link to National Biodiversity Strategy and action plan 2015-2021	
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84	Intact Forest Landscapes (IFL) 2018, Country profile http://www.intactforests.org/data.ifl.html	3
	IFL in Thailand 2018. Online map with losses and gain: http://www.globalforestwatch.org/map/7/5.98/99.69/ALL/grayscale/loss,forestgain/607?tab=basemaps-tab&begin=2001-01-01&end=2017-01-01&threshold=30&dont_analyze=true and	
	http://earthenginepartners.appspot.com/science-2013-global-forest?hl=en&llbox=83.7%2C-77.2%2C-179.4%2C-177&t=ROADMAP&layers=layer1%3A100%2Clayer9%3A100%2C6%2Clayer12%2C12%3A100%2C11	
	IFL - The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. IFL monitoring report. http://advances.sciencemag.org/content/3/1/e1600821/tab-figures-data	
85	Global Forest Watch, 2018. Country profile. http://www.globalforestwatch.org/country/THA	All
86	WWF, 2018. Global priority places. http://wwf.panda.org/what_we_do/where_we_work/ List of ecoregions https://www.worldwildlife.org/biomes	All
87	FSC Int website & local standards, 2018. Country profile and certificates and audit reports https://ic.fsc.org/file-download.nfss-global-process-report.a-2113.pdf (there is no local standard).	All
88	Global forest registry 2018. Direct link to most legislation applicable http://globalforestregistry.org/related_files/download_related_file/149	All
89	FSC international, 2018 Already approved CNRA's. https://ic.fsc.org/file-download.cnra-and-nra-database.6435.htm	All
90	Godbold 2011. Climate Change and Tree Species Migration impacts on boreal and temperate forest biodiversity, https://www.researchgate.net/publication/270876937_Climate_Change_and_Tree_Species_Migration	All
91	Seebacher and Post. 2015. Climate change impacts on animal migration. https://climatechangeresponses.biomedcentral.com/articles/10.1186/s40665-015-0013-9b	All
92	Wim H. Van der Putten, 2010. Predicting species distribution and abundance responses to climate change, http://rstb.royalsocietypublishing.org/content/365/1549/2025	All

Controlled wood category 4: Wood from forests being converted to plantations or non-forest use

Risk assessment

Indic ator	Source of information	Functio nal scale	Risk designation and determination
4.1	Legislation Ministerial Regulation on the Request and Permission to Utilize Forest Estate B.E. 2558 (2015) clause 5.5, 9, 12, 17, 23, 24 http://hydrolaw.thaiwater.net/web/2016/05/27/%E0%B8%81%E0%B8%8E%E0%B8%81%E0%B8%A3%E0%B8%B0%E0%B8%97%E0%B8%A3%E0%B8%A3%E0%B8%B7%E0%B8%B0%E0%B8%97%E0%B8%A3%E0%B8%A7%E0%B8%87%E0%B8%AD%E0%B8%B2%E0%B8%A3%E0%B8%B2%E0%B8%AD%E0%B8%B2%E0%B8%99%E0%B8%B8%E0%B8%B0%E0%B8%B2%E0%B8%99%E0%B8%B8%E0%B8%B0%E0%B8%B2%E0%B8%95%E0%B9%81%E0%B8%A5/ National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (2015), Section 16 bis, 16 tres, 20 http://www.dnp.go.th/wildlifednp/เขกชาว/กฎหมาย/prb2.pdf www2.austlii.edu.au/~graham/AsianLII//National%20Reserv e%20Forest%20Act.pdf Royal Forest Department Regulation on the Permission to Establish Forest Plantation or Tree Plantation in National Forest Reserves B.E. 2548 (2005), by virtue of section 20 of National Forest Reserves Act B.E. 2507 amended by National Forest Reserves Act B.E. 2508 (2005), Section 4 https://new.forest.go.th/economy/th/wzzznwujupinew.forest.go.th/economy/th/wzzznwujupinew.forest.go.th/economy/th/wzzznwujupinew.forest.go.th/economy/th/wzzznwujupinew.forest.go.th/economy/th/wzznnwujupinew.forest.go.th/economy/th/wzznnwujupinew.f	Country level	Introduction Thailand has a long history of deforestation and land conversion. See category 3 of this CNRA for a full introduction. In the brief we summarize this here: During 1896-1953 forestland was managed primarily for commercial timber extraction to meet both domestic and foreign consumption. Until 1953, about 60 percent of the total land area was still forested. The period of 1954-1967 saw a push to use forestland to support national economic development. There was a large shift in forest use in Thailand. Deforestation began to increase, but not due to the commercial uses of teak forests in the north, but rather increased agricultural exports from the south. Transformation of the landscape accelerated during this period, and by 1967, forest cover was reduced to 48 percent of the kingdom while the farm land increased to 26 percent. Between 1968 -1980 forests became under increasing pressure. In 1968, the government decided to extend long-term harvesting concessions. The program resulted in more than 500 concessions being granted, covering half the country. Deforestation accelerated, leaving only 32 percent of the kingdom under forest cover. Between 1981-1990, the government began recognizing the magnitude of forest loss. A rising urban middle class, with increasing environmental awareness, pressed for action to halt forest degradation. This led to the 1989 national logging ban. The logging ban pointed towards a shift in national forest management policies, toward local participation and forest conservation. The period of 1991 and 2000 saw an increase in community involvement in Forest Management. Forestry policies in the 1990s have echoed the concern raised by the general public. In 1979, Thailand had only 16 national parks covering an area of 935 700 ha. By 1996, this had increased to 81 national parks covering an area of 41 738 000 ha. In addition, the Eighth National Economic and Social Development Plan (NESDP,1997-2001) emphasizes human resource development as its main thrust. Many of the strategi

2535/http://library2.parliament.go.th/giventake/content_nla255 7/law44-260558-1.pdf

Other information

Information from local experts.

Royal Forest Department (RFD) website (Department of MNRE) (translation required for all webpages below)

- http://www.forest.go.th/index.php?lang=en (main landing page)
- http://forestinfo.forest.go.th/55/Default.aspx (Forest info)
- http://forestinfo.forest.go.th/55/Content.aspx?id=1 (
 General Statistics, annual report etc.)
- http://forestinfo.forest.go.th/55/Content.aspx?id=9
 (Statistics per year)
- http://forestinfo.forest.go.th/55/National_Forest.aspx (1221 national forest areas with PDF and GPS map online)
- RFD Strategic management plan between 2016-2021 http://forestinfo.forest.go.th/Content/file/forest%20strategy%2059_64.pdf

Master Plan for Integrated Biodiversity Management (2015-2021) Office of Natural Resources and Environmental Policy and Planning (<u>ONEP</u>), Ministry of Natural Resources and Environment

https://www.cbd.int/doc/world/th/th-nbsap-v4-en.pdf

National Forestry Master Plan (2014) Ministry of Resources Nature & Environment

http://www.dnp.go.th/info_protect/%E0%B9%81%E0%B8%9 C%E0%B8%99%E0%B9%81%E0%B8%A1%E0%B9%88%E 0%B8%9A%E0%B8%97/%E0%B9%81%E0%B8%9C%E0% B8%99%E0%B9%81%E0%B8%A1%E0%B9%88%E0%B8% 9A%E0%B8%97%E0%B8%9E%E0%B8%B4%E0%B8%97% E0%B8%B1%E0%B8%81%E0%B8%A9%E0%B9%8C%E0% B8%97%E0%B8%A3%E0%B8%B1%E0%B8%9E%E0%B8% management.

Between 2001 and 2018 further NESDP plans were made (the 9th, 10th and 11th). The focus remained on people's participation in national resource management. The <u>Twelfth Plan</u> runs from 2017-2021. Strategy 4 in the NESDP handles about natural resources and forests and reads "Strategy for Environmentally Friendly Growth for Sustainable Development'. One of the goals is to reach again a 40% forest cover, classified into forest for conservation (25%), and commercial forest (15%).

Further details are specified in the *Forestry Master Plan (2014)* and the <u>Master Plan on Integrated Biodiversity Management</u> (2015-2021). The 'Forestry Master Plan' (FMP) was issued by Thailand's Internal Security Operations Command (ISOC) and the Ministry of Natural Resources and Environment. The Forestry Plan aims to "resolve the problems of forest destruction, trespassing of public land and sustainable management of natural resources". The over-arching goal of this plan is to "increase the forest cover" in Thailand to 40% within 10 years. The three stated objectives of the FMP are:

- To stop forest degradation and reclaim illegally used forest lands as stated in the goal within one year.
- To establish efficient, effective and sustainable forest management systems within two years
- To re-establish healthy forests in the country during the next 2-10 years.

There is a lot of criticism on the Forestry Master Plan as there was no consultation with the public or civil society before the drafting of this plan, nor was there any kind of referendum or public consultation after the plan was finalized (see lit 16 under category 3 for several articles).

Forest cover over the years.

Rai	Ha (1 Rai= 0,16 ha)	% of total land	year
191.566.875	30.650.700	60,0%	1953
153.299.875	24.527.980	48,0%	1967
138.566.875	22.170.700	43,4%	1973
124.010.625	19.841.700	38,8%	1976
109.515.000	17.522.400	34,3%	1978
97.875.000	15.660.000	30,7%	1982
94.291.250	15.086.600	29,5%	1985

A2%E0%B8%B2%E0%B8%81%E0%B8%A3%E0%B8%9B%
E0%B9%88%E0%B8%B2%E0%B9%84%E0%B8%A1%E0%
B9%89%E0%B8%82%E0%B8%AD%E0%B8%87%E0%B8%
8A%E0%B8%B2%E0%B8%95%E0%B8%B4.pdf

The National Economic and Social Development Plan (NESDP), Office of the National Economic and Social Development Board. Website with all 12 plans this far: http://www.nesdb.go.th/nesdb_en/ewt_w3c/main.php?filename=develop_issue

Consulted international sources

Nepcon, Forest-Land Conversion and Conversion Timber Estimates. Thailand case study.

https://www.forest-trends.org/wpcontent/uploads/imported/2%20Thailand%20-%20A%20Banks.pdf

Convention on Biological Diversity (CBD), Country profile. https://www.cbd.int/countries/default.shtml?country=th

- National CHM (Clearing House Mechanism) website, Ministry of the Environment and Spatial Planning http://www.onep.go.th/
- Direct link to 5th National report https://www.cbd.int/doc/world/th/th-nr-05-en.pdf
- Direct link to National Biodiversity Strategy and action plan 2015-2021 https://www.cbd.int/doc/world/th/th-nbsap-v4-en.pdf

FAO sources:

- FAO country report Thailand (with graphics) http://www.fao.org/faostat/en/#country/216
- FAO, 2015. Global Forest Resources Assessment 2015 – Thailand, http://www.fao.org/documents/card/en/c/8ea99764-2825-4d13-9b69-bc66f4400b45/
- Asia-pacific forestry sector outlook study ii working

89.876.875	14.380.300	28,1%	1988
89.635.625	14.341.700	28,1%	1989
85.436.250	13.669.800	26,8%	1991
83.471.250	13.355.400	26,1%	1993
82.178.125	13.148.500	25,7%	1995
81.076.250	12.972.200	25,4%	1998
106.319.239	17.011.078	33,3%	2000
104.744.360	16.759.098	32,8%	2004
100.625.813	16.100.130	31,5%	2005
99.157.869	15.865.259	31,1%	2006
107.241.031	17.158.565	33,6%	2008
102.119.538	16.339.126	32,0%	2013
102.285.400	16.365.664	31,6%	2014
102.240.982	16.358.557	31,6%	2015
102.174.805	16.347.969	31,5%	2016
102.156.350	16.345.016	31,5%	2017

Sources: Lit RFD (annual report 2017, page 20) and FAO. In the missing years there was no measurement.

In 2017 there was thus 16 345 016 ha (16,3 million) of forest, resulting in a 31,5% forests cover. This measurement was done by satellite images.

The definition of forest cover used in the RFD 2014-2017 (satellite) survey is "land with a tree canopy cover an equivalent of 0,5 ha or larger, including surrounding natural grass and rocks". The definition "excludes eucalyptus plantations, or trees planted primarily for non-timber use such as agroforestry systems, fruit orchards, rubberwood and palm plantations". The densest forest lands lie in the northern region (6,2 million ha) and the western region (3,2 million ha).

The traditional official Royal Forest Department (RFD) statistics of 'forest lands' read 1 221 forest reserves with 23 028 064 ha (RFD 2016).

This while the forest cover (see above) measured by satellite is thus 16,3 million ha. The remaining are degraded forests that does not longer comply with the satellite

paper series working paper 2009. Thailand forestry outlook study

http://www.fao.org/docrep/014/am617e/am617e00.pdf

- Trends in forest owners' hip, forest resource tenure and institutional arrangements: are they contributing to better forest management and poverty reduction? A case study from Thailand. 2006. http://www.fao.org/forestry/10809-09f8870885bd8d85106e0a87cd906b784.pdf
- Recent Decentralization Plans of the Royal Forest Department and its Implications for Forest Management in Thailand (history of forest management) (1999) http://www.fao.org/docrep/003/x6898e/x6898e04d.htm
- National forest products statistics, Thailand (2001) http://www.fao.org/docrep/005/ac778e/AC778E21.ht
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Chatham House Illegal Logging portal. Indicators Country Report Card, 2018

https://www.illegal-logging.info/regions/thailand

2017 article about illegal logging in Thailand https://www.illegal-logging.info/content/no-let-thailand%E2%80%99s-relentless-violent-siamese-rosewood-poaching

Study about illegal imported timber, 2014.

https://indicators.chathamhouse.org/sites/files/reports/Lawson_Thailand_SK_India_PP_2014_0%281%29_1.pdf

definition of forest.

This is in line with what is stated in the <u>FAO/RFD 2015 report</u>, <u>page 52</u>) where a total of 6 137 180 ha is listed with reduced canopy cover (FAO definition: Forest that has undergone a reduction of canopy cover of more than 20% between the years 2000 and 2010 within the forest canopy cover range of 30-80% as detected by the MODIS VCF sensor). The explains the difference between the 23 and 16 million ha.

Following FAO (2015, Lit 6) Thailand has approximately 41% primary forest, 34% naturally regenerated forest, and 25% of planted forest.

Forests in Thailand are managed by the Royal Forestry Department; the Department of National Parks, Wildlife and Plant Conservation; and the Department of Marine and Coastal Resources.

Forest losses

In the last year 5 years (2013-2017) there was a forest loss of 5 890 ha, or 0,03% (*Sources:* Lit RFD (annual report 2017, page 20)). This amounts to 1178 ha or 0,006% annual loss.

There are clear drivers for conversion (Convention on Biological Diversity (CBD), monitoring report and NEPCON timber study):

- 1. Agricultural expansion. Agricultural land area increased from around 27% of the total land area in Thailand in 1971 to 42% in 2007.
- 2. Shifting cultivation. The only available data indicates that 800 000 hectares of land was under shifting cultivation in the mid-nineties (<u>Rerkasem and Rerkasem, 1995</u>).
- 3. Plantation development.

	1990	2000	2005	2010	2015
Plantations	2.668.000	3.111.000	3.444.000	3.986.000	3.986.000

4. Infrastructure development

In 2011, about 13 972 and 10 306 ha were lost to irrigation and power lines right -of-way, respectively (RFD, 2011). In 2011 about 5 843 ha were lost to mining (RFD, 2011).

Content of the law

On 10 August 2015, a new legislation was passed to prescribe the guidelines for forest

conversion: Ministerial Regulation on the Request and Permission to Utilize Forest Estate (2015). In the legislation, "utilization" is defined as an act of mining, petroleum exploration, shelter or agriculture, afforestation or forest plantation, use as rest area, use as livestock grazing, use as religious site, use as research and study, and use by government agencies. Clause 12 of the regulation prescribes the criteria of forest land permitted for conversion: i) The area is deemed unfit for 'prime forest'; ii) The area is not deemed suitable for preserving as a wildlife habitat; or iii) The area does not overlap the boundary of the forest prohibited for utilization declared by the Cabinet.

Basically, this was not new, because such things were already possible (although not that clear) under the National Reserved Forest Act B.E. 2507 (1964) and (3rd Edition) B.E. 2528 (2015), Section 20, where it is stated that national forest can be converted.

The Forest Act does not specify such things, while the Plantation Act only handles about plantations itself, and who can start them.

Only the Forest Industry Organisation (FIO) is permitted to harvest and sell timber from forest land permitted for conversion. Under clause 24 of the regulation, the license holder must notify the Royal Forest Department (RFD) should forest clearance be required, and that only the FIO is allowed to fell and remove logs in accordance with the RFD regulations. Special permission from RFD is thus always required.

Understand that the FIO is a state-owned company and thus aims to grow more plantations.

There is a special classification for native forests converted to plantations under the *Conservation forest areas (Zone C)*, fully protected park where no harvesting is allowed. Thus, in principle no wood can enter the market. One of the underlying classes is: *Plantations in Forest reserves*.

There is <u>no</u> clear policy, regulation or act that state that all native forest (degraded or not) should stay native forests and should be re-established as such by active management or natural regeneration.

Illegal logging

As can be seen in cat 3 of this CNRA assessment and several indicators under cat 1, there is illegal logging in Thailand. This is also part of the reason that there are so many degraded forest areas.

Documentation, authorization and compensation rules In the left column the most relevant regulations and the responsible governmental department can be found, with a link. For more details, see category 3 of this risk assessment for description about all permits and licenses and organizations involved. Compensation systems are not in place. Is the law enforced? There is a law that does not prohibit forest conversion, and this is enforced. Is it possible to conclude that the spatial threshold can be met by assessing the enforcement of legislation? In the last years (2013-2017) there was a forest loss of 5 890 ha, or 0.03%. This amounts to 1178 ha, or 0,006% annual loss. The spatial threshold is met and not exceeded. Risk designation The 4.1. indicator state that: 'Conversion of natural forests to plantations or non-forest use in the area under assessment is less than 0.02%- or 5000-hectares average net annual loss for the past 5 years (whichever is less)'. And 'conversion is illegal at the national or regional level on public and private land'. Conversion is less than 0,02% but it is not illegal to convert. On the other hand, the FIO is a state-owned company and aims to grow more plantations, thus there is an economic driver. There is no proper CNRA specified risk thresholds that can be used in a situation where the 0.02% is met, but when there are no laws in place to prevent further conversions. The economical driver for expansion on agriculture land, rubber wood, Eucalyptus and oil palm plantation placed an impact on the natural forest loss. Therefore, the precautionary approach is applied and following specified risk thresholds is applied. (7) There are significant economic drivers for conversion.

Recommended control measures

Indicator	Recommended control measures
4.1	There is no clear policy, regulation or act that state that all native forest (degraded or not) should stay native forests and should be re-established as such by active management or

Thus the 4.1 indicator is specified risk.

Data yield evidence that conversion is occurring on a widespread or systematic basis.

natural regeneration. Therefore, there are now plantations in protect forest areas (zone C). The absence of such a policy and the forest losses are creating a conflict with the CNRA/FSC policies.

On 10 August 2015, a new legislation was passed to prescribe the guidelines for forest conversion: Ministerial Regulation on the Request and Permission to Utilize Forest Estate B.E. 2558 (2015). In the legislation, "utilization" is defined as an act of mining, petroleum exploration, shelter or agriculture, afforestation or forest plantation, use as rest area, use as livestock grazing, use as religious site, use as research and study, and use by government agencies. The area does not overlap the boundary of the forest prohibited for utilisation declared by the Cabinet. Only the Forest Industry Organisation (FIO) is permitted to harvest and sell timber from forest land permitted for conversion. Under clause 24 of the regulation, the license holder must notify the Royal Forest Department (RFD) should forest clearance be required, and that only the FIO is allowed to fell and remove logs in accordance with the RFD regulations.

For companies sourcing timber DO NOT buy timber from <u>public plantation</u> that are located in <u>Conservation forest areas (Zone C</u>). As FIO is the only company that is allowed to harvest in zone C areas it means that you can thus not buy converted natural timber from FIO. State such in your contracts and when buying from public sources request that your supplier state from which ZONE the timber is coming from.

Controlled wood category 5: Wood from forests in which genetically modified trees are planted

Risk assessment

Indicator	Sources of information	Functi onal scale	Risk designation and determination
There is no commerc ial use or any testing of genetical ly modified trees.	 Applicable laws and regulations Plant Quarantine Act B.E. 2507 (1964). http://www.thailawforum.com/database1/plant-quarantine-act.html Plant Act B.E. 2518 (1975). http://www.thailawforum.com/database1/plants-act.html Plant Varieties Protection Act B.E. 2542 (1999) and 2017 update. http://www.thailawforum.com/thai-plant-protection-variety-act/ Food Acts BE.2522 (1979) - authorized FDA http://www.thailawforum.com/database1/food-act.html Other sources Agricultural law in Thailand: overview, Thomson Reuters, 2017 https://uk.practicallaw.thomsonreuters.com/3-602-5267?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1 Thailand, Agricultural Biotechnology Annual USDA 2016. https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Agricultural%20Biotechnology%20Annual Bangkok Thailand 11-16-2016.pdf Devex. What are the political drivers for GMOs in developing countries? Thailand summary of GMO	Countr y level	Introduction In the text below GMOs are related to genetically modified organisms for which DNA has been altered to create desirable traits such as a resistance to herbicides. Genetically Engineered (GE) refer to products for which DNA has been altered by human manipulation, often by inserting genes from unrelated species, to introduce new, desirable traits to that organism; genetically engineered products occur artificially in a way that would not otherwise happen in nature. Thailand is a member of the WTO as of 1 January 1995, a member of the International Plant Protection Convention (IPPC) as of 16 August 1978 and a member of the Office International des Epizooties (IOE)/World Animal Health Organization as of 25 January 1924. Four main government agencies are involved in the regulation of agricultural biotechnology. They are the: 1) Department of Agriculture (DOA), Ministry of Agriculture and Cooperatives (MOAC); 2) National Center for Genetic Engineering and Biotechnology (BIOTEC), Ministry of Science and Technology (MOST); 3) Ministry of Natural Resources and Environment (MONRE) (including the Royal Forest department RFD); and 4) Food and Drug administration (FDA), Ministry of Public Health (MOPH). In addition, the National Bureau of Agricultural Commodity and Food Standards (ACFS) under MOAC represents the Thai Government in negotiating all SPS issues in international organizations (i.e., Codex, OIE, etc.), including food safety in GMO and GE products. The review of any biosafety issues for plants and animals is currently being conducted by technical Biosafety Committee (TBC), an ad hoc technical advisor of BIOTEC. With regards to forestry there is no special law or regulation in place. Forest sector operator will need to follow the same country-wide regulations.
	developing countries? Thailand summary of GMO		In Thailand, the legal structure of import and export control measures for plants and propagation

status.

https://www.devex.com/news/what-are-the-political-drivers-for-gmos-in-developing-countries-92091

FAO documents stating the situation in Thailand: Report of the Regional Workshop on Strengthening Regional Cooperation and National Capacity Building on Biosafety in Asia (page 14) http://www.fao.org/3/a-i3902e.pdf

FAO summary of GMO situation in Thailand: http://www.fao.org/food/food-safety-quality/gm-foods-platform/browse-information-by/country/country-page/en/?cty=THA

ISAAA. Information Tug-of-War: Saga of Biotech Papaya

https://www.isaaa.org/resources/publications/communication_challenges_and_convergence_in_crop_biotechnology/download/communication_challenges_and_convergence_in_crop_biotechnology-chapter7.pdf

NCBI article about Biotech Papaya.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC240 9016/

ISAAA. GMO crop events in Thailand.

http://www.isaaa.org/gmapprovaldatabase/approvedeventsin/default.asp?CountryID=TH&Country=Thailand

Legal Authority

- 1) Department of Agriculture (DOA), Ministry of Agriculture and Cooperatives (MOAC):
- 2) National Center for Genetic Engineering and

materials, including crop seeds, is provided in the:

- Plant Quarantine Act B.E. 2507 (1964).
- Plant Act B.E. 2518 (1975).
- Plant Varieties Protection Act B.E. 2542 (1999).
- Biosafety Act (under development)
- Various regulations

The IPPC standards have been incorporated into these acts, and the Agriculture Commodity Standard Act 2008.

New crop development

There is no policy or implementation, in the area of new biotech crops and new crop cultivation methods and techniques. Biotech crops and genetically modified organism (GMO or GE) crops are still restricted at the experimental level. Currently no GMO or GE agricultural crops or tree species have been approved for cultivation nor have any field trials been undertaken.

This is also confirmed by independent sources like DEVEX, FAO, ISAAA and NCBI. In the ISAAA database no cases are recorded that contradict this statement. There are no articles in the media about the use of GMO/GE in the forest sector or tree production in Thailand. There were discussions about developing GMO Papaya's in the past (see sources in left column) but such plans were abandoned. Besides that, Papaya is not a regular wood specie that can be used in the timber industry.

Commercial production: Thailand has a de facto ban on GMO/GE crop cultivation. Although there were field trials for several imported transgenic plants and local plant varieties in mid 1990s, the Thai government issued a blanket ban in 2003 on further field trials after public opposition initiated by BioThai and the Organization of the Poor. Since then NGOs' opposition has stalled the implementation of effective policies to regulate the commercial production of biotechnology.

Exports: Thailand does not officially export GMO/GE products. However, according to the EU Rapid Alert System for Food and Feed (RASFF) report, about ten shipments of papayas originating from Thailand were rejected due to detections of GE contamination from 2013-2015. The DOA regulated in 2014 that all fresh/dried papaya or food products containing papaya exported to the EU and Japan are subject to a GE detection test prior to shipping.

Imports: The importation of GMO/GE plants for processed foods, soybean and corn for feed and industrial uses, and cotton lint is allowed by the Thai government. It is estimated that 95 percent of total soybean imports and 80-90 percent of cotton imports in 2015 were GE plants.

Biotechnology (BIOTEC), Ministry of Science and Technology (MOST);

- 3) Ministry of Natural Resources and Environment (MONRE); and
- 4) Food and Drug administration (FDA), Ministry of Public Health (MOPH).

There is no import or export of forest related GMO/GE species.

Plant Quarantine Act

The Plant Quarantine Act focuses on the inspection of plants and propagation materials to control and prevent the spread of or outbreak from the introduction of plant pests. It provides rules in relation to "prohibited article (all non-licensed GMO/GE material)", "restricted article (some GMO food products)", and "unprohibited article", which includes plants, plant pests, and carriers, as declared by the Agriculture and Co-operatives Minister, including exceptions and conditions for import and export control measures to prevent possible adverse effects on environmental or human health.

To import or bring in transit any "prohibited article", the importer must:

- Obtain a phytosanitary certificate issued by an appropriate government agency in the exporting country.
- Obtain the results of a pest risk analysis.
- Comply with the criteria, procedures, and conditions stipulated by the Director-General under the recommendation of the Plant Quarantine Committee (which includes the regulations for GMO/GE).

To import or bring in transit any "restricted article", the importer must:

- Obtain a phytosanitary certificate issued by an appropriate government agency in the exporting country.
- Comply with the criteria, procedures, and conditions stipulated by the Director-General under the recommendation of the Plant Quarantine Committee (which includes the regulations for GMO/GE).

The "prohibited article" or "restricted article" must be imported or brought in transit through a plant quarantine station for inspection by the responsible plant quarantine officials. For an "unprohibited article", the importer must only present a phytosanitary certificate and declare the article to the plant quarantine officials in the form specified by the Director-General of the Department of Agriculture. In terms of exporting plants out of Thailand, the Agriculture and Co-operatives Minister has declared "controlled plants" and "specially controlled plants".

To export any "controlled plants", the exporter must obtain a phytosanitary certificate issued by the government authority before exporting.

To export any "specially controlled plants", the exporter must both:

- Obtain a phytosanitary certificate issued by the government authority before exporting.
- Pay the government fees for phytosanitary inspection according to the rates announced in the Government Gazette.

Plant Act

The Plant Act mainly regulates the crop seed industry in Thailand. It empowers the Minister of Agriculture and Co-operatives to determine any species and varieties of plant as controlled seeds in the Government Gazette. At present, a total of 37 species and varieties of plant are designated by the Minister of Agriculture and Co-operatives as controlled seeds, with standard qualities for germination rate and purity of seed. The controlled seeds for collection, sale, import, export, and transit must comply with the designated standard.

The Plant Act also prohibits the collection, sale, import, export, or transit of controlled seeds for commercial purposes, unless that person has received an appropriate licence from the Department of Agriculture, in which case, the person must keep the controlled seeds in the place specified in the licences.

Licences for business operators related to controlled seeds in Thailand include licences for the:

- Collection of controlled seeds for trade.
- Sale of controlled seeds for trade.
- Importation of controlled seeds for trade.
- Exportation of controlled seeds for trade.
- The transit of controlled seeds for trade.

The licensee must conduct his or her business strictly in accordance with the practices and rules outlined in the Plant Act. If the responsible officials find that any licensee has not complied with the Plant Act or the related Ministerial Order or Notification, they are entitled to suspend the licence of the licensee. As a result, a business operator whose licence has been suspended must immediately stop doing business according to the licence during the suspension period. In addition to controlled seeds, the Minister of Agriculture and Co-operatives will also determine reserved plants, prohibited plants and conserved plants and announce in the Government Gazette. The exportation of reserved plants is prohibited unless there is a written permission from the minister for experiment or research purposes only. The importation of prohibited plants is prohibited and there are no exemptions. Conserved plants are plant species listed in the Appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) announced by the minister in the Government Gazette. The importation, exportation, or transit of conserved plants or its debris is prohibited unless there is permission from the Director-General.

Plant Varieties Protection Act

The main objective of the Plant Varieties Protection Act is to provide legal protection for breeders of new plant varieties. On obtaining a plant variety registration in Thailand, the breeder is entitled to the exclusive right to produce, sell, distribute, import, export, and possess the propagating materials, which include seeds, of that particular new plant variety. An offender who produces,

sells, distributes, imports, exports, and possesses the propagating materials of a registered new plant variety without authorisation of the right holder could face a maximum sentence of two years' imprisonment and a fine.

Import of new plant species or varieties and crop growing technologies
Importers must obtain an import licence under the Customs Act, and they must comply with the Plant Quarantine Act, the Plant Act, and the Plant Varieties Protection Act, all of which are regulated by the Department of Agriculture. New varieties which are imported must meet the requirements under the Plant Act, and they are subjected to phytosanitary requirements, as well as quarantine proceedings in accordance with the Quarantine Act, while observing other parties protection rights under the Plant Varieties Protection Act. Importation for the purpose of growth trial under the Plant Varieties Protection Act must also be subjected to restrictions/licence and approval under the Plant Quarantine Act and Plant Act. For example, under the Plant Act, if a variety of plant is categorised as a controlled seed, the importer must obtain a licence for the importation of controlled seeds for trade. There is no restriction on bringing crop growing technologies into the country.

The authority must issue a licence to collect, sell, import, or export controlled seeds for trade only when it appears that the applicant (section 16, Plant Act B.E. 2518 (1975)):

- Is a person of good financial standing, adequately capable of carrying on the business.
- Is at least 20 years of age.
- Has his or her residence or office in Thailand.
- Is not a person of unsound mind, nor an incompetent or quasi-incompetent person.
- Has a place appropriate for the collection, sale, import, or export of controlled seed for which the licence is applied.
- Uses a trade name which is not the same or similar to the trade name of another licensee or person whose licence has been superseded or revoked within the last two years.

In the case where a legal person applies for a licence, it must be qualified under the first, third, fifth and sixth bullet points above, and have a person to carry out the business who is qualified under the second, third and fourth.

Ministerial Regulation: Criteria, procedures, and conditions for licence application, issuance of licence, renewal of licence, and issuance of licence substitute concerning controlled seeds B.E. 2549 (2006).

This regulation provides rules for applying the licence for the importation of controlled seeds for trade. In summary, a licensee must submit "details notification" of seeds to be imported to the Office of Agricultural Regulation of the Department of Agriculture. Once the seed is at Customs, the competent official will perform sampling and will dispatch the seeds to the Department of

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Agriculture laboratory. The laboratory will then perform tests according to the rate of germination, purity, and plant disease. If the testing results do not meet the Department of Agriculture requirements, the seeds must be sent back to the exporting country.

Under construction: Biosafety Act

In December 2015, the Thai Prime Minister (PM) reversed his Cabinet's earlier decision in November 2015 to approve the draft Biosafety Act. The Biosafety Act was designed to provide a solid regulatory framework for agricultural biotechnology including research, field trials, and commercialization. The National Legislative Assembly (NLA) is currently attempting to revise the Biosafety Act. This is a lengthy process with an uncertain outcome.

Set up of R&D centres and use of test plots of new crops

No specific approval or licence is required to set up research and development (R&D) centres. With regard to the usage of test plots for new crops in Thailand, the grower must obtain a licence for collection of controlled seeds for trade if that particular variety of plant is categorised as a controlled seed.

An R&D centre (subject to its scope of activities to be engaged in Thailand) may be deemed to be a service business, as stipulated in Schedule 3 of the Foreign Business Act. This means that a foreign party would require a foreign business licence from the Director-General of the Department of Business Development before engaging in this restricted business (see Question 3, Restricted businesses).

Crop seed production

The manufacturer must comply with the Plant Quarantine Act, the Plant Act, and the Plant Varieties Protection Act. The manufacturer must obtain a licence for the collection of controlled seeds for trade if that particular variety of plant is categorised as a controlled seed. According to the Plant Act, a business operator who has obtained a licence for the collection of controlled seeds for trade, a licence for importation of controlled seeds for trade, or a licence for exportation of controlled seeds for trade, is deemed to have already obtained a licence for sale of controlled seeds for trade.

Cultivation, propagation, or development of plant varieties is included in Schedule 3 of the Foreign Business Act, and foreigners require a foreign business licence granted by the Director-General of the Department of Business Development before engaging in such business (see Question 3, Restricted businesses).

Summary

Cultivation, testing, production, import or export of GMO/GE trees is not allowed. This is also confirmed by independent sources like DEVEX, FAO, ISAAA and NCBI. In the ISAAA database no cases are recorded that contradict this statement. There are no articles in the media about the use of GMO/GE in the forest sector or tree production in Thailand. GMO/GE wood cannot enter the

market.
Conclusion
The 'Low risk' thresholds are met:
(1) GMO (trees) use is illegal according to applicable legislation of the area under assessment AND the risk assessment for relevant indicators of Category 1 confirms that applicable legislation is enforced ('low risk'),
AND
(3) Other available evidence does not challenge a 'low risk' designation.

Recommended control measures

N/A

GMO Context Question	Answer
1. Is there any legislation covering GMO (trees)?	Yes.
	 Plant Quarantine Act B.E. 2507 (1964). Plant Act B.E. 2518 (1975). Plant Varieties Protection Act B.E. 2542 (1999). Biosafety Act (under development) Various regulations
2. Does applicable legislation for the area under assessment include a ban for commercial use of GMO (trees)?	Yes. Biotech crops and genetically modified organism (GMO or GE) crops are still restricted at the experimental level. Currently no GMO or GE agricultural crops or tree species have been approved for cultivation nor have any field trials been undertaken.
3. Is there evidence of unauthorized use of GM trees?	No evidence found in independent sources (see left column above).
4. Is there any commercial use of GM trees in the country or region?	No uses have been found in governmental or independent sources (see left column above).

5. Are there any trials of GM trees in the country or region?	No trials.
	ISAAA. GMO crop events in Thailand (database). http://www.isaaa.org/gmapprovaldatabase/approvedeventsin/default.asp?CountryID=TH&Country=Thailand
6. Are licenses required for commercial use of GM trees?	Not allowed, thus no licenses.
7. Are there any licenses issued for GM trees relevant for the area under assessment? (If so, in what regions, for what species and to which entities?)	
8. What GM 'species' are used?	Nothing. See 2 above. Only some GMO food species are allowed to import.
9. Can it be clearly determined in which MUs the GM trees are used?	Not applicable.