Background analyses for
VPA support project in Cameroon, Laos and Vietnam

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Context

The three countries Vietnam, Laos and Cameroon are engaged in Forest Law Enforcement Governance and Trade (FLEGT) – processes with the European Union (EU) at various stages with the aim to combat illegal logging and illegal timber trade. Cameroon has signed a Voluntary Partnership Agreement on FLEGT (VPA) in 2010, Vietnam in October 2018 and Laos is currently negotiating its VPA.

In the specific context of Vietnam, the development of a timber legality assurance system (VNTLAS) to implement the VPA needs to pay special attention to the high south-south timber trade and supply chains. The development of this aspect by the Government of Vietnam is supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) in cooperation with the UK Department for International Development (DFID). The project “Support to VPA processes in Vietnam, Laos and Cameroon – towards legal timber supply chains between VPA countries” is commissioned to the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH with the Sector Project International Forest Policy (SV IWP) and implemented in three countries (Vietnam, Laos and Cameroon). It supports the exchange between these three countries on timber and wood product trade and supports the development of an import control system in Vietnam as well as export control systems in the supplying countries of Cameroon and Laos.

The government, private sector and civil society partners in Vietnam, Laos and Cameroon are additionally supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) during negotiations and implementation of their FLEGT VPA processes: In Vietnam BMZ-support is provided through the GIZ Programme Conservation and Sustainable Use of Forest Biodiversity and Ecosystem Services (Forest-Biodiversity Project). In Cameroon the Forestry and Environmental Programme ProFE (Appui à la mise en œuvre de la stratégie de développement du secteur rural volets Forêt Environnement), implemented by GIZ and the Forest Basket Fund, implemented by KfW, support VPA implementation. In Laos, the GIZ Programme on Protection and Sustainable Use of Forest Ecosystems and Biodiversity (ProFEB) with its ProFLEGT component supports the Laos government during the ongoing VPA negotiations and a KFW-funded VPA-support program is under preparation.

This report and the attached risk assessments and document guides for the ten main high risk timber supplier countries to Vietnam have been developed by NEPCon, under contract with the GIZ Sector Project International Forest Policy, to gather background data on the trade between the countries and support the development of legal timber supply chains between these countries.

DISCLAIMER:
The analysis, results and recommendations in this paper represent the opinion of the author(s) and are not necessarily representative of the position of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

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Executive summary

The report *Background analyses for VPA support project in Cameroon, Laos and Vietnam* was developed by NEPCon on behalf of the GIZ Sector Project International Forest Policy, as input to the GIZ work to support the development of the Timber Legality Assurance System (TLAS) of Vietnam (VNTLAS) and the south-south exchange on supporting legal timber supply chains between Cameroon and Vietnam, and Laos and Vietnam.

The report contains an assessment of legal requirements, identifies legally required documents, as well as relevant timber legality risks in the 10 main high risk supplier countries of Vietnam: Angola, Cambodia, Cameroon, Congo, Democratic Republic of Congo (DRC), Equatorial Guinea, Gabon, Ghana, Laos, and Nigeria. Laos and Cameroon are in special focus as key countries selected for the GIZ Project.

Trade data and timber sector analysis

Part 1 of the report contains an analysis of timber trade data and trade patterns between Cameroon and Vietnam, and Laos and Vietnam. Even though trade data were difficult to access, and data were not obtained for both value and volumes from all three countries, the data analysis clearly underlines a significant discrepancy between the reported exports and imports among all three countries. The size and consistency of discrepancies indicates systematic challenges with recording data on exports and imports and highlights the needs for improved data consolidation systems and collaboration between Vietnam and source country authorities to ensure correct and accessible trade data.

The report also contains a short timber industry overview for Vietnam, Laos and Cameroon, providing findings relevant to the trade in forest products, and challenges and opportunities related to the implementation and enforcement of the Vietnam VPA. The findings underline the need for Vietnam to seek collaboration in supplier countries to enable industry to meet legal requirements and ensure that importers in Vietnam can meet future due diligence obligations.

Risk Assessments

The Risk Assessments have been developed using the methodology developed by NEPCon\(^1\). The approach uses six categories: 1. Legal rights to harvest, 2. Taxes and fees, 3. Timber harvesting activities, 4. Third parties’ rights, 5. Trade and transport, and 6. Processing. In addition, there are 26 sub-categories. These form the basis for identifying applicable legislation and legally required documents and help to identify legal obligations and assess potential risks for different types of forest management entities and supply chain actors.

Based on the assessment of the 10 countries supplying timber to Vietnam, potential risks have been specified for each country. The below figure 1 provides an overview of how many sub-categories have been identified as having specified risk\(^2\) for each country.\(^3\)

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\(^2\) Specified risk is used here as equivalent to risk that is not negligible according to the EU Timber Regulation.

\(^3\) Note that the count of sub-categories with specified risk has been made using a simple count. In some countries, different risks may have been identified for different types of forests, and the full details of the risk specification should be accessed in the main report.
The results indicate that risks persist in all the supplier countries and in most of the categories included in the assessment. This finding underlines the need for importers of wood products from these countries to implement a strong due diligence system, both in terms of securing adequate access to information about supplies, and the ability to assess and mitigate risks in the supply chain.

Document Guides

In addition to the Risk Assessments, Document Guides have been developed, containing an overview of the key legally required documents used in each country at each step of the wood product supply chain. The Document Guides contain examples of scanned documents, alongside explanation of key information regarding each document. The Document Guides can be used by buyers of timber to understand which documents are necessary to proof legality in the supply chain, and to understand the role of the document. The Guides also highlight potential issues to be aware of, when assessing supply chain information integrity.

Key messages from the study

The report illustrates the complexity of challenges that actors in the supply chain must deal with to support legal timber supply chains. It contains detailed specification of risks for the 10 supplier countries (Angola, Cambodia, Cameroon, Congo, DRC, Equatorial Guinea, Gabon, Ghana, Laos and Nigeria) within the categories of the assessment framework, underlining the need for Vietnamese importers to implement high quality due diligence systems, that ensures consistent risk management. Additionally, on the government side control and verification systems for import need to be developed to verify that due diligence systems are implemented.

The study also underlines the needs for bi-lateral collaboration between Vietnam and the main high risk supplier countries to address the challenges of persistent illegal timber trade and logging, as well as to improve data and information sharing and calibration. Enabling such collaboration should play an important role in curbing ongoing illegal activities.

4 Where categories are assigned Not Applicable (N/A) it means that there is no applicable legislation in the country for that specific sub-category. It may e.g. be that a country does not have any legislation covering indigenous people’s rights, or transfer pricing.

5 Note that for some countries where several Source Types exist, the risk score presented in the figure represents only one of the main Source Types. See the full Risk Assessment for the detailed data.
Introduction

In October 2018, the Government of Vietnam signed a Voluntary Partnership Agreement with the European Union. It entered into force in June 2019. The Government is currently developing the Timber Legality Assurance System that will ensure that all timber produced in, imported to and exported from Vietnam is coming from legal sources. Being one of the major wood processing hubs in Asia and with an increasing import from Sub Saharan Africa Vietnam has with this a major opportunity to become the market leader for supplying legal timber and wood products worldwide.

The project “Support to VPA processes in Vietnam, Laos and Cameroon – towards legal timber supply chains between VPA countries” supports VPA processes with the objective to contribute to sustainable management of timber supplying forests, strengthened legal compliance and rule of law in Vietnam, Laos and Cameroon. Specifically, the project aims to provide country stakeholders from government, private sector and civil society in Vietnam, Laos and Cameroon with the most relevant information needed to improve legality of the supply chain between the countries.

NEPCon has been commissioned to conduct research that will feed into this project by making available detailed information on the current trade between Cameroon and Vietnam and Laos and Vietnam and on the legal requirements of the forest sectors of key countries who supply timber to Vietnam. Also, NEPCon has assessed the current situation of the forest sectors of the respective countries to draw conclusions related to the level of risk of legal non-compliance. In addition to collecting and analysing legal requirements and legality risks, NEPCon has identified legally required documents in each country that can be used to indicate legality at each stage of the supply chain as well as from harvest to export and through processing. This information will help the development and implementation of the timber legality assurance system of Vietnam (VNTLAS). The assessment of the legal requirements for harvesting, processing, trade and export from key high risk supplier countries to Vietnam, for the following ten countries is included in this report:

1. Angola
2. Cambodia
3. Cameroon
4. Congo
5. Democratic Republic of Congo
6. Equatorial Guinea
7. Gabon
8. Ghana
9. Laos
10. Nigeria

This report contains the results of the national risk assessments, as well as additional analyses, specifically focusing on the timber trade between Laos and Vietnam, and Cameroon and Vietnam.

Opportunities identified

In the report NEPCon have identified the following opportunities for the government of Vietnam, as they continue efforts to implement the VPA. The opportunities are listed according to the relevance for different actors in Vietnam:
**Government**

**Market leadership** - the effective implementation of the VPA and the VNTLAS presents a tremendous opportunity, not only to Vietnam, but also to further the global agenda related to securing better governance, more transparency, increased accountability and overall legal compliance in the forest sector. As a major buyer of timber from tropical countries, Vietnam can push this agenda towards improved forest governance through its weight as a major importer. If engaging in the implementation of an effective VPA, Vietnam will also have the chance of gaining a major market advantage over competing countries, especially China, as a supplier of legal wood products, not only to the EU, but also to the global market.

**Sustainable production and sourcing** – Though legal compliance is an important bar to reach in timber supply chains, there is also an opportunity for the industry to impact forest management globally toward more sustainable practices. Requiring legal compliance in supply chains may act as a catalyst for forest governance reform and changes on the ground in the forest, increase demand for sustainable forest management certification, and more transparency in the timber sector. These effects can impact forest management and pave the way for more sustainable use of scarce forest resources.

**Government partnerships** – Like Vietnam is partnering with the EU to develop and implement the FLEGT VPA, so could Vietnam seek to support and collaborate with supplier countries in improving forest governance and legal compliance in the sector. As Vietnam’s industry is already engaged in business management in several African and Asian countries to secure raw material supplies, so could the Vietnamese Government engage to work with national governments to ensure that systems and practices in supplier countries attain a higher level of compliance and better transparency. Agreements (Memoranda of Understanding) with few countries in relation to support legal timber trade (e.g. Laos, Cambodia), but also to fight illegal wildlife trade (Mozambique) have already been established and could be established with other timber supplier countries.

**Lessons learned from the implementation of the EUTR** – The government of Vietnam (as well as other actors) should look to the experiences gained during the past 7 years of implementation of the European Timber Regulation (EUTR). Since the challenges of the European timber industry, and the competent authorities of EU Member states are very similar to those facing the Vietnamese government and industry, there is potential to learn from the experiences from Europe. Lessons learned from EUTR implementation includes experience on enforcement by authorities, as well as how the authorities may support the industry in meeting due diligence requirements.

**Industry**

**Certification** – In order to meet due diligence requirements, it has been illustrated in the implementation of the EUTR, that certification (like FSC™ or PEFC) can play an important role as a risk management tool for importers and traders of wood. Even if certification is not considered to except importers from due diligence requirements, it is still considered that the sourcing of certified material, has the opportunity to provide a very strong tool for meeting legality verification requirements.

**Increased sourcing efficiency** – In order to meet the commitments of the VPA, the industry importing timber will have to make changes to their supply chains – business as usual cannot be considered as meeting the requirements of the VPA. Though a challenge in itself, supply chain revision also presents an opportunity to secure more transparent, more trustworthy and more reliable supply chains. Evidence from other importing countries show that transition from in-transparent and short term supply chains to longer term supplier relations and increased transparency, can reduce risks and costs.

**Learning from due diligence systems of EU importers** – The European timber industry have been operating under
the obligations of the EUTR since 2013. During this time, a significant amount of experience have been gained. There is a real opportunity for the Vietnamese industry, to collaborate with and learn from their European counterparts, to take advantage of lessons learned.

**Market access** – implementing an effective VNTLAS will, even before the potential approval of a FLEGT licensing scheme, provide potential market benefits for the Vietnamese wood products export sector. Providing timber and wood products to markets such as the EU, US, Japan and Australia (all regulated markets) with evidence of legality (or low risk of illegality) through a VNTLAS with high quality and integrity presents a market opportunity for the Vietnamese industry. It should be noted that the implementation of timber legality assurance systems may also incur added cost to the industry, meaning higher prices on products, which may counter market gains made by higher level of legal integrity.

**Civil society in Vietnam and abroad**

Civil society play a vital role in the effective implementation of timber legality systems. Not only as stakeholders in local forest management and timber extraction, but also as a part to the wider implementation of a timber legality system such as the VNTLAS. Experience from other countries where a VPA is being negotiated or implemented have clearly shown the key role of civil society organisations. Civil society is already an important player in the VPA processes and is also included in the VPA through the multi-stakeholder implementation core group (MCIG). Including civil society in the implementation of the VPA is not only necessary, but also an opportunity for Vietnam to ensure integrity of the VNTLAS and improve transparency and accountability in the forests sector. **Monitoring** - there is a clear role for CSOs to play in terms of monitoring the implementation of the VPA. Vietnam should seize the opportunity to engage with stakeholders to ensure their participation in the process.
Report overview

The report is structured in two parts supplemented by appendices. The appendices contain detailed country-level information for each of the 10 countries.

The Main Report is separated in two parts, supported by annexes and appendices:

PART I: The first part of the report focusses on Vietnam. We provide an overview of current trade of Vietnam with Laos, and Vietnam with Cameroon, and analyses of classification discrepancies of volumes and species along the supply chain between and within the countries. We also provide a review of the Vietnam VPA Timber Legality Assurance System (TLAS) Decree with the aim of assessing how due diligence can be assured in relation to Vietnam timber imports.

PART II: The second part contains country profiles for the 10 supplier countries to Vietnam. The country reports contain overviews of legal requirements for timber harvesting, processing and trade, combined with assessments of potential risks related to trade in timber. We also include analysis of potential challenges and opportunities associated with legal compliance and verification along the supply chain of the countries; as well as recommendations to improve compliance and verification, particularly for the development of the VNTLAS, and enabling Vietnam actors to effectively meet the commitments of the VPA.

ANNEXES: This report also contains three annexes with information related to the report contents.

APPENDICIES: In addition to the Main Report, the detailed Risk Assessments and Documents Guides are accompanying the report as separate appendices – one Risk Assessment and one Document Guide for each of the 10 countries.
Methodology

The report has been developed using primary and secondary data from all the 10 countries. For the development of the sections on trade data discrepancies relating to the trade between Vietnam and Cameroon, and Vietnam and Laos, NEPCon sought to access primary trade data relating to export from Cameroon and Laos, as well as primary import data from Vietnam. However, due to difficulties in accessing primary data, it was necessary to use secondary sources for some of the data. As can be seen in Chapter 1, the data collected were used to assess discrepancies in trade data and present findings both as relative and absolute comparison of traded volumes and values.

The analysis of national level legality frameworks and governance issues was conducted using NEPCon’s existing methodology for conducting timber legality risk assessments. Since 2014, NEPCon has worked on developing country risk assessments for timber legality. Since 2013, NEPCon has collaborated with Forest Stewardship Council™ (FSC) to support their work on developing national risk assessments for the FSC Controlled Wood Programme. In doing so, NEPCon and FSC have developed a methodology to produce Risk Assessments. The development of this report is based upon these assessment methodologies which can be accessed [here](https://www.nepcon.org/sourcinghub/info/timber-risk-assessment-methodology) and [here](https://fsc.org/en/document-centre/documents/resource/377).

In relation to the assessments conducted for this report, NEPCon has applied only the relevant criteria for timber legality (whereas FSC’s Controlled Wood system includes five categories, including the category for timber legality).

It is emphasised that the use of the FSC methodology in the context of the Vietnam VPA, is considered to provide relevant risk information consistent with the EU use of the concept of due diligence, such as outlined in the EUTR. The results of the Risk Assessments therefore have direct relevance to the commitment of Vietnam to avoid importing illegally harvested wood by applying a risk-based due diligence approach. The Risk Assessments have all been developed using a national expert to lead the information gathering and evaluation of governance issues. A brief description of each step of the methodology for developing country Risk Assessments is provided below.

**Step 1: Identify which of the 26 areas of law apply to the country in question and identify the timber source types**

NEPCon has developed a timber legality framework, consisting of six categories and 26 sub-categories as follows:

1. **Legal rights to harvest**
   1.1 Land tenure and management rights
   1.2 Concession licenses
   1.3 Management and harvesting planning
   1.4 Harvesting permits
2. **Taxes and fees**
   2.1 Payment of taxes, royalties and harvesting fees
   2.2 Value-added taxes and other sales taxes
   2.3 Income and profit taxes
3. **Timber harvesting activities**
   3.1 Timber harvesting regulations
   3.2 Protected sites and species

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3.3 Environmental requirements
3.4 Health and safety
3.5 Legal employment

4. Third parties' rights
4.1 Customary rights
4.2 Free, Prior and Informed Consent (FPIC)
4.3 Indigenous and traditional peoples' rights

5. Trade and transport
5.1 Classification of species, quantities and qualities
5.2 Trade and transport
5.3 Offshore trading and transfer pricing
5.4 Customs regulations
5.5 CITES
5.6 Legislation requiring due diligence/due care procedures

6. Processing
6.1 Legal registration of business
6.2 Environmental requirements for processing
6.3 Processing requirements in the timber industry
6.4 Health and safety
6.5 Legal employment

It is worth mentioning that not all countries have legal requirements for all 26 sub-categories. For example, many countries do not use a concession licensing system (see sub-category 1.2 above). There is no risk of legal violation of a specific issue if no legislation is in place to address that issue. Where legal requirements do exist, applicable legislation and regulations are identified and referenced. Where possible, links are made to applicable legislation or regulation as well as references to specific clauses or sections. This step also includes the identification of the different forest source types that exist within the country. A source type is defined according to the different attributes of forest types. The source type characteristics are as follows:

- The forest type, e.g. whether the forest is a plantation or a natural forest
- The location of the forest
- The legal status of the forest, for example whether it is protected or production forest
- The ownership of the forest, for example whether it is privately or state-owned
- The management of the forest, for example whether it is managed by private companies or by the state.

The source type identification is important because different types of forest may have different risk profiles. If relevant, for each sub-category, applicable legislation is identified for each source type.

**Step 2: Identify the relevant legal authorities**

Identify all legal authorities responsible for monitoring and enforcing applicable legislation.

**Step 3: Identify all legally required documents**

Specific documents are often required to document legal compliance, e.g. harvest permits, tax registration forms and environmental impact assessments. These documents are also used downstream in the supply chain as indicators of legality. The details of relevant documents are included in the Appendices to this report as Document Guides.

**Step 4: Identify reliable sources of information**
Information used in the assessment comes from governments as well as non-governmental sources. Where relevant, information from Voluntary Partnership Agreements (VPAs) is also used to identify the baseline for the definition of legality.

**Step 5: Describe the risk of illegality**

To be able to describe the risk of illegality, a description of what is required by law for each sub-category is prepared (for example, that harvesting permits need to be issued by the relevant authority) after which, and based on the information collated in the previous steps, the risk of legal non-compliance is assessed for each legal requirement and source type. The following instances of legal non-compliance are considered to be low risk:

- Temporary.
- Unusual or non-systematic.
- Limited in their impact.
- Effectively controlled through monitoring and enforcement by efficient and effective government agencies.

Instances of legal non-compliance that fall into the following categories are considered to be specified risk:

- Affect a wide area and/or causes significant damage and/or continues over a long period of time.
- Indicate the absence or break-down of enforcement of the legal system.
- Are not corrected nor adequately responded to when identified.
- Have a significant negative impact on society, the production of forest products and other services, the forest ecosystem and the people directly and indirectly affected by forest operations.

**Step 6: Conclusion as to the risk of illegality**

Based on the information above, a conclusion as to whether legal compliance with each of the relevant legal requirements should be considered ‘low’ risk or ‘specified’ risk (i.e. not low) is made. This is done at country level for each area of risk and for each of the different forest source types. In each case, a justification for the conclusion is provided.

**Step 7: Identify steps that could be taken to mitigate the identified risks**

The steps that could be taken to mitigate the risk of illegality depend on which categories of legislation are identified as being at risk of legal non-compliance. The risk mitigation measures that are recommended – among others – include advice on how to determine if the identified risk is present in a supply chain, where the risk is located, and how to control that risk. Some risks can be verified as being low risk by a field visit to the harvesting sites. Other risks can be verified as being low risk based on document control.

**Step 8: Validation**

Based on a draft of the Risk Assessment, NEPCon has initiated a national validation process. This process has been led by the national expert. The validation process has involved sharing the draft of the Risk Assessment with relevant stakeholders, as well as organizing a face-to-face meeting with stakeholders to present and discuss the findings.
PART I: VIETNAM – TIMBER TRADE AND THE VPA

This part of the report focuses on Vietnam. There are sections related to the general trade of timber of Vietnam, and the country’s timber industry. We also look specifically at the timber trade between Laos and Vietnam, and Cameroon and Vietnam – in terms of describing the size of trade, the products and species traded, as well as analysing the discrepancies in reported trade data between Vietnam and the two supplier countries.

As one of the fastest-growing timber processing hubs, Vietnam has experienced a steady increase in timber imports over the past few years. In both Laos and Cameroon, Vietnam has been a major trading partner for export of logs (roundwood) and sawn wood, although timber volumes exported from Laos to Vietnam have decreased since 2016 due to Laos’ ban on export of primary products (Prime Minister Decree 15). The correct declaration of the scientific name of timber species for export/import remains a major challenge for the customs authorities involved in the verification process.

With a decline in imports from Laos, Cameroon and other African countries have become increasingly important as sources of hardwood timber for Vietnam.

This chapter will provide an overview of the current trade patterns and trends between Vietnam and Laos and between Vietnam and Cameroon. The overview will include all relevant aspects that characterize these trade relations, as well as looking at issues relevant to implementation of the Vietnamese VPA.

Note on data sources:
The drafting of this chapter of the report was affected by lack of available data. It has been difficult to access primary trade data, especially in Vietnam and in Laos, where these types of data are not shared nor made publicly available.

Data can be flawed, be inconsistent, and can be a source of bias, if the source of data is not well understood. From a research perspective, it is ideal to be consistent and use a single and/or sets of singular datasets for analysis to minimize the introduction of error and discrepancy between datasets.

An example of a single trade dataset that is publicly available is UN COMTRADE®, and despite its appeal for this type of research, it was determined to be undesirable due to the Harmonized Commodity Description and Coding System (HS code) specificity and the large discrepancies often seen in COMTRADE data compared other country-specific data.

Hence, the research team extracted data from numerous previously published studies and undertook individual consultation to try to get a more nuanced and complete set of trade statistics related to the Laos–Vietnam trade and Cameroon–Vietnam trade. Nevertheless, it is important to bear in mind that using multiple sources of data for each country can introduce additional discrepancies, as there can be reporting differences and nuances that do not transfer into the dataset extracted from secondary literature and compiled from consultant queries with government competent authorities.

The need to work on more harmonized data and access to primary data sets to better understand and monitor the trade between the countries is already a recommendation to the project stakeholders.

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8 [https://comtrade.un.org/]
1 Vietnam’s timber sources and imports

Vietnam is one of the world’s largest exporting countries of timber and timber products. The wood industry’s export turnover has been rising over the past few years, with US$ 7 billion in 2016, US$ 7.66 billion in 2017, US$ 8.48 billion in 2018 and US$ 11,184 billion in 2019 (Nhan Dan, 2019). Vietnam’s wood industry uses both domestic and imported raw materials. Figure 2 shows the volume of raw wood in cubic metres (roundwood equivalent or RWE) sourced and marketed in 2016.

The types of timber raw material which Vietnam imported, and values, are shown in Figure 3 below. While Vietnam’s tropical wood imports are large, a significant proportion of wood products exported from Vietnam are manufactured using imported wood from temperate forests. Vietnam imports more than 160 species of timber from over 100 countries and territories. Imported timber may be divided into two main groups:

- **Group 1**: Wood species originating from tropical forest countries such as the countries in the Mekong region and in Africa. This timber is considered as high risk. It accounts for nearly 50% of total imports.
- **Group 2**: Wood species from the United States and countries in Europe and Latin America. Annually, Vietnam imports 1–2 million m$^3$ roundwood equivalent (RWE) from this group. Major source countries are the United States, New Zealand, Chile, Brazil, Finland, and Germany.
In 2018, Vietnam’s wood processing industry imported roundwood equivalent to nearly 10 million cubic metres, at a value of almost 2.5 billion US$, with this providing about 25 per cent of the total input required by the domestic industries, according to the International Tropical Timber Organization (ITTO).

According to Vietnam government statistics, in 2017, the value of Vietnam’s wood product imports increased 17% to US$ 214 million from Cambodia, 13% to US$ 103 million from Thailand, and 0.4% to US$ 94 million from Malaysia. These gains offset a 47% decline in imports from Laos, to US$ 42 million and a 16% decline in imports from Indonesia, to US$ 18 million.

UN COMTRADE data indicate that the value of Vietnam imports of timber products from Cameroon increased 24% from US$ 143 million in 2015 to US$ 177 million in 2016, making Vietnam Cameroon’s second largest export market after China.

Figure 3: Raw material imports by Vietnam 2013–2018 in US$. Source: Calculation of VIFORES, FPA Binh Đình, HAWA, BIFA and Forest Trends, based on statistics of General Department of Customs.

Figure 3 (above) illustrates the trends in Vietnam’s timber imports, where sawn wood and planks are both considered sawn wood.

Table 1: Sources of imports and total values in US$ 2015–2018. Source: Calculation of VIFORES, FPA Binh Đình, HAWA, BIFA and Forest Trends, based on statistics of General Department of Customs.

<table>
<thead>
<tr>
<th>Market</th>
<th>Value (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>Africa</td>
<td>265,197,407</td>
</tr>
<tr>
<td>China</td>
<td>257,576,801</td>
</tr>
</tbody>
</table>
In the above table 1 it is evident that the value of imports has increased from most markets, especially Africa, China, US and the EU, while the values have decreased for Cambodia and Laos.

High-value natural timber imported as logs and sawn wood is mostly utilized for domestic market products such as furniture, handicraft and house construction, processed in wood craft villages; while logs and sawn wood originating from plantations and other materials such as plywood and veneer are processed at wood processing companies for indoor and outdoor furniture, and for export to international markets. According to Phuc et al. (2019), Vietnam’s wood processing enterprises spent more than US$ 2.34 billion on import of wood products in 2018. Of the total value, US$ 2 billion worth was in the form of round logs and sawn wood of which the vast majority is imported as raw material or semi-finished goods for further processing. Import turnover remained on the rise, however the growth rate in the export value is much higher than that of growth in imports.

Phuc et al. (2019) list the major source countries for roundwood. Among these, 7–8 countries have an average annual supply of 10,000 m³ per year or higher (Table 2). Table 1 and 2 also underlines the drastic drop in imports from Laos after 2016.

Table 2: Major suppliers of sawn wood to Vietnam by volume (m³) (Phuc et al., 2019).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>465,634</td>
<td>485,884</td>
<td>473,851</td>
<td>460,376</td>
<td>496,630</td>
<td>541,510</td>
</tr>
<tr>
<td>Cambodia</td>
<td>51,126</td>
<td>153,547</td>
<td>377,950</td>
<td>171,306</td>
<td>272,693</td>
<td>219,909</td>
</tr>
<tr>
<td>Chile</td>
<td>140,237</td>
<td>138,159</td>
<td>163,099</td>
<td>187,749</td>
<td>246,429</td>
<td>309,346</td>
</tr>
<tr>
<td>Brazil</td>
<td>57,463</td>
<td>85,749</td>
<td>91,714</td>
<td>110,661</td>
<td>170,399</td>
<td>209,706</td>
</tr>
<tr>
<td>Cameroon</td>
<td>22,751</td>
<td>23,107</td>
<td>33,741</td>
<td>47,552</td>
<td>85,349</td>
<td>117,379</td>
</tr>
<tr>
<td>Gabon</td>
<td>19,010</td>
<td>31,438</td>
<td>50,988</td>
<td>58,814</td>
<td>105,780</td>
<td>79,846</td>
</tr>
<tr>
<td>New Zealand</td>
<td>185,670</td>
<td>155,719</td>
<td>155,049</td>
<td>164,756</td>
<td>171,298</td>
<td>166,351</td>
</tr>
<tr>
<td>Croatia</td>
<td>11,009</td>
<td>20,775</td>
<td>31,344</td>
<td>48,041</td>
<td>46,385</td>
<td>63,796</td>
</tr>
<tr>
<td>China</td>
<td>14,531</td>
<td>9,957</td>
<td>7,814</td>
<td>12,884</td>
<td>32,638</td>
<td>44,524</td>
</tr>
<tr>
<td>Laos</td>
<td>358,485</td>
<td>495,126</td>
<td>383,149</td>
<td>97,138</td>
<td>43,697</td>
<td>36,038</td>
</tr>
<tr>
<td>Colombia</td>
<td>131</td>
<td>27,349</td>
<td>66,920</td>
<td>75,569</td>
<td>36,287</td>
<td>36,911</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5,567</td>
<td>14,315</td>
<td>32,201</td>
<td>30,447</td>
<td>38,532</td>
<td>29,403</td>
</tr>
<tr>
<td>Ghana</td>
<td>1,503</td>
<td>4,740</td>
<td>12,429</td>
<td>22,092</td>
<td>33,236</td>
<td>28,020</td>
</tr>
<tr>
<td>Uruguay</td>
<td>10,787</td>
<td>15,395</td>
<td>13,750</td>
<td>20,436</td>
<td>31,008</td>
<td>29,707</td>
</tr>
<tr>
<td>Sweden</td>
<td>20,754</td>
<td>25,789</td>
<td>20,100</td>
<td>36,038</td>
<td>29,707</td>
<td>16,621</td>
</tr>
</tbody>
</table>

As can be seen, Cameroon is, by far, the largest exporter of roundwood, whereas Laos still is an important source...
of sawn wood to Vietnam. Another interesting observation from the above tables is that the imports from Cambodia increased significantly around the time Laos started enforcing their log export ban. Also trade from Gabon, PNG, Angola and Equatorial Guinea have experienced a marked increase.
1.1 Imports from Africa

In 2018, Vietnam imported timber from 21 different African countries with a value of roundwood import of approximately US$ 515 million in 2018 - an increase of 51% compared with that of 2015. The top African exporting countries include Cameroon, Republic of Congo, Kenya, South Africa, Nigeria, and Ghana in terms of timber volume exported to Vietnam; of which roundwood accounts for 70% and sawn wood 30% of the volume.

Cameroon is a significant source of sawn wood for imports to Vietnam. In 2018, Vietnam imported approximately 117,000 m$^3$ sawn wood of the species tali, doussis, and other species. In general, sawn wood species imported from Cameroon into Vietnam are precious wood species.

Nigeria has become an important supply of timber for Vietnam. In 2016, the Vietnamese timber industry invested approximately US$ 36 million to import 85,490 m$^3$ logs. Most of the imported logs were padauk (81,680 m$^3$, US$ 34.5 million).

Gabon is another key source of sawn wood for Vietnam, with a reported import volume in 2018 of 79,846 m$^3$. Imported species from Gabon are predominantly high value hardwood species.

1.2 Domestic supply of industrial wood

The domestic supply of industrial wood is expanding to keep up with spectacular growth in demand in Vietnam’s domestic and export markets. This also reflects the Government decision to protect the country’s forests and promote forest plantations. As a result, domestic production in 2016 reached 25.6 million m$^3$, composed of:

- **Plantation timber**: About 17 million m$^3$ of plantation timber is harvested per year, of which 80% is acacia. Nearly 60% of the total harvest is from smallholders (1.1 million households) with the remaining 40% coming from State Forest Companies. Both the total plantation area and harvest volumes have expanded.
- **Rubberwood**: About 3.2 million m$^3$ of rubberwood is harvested annually. More than 43% of it comes from smallholders (263,876 households with rubber plantations) and the remaining 57% from (mainly) state-owned and private rubber companies.
- **Scattered trees**: Millions of smallholders produce 4.4 million m$^3$ of wood from trees. Of this total, 3.3 million m$^3$ are classified as coming from scattered trees.
- **Conversion timber and other sources**: About 1 million m$^3$ of timber comes from other sources, including conversion forest – such as timber harvested from infrastructure projects such as mines or dams – and illegally harvested timber.

2 Vietnam timber exports

Vietnam’s export market is much larger than its domestic market, with over 24 million m$^3$ of wood products exported each year compared to 7 million m$^3$ sold domestically.

The key export products include:

- **Wood chips**: According to data from VIFORES, FPA Bình Định, HAWA, BIFA and Forest Trends, a total volume of about 7 million dry tonnes (14 million m$^3$ roundwood equivalent), wood chip exports are valued at more than US$ 1 billion each year. Vietnam exports approximately 60–70% of this wood chip volume to China. Despite a furniture industry-supported wood chip export tax to reduce exports of low value-added timber products, there has not been a reduction in wood chip plantation area, production, or export.
- **Furniture:** In 2018 exports of furniture accounted for about 60% of total timber export revenue, exceeding US$ 5 billion per year. The United States is the largest market for Vietnamese furniture, followed by the EU. Half of the revenue is from the sale of outdoor furniture, and the remainder is from indoor furniture and wood-based handicrafts.

- **Other products:** This category includes various wood products classified under Harmonized System (HS) codes 4401–02, 4404–06, and 4419–21.

- **Logs and sawn wood:** Vietnam mainly imports tropical hardwoods, including rosewood species, from other Mekong countries and Africa. Vietnam re-exports imported logs and sawn wood of rosewood species to China.

### Table 3: Export market value (top 20) for wood and timber products 2015–2018. Source: Calculation of VIFORES, FPA Bình Định, HAWA, BIFA and Forest Trends, based on statistics of General Department of Customs.

<table>
<thead>
<tr>
<th>Country</th>
<th>Export Value (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>USA</td>
<td>2,577,528,222</td>
</tr>
<tr>
<td>Japan</td>
<td>1,016,324,648</td>
</tr>
<tr>
<td>China</td>
<td>986,118,400</td>
</tr>
<tr>
<td>Korea (Republic)</td>
<td>495,613,873</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>279,980,586</td>
</tr>
<tr>
<td>Australia</td>
<td>152,375,399</td>
</tr>
<tr>
<td>Canada</td>
<td>148,518,606</td>
</tr>
<tr>
<td>France</td>
<td>99,541,938</td>
</tr>
<tr>
<td>Germany</td>
<td>127,646,430</td>
</tr>
<tr>
<td>Malaysia</td>
<td>47,981,121</td>
</tr>
<tr>
<td>Netherlands</td>
<td>67,487,085</td>
</tr>
<tr>
<td>Taiwan</td>
<td>70,413,202</td>
</tr>
<tr>
<td>Laos</td>
<td>2,023,380</td>
</tr>
<tr>
<td>India</td>
<td>98,813,301</td>
</tr>
<tr>
<td>Indonesia</td>
<td>6,505,473</td>
</tr>
<tr>
<td>Thailand</td>
<td>21,307,960</td>
</tr>
<tr>
<td>Belgium</td>
<td>29,487,190</td>
</tr>
<tr>
<td>Spain</td>
<td>22,292,982</td>
</tr>
<tr>
<td>Sweden</td>
<td>23,999,800</td>
</tr>
<tr>
<td>Ireland</td>
<td>22,223,822</td>
</tr>
</tbody>
</table>

As depicted in Figure 4 (below), the Vietnamese timber industry mainly exports to regulated markets such as the US, Japan, Australia, and the EU. However, China also plays a very important role.
2.1 Domestic market

With more than 90 million people and an expanding middle class, Vietnam’s domestic market is increasingly prominent, consuming approximately 4 million m$^3$ roundwood equivalent in the form of furniture and 3 million m$^3$ for housing and construction needs, valued at about US$ 2 billion in total (Nguyen et al., 2016). However, information on the dynamics of the domestic market is scant, with little systematic collection of data concerning scope, operations, products and distribution networks as they have evolved over the past half-decade. Other sources estimate that the market is much bigger, with annual consumption of about 10 million m$^3$ roundwood equivalent (Phuc, 2017), broken down as follows:

- **Furniture**: 4.2 million m$^3$, including tables, chairs, bedroom furniture, kitchen furniture, etc.
- **Construction**: 1.5 million m$^3$, including pillars, wood used for construction sites, etc.
- **Housing**: 4.5 million m$^3$ of timber
- **Mining and boat construction**: 0.5 million m$^3$

Products for domestic markets are primarily sourced from domestic plantation timber (acacia), scattered trees, rubberwood, imported timber from the United States, EU and Latin America, and imported timber from tropical forests in Cambodia, Laos, Myanmar and Africa.

Phuc et al. 2017 examined the domestic market through the lens of timber product groups sold on this market. This approach adopts the following classification, and helps to delineate the potential risk of illegal sourcing related to the product type:

- **Normal products**: Diverse products in terms of design made from domestic plantation timber, rubberwood, plywood, and scattered trees. The risk of illegal harvesting may vary.
- **Modern style products**: Products – such as tables, chairs and flooring made from imported timber from the United States, EU and Latin America – are mostly consumed by young people in big cities. Products made from lower-value species that are sourced from the United States and EU are exported back to the source countries or sold on the domestic market. There is considered to be a relatively low level of legality risk associated with this source of timber.
• **Traditional products:** High-value species imported from tropical countries are typically transformed into heavy, dark-coloured and ornate furniture. Some of these products come from tropical timber species illegally harvested from Vietnam’s natural forests. Prices are much higher than those of normal or modern style products. Customers tend to be traditional, and in the middle or older age groups. These products are at the highest risk of illegal sourcing.

**High-risk product flows**

Most of Vietnam’s smallholder and plantation forests supply mainly low-risk species, such as acacia and rubberwood, that feed the low value-added wood chip export industry. On the other hand, about half of imported materials are tropical hardwoods, some of them rosewood species from countries in the Mekong and Africa with high-risk profiles as regards timber illegality. According to interviews conducted during data collection for this study it was found that these high value species are mainly manufactured and sold in Vietnam’s domestic markets, with some high-value rosewood products exported to China.

### 3 Vietnam’s wood industry

Vietnam has about 4,500 wood processing enterprises, up from 2,500 in 2008 to 4,500 in 2017, including 3,900 domestic and 600 foreign-funded enterprises. 95% of processing enterprises are privately owned and 5% are state owned. 93% of enterprises are small or very small, 5.5% medium, and 1.5% large companies. About 1,500 enterprises both process and export timber and timber products.

Besides formal (registered) enterprises, there are also thousands of timber processing and trading companies functioning at a household level, especially in craft villages or geographical areas associated with raw materials (timber harvesting and non-timber forest products). According to the Vietnam Forest Products Association and Forest Protection Department (2016), there were 11,549 timber processing businesses in 2016. In 2015, 93% of these enterprises were small or micro enterprises, 5.5% were medium enterprises and only 1.2% were large enterprises.

Foreign-funded enterprises comprised 30% of large enterprises. Eighty-two percent were private enterprises, foreign-invested enterprises accounted for 14%, and the rest were state-owned enterprises (4.3%) (VCCI, 2014). The scale of timber processing and production is expanding, however most timber processing enterprises are still small in scale.

### 3.1 Importers

There are generally three types of timber importers in Vietnam:

1. The first type is trading companies which import timber as round logs or sawn wood and sell to local/Vietnamese manufacturers for further processing. These traders do not own sawmill facilities, but may rent storage capacity inside the port and sell directly to buyers from there;

2. The second type are traders who imports round logs but also operate sawmilling facilities near the port. These traders often produce sawn wood based on specific orders from local manufacturers and sell sawn wood directly to them. These traders also import sawn wood and re-sell to local manufacturers.

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3. The third type consists of Vietnamese wood product manufacturers: they use some volume of imported timber for their own production and export products to the international market. Some of them also sell some volume of the imported timber to other processing companies in Vietnam. Not all local manufacturers own sawmill facilities, but those who do, buy imported timber and produce “cut to size” sawn wood.

It is estimated that there are about 300 companies importing timber in Vietnam. Some of them (around 10) are traders with 100% foreign investment registered business in Vietnam, owned by Chinese, Taiwanese, Singaporean. The rest are Vietnamese companies.

Each of the 20 largest traders import up to 50,000 m$^3$ RWE per year. Approximately 100 traders, considered as medium scale, each import between 5,000 and 10,000 m$^3$ RWE per year.

There are three large wood processing hubs in Vietnam, located in Dong Nai, Binh Duong and Binh Dinh provinces – with hundred companies from large- to medium-scale. Other areas are HCMC in the South, Quang Nam, Da Nang, Quang Ngai, Hue and Quang Tri provinces in central Vietnam.

Timber processing companies in Vietnam can be roughly divided into groups according to their main sources of timber:

- The companies buying natural timber from Africa, Laos, Cambodia, which are not normally FSC COC-certified.
- The entities buying FSC-certified plantation timber (e.g. acacia, eucalyptus, teak, pine, ash, oak) from Europe, US, New Zealand, etc.; these companies are 100% FSC CoC-certified for trading activities.
- The companies buying hardwood from US, Canada and European countries: they are also mostly FSC COC-certified for their trading business.

Related to the import of high-risk materials (e.g. hardwood from Africa, Cambodia, Laos) it is noted that most of this wood is processed within Vietnam’s extensive network of households within wood villages. The total amount of imported wood used by wood villages is about 1.4–1.75 million m$^3$ RWE (NEPCon and Forest Trends, 2018).

4 The Vietnam VPA and Timber Legality Assurance System (TLAS)

This section describes current regulations for import of timber into Vietnam. It also includes a description of the current commitments for regulating timber imports, as described in the VPA.

The Vietnamese Government has committed to ensuring that imported timber products have been harvested, produced and exported in accordance with relevant legislation of the country of harvest in line with the procedures described in the VPA, Annex 5, Section 6.3.7. Due to the size and value of Vietnam imports it will be key for the success of the VPA that the Government ensures that effective systems are developed and implemented. Effective measures must be in place to evaluate imported timber and ensure that the origin can be confirmed, and that adequate information is available to indicate legality.

With signing the VPA, Vietnam committed to work on an import regulation and requirements as part of the VNTLAS to verify that imported timber and timber products have been legally harvested and traded in accordance with the relevant legislation in the country of harvest. An article on the development of VNTLAS was included in the new Vietnamese law on forestry passed in November 2017. A Decree and Circulars are now being drafted to define different aspects of the implementation of VNTLAS covering domestic and imported timber through to sale on all markets.

It should be noted that the legal basis for meeting the import commitments outlined in the VPA are still under development in the form of the VNTLAS Decree.

To best inform the development of the VNTLAS and import regulations, it is important to understand legality.
requirements in the country of origin, including requirements for the harvest, processing and export. This will eventually support Vietnamese importers in following these requirements and Vietnamese authorities in verifying the legality of the timber imported. Equally important is to inform supplying countries about the import requirements of Vietnam, as they are currently defined through due diligence requirements.

4.1 Current import requirements

Vietnam implemented the WTO Customs Valuation Agreement through the 2006 Customs Law and related regulations, which significantly improved its customs valuation process. In 2014, the Vietnam National Assembly passed a revised Customs Law, which came to effect in 2015. The revised law regulates the implementation of a national singular form in customs operation that applied risk management principles, new regulations on the establishment of the Customs Department, the authorization of the Customs Authorities to determine the origin of goods, and more.

Import rights are granted for all goods, except for a limited number of products reserved for importation through state trading enterprises and certain products subject to a phase-in period for trading rights under Vietnam’s WTO accession agreement. There are no current limitations on timber products other than those relevant to CITES implementation as outlined in the Decree 06/2019/ND-CP.

Goods to be imported or exported are subject to the relevant customs clearance standards, which effectively check the quality, specifications, quantity and volume of the goods. Currently, these standards are set out under Law No. 54/2014/QH13 on customs as well as numerous implementing decrees and guiding circulars.


Imported goods require the following documents:

- Bill of lading
- Import goods declaration form
- Import permit (for restricted goods)
- Certificate of origin
- Cargo release order
- Commercial invoice
- Customs import declaration form
- Inspection report
- Packing list
- Delivery Order (for goods imported through seaports)
- Technical standard/health certificate
- Terminal handling receipts.

The import of timber follows standard customs procedures.

4.2 VPA TLAS import due diligence requirements

In connection with the development of the Vietnam TLAS, new regulations are under development. A draft Decree is under development to ensure that the commitments of the VPA, Annex 5 – related to imported timber – are incorporated in legal text of Vietnam. Below we look at these requirements and how they compare to known best practices and established procedures for due diligence.

The legality of imported material can be demonstrated by one of the following (VPA Annex section 6.3.7):

1. Valid FLEGT licence or equivalent export licence covering the entire shipment from an exporting country which has concluded a VPA with the EU and has an operational FLEGT licensing system in place; or
2. Valid CITES permit covering the entire shipment; or
3. A Self-declaration demonstrating due diligence and additional documentation according to the risk categories status of the imported timber as specified in Table 4 of this Annex V.

Figure 5 below, is taken form the VPA Annex V, and illustrates the import system expected to be implemented.

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14 The draft Decree version 3 has been reviewed for development of this report.
Figure 5: VNITLAS chart of timber import controls. Source: Vietnam VPA.
Figure 6 below, shows a list from Annex V (of the VPA) contains the following categorisation of risks:

Figure 6: Table from the Vietnamese-EU VPA illustrating the risk categorization. Source: Voluntary Partnership Agreement between the European Union and the Socialist Republic of Vietnam on Forest Law Enforcement, Governance and Trade.

<table>
<thead>
<tr>
<th>No</th>
<th>Risk status of the shipment</th>
<th>Verification measures based on the risk status of the shipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Species risk category</td>
<td>Geographic origin risk category</td>
</tr>
<tr>
<td>1</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>2</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>4</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

The draft Decree on TLAS (Draft 3) outlines also the criteria for risk management in Article 5 – criteria based on origin, and article 6 – criteria based on species.

Based on the above it is clear that the self-declaration of importers will be the key instrument used in determining the level of potential risk related to each shipment.

The self-declaration to be submitted shall use a template provided by the authorities and includes information on shipment (origin, species, documents indicating legality, risk assessment and risk mitigation actions).

In terms of comparing the VPA with other due diligence frameworks, such as the EU Timber Regulation, the US Lacey Act, the Australian Illegal Logging Prohibition Act, and others, a number of observations can be made, as follows:

4.2.1 Defining legal timber

The VPA and the draft TLAS Decree, clearly defines legal timber as “...timber products harvested, produced and exported in accordance with relevant legislation of the country of harvest...” and define relevant legislation relating to the following categories of legality:

1. Rights to harvest: Granting of rights to harvest timber, including compliance with legislation and procedures on forest land allocation and forest use and land use rights.
2. Forestry activities: Compliance with legal requirements regarding forest management and timber processing, including compliance with relevant environmental and labor legislation.
3. Taxation and fees: Compliance with legal requirements on taxes, royalties and fees directly related to timber harvesting and timber trade.
4. Trade and customs: Compliance with legal requirements on trading and customs procedures.

4.2.2 Requirements on legality and due diligence

The Vietnam VPA and the draft TLAS Decree do not include a ban or prohibition on placing illegally harvested timber on the Vietnamese market. The TLAS Decree does include, in Article 4, a clause requiring that “Imported timber must be ensured to be legal...”, however this is not considered a prohibition.

Also, the VPA and TLAS Decree does not require a due diligence system to be in place to manage risks but does mention a risk management system to control the risk of importing illegal timber. Rather the draft TLAS Decree contains in Article 3 – interpretation of terms, the use of the term “Explanation”, which currently is defined in the draft Decree as: “Explanation is the act that organisation or individual provide information related to the legal
The definition infers the implementation of a due diligence system, while the term explanation, and the definition, do not seem to fit this purpose.

### 4.2.3 Access to information

The draft TLAS Decree (Article 4) and the VPA (Annex V, section 6 on supply chain controls) does not directly require importers to have access to information about the origin of material. However, the subsequent requirements for risk assessment and the contents of the self-declaration form (Form 03 of the TLAS Decree), include information about the country of harvest as well as copies of harvesting documents or permits. This means that the importer must have access to information, not only about the country of harvest, but also the actual forest of harvest.

The self-declaration form (Form 03 of the TLAS Decree) does take a risk-based approach to documentation requirements, only requiring a harvesting document/permit in cases where the material are not low risk species and does not originate from positive geographical areas (see details below).

In Article 7 of the TLAS Decree, the requirements for providing documents related to imported timber are listed. Point d) in this clause also refers to the term *Explanation* to accompany the self-declaration and documents required there (Form 03). The self-declaration in turn requires that the importer lists the harvesting documents/permits where required (for all imports from countries NOT from positive geographical regions and made from low risk species).

It is noted that these requirements again focus on documentation and seem to be limited to the harvest documents/permits. There is no mention of access to additional type of information or documents, such as documentation for broader legality issues (land rights issues, taxes and fees, third parties' rights etc) or information regarding risk levels in the specific supply chains. These definitions narrow the system to include provision of harvest documents and do not consider the fact that other types of documents, such as documents related to legal performance against provisions for taxes and fees, third parties' rights and trade and transport.

These other types of documents are equally relevant to indicate legality against the legality definition (as outlined in the VPA and the draft TLAS Decree), which include a more complex range of issues than just a legal harvest permit.

It is therefore recommended that the wording of the TLAS Decree is changed to include a more complete definition of due diligence and provide more clear requirements for the type of documentation and risk management process that will be expected.

### 4.2.4 Risk assessment

The principles in Article 4 of the TLAS Decree (Clause 1) state that “Imported timber must be ensured to be legal”. In terms of the VPAs commitment to implement a risk-based system, this formulation seems to require assurance of legality in imported timber, rather than applying a risk based approach to seek to manage the risk of importing timber from illegal harvest and trade. This wording in the VPA is not reflected in the draft TLAS Decree, which applies a weaker definition of how risks of illegality should be managed.

The VPA, Annex 5, Section 6.3.7 also outlines the commitment to implement controls on imported timber through the following three risk-based verification filters and measures. These criteria are also reflected in the draft TLAS Decree in Articles 5 and 6:

1. Customs risk assessment system.
2. Species risk categories.
3. Risk associated to geographic origin of timber.
These three filters will be determining for decision on whether additional “physical checks” or additional documentation will be needed. The VPA goes on to describe the import due diligence for these three filters:

The customs risk assessment system is described as a process for customs to classify risks imposed on customs declarants and import and export shipments according to different levels (Red, Yellow, Green). However, it is not immediately clear what indicators will be used to assign the risk as red, yellow, or green.

The species risk is based on defining species into high or low risk. The VPA contains the following formulation related to risk classification of named species (Annex V, Section 6.3.7.4):

“Imported timber species shall be classified into 2 groups: high risk and low risk, based on the following criteria: –

- **High risk species are defined as those listed in Appendix I, II, III of CITES; critically endangered, precious, and rare species in Group IA and IIA according to legislation of Vietnam on controlled timber species; and species illegally traded according to the FPD database of violations of the Law on Forest Protection and Development and the database of the Customs Authority of Vietnam.**

- **The Joint Implementation Committee (JIC) shall consider additional species which are at risk of being endangered in the country of harvest or illegally traded, as officially proposed by Vietnam or the EU to the JIC, or based on information from the United Nations Organisation for Drugs and Crimes (UNODC), Interpol, CITES Secretariat, or World Customs Organisation (WCO), for inclusion on the list of high risk species.**

- **Species which are imported into Vietnam for the first time shall be considered as high risk unless otherwise decided by the JIC. Complex timber products that combine both high risk and low risk species shall be treated as high risk.**

- **Low risk species are defined as those not belonging to the above category.”**

In relation to geographical risk, the VPA outlines criteria for countries or regions to be placed on a list of “positive geographical areas”; that is stated to be developed by the Ministry of Agriculture and Rural Development (MARD) in agreement with the EC and the Joint Implementation Committee.

The VPA contains criteria for when positive geographical area status can be assigned, as follows:

“Countries are considered low risk if:

- **they have an operative TLAS in place issuing FLEGT licences; or**

- **they have binding national regulatory frameworks on due diligence for timber legality covering the whole supply chain to the country of harvest recognized by Vietnam as meeting the VNTLAS criteria; or**

- **the indicator for effectiveness of government according to the World Bank Worldwide Governance Indicators (WGI) is from 0 and above, and a regulatory system for CITES implementation is rated I-level as announced by the CITES Secretariat, and one of the two following are met:**
  
  (i) **Vietnam has a bilateral agreement on timber legality with these countries, recognized by Vietnam as meeting the VNTLAS criteria provided that these agreements have been published, or**

  (ii) **Countries have a national regulatory timber certification scheme recognized by Vietnam as meeting the VNTLAS criteria.”**

The draft TLAS Decree uses similar text, including Article 5 containing requirements for determining which countries are positive or non-positive geographical regions, and Article 6 containing requirements for identifying timber species risks.

Certification is mentioned in the TLAS Decree as part of assigning a positive geographical area rating – however, it is not clear from the text how such national or international systems will be evaluated in order to ensure that they
do in fact cover the legality definition applied in the VPA for imported timber, and have quality controls that are strong enough to secure integrity of the systems.

In both Articles 5 and 6 it is stated that the list of such positive geographical areas and list of high-risk timber species will be developed by MARD.

The challenge in this approach is that, while the responsibility to ensure legality still rests with the company importing goods, it will become the responsibility of the Vietnamese Government to assign risk scoring to species, as well as to geographical areas. This exercise is labour intensive and will require the Government to continue to update information to make efficient decisions. It will also be the responsibility of the Government of Vietnam to evaluate and recognize other countries’ national certification or due diligence systems, if they are to be approved as low-risk sources. The fact that the Government plans on making risk conclusions, means that the Government will assume a certain level of responsibility for the results or conclusions of this assessment – in the case of the Vietnam VPA the Government states that they will be responsible for identifying high risks species and “positive geographical areas”, in which case they could be considered to assume some of the responsibility for the due diligence process. It is noted that the EUTR is formulated somewhat differently, placing all responsibility on the Operators (companies), while allowing them to be supported by expert consultant organizations in the form of Monitoring Organizations. This set-up maintains the responsibility with the Operator, instead of requiring EU to make decisions on the integrity of other countries’ certification systems. This might be an approach that could also be adopted in the development of the VN TLAS decree development.

4.2.5 Risk mitigation measures

It is noted that very little text is allocated to describing what is expected in terms of risk management in cases where the import originates from non-positive geographical areas or are high-risk species. It is not clear, in the current texts of the VPA or the TLAS Decree, how material with a high-risk origin or of high-risk species should be managed, other than providing additional documentation in the self-declaration.

The VPA Section 6.3.7.1 in Annex V mentions the due diligence obligation of importers:
“…they (importers, ed.) shall exercise due diligence over the legal origin of imported timber, which covers collection of information, risk assessment and mitigation of any risk identified.”

However, due diligence and risk management is hardly mentioned in the draft TLAS Decree, only in the form of a brief mention in the principles of Article 4. The Decree does not provide any clear requirements regarding the form of risk management that is expected.

In the draft TLAS Decree, Article 7, Clause 2, d), it is required that importers make an “explanation” (see above on the issue of defining this term), along with documents required in the self-declaration. Also, here it is not clarified what the explanation should contain, other than what is explained in the interpretation of the term “explanation”.

It is clear from experience with implementation of due diligence systems to manage timber legality risks, that documents alone are not considered enough as evidence of legality. It has clearly been shown that documents may be falsified or misused in other ways to indicate legality. It is therefore suggested that clearer requirements towards providing evidence of legality should be included in the VNTLAS for imported material. Such changes to the draft TLAS Decree may entail:

- Include wording that allows the risk management requirements to reflect the stated definition of legal timber.
- Include a clear definition of due diligence, and exactly what obligations the Operator shall fulfil, and use this same definition in the articles of the Decree.
- Clarify to what level risk shall be mitigated by importers and ensure that it is clear if imported timber shall “...be ensured to be legal...” or if the imported material shall be “...subject to risk management...”. It is important to distinguish between ensuring something is legal or managing risks that it is not.
• Ensure that the criteria for determining “positive geographical areas” are clear, transparent and implementable (Article 5), and that the definition ensures that timber from such areas in fact are legal according to the definition of legal timber (Article 3).

• Ensure that the definition of low risk species ensures that the low risk is consistent with the definition of legal timber. The current criteria to identify species of risk, is not considered to provide a consistent approach that would identify all possible species of risk. E.g. teak is not currently on the Group I or II of the Vietnamese regulations and would therefore be considered a low risk species.

In the following sections, an overview is provided of the legal requirements, and potential timber legality risks, as well as a summary of documents used for verification of legality in the timber sector of 10 countries, from which Vietnam is importing. This information is intended to be used as part of the due diligence process of importers in Vietnam, and as guidance to the Vietnamese Government for their implementation and development of the VNTLAS import regulations.
5 Laos timber trade

Before 2016, Laos used to be considered as a hub for providing logs and sawn wood to China and Vietnam. In May 2016, the Government of Lao PDR enacted a Prime Ministerial Order (PMO 15) which, along with other commitments, aimed to help control the country’s high deforestation rates and promote Laos’ own domestic wood product industry by banning the export of all logs and sawn wood. Effects of these regulations are now being felt by both the Vietnamese and Chinese timber industries. Vietnam and China together imported approximately 87 per cent of all Lao timber product exports in 2015 – almost all of which (94 per cent) were in log or sawn wood form.

Lao PDR currently has 13.7 million hectares (ha) of forest cover (58 per cent of land area) and the 8th National Socio-Economic Development Plan 2016–2020 (NSEDP-8) and National Green Growth Strategy 2019–2030 aim to raise forest cover from the current 58 per cent to 70 per cent. Despite recent progress, the past 10 years’ inventories of Lao PDR’s Production Forest Areas (PFAs) show dramatic reductions in commercial grade timber stocks.

The objective of the Lao Government is to increase the domestic revenue from the timber sector by increasing the production of final and semi-final products, as opposed to exporting only round logs and sawn wood.

The wood processing industry of Laos is characterized by low value addition and efficiency, the non-transparent allocation of logging quotas and low capacity utilization. To operate at full capacity, the wood processing industry would require an equivalent of three to five times the sustainable annual allowable cut. On present trends and without significant reform in promotion and regulatory policy and improvement of private sector capacity, the industry will be unable to contribute meaningfully to the economy in the near future.

The main semi-finished product is sawn wood, which is sold on the domestic market and to small factories producing finished products that do not have log quotas or sawmilling capacity of their own. The finished products can be broadly divided into four categories: joinery products; flooring; furniture; and handicrafts. Some furniture factories buy logs and mill them, while others purchase sawn wood and other raw materials on the local market.

Apart from the domestic market, the principal markets for Lao wood products are in Thailand, Vietnam, and China, with small amounts going to the EU and other countries. Although there is an official ban on the export of logs and sawn wood, Lao timber is still mainly exported in the form of logs or different kinds of primary wood processing products. These include sawmill items, with additional minor quantities further processed into strip parquet flooring, furniture and other secondary wood processing products. There are significant differences between the different sources of official export statistics and the mirror import statistics for the main countries importing Lao wood products.

The export of finished wood products to Vietnam was low in 2016, due to the immediate effect of PMO 15. Total export values of wood products (including charcoal and fuel wood) increased between 2016–2018, with the biggest change happening in furniture or furniture pat (HS9403), jumping from US$ 109,000 to US$ 5 million, as also can be seen from the table 4.

Table 4: Wood products exported to Vietnam in the period 2016–2018 (value in US$). Source: Lao Trade Portal\(^{15}\).

\(^{15}\) Sources:
https://www.laotradeportal.net/kfinder/upload/files/Pub_153777802lo_LA.pdf
https://www.laotradeportal.net/kfinder/upload/files/Pub_1537772406lo_LA.pdf
Description and list of HS CODE see: https://www.laotradeportal.net/index.php?r=tradeInfo/listAll
<table>
<thead>
<tr>
<th>HS CODE</th>
<th>Description</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Form D</td>
<td>Form S</td>
<td>Form D</td>
</tr>
<tr>
<td>4401</td>
<td>– Fuel wood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4402</td>
<td>– Wood charcoal</td>
<td>10,002</td>
<td>36,173</td>
<td>149,175</td>
</tr>
<tr>
<td>4403</td>
<td>– Wood in the rough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4405</td>
<td>– Wood wool; wood flour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4406</td>
<td>– Wood sawn or chipped lengthwise</td>
<td>10,893</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4407</td>
<td>– Sheets for veneering</td>
<td>14,118</td>
<td>18,273</td>
<td></td>
</tr>
<tr>
<td>4409</td>
<td>– Wood continuously shaped</td>
<td>598,730</td>
<td>315,214</td>
<td>92,724</td>
</tr>
<tr>
<td>4412</td>
<td>– Plywood, veneered panels and similar laminated wood</td>
<td>332,949</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4416</td>
<td>– Casks, barrels, vats, tubs and other coopers’ products.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4418</td>
<td>– Builders’ joinery and carpentry of wood</td>
<td>54,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4419</td>
<td>– Wood and articles of wood; wood charcoal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4421</td>
<td>– Other articles of wood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4703</td>
<td>– Chemical wood pulp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9403</td>
<td>– Other furniture and parts thereof</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td>1,009,799</td>
<td>380,553</td>
<td>1,491,399</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,390,352</td>
<td>6,272,600</td>
<td>8,907,378</td>
</tr>
</tbody>
</table>

NOTE: The export information is based on Form D under ASEAN Trade in Goods Agreement (ATIGA), and Form S certificate of Origin under Laos Vietnam Trade Agreement.

### 5.1 Laos timber trade data

Forest Trends has used standard government trade data comparisons for the wood and forest products trade between Laos and Vietnam since 2014. Their work was used to highlight the magnitude of unregulated timber which ultimately resulted in the issuing of PMO 15 and subsequent moves to a more regulated, monitored and enforced TLAS framework.

It is important to note that the role of a customs agency is primarily to manage revenue (duties). Where a duty does not exist (such as exported timber), there is a lower incentive to accurately record such trade. Consequently, wood and forest products trade data are more inconsistent when Lao Customs documents and reports these products as there are no duties to collect. Conversely, the Vietnam Customs do collect duties on these products and as such the level and quality of reporting is expected to be higher.

The lack of accountability and the quality of any assessments meant that it was impossible to know if the legislated pre-logging inventories, if undertaken or reported, represented a realistic quantity from within an approved area.

In addition, it was common that conversion areas were not clearly defined, and adjoining forest resources were often exploited and laundered under existing permits (Smirnov, 2015).

Government of Laos logging quotas are determined from pre-logging inventories and then assessed against sustainable yields. Quotas allow for timber to be sourced from plantations, natural forests, and conversion activities. However, it is common for volumes, when recorded or identified, to exceed these approved quotas.

During this period Laos saw escalating exports in wood products (Figure 7), as well as a disparity between the reported Lao exports and import country imports (Table 5). Note, in 2013 and 2014 the reported value of exports was less than 10% of the declared value of imports by destination country.
Figure 7: Lao wood products export values (US$). Source: Smirnov 2015. Unpublished.

Table 5: Comparison of Laos approved harvest quota, with import data from Vietnam and China. Source: MAF/MOIC.

<table>
<thead>
<tr>
<th>Year</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao approved quota (m³).</td>
<td>357,000</td>
<td>306,000</td>
<td>580,000</td>
</tr>
<tr>
<td>Imports reported by Vietnam Customs as roundwood equivalent (40% recovery) (m³).</td>
<td>199,000/284,000</td>
<td>226,000/385,000</td>
<td>309,000/495,000</td>
</tr>
<tr>
<td>Imports reported by Chinese Customs as logs/sawn wood (m³).</td>
<td>110,000/71,000</td>
<td>205,000/96,000</td>
<td>NA</td>
</tr>
<tr>
<td>Total roundwood equivalent volumes (m³) imported by China and Vietnam.</td>
<td>1,019,000</td>
<td>1,393,000</td>
<td>1,299,000</td>
</tr>
</tbody>
</table>

Vietnam remains the largest importer of Lao sourced logs and timber products. Its imports peaked in 2015 and decreased significantly after the issuing of PMO 15 as indicated above. And while historical direct comparisons between Lao and Vietnam Customs data are inconsistent, for 2014/15, the GoL approved a timber harvest quota of 574,608 m³ and, for the same year, Vietnam’s customs reported imports from Lao of 310,000 m³ roundwood and 495,000 m³ sawn wood.

While the extent of infrastructure conversions has never been fully reported, it was estimated that in the period 2010–2016, an average of 2,000,000 m³ of logs (representing around 10,000 ha) were directly sourced annually from, or in association with, such projects and usually outside the lands specified under legal approval agreements. In effect, timber from these projects, without supporting documentation and legal approvals, could be determined as illegal.

For example, in association with Xekhaman 1 Hydro-electricity dam, a 2014 analysis reported that 71% of all logging occurred outside the designated flooding zone (that area approved for conversion logging). Similarly, a MOIC report (No. 0757 dated 20 August 2013), noted that a Vietnamese company extracted 406,114 m³ of logs in a single year while the pre-logging inventory estimated total volumes from approved areas were around 665,000
m³, which was to be harvested over a 10-year period (Smirnov, 2015). It is these inconsistencies in trade that highlighted a need to address inadequate domestic policies and the issuing of legal documents that led to the issuing of PMO 15 so that a ‘circuit break’ could be implemented to allow for the development of processes that allow the source of timbers to be identified and their legal status confirmed.

6 Cameroon timber trade

The scope of this report encompasses only timber volumes exported from Douala Port, since export data for Kribi port were not available. The analysis was carried out using COMCAM (Commercial Forestry Database of Cameroon) data for the 2009–2018 period. Four product categories – i.e., plywood, veneer, logs, and sawn wood – form the bulk of the production. Market demand and national context for forest management dictate fluctuations in production volumes for these product categories.

6.1 Overview of timber products traded between Cameroon and Vietnam

Products traded from Cameroon to Vietnam ranked by relevance order as follows: logs, then processed products – i.e., sawn wood, veneers, and plywood.

Concerning sawn wood, Vietnam distinguished itself from other destinations by the specific nature of contracts for processed products – essentially cants, rip cuts, and log slices.

This report does not provide proportion estimates per product category.

The following table summarizes features for products traded on various timber markets.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Market Category</th>
<th>Europe</th>
<th>Vietnam / China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
<td>High value</td>
<td></td>
<td>Various</td>
</tr>
<tr>
<td>Logs</td>
<td>High grades and large diameters</td>
<td>All shapes and diameters</td>
<td></td>
</tr>
<tr>
<td>Processed</td>
<td>Sawn wood</td>
<td>Cants, rip cuts, and log slices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Veneers</td>
<td>Veneers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plywood</td>
<td>Plywood</td>
<td></td>
</tr>
</tbody>
</table>

6.2 Volume evolution for traded timber (per major destinations and product type)

Over the past decade (2009–2018), Cameroon exported 13.34 million m³ of timber to 96 destinations (countries) around the globe. Per-continent proportions are as follows: Asia (60.1%), Europe (33.5%), Africa (4.3%), America (1.9%) and Oceania (0.08%). The graph below shows export trends to the top five destinations for Cameroon’s timber over the past decade.
Figure 8: Volume evolution for timber exported to the top five destinations. Source: COMCAM data.

The graph illustrates how Vietnam grew into Cameroon's second largest timber importer from 2009 to 2018. First is China, which alone imported 4.92 million m$^3$ of Cameroon's timber – namely 36.9% of total volume of exported timber in 2018. Then are ranked Vietnam (2.07 million m$^3$), Italy (1.22 million m$^3$), Belgium (0.96 million m$^3$) and France (0.5 million m$^3$). With a cumulative 9.67 million m$^3$ of timber imports, these five countries represent 73.29% of Cameroon's exports – the rest being shared among the other 91 destinations.

Figure 8 also displays the steady annual growth of exports to Asia (China and Vietnam). Exports to China increased from less than 300,000 m$^3$ in 2009 to peak at 700,000 m$^3$ in 2017, effectively more than doubling. While China remains Asia's largest importer of Cameroonian timber, Vietnam's interest in this product is also growing. Exports to Vietnam have indeed quadrupled from 100,000 m$^3$ in 2009 to 400,000 m$^3$ in 2018. In contrast, exports to Europe (Italy, Belgium, and France) and the rest of the world remained rather stagnant.

Table 7: Export volume to Vietnam over the past decade. Source: COMCAM data.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Volume (m$^3$)</td>
<td>92,420</td>
<td>85,928</td>
<td>125,785</td>
<td>117,097</td>
<td>167,995</td>
<td>206,912</td>
<td>260,418</td>
<td>268,289</td>
<td>341,686</td>
<td>403,895</td>
<td>2,070,425</td>
</tr>
</tbody>
</table>
The significant momentum seen in volumes exported to Asia correlates with strong changes observed in operators' lobbying and geostrategy.

Table 8: Product volumes (m$^3$) for exports to Vietnam over the past decade. Source: COMCAM data.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plywood</td>
<td></td>
<td></td>
<td>12</td>
<td>25</td>
<td>34</td>
<td>71</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log</td>
<td>85,445</td>
<td>78,777</td>
<td>115,051</td>
<td>105,169</td>
<td>147,198</td>
<td>187,516</td>
<td>243,756</td>
<td>233,507</td>
<td>276,022</td>
<td>220,128</td>
<td>1,692,569</td>
<td>81.7</td>
</tr>
<tr>
<td>Veneer</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>350</td>
<td>0.0</td>
</tr>
<tr>
<td>Sawn wood</td>
<td>6975</td>
<td>7117</td>
<td>10,734</td>
<td>11,928</td>
<td>20,785</td>
<td>19,396</td>
<td>16,586</td>
<td>34,748</td>
<td>65,460</td>
<td>183,706</td>
<td>377,435</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>92,420</td>
<td>85,928</td>
<td>125,785</td>
<td>117,097</td>
<td>167,995</td>
<td>206,912</td>
<td>260,418</td>
<td>268,289</td>
<td>341,686</td>
<td>403,895</td>
<td>2,070,425</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 9: Evolutionary trend for exports from Cameroon to Vietnam over the past decade. Source: COMCAM data.
6.3 Annual evolution of exports to Asian countries

While Cameroon chiefly exports timber to the Asian continent, demands for each destination country differ per product category and quantity.
This figure 11 shows that China and Vietnam are leading destinations for timber in Asia with 87.6% of exports (61.3% to China and 25.8% to Vietnam). Then Bangladesh (4.2%), India (3.4%), the United Arab Emirates (1.1%) – while the rest of Asia accounts for the remaining 4.3%. While exports to China and India keep growing, those to other Asian countries remain stable. This graph conveys China's and Vietnam's interest in Cameroonian timber.

6.4 Cameroon and Vietnam timber market features

Imports of African log and sawn wood has become increasingly crucial to Vietnam's timber industry, whose supply from African countries nearly accounts for a quarter of its yearly total import volume for logs and sawn wood. In terms of African timber imports, Vietnam has become the world's second largest timber importer after China (Phuc et al. 2019b).

Cameroon is the most significant African country in terms of volume and value for both logs and sawn wood. Species known as tali (Cameroon) and Lim in Vietnam (Erythrophleum spp.) dominate Cameroonian exports to Vietnam: 84% of all log and sawn wood exports to Vietnam are declared in customs data as tali. Overall, Vietnam imports more logs of this species from around the world than any other species, equivalent to 21% of Vietnam's total log import volume (per cubic metre) and 29% of the value of log imports. Cameroon, the source country of the tali species, is Vietnam's largest supplier (70% of all Vietnamese tali/lim log imports were supplied by Cameroon in 2015).

As described in the introduction, logs and sawn wood are the leading forest products that Cameroon exports to Vietnam via its main ports – Douala Port and Kribi (respectively 88% and 12% of log and timber exports).

Table 9: Vietnam's log and sawn wood imports from Cameroon. Source: COMCAM data.

<table>
<thead>
<tr>
<th>Year</th>
<th>Roundwood Logs / Squared Logs (HS 4403) m³</th>
<th>US$</th>
<th>Sawn wood/ Sawn wood (HS 4407) m³</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>191,036</td>
<td>91,318,700</td>
<td>23,107</td>
<td>16,460,250</td>
</tr>
<tr>
<td>2015</td>
<td>314,646</td>
<td>133529428</td>
<td>33,741</td>
<td>23,803,099</td>
</tr>
<tr>
<td>2016</td>
<td>420,471</td>
<td>164,280,698</td>
<td>47,552</td>
<td>26,257,832</td>
</tr>
<tr>
<td>2017</td>
<td>507,391</td>
<td>207,579,452</td>
<td>8,534</td>
<td>38,756,961</td>
</tr>
<tr>
<td>2018</td>
<td>513,861</td>
<td>215,854,338</td>
<td>117,379</td>
<td>53,591,100</td>
</tr>
</tbody>
</table>

Although Vietnam is Cameroon’s second-largest timber importer, it stands out in relation to the poor diversity of traded species. The table 10 below shows the volumes of the main species exported to Vietnam.

Table 10: Quantity per species sold to Vietnam, by Cameroon over the past decade. Source: COMCAM data.

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tali</td>
<td>90,709</td>
<td>80,625</td>
<td>122,880</td>
<td>114,905</td>
<td>154,939</td>
<td>190,648</td>
<td>239,482</td>
<td>219,957</td>
<td>264,107</td>
<td>288,503</td>
<td>1,766,755</td>
<td>85.3</td>
</tr>
<tr>
<td>Awoura</td>
<td>7</td>
<td>324</td>
<td>94</td>
<td>5,535</td>
<td>2,831</td>
<td>54,832</td>
<td>63,623</td>
<td>3.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Okan / odoum</td>
<td>443</td>
<td>842</td>
<td>812</td>
<td>126</td>
<td>1,555</td>
<td>4,226</td>
<td>4,082</td>
<td>12,759</td>
<td>12,664</td>
<td>15,861</td>
<td>53,370</td>
<td>2.6</td>
</tr>
<tr>
<td>White doussie</td>
<td>2</td>
<td>17</td>
<td>530</td>
<td>2,273</td>
<td>1,870</td>
<td>1,849</td>
<td>2,023</td>
<td>3,327</td>
<td>9,357</td>
<td>21,248</td>
<td>16,082</td>
<td>1.0</td>
</tr>
<tr>
<td>Bilinga</td>
<td>108</td>
<td>105</td>
<td>1,335</td>
<td>413</td>
<td>1,092</td>
<td>3,576</td>
<td>5,796</td>
<td>3,657</td>
<td>16,082</td>
<td>0.8</td>
<td>146,453</td>
<td>7.1</td>
</tr>
<tr>
<td>Other species</td>
<td>1,084</td>
<td>2,894</td>
<td>1,958</td>
<td>1,176</td>
<td>8,791</td>
<td>8,020</td>
<td>13,452</td>
<td>25,588</td>
<td>52,771</td>
<td>30,719</td>
<td>146,453</td>
<td>7.1</td>
</tr>
<tr>
<td>Grand total</td>
<td>92,420</td>
<td>85,928</td>
<td>12,5785</td>
<td>117,097</td>
<td>167,995</td>
<td>206,912</td>
<td>260,418</td>
<td>268,289</td>
<td>341,686</td>
<td>403,895</td>
<td>2,07,0425</td>
<td>100</td>
</tr>
</tbody>
</table>
Tali, awoura, okan and – to a lesser extent, doussie and other species – rank in importance order as the foremost species exported to Vietnam.

Here, other species include: abalé/abing, brown andoung/bikinia, azobé, dabéma, eyek, eyong, fraké, iroko, kossipo, limbali, makore/douka, mukulungu, naga, niové, onzabili/angongui, red padouk.

### 6.5 Key operators exporting to Vietnam

Carrying out a forestry operator typology brings into play several criteria: investment size, operating activities, sector integration level – to name a few.

This study is based on the typology developed by Groutel et al. (2015). The method establishes a detailed typology of private-sector operators by combining two approaches. The first scrutinizes current applicable law and its content through an administrative-legislative lens. The second, more qualitative, lets the very operators express their visions of this structuring. This mixed approach for identifying forestry sector operators brought to light seven enterprise categories, according to supply basin size, exported volumes and involvement scope in the supply and marketing chain for timber.

#### 6.5.1 Large multinational companies

Major international exporting companies are mentioned first. They are usually headquartered in a foreign country – and most certainly on another continent (Europe and Asia). Their international visibility and organizational structure allow for eco-label integration, such as FSC or Bureau Veritas “Origine et Légalité des Bois” (OLB). Their standardization level affords them major long-term logging investments, as well as their own supply chain – from logging site to export point. In recent years, these companies have greatly expanded their processing activities, in order to withstand declining harvested volumes, challenges with generating lucrative log sales, higher tax, transport costs, but also legality. It should be noted that supply challenges have often led them to acquire concessions.
Table 11: Leading multinationals operating large-scale forest concessions in Cameroon.

<table>
<thead>
<tr>
<th>Company Logging Hammers</th>
<th>Equity Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFC</td>
<td>Dutch</td>
</tr>
<tr>
<td>SIM</td>
<td>Italian</td>
</tr>
<tr>
<td>SABM</td>
<td>Lebanese</td>
</tr>
<tr>
<td>FIPCAM</td>
<td>Italian</td>
</tr>
<tr>
<td>SCIEB</td>
<td>Dutch</td>
</tr>
<tr>
<td>ESCB</td>
<td>Chinese</td>
</tr>
<tr>
<td>SEFAC</td>
<td>Italian</td>
</tr>
<tr>
<td>SEBAC</td>
<td>Chinese</td>
</tr>
<tr>
<td>SAB</td>
<td>Chinese</td>
</tr>
<tr>
<td>Green Valley Inc.</td>
<td>Belgian</td>
</tr>
<tr>
<td>SFIL</td>
<td>Belgian</td>
</tr>
<tr>
<td>ALPICAM</td>
<td>Italian</td>
</tr>
<tr>
<td>PALLISCO</td>
<td>French</td>
</tr>
<tr>
<td>Grumcam</td>
<td>Italian</td>
</tr>
<tr>
<td>TIMBER</td>
<td>Italian</td>
</tr>
</tbody>
</table>

According to the 2015 Statistical Yearbook of the National Statistics Institute (NSI), Cameroon had 106 forest management units (FMUs) distributed over more than 6 million ha of forest in 2014, representing 14% of the country’s total area. As part of the ‘China-Africa Forest Governance Project’, William Armand Mala and Joseph Mougou published in 2015 the results of a study disclosing that nine of the 106 FMUs in operation relied fully or partially on Chinese equity. These concessions cover more than 600,000 of the 6 million ha of Cameroon’s forest concessions. A 2013 report by the Center for International Forestry Research (CIFOR) provides further details on their owners. Such is the case for the Vicwood-Thanry group, whose six subsidiaries own nine FMUs – accounting for nearly 10% of the country’s total area of forest concessions.

6.5.2 Mid-size companies with at least one Processing Unit

Like large "foreign" companies, these entities may integrate all tiers of production chain – from logging site to export point and processing – which represents a major investment. They are managed through Cameroonian equity and occasionally mix in less transparent partners. The presence of Cameroonian equity holders is part of a strategy to easily remove certain administrative constraints, from which nationals are exempted. These companies either secure their marketing internally or rely on external agents. Some of these entities sell their production off-site.

Table 12: Companies operating mid-size forest concessions in Cameroon.

<table>
<thead>
<tr>
<th>Company Logging Hammers</th>
<th>Equity Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>STBK</td>
<td>Cameroonian</td>
</tr>
<tr>
<td>SIENCAM</td>
<td>Cameroonian</td>
</tr>
<tr>
<td>SOFOHNY</td>
<td>Chinese</td>
</tr>
<tr>
<td>CUF</td>
<td>Lebanese</td>
</tr>
<tr>
<td>SODETRANCAM</td>
<td>Cameroonian</td>
</tr>
</tbody>
</table>
Background analyses for VPA support project in Cameroon, Laos and Vietnam

6.5.3 Mid-size equity joint venture enterprises with a tangible Cameroonian partner

Managing directors at these enterprises may partake in activities other than those related to the forestry industry. Neither company size nor commercial targets compel them to meet labelling standards. They curb their involvement in exploitation and export activities. They make use of working capital and very often enter partnerships (financial and material). Their poor potential for technological development consequentially prevents them from accessing loans from commercial banks. Existing core teams lack competencies, be it for data collection or marketing strategy implementation.

Table 13: Companies operating predominantly via concession outsourcing in Cameroon.

<table>
<thead>
<tr>
<th>Company Logging Hammers</th>
<th>Equity Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Trade International sarl</td>
<td>Joint-management with a Cameroonian partner</td>
</tr>
<tr>
<td>BTA</td>
<td>Joint-management with a Cameroonian partner</td>
</tr>
<tr>
<td>Canabois</td>
<td>Joint-management with a Cameroonian partner</td>
</tr>
<tr>
<td>Camtrans</td>
<td>Joint-management with a Cameroonian partner</td>
</tr>
<tr>
<td>Cambois</td>
<td>Joint-management with a Cameroonian partner</td>
</tr>
<tr>
<td>Dino &amp; son</td>
<td>Joint-management with a Cameroonian partner</td>
</tr>
<tr>
<td>Botac</td>
<td>Joint-management with a Cameroonian partner</td>
</tr>
</tbody>
</table>

6.5.4 Small national operating companies

These entities do not trade in timber export and rely on intermediary facilitation. They shy away from ownership of operating equipment and operate primarily through partnerships with either lenders or select licensed companies. In terms of staffing, there is usually no existing core team. Company staff consists only of the promoter – and close family members, when applicable. Lack of technological development prevents them from accessing loans from commercial banks. Tax defaulting deprives them of their own timber export trademark. Several Asian investors in the Wouri and Dibamba departments (Littoral region) own sawmills.

6.5.5 Small national companies (small-scale loggers and community forests)

These operators consist of either small groups of individuals – as in a small business – or legally recognized communities, such as an association (common interest group, cooperative, etc.). In both cases (individual or community), the Forestry Code requires harvesting permits for small-scale logging, albeit most of this exploitation occurs illegally. Overall, whether individual or communal, small-scale logging has significantly increased over the past 15 years, with operators aspiring to trade on national or international markets. These entities deal mostly with illegally exploited timber volumes, which are sometimes refurbished for export (which small and medium-sized enterprises (SMEs) do not undertake themselves) or intended for the national market – according to opportunities and sale strategy. Production means are basic. It is noteworthy that exploitation tools vary depending on whether products are destined for the local market or export. Thus, "mobile sawmills remain linked to the export market", while chainsaw-equipped sawyers focus on the domestic market (Cerutti and Lescuyer, 2011). Mobile sawmill owners have poor self-financing capacities, and access to loans remains limited – more so by high-interest rate levels than guarantee provisions. The past decade has witnessed a
growing awareness regarding the cost-effectiveness of these structures. Some SMEs partner simultaneously with several community forests to operate in any given area, while others hold CRTP (Certificate of Registration as a Timber Processor). In some cases, pre-export processed products are reconditioned in other Timber Processing Units (TPUs), before their export under cover of another exporter.

6.5.6 Individual processors or secondary-and-tertiary-processing agents

This operator category has been booming in Cameroon for a decade. Although most of these entities do not hold proper logging licenses. Their investment’s profitability and depreciation restrict their supply sources to some exploitation types – mostly small Non-permanent Forest Estate (NPFE) concessions.

Their suppliers' lax legal requirements and primary processing restrictions set Asian-equity-backed processors apart from their European peers. For example: while most Vietnamese companies request only waybill ownership, European ones also require tax file as well as details of second- and third-transformation setup.

Asian processors are also conspicuous for breaching the law on environmental rights, employment and working condition requirements, and safety measures.

- These enterprises' foremost processed products (cants, rip cuts, and log slices) differ from European-owned entities’ products (square-edged). Timber waybills would not apply to freight some of these products (rip cuts and log slices). To address this gap, the MINFOF (Ministry of Forests and Wildlife) will have to update its product group list and implement tracking tools for unconventional product traceability (record cards, waybills, etc.).
- The forestry and finance administrations have ratified several contradicting regulatory texts concerning Chinese–Asian enterprises’ leading processed products. This discrepancy has led to a decrease in these companies' processed timber volumes over the last six months. As a corollary to the declining production, this forest sector’s contribution to the national economy has decreased.

6.5.7 Domestic and international traders

As intermediaries, these traders do not necessarily operate on a large scale (in terms of human resources), but they generally buy substantial product volumes. Depending on compliance market opportunities, they equally buy certified and non-controlled-source timber. Profit-making export trade takes precedence. This operator group consists of two segments – according to their involvement scope in the timber product marketing chain.

**Export auxiliary**

Regulations for processing and exporting timber products stipulate that 'every timber exporter must be registered in the exporters register for the current year and be a cardholding taxpayer’. It turns out that several Asian investors cannot meet this condition. Therefore, getting timber out of Cameroon requires them to resort to Cameroonian CRTP holders who are properly registered as log/sawn wood exporters – yet usually lack offices or staff. Timber products are thus exported on behalf of a Cameroonian national whose name also figures on the BL or 'Bill of Lading'. This practice allows circumvention of forestry litigations (criminal sanctions, transactions, and legal proceedings) in the event of an infringement.

**Brokers and agents**

These operators may be based in either destination or origin countries. Either suppliers or customers may mandate them to find outlets, inspect products, or organize transport, etc. Their remuneration is commission-based (percentage) and they do not contribute private funds to the operations that are carried out. They operate either as sole trader or with very few employees – and, in spite of a modest turnover, their market influence may be
substantial. Their knowledge of upstream opportunities (customers, applications, shipping companies, products, legislation, etc.), and downstream markets actively contributes to creating new flows. They play a prospective role in the market. Their role in international trade often remains shrouded and therefore little studied. Asian brokers’ permanent resident status sets them apart from European ones.

These operator categories aside, there are about sixty active operators who specialize – albeit without processing units – in exploiting logs that they sell either to TPU-holding operators or directly for export. These logs originate mainly from forest land conversions in the scope of rural development projects that are not always justified.

Box 1: Findings specific to Vietnamese-owned companies/investments in Cameroon collected during the semi-structured interviews.

Vietnamese-owned processing companies differ from others in: the wide variety of their supply source – some of them simultaneously source from 10 titles of different risk categories identified by the FLEGT VPA grids (UFA, cut sale, auction sale, special cut sale, Community Forests, communal forests, AEB, ARB, APC, and PEBO). These enterprises use Vietnamese-origin technology and are essentially limited to first, or even second, transformation. Their activities do not foray into more advanced timber processing, as advocated by the Forestry Department. On the other hand, it is noteworthy that production of rip cuts – for any given timber volume – requires more labour than sawn wood.

Industry operators interviewed during the study were not aware that Vietnam now implements VPA.

7 Discrepancies in trade data

The following section includes an analysis of trade data discrepancies for the trade in timber between Vietnam and Laos, and Vietnam and Cameroon.

Timber and forest products are just one grouping of commodities out of an entire suite of goods that a country imports and exports. Forest product trade data, therefore, suffer from many of the same shortcomings of data availability and accuracy as any other traded commodity. It is well documented in the literature that import and export data – across all commodities – rarely match exactly (Bhagwati 1964, Ferrantino and Wang 2008). There are many potential explanations for these types of discrepancies, some of which might be due to normal economic activity while others might be a result of illegal trade (see Eastin and Perez-Garcia 2003, 2004, Vincent 2004, Castaño no date, Chang and Peng 2015).

Given the limited availability of detailed species-specific bilateral trade data between Cameroon–Vietnam and Laos–Vietnam, only a very broad and incomplete analysis can be conducted: roundwood log and sawn wood sawn wood commodity-specific reported flows for value (US$) and volume (m³). The ability to conduct this analysis in only the broadest of terms is a telling finding, namely, that it is hard to accurately determine a complete understanding of trade dynamics between Cameroon–Vietnam and Laos–Vietnam if the quality and quantity of data compiled from expert sources from each country is neither openly accessible nor specific enough to allow meaningful conclusions to be drawn. The more generalized the data, the harder it is to understand the possible causes of discrepancies.

What follows is a summary of data discrepancies – based on the available compiled data of values and volumes – of the two sets of bilateral trade flows. Namely, the Cameroon–Vietnam trade (Cameroon’s reported exports to Vietnam and Vietnam’s corresponding reported imports from Cameroon) and the Laos–Vietnam trade (Laos’ reported exports to Vietnam and Vietnam’s corresponding reported imports from Laos).
This analysis of two sets of bilateral trade flows uses Vincent's (2004) equations to estimate a relative measure of discrepancy in trade data (see Annex 1 for the formal analysis, results, and tables summarizing the data in the figures below as well as the full results). Vincent (2004) notes that for the relative measure:

“Positive values indicate that the importer reports a larger trade flow than the exporter, and negative values indicate the reverse. The index has the maximum value of +1 when the importer reports a trade flow, but the exporter does not and the minimum value of –1 when the opposite conditions hold, i.e. the exporter reports a trade flow, but the importer does not. It equals zero only when there is no discrepancy”.
Figure 13: Cameroon–Vietnam trade in roundwood logs, by value and volume (Cameroon data compiled by authors from SEPBC Statistics no date; Douala Forest Administration Data July 2019, Cameroon COMCAM July 2019; and Vietnam data compiled by authors from Phuc et al. August 2018, Phuc et al. February 2019 “Vietnam Import..”, and Phuc et al. February 2019 “Presentation: Overview of Timber and Timber products...”)

The authors could not find reliable in-country data for Cameroon’s log exports by value, and therefore no relative measure could be calculated. Importantly, given the large dollar value associated with Vietnam’s imports of logs in 2018 (US$ 215,854,338), even without any data on the Cameroon side, one can acknowledge that even if there was a small relative measure statistic it could indicate the presence of a large dollar value discrepancy. Bilateral volume data for logs was compiled and the analysis showed that the relative measure grew consistently between 2014–2018. In 2014, the relative measure was 0.01 and, hence, there was very little discrepancy. This relative measure increased in the following years and in 2018 the measure was 0.34 which means that Vietnam’s reported imports were twice as large as Cameroon’s reported exports of logs.
The authors could not find reliable in-country data for the value of Cameroon’s export of sawn wood, which is why no relative measure could be calculated. However, in terms of volume, the results indicate a fluctuation in discrepancy between 2014 and 2018 depending on which country reports more exports or imports. That is, between 2014 and 2016, Vietnam reported a higher export of sawn wood, with a peak discrepancy in 2015 (a relative measure of 0.34 indicating that Vietnam reported twice as much import in terms of volume as Cameroon reported as export). In 2016, the discrepancy metric decreased meaning that reported imports to Vietnam were 1.37 times Cameroon’s reported exports. The trend reversed in 2017 with a relative measure of -0.77 indicating that Cameroon’s reported exports were much higher (65,462 m³) than Vietnam’s reported imports (8,534 m³). In 2018, the discrepancy continued in the same direction (Vietnam reported fewer imports than Cameroon reported exports). The relative measure in 2018 was -0.22, indicating that the discrepancy lessened.
The authors were able to gather a complete set of bilateral trade data (value and volume) between Laos and Vietnam for the period 2014–2016. In 2014 and 2015, Vietnam reported a trade value for its imports 1.5 times higher than Laos reported for exports – with a relative measure of 0.22 in both years. Even though the relative measure increased to 0.51 in 2016 (meaning Vietnam reported three times the imported value that Laos reported), it is important to point out that the total value of exports dropped significantly between 2015 to 2016. Even though the discrepancy relative measure was much larger, the actual value of the discrepancy in 2014 and 2015 was of greater dollar value. For example, the 2014-dollar value of the discrepancy for logs was US$ 54,082,882, whereas in 2017 it was US$ 6,480,817, a dollar value that is approximately eight times higher.

With respect to the discrepancy of the volume (m$^3$) of logs traded, the data we acquired for Vietnam indicated such low volumes of imports from Laos, that in comparison to the volume Laos indicated it exported in 2014 and 2015, Vietnam’s reported imports were essentially zero. The relative measure in 2014 and 2015 was -1 and 0.99, respectively. However, with the sharp decrease in log trade indicated by the Laos export data in 2016, the relative measure was just -0.60 in 2016, indicating that Vietnam reported imports that were just 25% of the volume that Laos reported exporting.

Figure 15: Laos–Vietnam trade in roundwood logs, by value and volume (Laos data compiled by authors from Phuc 2018; Vietnam data compiled by authors from Phuc and Canby 2017, and Cam and Phuc 2019).
With respect to the bilateral trade of sawn wood, a similar trend to that of the trade of roundwood logs can be observed. The relative measure was 0.61 and 0.51 in 2014 and 2015, respectively. In 2016, it increased to 0.77. However, the dollar value of the 2014 data, even with a relative measure that is lower than 2015 and 2016, indicates a very large discrepancy: Vietnam reported importing sawn wood from Laos that was four times higher than Laos’ reported exports, for a difference in value of over US$ 300,000,000.

In terms of trade volume, a similar trend to that of the trade volume of roundwood logs can be observed. Laos reports much higher volumes of sawn wood exports to Vietnam than Vietnam reports of imports and the relative measure is close to -1 for all three years for which we have data (2014–2016).

8 Identification of key species and discrepancies in naming

Species classification and naming introduce their own challenges with regards to the trade of timber. In many countries, timber species are grouped under a single or few trade names, each containing several scientifically discrete species. Also, individual species may have different names in trade and harvesting contexts in both the Phuc 2018; Vietnam data compiled by authors from Phuc and Canby 2017, and Cam and Phuc 2019).
country of harvest as well as in other countries where the wood might be transported or processed. As trade names are used freely by industry and in trade, there is no system to ensure that trade names are used uniformly to match scientific names.

Given the available data, it has not been possible to provide a full evaluation of species discrepancies in trade, as the customs data also differ in the amount of detail provided at species level. Hence, the data on species discrepancies is not accurate and may further exacerbate the challenge of recording and evaluating timber by scientific species name.

Son (2017) conducted an analysis of customs trade data for all species reported to have been imported to Vietnam. The total number of species (for both roundwood log and sawn wood) imported into Vietnam over the period 2013 to 2015 was estimated at 404. The topmost imported species by value were: azobe, pau rosa, pyinkado, eucalyptus, ash, padouk, oak, apitong and teak.

8.1 Species from Cameroon

Phuc et al. (2018) conducted a species-level evaluation of species imported from African countries into Vietnam. This report includes trade data on some of the key species categorised by Vietnamese trade names.

In terms of the naming of species in Vietnamese, there is a general lack of uniformity in naming imported timber species from Africa. Some specific problems are:

- Vietnamese trade names seem to be developed based on the colour or structural qualities of the timber and may be applied in factories or by traders on an ad hoc basis. There is therefore a great variation in the use of Vietnamese names for different timber species.
- In import customs declaration forms, many businesses use both Vietnamese names and scientific names for imported timber species. However, a common situation is that a timber species may be described with many different scientific names. For example, in customs declaration forms, an imported timber species is declared as ‘gõ cắm’ (rosewood) in Vietnamese while it has also been reported as covering 11 scientific names in the same declaration form (Error! Reference source not found.14). Similarly, ‘padauk’ is known to cover at least 15 scientific species (Table 15); the term ‘iron wood’ (Vietnam: Lim; Cameroon: tali) is covering some 14 scientific names (Table 16).

Table 14: ‘Rosewood’ (gõ cắm) species imported as logs in 2016–2017 (Adopted from Phuc et al. 2018).

<table>
<thead>
<tr>
<th>Scientific names (as reported in customs declaration form)</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Volume (m³)</td>
<td>Value (US$)</td>
</tr>
<tr>
<td><em>Berchemia zeyheri</em></td>
<td>24</td>
<td>6,240</td>
</tr>
<tr>
<td><em>Bobgunnia fistuloides</em></td>
<td>28</td>
<td>6,885</td>
</tr>
<tr>
<td><em>Guibourta demeusei</em></td>
<td>1,963</td>
<td>1,339,257</td>
</tr>
<tr>
<td><em>Guibourta pelieganna</em></td>
<td>217</td>
<td></td>
</tr>
<tr>
<td><em>Guibourtia arnoldiana</em></td>
<td>1,384</td>
<td>296,527</td>
</tr>
<tr>
<td><em>Guibourtia colesosperma</em></td>
<td>1,359</td>
<td>386,607</td>
</tr>
<tr>
<td><em>Guibourtia ehie</em></td>
<td>863</td>
<td>263,165</td>
</tr>
<tr>
<td><em>Guibourtia pellegriniana</em></td>
<td>189</td>
<td></td>
</tr>
<tr>
<td><em>Guibourtia sp.</em></td>
<td>197</td>
<td></td>
</tr>
<tr>
<td><em>Guibourtia tessmannii</em></td>
<td>63</td>
<td>165,676</td>
</tr>
<tr>
<td>Swartzia fistuloides</td>
<td>2,616</td>
<td>2,175,236</td>
</tr>
</tbody>
</table>
Table 15: ‘Padauk’ (may also known as Gỗ cẩm or Cẩm in Vietnam) species imported in 2016–2017 (Adopted from Phuc et al. 2018).

<table>
<thead>
<tr>
<th>Scientific names (as reported in customs declaration form)</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume (m³)</td>
<td>Value (US$)</td>
</tr>
<tr>
<td>Guibourtia arnoldiana</td>
<td>42</td>
<td>7,980</td>
</tr>
<tr>
<td>Guibourtia coleosperma</td>
<td>8,231</td>
<td>3,058,782</td>
</tr>
<tr>
<td>Paraberlinia bifoliolata</td>
<td>543</td>
<td>191,292</td>
</tr>
<tr>
<td>Pterocarpus angolensis</td>
<td>57</td>
<td>34,849</td>
</tr>
<tr>
<td>Pterocarpus erinaceus</td>
<td>91,821</td>
<td>39,335,529</td>
</tr>
<tr>
<td>Pterocarpus pedatus</td>
<td>1,338</td>
<td>211,224</td>
</tr>
<tr>
<td>Pterocarpus lignum</td>
<td>66</td>
<td>15,124</td>
</tr>
<tr>
<td>Pterocarpus macrocarpus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pterocarpus soyauxii</td>
<td>13,268</td>
<td>5,062,203</td>
</tr>
<tr>
<td>Pterocarpus spp.</td>
<td>2,134</td>
<td>368,035</td>
</tr>
<tr>
<td>Pterocarpus tinctorius</td>
<td>2,771</td>
<td>580,319</td>
</tr>
<tr>
<td>Staudita stipitata</td>
<td>512</td>
<td>61,453</td>
</tr>
<tr>
<td>Staudtia kamerunensis</td>
<td>632</td>
<td>193,664</td>
</tr>
<tr>
<td>Tetraberlinia bifoliolata</td>
<td>284</td>
<td>99,299</td>
</tr>
<tr>
<td>Vouacapoua americana</td>
<td>91</td>
<td>21,756</td>
</tr>
</tbody>
</table>

As can be seen from the three tables above, one trade name may cover several discrete species. Also, it can be seen that certain scientific names are described with different trade names. For example, tables 14 and 15, respectively, show that the same scientific names (e.g. Guibourtia arnoldiana, Guibourtia coleosperma) are used to
refer to both ‘rosewood’ and ‘Padauk’ in customs declarations made by timber importing enterprises.
Details of the most commonly imported species are shown in the graphs below, in m³ by roundwood and sawn wood.
Figure 17: Major log imports by species in m$^3$ for the years 2015–2018. Source: Phuc et al., 2019a.
Figure 18: Graph of major sawn wood imports by species in m$^3$ for the years 2015–2018. Source: Phuc et al., 2019a.
Table 17: Overview of potential species names relevant for species imported from Africa based on the Vietnamese name (Phuc et al. 2017).

<table>
<thead>
<tr>
<th>Vietnamese names</th>
<th>Possible trade name(s)</th>
<th>Possible scientific names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gỗ đen châu Phi</td>
<td>Rosewood, padauk, bubinga, kevazingo and ovangkol</td>
<td>Guibourtia spp. – CITES App. II. Guibourta demeusei Guibourta peliegnana Guibourtia arnoldiana Guibourtia coleosperma Guibourtia ehi Guibourtia pellegriniana Guibourtia spp. Guibourtia tessmannii</td>
</tr>
<tr>
<td>Gỗ cầm</td>
<td></td>
<td>Guibourtia demeusei Guibourta peliegnana</td>
</tr>
<tr>
<td>Cầm</td>
<td></td>
<td>Guibourtia arnoldiana Guibourtia coleosperma</td>
</tr>
<tr>
<td>Gỗ, Cà te, Hồ bi, Doussie</td>
<td>Rosewood, doussie or m’banga</td>
<td>Afzelia africana or Afzelia xylocarpa Pahudia cochinchinensis</td>
</tr>
<tr>
<td>Huong</td>
<td>Rosewood, padauk</td>
<td>Pterocarpus spp.</td>
</tr>
<tr>
<td>Cam lai</td>
<td>Rosewood</td>
<td>Dalbergia spp.</td>
</tr>
<tr>
<td>Lim xan</td>
<td>Rosewood</td>
<td>Erythrophleum fordii</td>
</tr>
<tr>
<td>Azobe</td>
<td>Azobé or eki</td>
<td>Lophira alata</td>
</tr>
<tr>
<td>Iroko</td>
<td>Iroko or abang</td>
<td>Milicia excelsa</td>
</tr>
<tr>
<td>Xoan dào Kosipo</td>
<td>Kossipo</td>
<td>Entandrophragma candollei</td>
</tr>
<tr>
<td>Movingui</td>
<td>Movingui or eyen</td>
<td>Distemonanthus benthamianus</td>
</tr>
<tr>
<td>Lim, okan</td>
<td>Okan or odoum or bokoka or African greenheart</td>
<td>Cyclicodiscus gabunensis</td>
</tr>
<tr>
<td>Xoan Đào</td>
<td>Sapelli</td>
<td>Entandrophragma cylindricum</td>
</tr>
<tr>
<td>Lim (Lim xan)</td>
<td>Iron wood, tali or elone</td>
<td>Erythrophleum ivorense; Erythrophleum fordii; Erythrophleum suaveolens, Erythrophleum spp.</td>
</tr>
<tr>
<td>Ebiara, Ngũa văn</td>
<td>Ebiara</td>
<td>Berlina bracteosa</td>
</tr>
</tbody>
</table>

The tables and figures above show that there exists a general level of confusion about how species are named. There seems to be no consensus on how different species are named in Vietnam, especially for the species originating from Africa. Some species have several different international trade names as well as several different names in Vietnam. In addition, the trade names and Vietnamese names may cover several and overlapping groups of scientific species names.

A further source of confusion is that certain genera (like Pterocarpus) are pan-tropical or may be represented by different species in both Asia and Africa. Padauk (Pterocarpus) includes 35 different species distributed across Asia and Africa.

It is therefore only at species level, using the scientific nomenclature, that a species can be correctly and unambiguously identified by name.
8.2 Species imported from Laos

Laos has long been a major source of timber for the Vietnamese wood processing industry, although the log export ban in Laos resulted in a sharp reduction in formal imports. Forest Trends have accessed data on species imports from Laos (Phuc and Canby 2017; Phuc et al. 2017). In the table 18 below, some of the key species imported based on volume and value are listed according to Vietnamese import data.

Table 18: Main commercial species imported to Vietnam from Laos with import volumes and values from 2016 (Phuc et al. 2017).

<table>
<thead>
<tr>
<th>Vietnamese name</th>
<th>Trade name</th>
<th>Scientific name</th>
<th>Volume (m³)</th>
<th>Value (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hương</td>
<td>Rosewood, doussie</td>
<td><em>Pterocarpus cambodianus</em> <em>Pterocarpus pedatus</em> <em>Pterocarpus erinaceus</em></td>
<td>26,848</td>
<td>30,304,636</td>
</tr>
<tr>
<td>Gụ</td>
<td>Kossipo</td>
<td><em>Sindora maritima</em> <em>Sindora cochichinensis</em> <em>Sindora tonikiensis</em></td>
<td>22,339</td>
<td>12,240,820</td>
</tr>
<tr>
<td>Gỗ</td>
<td>Doussie, pachyloba, papao</td>
<td><em>Afzelia xylocarpa</em> <em>Afzelia pachyloba</em> <em>Sindora siamensis</em> <em>Pahudia cochinchinensis</em></td>
<td>6,797</td>
<td>4,699,200</td>
</tr>
<tr>
<td>Giỏi</td>
<td>Magnolia, arau, talauma</td>
<td><em>Nauclea diderrichii</em></td>
<td>6,171</td>
<td>2,035,956</td>
</tr>
<tr>
<td>Pơ mu</td>
<td>Hinoki</td>
<td><em>Fokiennia hodginsii</em></td>
<td>4,442</td>
<td>1,205,554</td>
</tr>
<tr>
<td>Lím</td>
<td>Tali, okan, denya, azobe</td>
<td><em>Erythrophloeum fordii</em></td>
<td>3,800</td>
<td>2,849,774</td>
</tr>
<tr>
<td>Kiền kiễn</td>
<td>Merawan, giaza</td>
<td><em>Hopea pierrei</em></td>
<td>3,328</td>
<td>1,002,540</td>
</tr>
<tr>
<td>Nghiễn</td>
<td>NA</td>
<td><em>Parapatentace tonkinensis</em></td>
<td>2,901</td>
<td>927,828</td>
</tr>
<tr>
<td>Bằng lăng</td>
<td>Pyinma</td>
<td><em>Lagerstroemia loudoni</em></td>
<td>2,793</td>
<td>830,875</td>
</tr>
<tr>
<td>Xoan dào</td>
<td>Sapele, sipo, sapelli, kossipo</td>
<td><em>Pygeum arboretum</em></td>
<td>1,692</td>
<td>337,005</td>
</tr>
<tr>
<td>Sa mu</td>
<td>NA</td>
<td><em>Cunninghamia konishii</em></td>
<td>1,272</td>
<td>380,245</td>
</tr>
<tr>
<td>Cấm (cam lai)</td>
<td>Paorosa, bosse, rosewood</td>
<td><em>Dalbergia oliveri</em> <em>Dalbergia cambodiana</em></td>
<td>1,258</td>
<td>1,778,105</td>
</tr>
<tr>
<td>Gội</td>
<td>Pasak, aglaia</td>
<td><em>Aglaia spp.</em></td>
<td>1,210</td>
<td>247,820</td>
</tr>
<tr>
<td>Tấu mặt</td>
<td>NA</td>
<td><em>Vatica tonkinensis</em></td>
<td>1,108</td>
<td>334,942</td>
</tr>
<tr>
<td>Dầu</td>
<td>Keruing, sepetir</td>
<td><em>Dipterocarpus spp.</em> <em>Dipterocarpus tonkinensis</em></td>
<td>1,082</td>
<td>325,668</td>
</tr>
</tbody>
</table>

As with African species, the naming of species is equally inconsistent with Asian species reported as being imported from Laos. A species with the trade name of Kossipo refers to the genus *Entandrophragma*, which is found only in Africa. However, in the customs data from Vietnam it appears that kossipo is used as synonymous with different species of the genus *Sindora*.
Another example is “xoan dao”, which is a Vietnamese term seemingly covering different trade names like sapelli (and also kossipo). Sapelli as a trade name is relatively well recognized, covering the species *Entandrophragma cylindricum*, which is found only in Africa; while *Pygeum arboresum* seems to be a lesser-known timber species that occurs both in Asia and Africa, but would normally not be called sapelli.

The above examples are only a few of the inconsistencies found in these data.

In addition, Son (2017) did a study specifically focussing on identification of inconsistencies in species names – and outlining challenges in identification of high-risk species based on these inconsistencies. According to the report, Vietnam imported 404 wood species in the period 2013–2015. However, the identification of wood species had not been accurate and consistent in recognizing scientific names, common names and trading names.

*Table 19: Examples of inconsistent species identification (Son, 2017).*

<table>
<thead>
<tr>
<th>Vietnamese name</th>
<th>Trade names</th>
<th>Scientific name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ebiara</td>
<td>Ebiara</td>
<td><em>Berlinia bracteosa</em></td>
</tr>
<tr>
<td>Ngưa văn</td>
<td>Ebiara /ekop beli</td>
<td><em>Berlinia bracteosa</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Paraberlinia bifoliolata</em></td>
</tr>
<tr>
<td>Mit</td>
<td>Jack fruit</td>
<td><em>Artocarpus integrofalia</em></td>
</tr>
<tr>
<td>OT</td>
<td>otak udang</td>
<td><em>Buchanania spp.</em></td>
</tr>
<tr>
<td>Cảm</td>
<td>Chanate, pao rosa/guayakan/bubinga</td>
<td><em>Colophospermum mopane</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Dalbergia nigra</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Dalbergia oliveri</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Dalbergia retusa</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Guibourtia demeusei</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Guibourtia spp.</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Guibourtia demeusei</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Swartzia fistuloides</em></td>
</tr>
<tr>
<td>Trắc</td>
<td>Pau-ferro, pau rosa, pao rosa</td>
<td><em>Dalbergia cochinchinensis</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Swartzia fistuloides</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Berchemia zeyheri</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Swartzia madagascariensis</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Fugraea fragrans</em></td>
</tr>
</tbody>
</table>

The identification of species is found to focus on the name of the family name, for example: *Dalbergia oliveri* are recognized as *cảm lai*, but in customs documentation, it is called *cảm*. This creates difficulty in managing the protection of rare and endangered wood species like *cảm lai*.

The ability to identify species of the Forest Protection Department at provincial level also faces the same confusion as the Customs Agency. This leads to the incorrect identification of wood.

### 8.2.1 Risk classification of species

The VPA Annex V (Section 6.3.7.4) includes requirements that the importer declares the scientific species name, and that species will then be classified for risk according to the below definitions (see chapter 2 for further discussion).

The species contained in Group IA and IIA are those contained in Decree No. 06/2019/ND-CP, designated as
endangered species in Vietnam. These two groups refer only to plants and animals found in Vietnam – although some of the tree species on this list may also be found in neighbouring countries such as Cambodia and Laos. Son (2017) outlines the species that were imported to Vietnam that would be covered by the high-risk species definition in the years 2013–2015.

The result of classifying high-risk species according to the high-risk criteria shows that:

- There are 13 species belonging to the CITES convention: *Pseudotsuga menziesii, Araucaria araucana, Prunus serotina, Dalbergia cochinchinenensis, Swartzia fistuloides, Swietenia macrophylla, Myroxylon peruiferum, Dalbergia cochinchinensis, Myroxylon peruiferum, Lovoa trichilioides, Juglans sp, Juglans nigra, Dalbergia annamensis, Mansonia altissima, Taxus wallichiana, Larix sibirica.*

- There are 52 species belong to Group I and II that are endangered, such as: *Lagerstroemia angustifolia, Dalbergia oliveri, Dalbergia bariaensis, Pantacme siamensis, Pterocarpus pedatus,* etc.

There are 65 species in the high-risk group. The remaining 277 species are in the low-risk group.

*Table 20: The classification of imported wood (Son, 2017).*

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-risk species</td>
<td>65</td>
</tr>
<tr>
<td>Species found in Annex I, II, III of CITES$^{16}$</td>
<td>13</td>
</tr>
<tr>
<td>Endangered species in Group I and II according to Vietnam’s regulations</td>
<td>52</td>
</tr>
<tr>
<td>Low-risk species</td>
<td>277</td>
</tr>
</tbody>
</table>

It is noted that the current definition of high-risk species would miss a large portion of species not endemic to Vietnam or not in the CITES appendices; for example teak, which is not included in any of the CITES appendices. Considering the challenges identified in relation to correct naming of species, as well as the limitations of the current definition of high-risk species, it is considered that the VPA’s use of species as a risk category will be difficult to effectively implement, and will be able to address only a limited number of species, while classifying many species that may come from high-risk areas (e.g. teak) as low-risk.

It is noted that the VPA does declare that: “...the Ministry of Agriculture and Rural Development shall issue a legislation presenting the list of high-risk species that shall be updated periodically as required according to decision of JIC.”

It is therefore noted that there would be need for substantial resources for customs or other relevant competent entities, who will be responsible for verifying imports, in identifying wood species correctly and also in conducting thorough review of the species risk classification, in order for such a system to be efficient.

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$^{16}$ CITES Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances. CITES Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival. CITES Appendix III contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade. See also: [https://www.cites.org/eng/disc/how.php](https://www.cites.org/eng/disc/how.php)
9 Challenges and recommendations: Vietnam

Based on the above assessment of the timber industry of Vietnam, the following section includes an overview of challenges and NEPCon’s recommendations to Vietnam, to support an efficient VPA implementation and VNTLAS development.

The scale and complexity of the timber imports to Vietnam underlines the challenge of the Vietnamese Government and the Vietnamese industry to tackle illegal logging in the supply chains. However, size of imports also indicate the opportunity for Vietnam to become a leading player in the global efforts to curb illegal logging, increase transparency in timber supply chains and improve governance in the forest sector; not only in Vietnam, but also – through effective implementation of the VNTLAS – in countries globally supplying timber to Vietnam. In doing so, Vietnam would place itself at a distinctive market advantage over other major producer countries such as China.

This should also be seen in relation to the recently signed free trade agreement between the EU and Vietnam, signed in June 2019, the first of its kind with an emerging economy in Asia, paving the way for tariff reductions on 99% of goods between the EU market and the Southeast Asian country. The ability of Vietnam to fulfil its commitments in the VPA – and the subsequent implementation of the VNTLAS and issuing of FLEGT licenses – will be pre-requisites to the free flow of wood products from Vietnam to the EU internal market.

An overarching challenge for both Vietnam and many supplier countries is corruption. All the 10 countries included in this study, as supplier countries to Vietnam, have a high level of perceived corruption according to Transparency International’s Corruption Perceptions Index (CPI). The 2018 CPI of the countries included in this study is shown in Table 21.

Table 21: CPI of the 10 supplier countries included in this study, and Vietnam. Source: https://www.transparency.org/en/cpi/2019/results

<table>
<thead>
<tr>
<th>Country</th>
<th>CPI score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>26/100</td>
</tr>
<tr>
<td>Cambodia</td>
<td>20/100</td>
</tr>
<tr>
<td>Cameroon</td>
<td>25/100</td>
</tr>
<tr>
<td>Congo</td>
<td>19/100</td>
</tr>
<tr>
<td>Democratic Republic of Congo (DRC)</td>
<td>18/100</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>16/100</td>
</tr>
<tr>
<td>Gabon</td>
<td>31/100</td>
</tr>
<tr>
<td>Ghana</td>
<td>41/100</td>
</tr>
<tr>
<td>Laos</td>
<td>29/100</td>
</tr>
<tr>
<td>Nigeria</td>
<td>26/100</td>
</tr>
<tr>
<td>Vietnam</td>
<td>37/100</td>
</tr>
</tbody>
</table>

As can be seen from Reference source not found.21, all the countries included in the study, including Vietnam, score relatively low. Even if the CPI is not a scientific proof or quantitative measure of corruption, it does still provide a good indication of how severe the corruption is in each country.

Systems like the VNTLAS (as well as other systems using a risk-based approach) are dependent on valid and correct documentation and information from supplier countries. The risk of misleading, incomplete or fraudulent documentation is much higher in countries with high levels of corruption. In many countries the timber supply chains contain many nodes where incentives for rent seeking exist, such as where documents need approval from
government officials. Examples of this could be allowing over harvesting by forest department officials, facilitating issuance of fraudulent paperwork to cover illegally harvested timber etc. Corruption therefore is highlighted as a key challenge to all levels of the implementation of the Vietnam VPA and the VNTLAS.

9.1 Ban on importing illegally harvested material

**Challenge:** The VPA and the draft TLAS Decree do not include a ban on placing illegal timber on the Vietnamese market. Not having such a ban may present a challenge in enforcing the VPA and TLAS, since the ability to litigate based on more vaguely defined risk mitigation requirements are not clear.

**Recommendation:** The Vietnamese Government should include a ban on placing illegal timber on the Vietnamese market in the TLAS Decree.

9.2 Trade data

**Challenge:** The trade data discrepancies between exporter countries and Vietnam imports makes assessment of trade patterns difficult, thus impeding the ability to act on potential illegal trade flows. One issue is that Vietnam records timber imports by country of export—not by country of origin. This could be a cause for data discrepancy.

**Recommendations:**

1. **Volume / weight discrepancies:** different methods exist to scale logs resulting in different volume calculations. It is recommended to explore how these methods are implemented in each country and seek to align methodologies or address how the use of different methods may affect results in data on volume.

2. **Value discrepancies:** terms of trade (transport costs, exchange rates, lag times associated with shipping duration) can be a potential reason for discrepancies, as well as differences in classifying products as either raw materials or finished products. It is recommended that classification methods are aligned.

3. **Data analysis:** would be helpful to understand broader trade patterns of wood exporting countries (in this case, Laos & Cameroon), to other trade partners to discover how specific bilateral trade data to Vietnam compares to other trade partners to assess the same level of discrepancies are found in trade with other countries.

4. **Record data by country of origin:** Instead of only recording trade data per country of export, Vietnam should record data for the country of origin. This would help to eradicate risk of data discrepancies by not including timber in transit form other countries.

5. **Reconciliation of data:** It is recommended to explore options for data openness and reconciliation between the countries involved in timber trade. This could be supported by securing that trading countries have official channels of communication (between Customs Authorities, etc) to check trade data.

6. **Linkages to allowable harvest:** It is recommended to explore ways to reconcile the total trade data from exporting countries with data on annual allowable cut volumes,
to enable comparison of these volumes. This could provide a strong indicator of potential overharvesting or export of timber harvested outside the formally allowed volumes.

9.3 Species identification

**Challenge:** It is clear from the analysis above that information on species in customs forms, as well as in the documents received from supplier countries is inconsistent. Since species has been identified in the VPA as a specific risk indicator, the identification of scientific species names is crucial to the ability of the Vietnamese authorities to meet their VPA commitments.

**Recommendation:** Both Operators, as well as Vietnam government entities involved in VPA implementation should increase their capability and resources in terms of species identification. Also, the system to record imported species should be improved to ensure correct identification at import. Vietnamese customs currently record species on import declarations only based on the information submitted on export declarations from supplying countries. This system contains a high risk of human error or omissions on both sides of the border. Capacity should be built both in terms of personnel, systems, and testing abilities to verify shipments. The World Customs Organisation could be a potential partner to support capacity development and trainings.

9.4 Due diligence – definition and implementation

**Challenge:** The TLAS decree draft does not require importers to have a due diligence system. It seems that the terminology of the draft decree is focused on documented evidence, rather than a risk-based evaluation of supply chains. The draft decree also uses the terms “explanation” when providing the definition of terms which includes mention of risk assessment and mitigation – however due diligence is not mentioned. Without a clear requirement to implement a risk-based system (due diligence system) it appears the system will focus on documents, as the focus of the Self-Declaration is on harvest documents, and potentially miss out on in-depth risk assessment and management. This will likely challenge the implementation of the TLAS and weaken the integrity of the system. An additional challenge is that, as formulated in several sections of the VPA and draft TLAS Decree, the evaluation of risks and risk mitigation measures are primarily based on documents. *the VPA annex V, section 6.3.7 mentions* “additional documentation requirements” that may be applied to importers, as well as “On suspicion of risk, the verification entities shall carry out additional checks on the legality of the imported shipment”. It is however not yet specified, what the precise document requirements will be, or how verification entities shall operate. The challenge is connected to the capacity and competence of enforcement agencies, but here relates specifically to the issue of developing and establishing procedures for the different government entities including a clear approach on how these procedures are checked and verified. Whereas documents do play an important role in the due diligence process, they cannot be considered as a stand-alone tool for risk mitigation.
One group of enterprises that may be significantly at risk of negative impacts of the TLAS is SMEs. Vietnam has a large SME sector (see chapter 1) and many operate through more or less informal markets and supply channels. Due to limited resources and capacity, as well as the reliance on informal supply chains, SMEs are likely to face the greatest challenges in implementing the due diligence requirements, specifically on imported material.

Recommendations: For the TLAS Decree: The future TLAS Decree should include a clear requirement for importers of timber to have in place and implement documented system to access information about their supply of materials and assess and mitigate risks. The term “explanation” used in the draft translation of the Decree should be changed and clarified. The due diligence system should be clearly defined in the Decree, as to what the interpretation of it is and how it should be applied. As also addressed below it is recommended that the due diligence definition is clarified to include requirements for accessing information about the supply chains as well as assessing and mitigating any risks identified.

For Operators: should prepare timber purchasing policies reflecting due diligence systems and making it known to suppliers and stakeholders. Policies should be supported by adequate procedures and work instructions for relevant staff. These procedures should cover the requirements of the VNTLAS Decree. Industry associations should support their members in meeting the VNTLAS due diligence requirements. Effective risk mitigation needs to be supplemented, where relevant, by on-site verification in the country of harvest and actual changes to supply chains where illegal activities or lack of transparency has been identified.
9.5 Access to information

Challenge: In the draft TLAS Decree the requirements to access information appears to be limited to have harvest documents/permits from the forest of origin as required on the Self-Declaration. It is considered that this limitation is not consistent with an in-depth approach evaluation of supply chain documents. It seems there is a risk that the system will be based on documents alone, focusing on specific documents in the supply chain, without regard of the type of risk present. For importers of wood it is often difficult to secure access to relevant and precise information and documentation about the material they are purchasing. Often supply chains may be complex, including different types of middlemen or traders. Also, information management systems differ significantly between countries which makes a standardised approach to data collection and management difficult. Access to supply chain information and documentation that can indicate legality is therefore a significant challenge for the importers responsible for mitigating any legality risks.

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challenge for the importers responsible for mitigating any legality risks.

**Recommendations:**

For the TLAS Decree: The future TLAS Decree should include clear requirements for the importer regarding availability of relevant information and documentation from the supply chain. The current text focus on harvesting documents/permits, while other types of information is not mentioned as a requirement.

For Operators: In order to secure supply chain information, it will be necessary for importers to work closely with their suppliers to make sure they gain access to this information. It is therefore necessary to implement activities to strengthen collaboration with suppliers to ensure that only supply chains where there is access to information is used. Moving towards more secure and transparent supply chains will be key to achieving this access and will also mean that certain types of supply chains where high risks remain or information is not available should be stopped. Vietnam wood associations can have a role to play in supporting legal timber trade and sharing of supply chain information. Sharing supply chain information with members who import or process timber products from this source should be identified as one of the important activities of the associations.

### 9.6 Risk assessment

**Challenge:**

The requirements on risk assessment in the draft TLAS Decree are primarily focused on the provision by MARD of lists of positive geographical areas and a high-risk species list. The draft decree contains limited mention of the details of how a risk assessment should be conducted for areas and species that would fall under a high-risk status (see Ta. It will be a challenge for the industry, as well as for enforcement agencies, to clearly understand the level of risk assessment required, as no clear requirements are provided, thus challenging effective implementation.

For Vietnamese importers to fulfil their obligations according to the VPA they will have to establish systems to identify applicable timber legality risks in their supply chains. The work contained in this report is as first step in this process, outlining legal requirements and risks at country level for 10 supplier countries to Vietnam. However, even with a risk assessment at hand, the importers will have to conduct evaluation of the risks relevant to their specific supply chains. As described above they initial prerequisite for this is to gain access to information about the supply chain. The next steps include using the risk assessment for the country (if available, to specify the specific risks in the supply chain, in terms of the type of risk (e.g. risk of non-compliance with environmental legislation) and at what point in the supply chain the risk might occur (e.g. at forest level, in transit or in processing). Even with a risk assessment developed, specifying supply chain risks to a level where concrete mitigation actions can be taken is no simple task. It requires a good understanding of the supply chain and the legal requirements in the country of harvest, as well as the specific structures and functions of the supply chain. Gaining experience, capacity, and competence in conducting supply chain risk assessment will present a challenge for many importers in Vietnam.

**Recommendations:**

For the TLAS Decree: The future TLAS Decree should include clear requirements for the
assessment of supply chain risks. The current wording does not provide the importers a clear path to identify which risks should be considered when buying timber or what risk thresholds should be applied. Also, the Government current is allocated a lot of the responsibility to identify positive geographical areas and high-risk species. The TLAS should be rephrased to assign the obligation of risk assessment to the importers directly.

**For Operators:** As described above they initial prerequisite for effective risk assessment is to gain access to information about the supply chain. The next steps include to review legality risk information for the country (if available, to specify the specific risks in the supply chain, in terms of the type of risk (e.g. risk of non-compliance with environmental legislation) and at what point in the supply chain the risk might occur (e.g. at forest level, in transit or in processing). Even with a risk assessment developed, specifying supply chain risks to a level where specific mitigation actions can be taken is no simple task. It requires a good understanding of the supply chain and the legal requirements in the country of harvest, as well as the specific structures and functions of the supply chain. Also, here the timber industry associations of Vietnam could play an important role by supporting their members to make risk assessment information available and up to date.

### 9.7 Risk mitigation

**Challenge:**
In the draft TLAS Decree, there is no clear requirements for risk management or risk mitigation. “Risk management” is mentioned in the principles of Article 4, but only addressed indirectly again in Clause 2, d) of Article 4. It is found that the level of clarity regarding the requirements for risk mitigation are very limited and thus represents a real challenge to the effective implementation by industry and enforcement by authorities.

**For the industry**

**Recommendations:**

**For the TLAS Decree:** The TLAS Decree should include clear requirements for how material that is identified as having high risk of illegal harvesting, trade or processing in the country of harvest should be managed and how importers should report this to the authorities.

**For Operators:** the ability to efficiently mitigate risks rests on the effective access to information (transparent supply chains) and clear risks specification. Operators should work to ensure that they can address risks specified in their specific supply chains by supplier collaboration. Where risks can be mitigated by securing documentation of legal compliance, and these documents can be trusted, importers should seek to gathers additional information and documentation. However, many risks specified in the country Risk Assessments, cannot be mitigated by only using documents. Several risk instances will need on-site evaluation and action before they can be mitigated. It is key that the Vietnamese importers build capacity and competence to assess and mitigate risks in their supply chain. For specific risk mitigation actions related to each of the countries included in this study, please see the individual country profiles.
9.8 Use of voluntary certification systems

Challenge: Certification is mentioned in the draft TLAS Decree as part of assigning a positive geographical area rating – however, it is not clear from the text how such national or international system will be evaluated in order to ensure that they do in fact cover the legality definition applied in the VPA for imported timber, and have quality controls that are strong enough to secure integrity of the systems. This gap will introduce a challenge in defining when a certification system (national or international) is good enough to count against the rating as a positive geographical area.

The Vietnam VPA recognises the role of third-party certification systems (both voluntary and national schemes) as a part of the verifiers to be evaluated by FPD and Customs. Though forest certification has been successful in increasing the areas certified continually over many years, the success rate in many tropical countries has been much less clear. The availability of timber from certified forests in the 10 countries included in this study is limited, and will not, in any way near, be enough to satisfy the demand from Vietnam. Aside from recognised PEFC and FSC certified materials, it may result also in national certification schemes, of unknown quality to be used as a means of fulfilling the risk mitigation requirements, thus creating a challenge for the industry to identify which systems are credible, and which are not – something that is already challenging operators in the EU.

Recommendation: The TLAS Decree mentions national and international certification systems as an aspect of assigning a country as positive geographical area. However, the threshold for such systems are not mentioned. The TLAS Decree should be supported by clear guidance or procedures to determine when a national or international certification system is good enough to meet the VN TLAS principles.

PART II: COUNTRY PROFILES

The following part of the Report contains short country profile for each of the ten supplier countries included in the study.

Each country profile contains a summary of the risk assessment findings, as well as an overview of challenges and recommendations for each country related to the risks specified in the full Risk Assessment. The intention of the country profiles is to provide a brief overview of the key requirements for harvest, transport, processing and export, as well as give a brief overview of key risks and provide recommendations for risk mitigation. All the information is presented with the intention to provide the importer an overview of relevant information about the source of timber in the country of harvest and provide detailed analysis of risks and potential risk mitigation options. The country profiles thus act as an introduction to the full risk assessment, that can be accessed easily by importers of timber to gain an overview of key issues. The brief country profiles should be used as an introduction to the full Risk Assessments and Document Guides.

Note that references in the text are included in the full Risk Assessment attached as appendices to this Main Report.

All Document Guides are also attached as appendices.

The following country profiles provide a summary of the most relevant aspects related to the legality of timber.
10 Angola

10.1 Export bans and regulations

10.1.1 Logs

Log export is banned in Angola.

10.1.2 Species

By Executive Decree no. 278/18 7 Aug 2018, the felling of *Guibourtia coleosperma* (mussivi or rosewood) is prohibited in Angola.

The Ministry of Forest and Agriculture is required by the Presidential Decree no. 171/18 of 23 July 2018 to establish yearly harvest quotas of logs (from natural and plantation forests), firewood, and charcoal for each province of the country. The quotas are established each year by executive decrees. For example, the Executive Decree no 277/18 of 7 August 2018 establishes the maximum quantity of logs, firewood and charcoal to be harvested in 2018.

10.1.3 CITES

Angola accessioned to the CITES on 02/10/2013 and it came into force on 31/12/2013. It has not yet ratified the convention but has domesticated it into legislation through law no. 6/17 of 24 January 2017 (Forests and Wildlife Basic Legislation). Article 87 (Exports and imports of forest products) stipulates that the import or export of CITES species requires the demonstration of a CITES certificate during the approval process.

Article 155 (Supervision and control of imports and exports) of the Presidential Decree No. 171/18 of 23 July 2018 gives the authority to the IDF and DNF of the Ministry of Agriculture and Forestry and the Ministry of Environment, respectively, to ensure compliance with the provisions of Article 153 (Importation of forest products), Article 154 (Export and Import of CITES Species) and Article 155. The responsibility for the supervision and inspection of the import and export of forest products covered by CITES is given to the Ministerial Department at the Ministry of Environment.

Article 154 specifies that the export and import of products from CITES species requires approval from the National Administrative Authority. Any exporter shall demonstrate an import license issued by the authorities of the destination country supported by phytosanitary certificates and CITES export permits concerning the species listed in Appendices I, II and III of the Convention. Any importer of CITES species from Angola shall in addition to an import license issued by the National Administrative Authority demonstrate phytosanitary certificates and CITES export permits issued by the country of origin concerning the species in Appendices I, II and III of the Convention.

10.2 Legal timber sources

Timber supply to Vietnam from Angola mainly comes from two sources of forests, namely, natural production forest and plantation forest.

Table 22: Main sources of timber from Angola

<table>
<thead>
<tr>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Production forest</td>
<td>Natural forest classified as production forest by the Ministry of Agriculture and Forestry with granted exploitation rights. Exploitation rights are granted through either a concession contract or annual harvesting permit.</td>
</tr>
<tr>
<td>Plantation forest</td>
<td>Plantation forests of commercial or industrial production objectives. All</td>
</tr>
</tbody>
</table>
current commercial or industrial plantation forests under exploitation belong to the government. However, national and foreign companies are allowed to invest in plantation forests.

10.3 Legal requirements for harvesting

Exploitation rights to both natural production forests and plantation forests are awarded either as a concession agreement or an annual harvesting permit. No concession contract has been granted to date. The annual harvesting permit specifies the quantity of different timber species that can be harvested within a demarcated area. The allocation of harvesting permits occurs between the 1st November and the 30th April of the following year. Harvesting activities may normally only take place from the 1st May until the 31st October of the same year. The remainder of the year (1st November to 30th April of the following year) is declared a vegetative rest period where harvesting activities are usually prohibited. The harvesting permit may be renewed however under clearly specified terms and conditions. The permit cannot be transferred to a third party. Exploitation rights are reserved for Angolan nationals. Foreigners are however permitted to provide logistical and administrative services.

10.4 Legal requirements for processing and transport

10.4.1 Processors

Timber processors are required to register as legal entities with the Ministry of Industry in addition to being included in the trading register under the Ministry of Trade. Timber processors are obliged to comply with health and safety regulations as well as meet the provisions of the General Labour Law. These include the payment of minimum wage, registration of workers for social security system as well as contribute and pay to the social security system.

10.4.2 Transport

The transportation of logs shall be marked with 1) the harvesting permit #, 2) the serial # of logs felled by contractor 3) province of origin, 4) volume and 5) # of Range Supervisor at the check point. The transport of forest products shall be accompanied with a certificate of origin and transit permit. The certificate of origin shall be issued and signed by the head of the respective IDF Provincial Department. The transit permit shall be completed and signed by the harvesting permit holder and plantation operator. The transit permit shall - in the case of forest concession holders as well as companies holding harvesting permits to plantation forests - be authorized by the relevant Resident Inspector. The transit permit shall - in the case of companies holding a harvesting permit to natural productions forests - be authorized by the relevant Head of the Provincial Department of the IDF or, in his absence, by the Chief Technical officer and the Supervisor. Government storage facilities have strategically been established across the country for the purpose of controlling and monitoring the exploitation and trade of forest products. All forest products, whether targeted for the domestic or international market, shall be subjected to inspection at one of these storage facilities. It is hence prohibited to sell any forest product without it first passing through one of the storage facilities and inspected by the relevant authorities (e.g. the IDF, Tax Police, General Tax Administration, Commercial Banking). If a forest product is approved by the IDF, the Director General of IDF issues the certificates and the declarations in question after payment of applicable fees and charges.
10.5 Legal requirements for export

Exporters of timber products in Angola must have an Export and Import Registration (RIE) obtained from the National Directorate of External Trade of the Ministry of Trade. RIE registration requires the possession of a National Identity, Business Registration as well as proof of payment of applicable fees and tax using the registered tax identification.

Export documentation is carried out by freight forwarders on behalf of the timber exporter. The Ministry of Commerce’s external trade division is responsible for checking and approving the export documentation after which the approval process goes to the Customs division of the General Tax Authority (GTA) and the Central Bank for the letter of credit and then export.

Exporters of forest species classified as endemic or vulnerable requires special permission from the Minister of Agriculture and Forestry.

10.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the risks specified in the risk assessment for Angola, along with recommendations for importers of timber from Angola.

For **Legal rights to harvest**, there is a risk that annual forest exploitation licenses are transferred illegally to third parties (such as foreign national or companies) that are not eligible to hold a license.

**Mitigation recommendation**: Importers should ensure to verify the legal status of the Forest Exploration License. This should be done by contacting the FDI in collaboration with the supplier and/or the License holder.

For **Timber harvesting activities**, there is the risk that timber is harvested below the minimum diameter and beyond their permitted area boundaries.

**Mitigation recommendations**: The importer should evaluate the Forest Exploration License, along with available transport documentation to evaluate if the diameter of the original logs is established according to the minimum requirements. Further evaluation may be needed on-site at the forest level to evaluate the harvest practices, which should also include evaluation of the harvest area.

For **Timber harvesting activities**, there is a risk that: health and safety regulations are not met at the forest level and processing facilities.

**Mitigation recommendations**: Evaluation of implementation of health and safety measures should be conducted on-site at the forests level (harvest site), as well as in processing facilities. In addition, the Occupational Health and Safety (OSH) Services monthly, quarterly and annual reports for companies with 50 or more employees should be evaluated where relevant (company has more than 50 employees)

For **Timber harvesting activities**, there is a risk that: workers engaged in forest operations and in processing facilities are not registered for social protection by their employers and social security contribution deduction is not made and paid on their behalf by employers and some forest operations also do not pay the current monthly minimum wage.

**Mitigation recommendations**: Evaluation of legal employment will require on-site evaluation to review legally required documents (employment contract and social security clearance letter), in addition to conducting interviews with workers and evaluating the company’s list of employees.

For **Trade and Transport**, there is a risk that timber may be transported under falsified documents, stating incorrect volumes.

**Mitigation recommendations**: document verification could be conducted by evaluating the Exploitation
permit, the Certificate of origin as well as the transit permit/certificate and assess if there is consistency and connection between the documents and the material reported on the documents available. Also, verification from competent authorities (FDI and the general Tax Administration) could be conducted along with onsite evaluation of supply chain documentation.
11 Cambodia

11.1 Bans and restrictions on exports

11.1.1 Logs and timber

The following wood products are banned for export from Cambodia:

- Logs whether debarked or not
- Crude or rough sawn timber
- Squared logs with a thickness or width of more than 25 cm, even when smoothed
- Firewood and charcoal from natural forests
- Unprocessed timber from natural forests

11.1.2 Species

The following species of timber are listed as “luxury timber” in Cambodia and formally protected from harvesting and export:

- *Afzelia xylocarpa* (beng)
- *Albizia lebbek* (chres)
- *Dalbergia bariensis* (neang nuon)
- *Dalbergia cochinchinensis* (kra nhoung)
- *Fagraea fragrans* (ta trav)
- *Pterocarpus macrocarpus* (thnong)
- *Gluta laccifera* (kroel)
- *Diospyros pilosanthera* (tro-yoeng)
- *Cassia garettiana* (hai-san)

11.1.3 CITES

Cambodia acceded to the CITES convention in 1997. Trade in species listed on the CITES appendices I, II and III, shall therefore be regulated.

The import-export and re-export of any species listed in the CITES appendices requires a valid import-export permit or re-export permit issued by the Forestry Administration and CITES Management Authority in Cambodia. An import-export permit and re-export permit are valid for a period of six months from the date on which they were issued.

The timber species *Dalbergia* spp. (rosewood) and *Diospyros ferrea* (black ebony) are both listed on CITES Appendix II, which means that trade of these species must be strictly controlled.

11.2 Legal timber sources

There are three main sources of legal timber in Cambodia (table 23).

Conversion timber (either from Economic Land Concessions or infrastructure development) is the primary source of timber in Cambodia. Natural forest concession activities have been suspended since 2002 and, as such, natural production forests, managed for producing timber, are not currently a legal source of timber in Cambodia. But the production forests could be allocated for Annual Bidding Coupes, although the vast majority of production forests formerly under Forestry Administration jurisdiction were transferred to Ministry of Environment jurisdiction in 2016 and are no longer classified as such.
Table 23: Main sources of timber from Cambodia

<table>
<thead>
<tr>
<th>Source type</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversion timber from infrastructure development</td>
<td>State Private land that is allocated to private companies for development (e.g. hydro-power dams, national and provincial road areas). Harvest permits are required to clear the land to prepare for the development. Like forest conversion for ELC, timber harvest and forest clearance are made by separate entities. Timber from infrastructure development can be used for domestic use or export.</td>
</tr>
</tbody>
</table>
| Economic Land Concessions (ELCs)                      | State Private Land that is classified as production forest or within the protected areas system. ELC contracts are allocated to private companies to develop forest areas for other uses. Since 2014, ELCs can be awarded for agro-industrial purposes (including forest plantations) for maximum 50 years of lease duration and for areas no greater than 10,000 ha. They can be revoked or cancelled by the government when legal and contractual requirements are not complied. Harvest Permits are required.  
Since 2012, there has been a moratorium on establishing new ELCs. The moratorium does not apply to ELCs that were already in the approval process when the moratorium was implemented. |
| Confiscated illegal timber                            | Transport Permits are required. Any drifted, stranded, sunk or unmarked logs, and any unclaimed timber shall be seized as state property and publicly auctioned. A transport permit (PC-2) is given to the auction winner, normally a Cambodian entity, to transport the seized timbers to their target processing sites. Illegal timbers that are confiscated from within the protected areas are handled by Ministry of Environment (MoE). However, the auction winner, again, must have PC-2 from the Forestry Administration to transport the timbers to their target processing sites. It is noted that the MoE officials are restricted to patrol illegal timber harvest only within the territories of the protected areas, outside protected areas are handled by MAFF. |

11.3 Legal requirements for harvesting

A harvesting permit is required for any private company who wishes to conduct harvesting activities on State Private Land. In addition, private companies shall be registered (i.e. timber harvest registration) with the Ministry of Agriculture, Forestry and Fisheries as well as hold a Logbook A issued by the Forestry Administration.

The technical activities required for obtaining harvesting rights depend on the source type, and include forest inventory, granting of log permit, establishment of Logbook A, timber cutting, transport of timber and sawmill activities. The forest inventories are conducted under FA technical supervision. The FA is mandated to grant the log permit to businessperson to enter into forestlands for establishment of Logbook A. The Logbook A is normally included timber volumes for royalty payment.
11.4 Legal requirements for processing and transport

11.4.1 Processors

Timber processors are required to obtain a Prakas (i.e. special permission) from the Ministry of Agriculture, Forestry and Fisheries.

11.4.2 Transport

The transportation of timber products within and out of Cambodia shall be accompanied by the following:

- PC-1 (Permit de Condure-1) - transport of logs from the stockpile to a defined processing mill
- PC-2 (Permit de Condure-2) - transport of timber products for the domestic markets
- PC-IMEX - transport of timber and NTFP for export-import

For confiscated illegal timber, a transport permit (PC-2) is given to the auction winner, normally a Cambodian entity, to transport the seized timbers to their target processing sites.

11.5 Legal requirements for export

Illegally logged timber seized by the authorities and sold through bidding can be exported (Technical Working Group on Forestry Reform, 2014).

Timber products intend for export shall pass through official government ports. An export license is mandatory for the export of all commercial forest products. The export license shall be issued by the Ministry of Commerce with visa issued by the head of the Forest Administration.

Processing mills that produce timber product must obtain a PC-IMEX for the import or export of wood products.

Forest products for export shall be inspected during their loading into containers and officially sealed by the Forestry Administration to transport to customs warehouse and stockpile areas. The seal shall be attached to the outside of the container holding the forest products for export.

11.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for Cambodia, along with recommendations for importers of timber from Cambodia.

For **Legal Rights to Harvest**, there is a risk that land tenure is unclear due to confusion about property rights and that regulations governing the establishment ELCs and conversion projects are violated. More specifically, there is among others, risk that illegal forest clearance takes place prior to the proper legal process for granting ELCs being completed, ELCs are illegally allocated in the wrong zoning areas within protected areas, that license holders manage more than 10,000 ha and that conversion permits are misused to harvest profitable forest areas adjacent to the ELC.

**Mitigation recommendation:** In order to ensure that legal requirements are met in the allocation of harvest permits and that illegal timber has not been harvested in adjacent areas, on-site verification of concessions is necessary. This would include evaluation of the license allocation process through interviews with government entities at central and local levels, as well as review of documents. Also, on-site visits to the license areas should be conducted in include review of documents, as well as interviews with stakeholders and license holder staff.

For **Taxes and Fees**, there is a risk that there is non-payment of taxes and fees

**Mitigation recommendations:** The risks related to taxes and fees should be clarified through review of tax
payment documents, as well as visit to the MEF to ensure that all relevant taxes and fees have been paid. For Timber Harvesting Activities, there is a risk that harvesting regulations for ELCs and conversion projects are violated, for example, companies harvesting above their annual allowable cut and harvesting trees outside their designated boundaries. There is risk of illegal logging of protected species including Burmese padauk and Siamese rosewood. There is risk of violation of environmental regulations such as conducting and adhering to EIAs prior to initiating logging operations. In addition, there is risk of harvesting without a valid harvesting permit.

Mitigation recommendations: Mitigation of this risk also requires on-site evaluation, including observation of harvesting practices and implementation of required management practices, interviews with stakeholders, such as staff of the license holder (or contractors) and government representatives at both local and central levels. Also, careful evaluation of available documentation, such as management plans and other supporting documentation for evaluating harvest and forest management activities should be conducted.

For Third Parties’ Rights, there is a risk that logging companies do not provide development to villagers in accordance with the law and does not manage any existing or potential conflicts arising from land disputes.

Mitigation recommendations: mitigation of these risks related to third parties’ rights require on-site evaluation and stakeholder consultation of the communities living in or adjacent to the license area. It should be evaluated if the company operating the area are meeting legal requirements for respecting third parties’ rights and if they are managing potential and on-going conflicts according to the law.

For Trade and Transport, there is a risk that timber - including both protected, luxury and CITES listed species - are flowing illegally out of Cambodia from both official and unofficial borders crossings. This timber may be transported under falsified documents, stating incorrect quality and volumes or avoid proper inspection by border officials – in some cases due to bribes from traders.

Mitigation recommendations: Prohibited species shall be avoided in all cases and CITES species shall be accompanied by correct and valid documentation. Any documents accompanying CITES species should be verified.

For Processing, there is risk that sawmills are either not legally registered or illegally located with Permanent Forest Reserves. Unregistered processors are usually much more mobile and therefore play an important role in processing illegally harvested natural timber. In many cases, Environmental Impact Assessment report is not available while natural forest timber processing had already been running. In addition, illegal tools and equipment for natural forest timber processing are used; and normally these tools are sources of wasting raw wood materials.

Mitigation recommendations: Onsite evaluation of processing is necessary to evaluate if processing facilities are legally constructed and operating according to the requirements.
12 Cameroon

12.1 Bans and restrictions on exports

12.1.1 Logs and timber

There is currently no ban on log and timber exports in Cameroon.

12.1.2 Species

There is a log export ban on timber from the species *Entandrophragma cylindricum* (sapelli), *Lovoa trichilioides-klaineana* (bibolo), *Distemonanthus benthamianus* (movingui) and some species of the genus *Pterocarpus* spp. (padouk). In addition, a log export quota is established for the timber species *Triplochiton scleroxylon* (ayous).

12.1.3 CITES

Cameroon signed the CITES Convention in June 1981 and ratified it in September of the same year. Export of timber species listed on the CITES appendices I, II and III is only permitted upon demonstration of a valid CITES permit issued by the Ministry of Forests and Wildlife.

12.2 Legal timber sources

There are six sources of legal timber in Cameroon (table 24).

*Table 24: Main sources of timber for export in Cameroon.*

<table>
<thead>
<tr>
<th>Category</th>
<th>Permanent forest estates</th>
<th>Non-permanent forest estates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest title</td>
<td>Forest management unit (FMU)</td>
<td>Communal forest management unit (FMU)</td>
</tr>
<tr>
<td></td>
<td>Unité Forêt communale d’Aménagement (UFA)</td>
<td>Forêt communale et autres collectivités locales</td>
</tr>
<tr>
<td>Modality of transfer of land rights</td>
<td>Consultation conducted by the Forestry Administration</td>
<td>Consultation conducted by the Forestry Administration</td>
</tr>
<tr>
<td>Land tenure</td>
<td>Private state forest</td>
<td>Private state forest</td>
</tr>
<tr>
<td>Assignation period</td>
<td>15 years</td>
<td>15 years</td>
</tr>
<tr>
<td>Management</td>
<td>Co-management by the forest administration and the forest</td>
<td>Co-management by the forest administration and the harvester</td>
</tr>
</tbody>
</table>
12.3 Legal requirements for harvesting

The legal requirements for harvesting timber for the main sources of legal timber from Cameroon are described in detail here below. Timber from private forests is not included because it represents a small source of wood.

12.3.1 Forest Management Units (permanent forests)

Concession holders of FMUs must either be residents of Cameroon or a company registered in Cameroon and whose shareholders are known to the forestry service. If these requirements are not met, a concession will not be granted. Before a concession can be granted the following steps must have been implemented: 1) a public call for tender is issued, 2) Accredited bidders submit applications, 3) An interdepartmental concession allocation committee is created and tasked to evaluate the applications, 4) this committee decides on the allocation of the tender/title and 4) the Minister of Forests and Wildlife notifies the selected bidder. The selected bidder then pays, and the contract is signed with the Ministry of Forests and Wildlife. Harvesting is done without a management plan during the first three years under the provisional agreement. During this period, the concession holder develops the management plan according to prescribed steps. The validation of each step by the Ministry of Forests and Wildlife is required before moving to the next one.

Once the owner has fulfilled these obligations, the Forestry Service issues a certificate of conformity with the specifications of the provisional exploitation contract. The owner can then apply for a permanent exploitation contract. Forest exploitation in private state permanent forests is governed by an operating agreement which is signed by the Minister of Forests and Wildlife and valid for 15 years. The agreement covers a forest area consisting of one or more FMU and must comply with a management plan approved by the Ministry of Forests and Wildlife and an inter-ministerial commission. The management plan is valid for 30 years however can be revised after a period of 5 years. The revised management plan must also be validated by Ministry of Forests and Wildlife and the inter-ministerial commission before it is implemented. It should be noted that local communities shall be given opportunity to voice their opinion on micro-zoning aspects of the proposed management plan.

12.3.2 Communal forests (permanent forest)

In order to obtain legal rights to harvest timber in communal forests areas, municipalities and communities must first submit a request for co-management of a forest area to the Ministry of Forests and Wildlife. The Ministry of Forest and Wildlife then consults relevant stakeholders and, if no objection, the Ministry signs an agreement. Harvesting operations in communal forests are subject to the approval of a forest management plan. As with the FMUs, harvesting operations can be conducted without a management plan during the first three years of the provisional agreement. During this period, the community shall develop the management plan, following the same process as for forest concessions in FMUs explained above.

12.3.3 Community forests (non-permanent forest)

The decision to allocate part of the non-permanent forest domain as a community forest is taken following a request from the community’s representatives and a favourable opinion of the rest of the community. For communities to harvest timber, an Annual Exploitation Certificate is required and issued by the Ministry of Forests and Wildlife. The steps to follow for communities to legally harvest timber from their forest include: verifying the boundary of the annual logging unit; carrying out an inventory; writing an Annual Activity Report for the previous exploitation year; an annual plan for the current year; photocopy the Simple Management Plan approved by the Ministry of Forests and Wildlife; and write a request to obtain an Annual Exploitation Certificate.
12.4 Legal requirements for processing and transport

12.4.1 Processors

In order to legally process timber, companies in Cameroon need to register as wood processors with the Ministry of Forests and Wildlife. In addition, timber processing plants in Cameroon must prepare an environmental impact study and implement the associated management plans.

12.4.2 Transport

The transport of timber products in Cameroon requires the issuance of a transport permit from the Forest Administration. Please note that only valid title holders, registered timber processors or owners of log processing sites can request transport of forest products. To obtain a transport permit, several documents must be submitted and approved by the Forest Administration after which a series of authorization letters for the transportation of logs or processed timber are issued.

12.5 Legal requirements for export

The Ministry of Forestry and Wildlife and the Ministry of Finances are overall responsible for ensuring legal compliance with the export of timber products from Cameroon.

The legal requirements for export depend on the type of timber species being exported where specific requirements apply to the following:

- Species banned from exportation in the form of logs (i.e. padouk, sapelli, bibolo and movingui).
- Species with quotas on exportation of logs (i.e. ayous and sapelli)
- Species that require CITES permits for exportation (i.e. Afrormasia).

In Cameroon, the monitoring and inspection of timber exports is outsourced to SGS, an external verification and certification company. All forest products leaving the country shall have an export permit issued by SGS that confirms legal origin, traceability and payment of taxes and fees. In addition, SGS is responsible to ensure that export declarations to customs are correct (e.g. quantity, species, tariff classification and value).

Any exporter of wood products shall first subject the product to phytosanitary treatment and inspections after which an export declaration is obtained. The exporter shall then ensure a domiciliation of the Export Declaration from a bank. The exporter must then apply to the foreign exchange department. This registers the Export Domiciliation. He affixes his visa on the copies of the Domiciliation of Exportation. The copies with the visa are returned to the operator, who then hands them over to the Domiciliation Bank and to Customs.

12.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for Cameroon, along with recommendations for importers of timber from Cameroon.

For **Legal Rights to Harvest**, there is a risk of non-compliance with the procedures of allocating logging concessions (i.e. for FMUs) and the procedures for issuing annual operating authorizations, respectively. In addition, there is risk that the management plan required for the exploitation of timber from FMUs and Communal forests is either not adequately adhered to, not developed according to official procedures or simply not developed/used at all.

**Mitigation recommendations**: Evaluation of the process of concession license issuance is necessary, as well review of the license itself and management plans.

For **Taxes and Fees**, there is a risk that there is non-payment of taxes and fees, among other things, because of
fraudulent declarations on income and profits.

**Mitigation recommendations:** Evaluation of tax payments should include on-site evaluation of documentation and interviews with company employees and relevant government representatives to ensure that relevant taxes and fees have been paid.

For **Timber Harvesting Activities**, there is a risk that prescriptions in the officially approved management plan are not followed along with the risk that illegal logging in protected areas and/or of protected timber species there is also risk that companies are not complying with environmental regulations such as failure to conduct ESIs prior to logging operations. Moreover, there is a risk that workers engaged in forest operations are not registered for social protection by their employers and social security contribution deduction is not made and paid on their behalf by employers and some forest operations also do not pay the current monthly minimum wage. There is risk that health and safety regulations are not met.

**Mitigation recommendations:** Regarding harvesting activity risks, on-site evaluation is necessary to assess the level of legal compliance of operations. This would entail reviewing management plans and harvest permits and observe harvest practices in the field. Also, ESIA reports should be evaluated and assessed relating to the performance to meet requirements. Forest workers should be interviewed, and their contracts reviewed to ensure that they are employed and working under legal conditions.

For **Third party rights** there is risk that local communities are not consulted with as part of the establishment process of FMUs together with the risk that local communities are prevented from accessing some FMUs.

**Mitigation recommendations:** On-site evaluation should be conducted to evaluate the community relations procedures of the company, along with interviews of company employees and community members, as well as relevant government representatives.

For **Trade and Transport**, there is a risk that timber is transported under falsified documents, stating incorrect quality, volume etc. to avoid proper inspection by border officials. Furthermore, there is risk that protected timber species are illegally exported and/or their annual export quota is exceeded in addition to exporters not possessing valid timber export licences.

**Mitigation recommendations:** Document verification should be conducted to evaluate the status of these. This could be done by interviewing or contacting government representatives responsible for issuing documents. On-site evaluation of harvest records and transport documents should be included as a mitigation measure.

For **Processing**, there is risk that workers engaged in wood processing operations are not registered for social protection by their employers and social security contribution deduction is not made and paid on their behalf by employers and some forest operations also do not pay the current monthly minimum wage. There is risk that health and safety regulations are not met. Additionally, wood processors in some cases fail to carry out ESIs and/or implement their identified measures.

**Mitigation recommendations:** To evaluate and mitigate this risk, on-site evaluation is necessary to evaluate the operations of processing facilities – including management of health and safety requirements and implementation of necessary actions according to the ESIA.
12.7 Recommendations based on diagnosis and analysis of the Vietnamese timber sector in Cameroon

Table 25: Overview of recommendations for institutional actors

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>What to do</th>
<th>How to do</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of a framework for collaboration between the two countries for the timber trade (Cameroon-Vietnam)</td>
<td>1. Signature of a Memorandum of Understanding between the administrations of the two countries 2. Strengthening the traceability of marketed woods</td>
<td>1.1 Organisation of high-level meetings (inter-ministerial, bilateral)</td>
<td>MINFI, MIFOF</td>
</tr>
<tr>
<td>Improved exchange of information between the parties concerned (Cameroon-Vietnam)</td>
<td></td>
<td>1.2 Exchanges of customs data</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.1 Elaborate a table of concordance (a lexicon of essences between scientific and commercial designations between Cameroon and Vietnam) 2.2. Updating the database of statistical systems from the developed commercial species cross-reference table. 2.3. Improve the control and legal framework of the sources of supply of dry savannah species and privately-owned forests. 2.4. Establish a framework for exchanges between the administrations of cross-border countries (Cameroon, Central African Républic and Popular Républic of Congo) 2.5. Improving the control system for timber in transit</td>
<td>MINFOF, MINFI supported by GIZ</td>
</tr>
<tr>
<td>Recommendations</td>
<td>What to do?</td>
<td>How to do?</td>
<td>Responsible</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Vietnamese investors must join forces with Cameroonian stakeholders in the sector to participate in the reflection on the strategic framework for the management of Cameroonian forests. | Create a permanent consultation framework between Vietnamese investors and the Cameroon Forest and Timber Industry Federation (IFFB). | Organize a first meeting between Vietnamese operators and the IFFB to discuss the modalities of setting up this consultation framework and how it will function. | • IFFB  
• Vietnamese Investors  
Supported by GIZ |
| Participate in the development of the consultation framework between Cameroon and Vietnam | To formulate proposals within the framework of consultation meetings between Cameroonian and Vietnamese investors to encourage the Cameroonian and Vietnamese administrations to develop a framework for bilateral collaboration. | Conduct reflections during the meetings of the permanent consultation framework | • IFFB  
• Vietnamese Investors |
| Organising a fair to promote legal timber in Cameroon and Vietnam               | Organise joint fairs in Cameroon and Vietnam for the promotion of legal timber and provide opportunities for joint ventures. | Conduct discussions during the meetings of the permanent consultation framework for the organisation of these fairs. | • IFFB  
• Vietnamese Investors  
• MINFOF  
• MINCOMMERCE  
• MINPME  
• The media  
Supported by GIZ |
| Support for the legal compliance of companies in their forestry activities     | Bringing companies up to speed on legal and regulatory requirements                                         | Awareness and training of companies on legal and regulatory requirements  
Exchanges of skills                                                                                      | • MINFOF, MINFI, Investors, Operators  
• supported by GIZ |
13 Congo

13.1 Export bans and regulations

13.1.1 Logs and timber

Log export is banned in Congo with the notable exception that:

- Companies can export 15% of their production of logs for some species upon official approval from the relevant authorities.
- Companies can export over 15% of their production of logs upon official approval and contingent on the payment of additional taxes.

13.1.2 Species

Congo has not banned the export of specific timber species. Although some level of protection is given to certain timber species, these may be exported upon official approval from the relevant authorities.

13.1.3 CITES

Congo acceded to the CITES convention in 1983. It came into force in May 1983. Export and import of timber species listed in the CITES appendices I, II and III must be documented and accompanied by official export, import and re-export permits issued by CITES Management Authorities.

13.2 Legal timber sources

There are four sources of legal timber in Congo (table 27).

Table 27: Main sources of timber for export in Congo.

<table>
<thead>
<tr>
<th>Category</th>
<th>Permanent forest estate</th>
<th>Permanent and non-permanent forest estates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest title</td>
<td>Forest management unit (FMU) « Unité Forestière d’Aménagement (UFA) »</td>
<td>Special permit « Permis Spécial »</td>
</tr>
<tr>
<td></td>
<td>Forest harvesting unit (FHU) « Unité Forestière d’exploitation (UFE) »</td>
<td></td>
</tr>
<tr>
<td>Modality of transfer of land</td>
<td>Granted to a private forest operator following public tender and review of applications by a committee</td>
<td>Tree cutting permits on plantations</td>
</tr>
<tr>
<td>rights</td>
<td>Granted to a private forest operator following public tender and review of applications by a committee</td>
<td>Granted to a private forest operator. Emphyteutic lease contract for tree cutting on forest plantation.</td>
</tr>
<tr>
<td>Land tenure</td>
<td>Public</td>
<td>Public</td>
</tr>
<tr>
<td>Assignation period</td>
<td>25 years</td>
<td>15 years</td>
</tr>
<tr>
<td>Management</td>
<td>Private</td>
<td>Private</td>
</tr>
</tbody>
</table>

As per the Forest Code Act No. 16-2000 of November 20, 2000, exploitation titles are categorized into the following:
1. Agreement for Industrial Processing: Forest operators granted this title can collect an annual harvest quota defined in their Forest Management Unit. The validity of these operation permits is determined according to the volume of output and may not exceed 15 years. Renewal is possible.

2. Agreement for Management and Processing: Like the Industrial Processing Agreement, holders must also carry out silvicultural operations as part of a development plan for areas of concern. The validity of these permits may not exceed 25 years; however, they can be indefinitely renewed unless the holder fails to meet its obligations, trees fall, species become threatened or civil society reacts.

3. Tree cutting permits from forest plantations: These permits are granted according to the number of trees to be collected and the work may not exceed six months. Their extension is only possible in case of force majeure.

4. Special permits: These permits can only be granted to individuals of Congolese nationality, NGOs and other associations incorporated under Congolese law. Permit holders may commercially exploit non-timber forest products in specific areas and in a limited quantity. If allowed, the felling of a select number of trees for commercial purposes may be allowed. Special permits are valid for a month and may not be renewed.

### 13.3 Legal requirements for harvest

The Agreements for Industrial Processing (ITC), and Management and Processing (CAT) are only awarded after a process beginning with an Order from the Minister for Water and Forests. Applying companies are assessed according to various criteria including the socio-economic impact of their projected activities, financial risk, equipment, and/or their commitment to implementing a development plan. Moreover, agreement holders must apply to the Department of Water and Forests for authorization to build any necessary infrastructure. They must also file an application to authorize their maximum annual cut. These Agreements may not be transferred or sub-contracted, except when approved by the Department of Water and Forest. Tree cutting permits (i.e. plantation logging permit) are issued following a public tender process and final approval by the Minister for Water and Forests and Minister of Finance (who also define the final sales price). Special permits (i.e. agreement) are issued for a period of one month by the relevant State Forest Administration. To obtain this type of permit, the beneficiary must present an official request at the State Forest Administration office, who then goes on-site to mark the trees to be harvested. When harvesting operations are completed, the State Forest Administration shall then produce a post harvesting report. Harvest permits are granted only to companies incorporated under the Congolese laws. Foreign private companies willing to carry out logging activities in Congo-Brazzaville must therefore establish subsidiaries in accordance with Congolese law. Furthermore, logging companies with foreign capital shall open their share-capital to Congolese citizens.

### 13.4 Legal requirements for processing and transport

Timber processors in Congo must undergo an official registration process with the Ministry of Water and Forests as well as obtain a professional industry ID card. Law 003/91 specifies that plywood factories and generators above 39.5 MW are subject to environmental impact studies. However, all processors are clearly subject to waste disposal regulations, health and safety regulations and legal employment obligations. These among others include the payment of minimum wage, registration of workers for social security system as well as contribute and pay to the social security system.
13.5 Legal requirements for export

Export of forest products from Congo is subject to an inspection (e.g. quantities, grades, species and grading) by the Department for the Verification of Forest Products for Export. After this technical inspection work, the Department for the Verification of Forest Products for Export issues an export verification certificate. In addition, any export of forest products from Congo must be accompanied by an export declaration, certificate of origin as well as a phytosanitary certificate.

13.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for Congo, along with recommendations for importers of timber from Congo.

For **Harvesting Rights**, there is a risk that requirements for valid concession contract are not being followed and that management plans and harvest permits are not adequate or lacking.

**Mitigation recommendations:** the concession license, harvest permits, and management planning documents should be evaluated, and it should be assessed whether they have been awarded according to the legally established process and are valid.

For **Taxes and Fees**, there is a risk that operations do not pay taxes and levies on the harvest (harvest tax, acreage tax, deforestation tax), as well as the acreage tax on a non-regulatory basis (ITC). There is also risk of non-payment of the levy for the Local Development Fund (CAT) and non-fulfilment of the socio-economic infrastructure provided for in the Convention Charges (CAT and CTI)

**Mitigation recommendations:** It is recommended to evaluate the status of tax payments for timber volumes and area for forest operations through document review. Potentially contact to relevant government authorities can be used as a way of confirming the validity of documents and correctness of information. It is recommended to try to cross reference tax payment information with other information that can confirm the payment basis, to ensure that the correct volumes and/or area is used for calculation.

For **Timber Harvesting Activities**, there is a risk that forest operations do not meet legal requirements related to limitations on species, area, volumes, minimum diameters of logs, as well as not meeting reduced impact logging rules. Also, requirements for Environmental and Social Impact Assessment (ESIA) and to draw up an operational program and/or to implement provisions aimed at mitigating environmental and social impacts may not be adhered to. Lastly there are risks that operations fail to meet workers' health requirements or comply with worker safety and employment regulations.

**Mitigation recommendations:** It is recommended conduct on-site evaluation of issues related to harvesting practices, to evaluate that legal requirements related to harvest restrictions are met. Also, ESIA should be evaluated to assess if it is in place, adequate and being implemented. Lastly evaluation should be conducted to ensure that regulations related to workers’ rights and protections are being followed.

For **Third-Parties Rights**, there is a risk that, the operation does not carry out identification of spiritual and sacred sites of indigenous peoples or lack of restitution/reparation in case of non-compliance.

**Mitigation recommendations:** To evaluate compliance with legal requirements related to third parties’ rights it is recommended to conduct on-site assessment of the activities of the operation to meet legal obligations. This could include review of documents and procedures required by law, as well as interviews with local communities and government representatives, to confirm that legal requirements are met.

For **Timber Trade and Transport**, there is risk of misdeclaration of volumes and species as well as use of fraudulent...
Mitigation recommendations: To mitigate risks in the stage of transport, supply chain verification is recommended. This would include on-site verification of shipments to evaluate their compliance with measurement and species identification rules. Verification could entail document review, as well as interviews with company staff and government officials.

For Processing, there are risks that the processing unit does not carry out the Environmental and Social Management Plan and/or operates without licenses/permit. In addition there are risks of failure to comply with workers' health requirements (lack of a statutory medical service, failure to take care of workers in the event of accident or illness, failure to register workers and work accidents with the National Social Security Fund) as well as failure to comply with worker safety obligations (lack of personal protective equipment) and employment regulations (lack of a valid and registered employment contract, failure to use wage slips for workers payment, employer failure to cover Social Security contributions, remuneration of workers below the minimum wage.

Mitigation recommendations: It is recommended to conduct on-site evaluation of processing facilities to evaluate if they meet all legal requirements specified as risk.
14 DRC

14.1 Export bans and regulations

14.1.1 Logs and timber

There is currently no ban on the export of logs and timber from the DRC

14.1.2 Species

There is currently no ban on the export of specific timber species from the DRC

14.1.3 CITES

The DRC became party to the CITES convention in 1976. A DRC Ministerial Order on 28 March 2000 details the CITES listed plant species found in the DRC and states the new regulations for their protection, handling, trade and export. Those listed in Appendix II include two commercially exploited species: *Pericopsis elata* and *Prunus africana*.

14.2 Legal timber sources

There are three main sources of legal timber in the DRC (table 28).

*Table 28: Main sources of timber for export in DRC.*

<table>
<thead>
<tr>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial logging (forest concession)</td>
<td>Exploitation rights granted through a concession contract. A forestry management plan validated by the forestry administration with written specifications drawn up with the local communities is required. A 2002 ministerial order suspended new forest concessions (order CAB / MIN / AF.F.E.T./194/MA5/02). This decision was renewed in 2005 (Decree No. 05/116 of 24 October 2005).</td>
</tr>
<tr>
<td>Small-scale logging</td>
<td>A special scheme is provided for Small-scale Forestry Units, whose creation and allocation are managed at the provincial level, according to a process identical to that of forest concessions allocations (Ministerial Order No 85/CAB). 'Primary small-scale logging' is carried out by a natural person (a Congolese national) on a cutting area of less than 50 ha. Secondary small-scale logging is carried out within small-scale forestry units by a natural or legal person on a cutting area between 100 and 500 ha. As of late 2019, DRC has not implemented Small-scale Forestry Units yet</td>
</tr>
<tr>
<td>Communal logging</td>
<td>Forest concessions awarded to local communities who can claim the forest area as their customary right</td>
</tr>
</tbody>
</table>

14.3 Legal requirements harvest

14.3.1 Industrial logging (forest concessions)

All forest management and logging activities in forest concessions shall be carried out according to a predefined...
management plan (Article 71 of the Forestry Code). Concession holders are responsible for drawing up forest concessions management plans and having them ratified by Order of the provincial governor (Article 76 of the Forestry Code).

Concession holders are required to elaborate their management plan within four years of signing their concession contract. They may be granted an additional period of up to 12 months on a reasoned request and by a decision of the Minister of Forests and Water (Article 5 of Decree No. 34/CAB/MIN/EDD). If the proposed forest management plan has not been filed with the Forestry Department by the end of the deadline, the logging permits shall be suspended.

During the implementation of the management plan, concession holders prepare a forestry operation annual report, following the template developed by the Forestry Department (Article 65 of Decree No. 34/CAB/MIN/EDD). They also draw up a five-year forest management report every five years. Monitoring, follow-up, and evaluation of the management plan implementation must be carried out by the Forestry Department (Article 76 of the Forestry Code).

14.3.2 Small-scale logging

Small-scale operators must obtain a forestry profession license, issued by the Governor of the respective province and valid for 5 years. As of late 2019, DRC has not implemented Small-scale Forestry Units yet – thus secondary small-scale logging still is not in effect there. On the other hand, primary small-scale operators can access timber resources through a so-called 'mapatano' operating agreement signed with a local community, but there is no convention template available to guide negotiations between local communities and small-scale operators.

14.3.3 Communal logging (local communities forest concessions)

Community representatives must register with the provincial governor and ensure their application include participatory mapping, approximate forest area, and community council minutes (Article 4 of Decree 14/018). The Forestry Department carries out preliminary investigations to verify the veracity of the applicant community’s rights (Article 9 of Decree 14/018).

Community concessions management and logging are carried out following a simple management plan that the local community draws up with the support of the local Forestry Department, following an operational guide produced by the Forestry Department (Article 22 of Decree No. 25/CAB). Though simple, this management plan shall specifically include a division of the concession into specific zones, programming based on a simplified multi-resource inventory, a socio-economic survey report and a description of the management measures falling within the community’s Customs and traditions (Article 23 of Decree No 25/CAB). If one of the zones is allocated to timber logging, the simple management plan provides the quantities or volumes to be harvested annually over a maximum period of 5 years (Article 24 of Decree No 25/CAB).

14.3.4 Harvest permit

The law provides for permits to be issued to private forest operators who directly carry out logging operations (Articles 97 and 98 of the Forestry Code). Such authorization takes the form of either an industrial harvesting permit for industrial forest concessions (Art.20, Decree No. 84/CAB/MIN/ECNDD) or a small-scale harvesting permit for primary or secondary small-scale logging.

14.3.5 Environmental requirements

The Environmental Protection Act stipulates that ‘any forestry project […] likely to have an impact on the environment shall be subject to a preliminary environmental and social impact assessment, together with its management plan’. This plan must describe in particular ‘impacts, mitigation or enhancement measures, monitoring and follow-up responsibilities (as well as their estimated cost during the project and upon its
Completion), follow-up KPIs, timetable, capacity building modalities, and public consultations findings' (Art. 19 Decree n°14/019). A consultancy firm must carry out the impact assessment. If the ESIA (Environmental and Social Impact Assessment) is satisfactory, the Congolese Environment Agency will issue an environmental certificate.

14.3.6 Third-party rights

Congolese forest legislation requires that local communities be considered in forest management processes. Thus, concession holders identify them during the management plan's development phase. Affected local populations fully contribute to drafting up this management plan and the law even encourages their participation in managing the forest. The concessionaire must mention applicable user rights in its concession's management plan (Article 10 Annex Decree No. 023/CAB).

Besides, the annex of the forest concession contract includes a section on socio-economic infrastructure for the benefit of local communities. This 'social clause' of forest concession aims to redistribute industrial logging benefits to local communities. The forest concession contract must be agreed upon following a consultation process between the riparian communities and the concession holder. Sometimes several social clauses are signed by a forest company, due to the number of communities bordering the concession (Tsanga et al., 2017). The template concession holders must use identifies stakeholders and specifies which socio-economic infrastructures to build, according to which implementation timetable, and indicates that the concession holder undertakes to finance these activities through the Local Development Fund (LDF).

14.4 Legal requirements for processing and transport

14.4.1 Processors

Processing units and all classified facilities must obtain a permit to operate their plants. This permit is delivered upon the Minister's favourable opinion, after an application procedure including both a technical and a Territorial-administration public inquiry.

Based on Article 109 of the Forest Code, companies (national and foreign) should process their wood in the DRC to promote local processing industry and add value to their wood and wood products before export. Only national operators and those with processing facilities are authorized to export 30% of raw logs during a ten years period. Although the law remains somehow vague, the intent is presumably to reach a 100% in-country processing at the end of the 10 years period.

Kinshasa (DRC capital) is home to nearly all major industrial processing units – except two large industrial sites located in Nioki (Bandundu) and Bumba (Equator province) (NSIMBA, 2012).

14.4.2 Transport

Logbook and traffic slips are the two types of documentation used between timber harvesting and export. Concession holders produce these documents per the operating standard template (Articles 68 and 71 of Decree No 84/CAB).

The relevant forestry authority for the logging location – or, failing this, a forestry officer posted along the route – must issue the traffic slips (Article 71 of Decree No 84/CAB). These shall include the identifies of the transporter and forestry operator timber destination and timber load identification numbers – including harvesting permit number, log species and their matriculas, freight volume.

If the load carried is altered during the journey ('load breaking'), a new traffic slip must be drawn up (Article 73 of Decree No 84/CAB).

Any timber ownership transfer (purchase or sale) must be reported to the Ministry for Forests and Water at the latest within 15 days following the transaction (Article 80, Decree No. 84/CAB).
14.5 Legal requirements for export

Any exporter of timber products must hold a valid timber-export permit from the Directorate of Forest Management at MECT. The permit is valid for one year. Companies shall in addition complete the customs declaration form indicating the timber volume to be exported and present this form to the Tax Administration and Customs Office. Companies managing concessions and involved in the export are subjected to five types of taxes and royalties, the rate of which is determined by a joint order from the ministries of forest and finance. The list of these taxes is provided hereafter along with indications about their allocations:

- Concession area tax (CAT): 40% to the decentralized administration and 60% to the Tax Office
- Felling tax (FT): equally shared between the National Forest Fund and the Tax Office
- Export tax (ET): 100% to the Tax Office
- Deforestation tax (DT): equally shared between the National Forest Fund and the Tax Office
- Reforestation tax (RT): 100% to the Tax Office

14.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for the DRC, along with recommendations for importers of timber from the DRC.

For **Harvesting Rights**, there is a risk that requirements for valid concession contract are not being followed and that management plans and harvest permits are not adequate or lacking.

**Mitigation recommendations:** the concession license, harvest permits, and management planning documents should be evaluated, and it should be assessed whether they have been awarded according to the legally established process and are valid.

For **Taxes and Fees**, there is a risk that, calculation/estimation of due amounts, are being based on distorted figures (area or volumes), to avoid payment. Also, there are instances of failure to collect area tax or felling tax (for small-scale logging permits) in connection with major administrative malfunctions – particularly for cross-border flows in the Great Lakes region.

**Mitigation recommendations:** It is recommended to evaluate the status of tax payments for timber volumes and area for forest operations through document review. Potentially contact to relevant government authorities can be used as a way of confirming the validity of documents and correctness of information. It is recommended to try to cross reference tax payment information with other information that can confirm the payment basis, to ensure that the correct volumes and /or area is used for calculation.

For **Timber Harvesting Activities**, there is a risk that forest operations do not meet legal requirements related to limitations on species, area, volumes, minimum diameters of logs, as well as not meeting reduced impact logging rules. Also, requirements for Environmental and Social Impact Assessment (ESIA) and to draw up an operational program and/or to implement provisions aimed at mitigating environmental and social impacts may not be adhered to. Lastly there are risks that operations fail to meet workers’ health requirements or comply with worker safety and employment regulations.

**Mitigation recommendations:** It is recommended conduct on-site evaluation of issues related to harvesting practices, to evaluate that legal requirements related to harvest restrictions are met. Also, ESIA should be evaluated to assess if it is in place, adequate and being implemented. Lastly evaluation should be conducted to ensure that regulations related to workers’ rights and protections are being followed.
For **Third-Parties Rights**, there is a risk that, the Social Clauses are not included in the concession contract and/or not being implemented. There is risk that the development fund is not in place or funds are being misused. Also, there is risk failure to form or sustain Local Monitoring and Local Management Committees (LMoC and LMaC).

**Mitigation recommendations:** To evaluate compliance with legal requirements related to third parties’ rights it is recommended to conduct on-site assessment of the activities of the operation to meet legal obligations. This could include review of documents and procedures required by law, as well as interviews with local communities and government representatives, to confirm that legal requirements are met.

For **Timber Trade and Transport**, there is risk of misdeclaration of volumes and species as well as use of fraudulent traffic slips.

**Mitigation recommendations:** To mitigate risks in the stage of transport, supply chain verification is recommended. This would include on-site verification of shipments to evaluate their compliance with measurement and species identification rules. Verification could entail document review, as well as interviews with company staff and government officials.

For **Processing**, there are risks that the Timber Processing Unit (TPU) does not carry out the Environmental and Social Impact Assessment (ESIA) and/or operates without licenses/permit. In addition there are risks of failure to comply with workers’ health requirements (lack of a statutory medical service, failure to take care of workers in the event of accident or illness, failure to register workers and work accidents with the National Social Security Fund) as well as failure to comply with worker safety obligations (lack of personal protective equipment) and employment regulations (lack of a valid and registered employment contract, failure to use wage slips for workers payment, employer failure to cover Social Security contributions, remuneration of workers below the minimum wage).

**Mitigation recommendations:** It is recommended to conduct on-site evaluation of processing facilities to evaluate if they meet all legal requirements specified as risk.
15 Equatorial Guinea

15.1 Export bans and regulations

15.1.1 Logs and timber

There is currently an export ban on roundwood from Equatorial Guinea.

15.1.2 Species

Export of the species *Guibourtia tessmannii* (bubinga), *Diospyros crassiflora* (ebony) and *Milletia laurentii* (wengue) in the form of sawnwood is strictly prohibited. In addition, the felling of these species requires special permission from the relevant authorities (Article 60, Decree 97/1997).

15.1.3 CITES

Equatorial Guinea acceded to the CITES convention in 1992. The Decree 172/2005 of September 8th regulates the Commerce of Endangered Species of Wild Flora and Fauna in the Republic of Equatorial Guinea. The import-export and re-export of any timber species listed in the CITES appendixes require the prior granting of an import-export CITES permit from the relevant CITES management authority. *Guibourtia tessmannii* (bubinga), *Diospyros crassiflora* (ebony), *Milletia laurentii* (wengue) and *Prunus africana* (African cherry) are included in the CITES annex II. Hence, the felling of these timber species must be carried out with a special permission granted by the relevant authority.

Export quotas are established for the following timber species *Dalbergia sp* (rosewood), *Guibourtia demeusei* (African rosewood), *Guibourtia tessmannii* (bubinga) and *Prunus Africana* (African cherry).

15.2 Legal sources of timber

There are three main sources of legal timber in Equatorial Guinea (table 29).

*Table 29: Main sources of timber from Equatorial Guinea*

<table>
<thead>
<tr>
<th>Source type</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Woodlots (Continental region) - Semi-permanent forestry reserves / Production domain | Property: Private  
Management type: Production domain  
License/permit: Exploitation rights issued by the supervising Ministry and signed by the President. Requires an authorization issued by the Forest Stewardship.  
Description: Small areas of natural or replanted forest located inside the boundaries of silvi-agricultural or rural |
| Communal Forests (Insular and Continental regions) - Lands for agriculture and other activities | Property: Local community  
Management type: Production domain (Maximum area 4 ha / head of household Validity: Indefinite)  
License/permit: Harvesting permit granted by the supervising Ministry and signed by the President. Recognition of Communal Forest Tenure Certificate.  
Description: They are the areas of natural or replanted forests that the state acknowledges, delimit and grant an assignment of continued use of to rural communities. |
The state grants the permanent use of the forests to a community. A community that wish to obtain communal forests first submits its last census to INDEFOR-AP. Then the area is calculated and INDEFOR-AP establishes the boundaries of the proposed communal forest; after this, INDEFOR-AP sends the delimitation together with the written application of the community to the Regional Delegation of the ASM, who submits the title to the Minister in order to be signed. The community can then exploit this forest or authorize a third party to do so by means of a simple contract signed by the president of the Tribal Council and the forest company, provided the approval of the Forest Stewardship.

The remuneration for the license to exploit timber in communal forests is done in kind, that is, carrying out the same type of Social services done by forest companies in the licensed areas bordering the national forests. The communal forest is granted to the community in a permanent way, but the area of this license is recalculated every 10 years according to the census; this allows the communal forest to be expanded in accordance with the increase of the community population.

**National Forests (Continental region) - Permanent forestry reserves**

<table>
<thead>
<tr>
<th>Property: State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management type: Production domain (maximum area 50,000 ha)</td>
</tr>
</tbody>
</table>

Validity: 15 years, and they can be renewed

License/permit: Forestry concession through the Lease Agreement for Harvesting of Timber (LAHT). Requested from the Forestry Ministry to be submitted for signature in the Presidency of the Republic.

In Art. 38 from Act 1/1997, the different modalities of LAHT, their duration and the areas to be granted are stated as follows:

a) Short term: Duration: 5 years, renewable. Maximum area of 10,000 ha. Transformation by the holder or by third parties.

b) Medium term: Duration: 10 years, renewable. Area: ranging from 10,001 to 30,000 ha. Ownership of an industrial plant for primary transformation.

c) Long term: Duration: 15 years, renewable. Area: 30,001 to 50,000 ha. Ownership of an industrial plant for primary and secondary transformation.

d) Notwithstanding being able to aim for any of the three modalities of Lease Agreement for Harvesting of Timber, only local people will be eligible for the modality foreseen in section a) of this article.

Description: Areas of natural or replanted forests that the state keeps for itself, being able to exploit them direct and exclusively or through third parties with economic capacity to extract, transform and export timber.
15.3 Legal requirements for harvest

Laws governing the use and management of forests in Equatorial Guinea are laid down in Act 1/1997 of February 18th. Among others, in Article 18, it is established that all timber exploitation for commercial purposes requires a prior authorization for the use, according to the species, volumes, quantities, qualities and other parameters established in the regulations. Decree 97/1997 of August 12th sets forward the specific forest management regulations.

It should be noted that the Presidential Decree 7/2017 of January 31st forbids the felling of trees for commercial purposes to some mechanical saw operators and some forest companies at the national level in order to establish a proper and convincing way of processing the application files for timber exploitations activities in the country.

15.3.1 Woodlots

Timber harvesting activities in woodlots require an exploitation authorization issued by the Forest Stewardship (and signed by the President of the Republic). In order to request an exploitation authorization, the owner of the woodlot must possess a property title of the woodlot granted by the Presidency of the Republic, mechanical saw registration and technical report on the existence of commercial trees in the woodlot, as well as the authorization of sales in the timber to be felled will be sold locally.

Any natural or legal person who wishes to carry out harvesting activities in a woodlot must have a felling authorization granted by the General Director or Forest Production and Commercialization in the case of the insular region, or granted by the Regional Delegate of the Ministry of Fishing and Forestry for the continental region. This authorization must include information about the species and the approximate volume to fell.

15.3.2 Communal forests

Timber harvesting activities in communal forests require authorization from the Ministry responsible for the area in which the forest belong. This authorization must also be signed by the President of the Republic.

Before being able to request an authorization for harvesting timber, the community must obtain a Recognition of Communal Forest Tenure Certificate in which the license of use is granted to that community.

To obtain the exploitation authorization in a communal forest, the beneficiary community must justify in their application the need of exploiting the communal forest as well as include a list of the priority development projects.

The responsible Ministry will issue the exploitation authorization for the communal forests after a satisfactory analysis of the submitted documentation and a verifying inspection in the suggested cutting area. The authorization is valid for a year from the issue date.

If the harvesting of timber is conducted by a third party, it will also be necessary in the application for exploitation authorization to enclose a Timber purchase contracts signed by the third party and the community (i.e. tribe) council. This contract shall also be countersigned by the Forest Stewardship for follow-up purposes.

15.3.3 National forests

Forest operators shall obtain a Lease Agreements for Harvesting of Timber (LAHT) from the Ministry of Forestry (and signed by the President of the Republic) in order to carry out timber harvesting activities in national forests.

To obtain the LAHT, an application form addressed to the Presidency of the Republic must be submitted. This application must among others explain the goals justifying the request of a LAHT, the forest management plan and accurate description of the location and area.
15.4 Legal requirements for processing and transport

Any LAHT holder must commit to the industrial processing of a minimum of 60% of their roundwood production after the first year of signing the agreement. This processing commitment shall be formalized by a notary public. In addition, the LAHT holder is further obliged to be able to process 100% of its total roundwood production within a certain set of years to ensure development of domestic industrial processing.

Processing requirements for LAHT holders are listed as follows:

a) Short term: Duration: 5 years, renewable. Maximum area of 10,000 ha. Transformation (i.e. processing) by the holder or by third parties.

b) Medium term: Duration: 10 years, renewable. Area: ranging from 10,001 to 30,000 ha. Ownership of an industrial plant for primary transformation.

c) Long term: Duration: 15 years, renewable. Area: 30,001 to 50,000 ha. Ownership of an industrial plant for primary and secondary transformation.

Beneficiaries of the LAHT shall take the necessary measures for the full use of the timber with the purpose of reducing the high percentage of waste currently accounted in the forest industries and exploitations of primary transformation. These measures are to be written down in a management plan at the end of the first year after signing the agreement.

15.5 Legal requirements for export

The export of timber products is allowed only after classifying it by the product quality and the species category to which it belongs. These characteristics must be shown on the bills of lading and the corresponding invoices. Any natural person or legal entity that proceeds to the trade with timber products of their property or in their legitimate possession will therefore have to submit a prior declaration to “Oficina de control, información y promoción de las especies forestales” (OCIPEF) for control and classification purposes.

The Forestry Governance Division issues the Origin and Legality Certificates which are signed by the responsible Minister after reviewing and verifying all the documents concerning the forest being exploited by the company and all the documents prepared for the export including proof of company registration, timber exploitation authorization, bill of lading, export license and phytosanitary certificates.

15.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for Equatorial Guinea, along with recommendations for importers of timber from Equatorial Guinea.

For Legal Rights to Harvest, there is a risk that concession rights or permits are issued without clear property limits or lacking legally require documents. There is also risk that management plans are not sufficiently developed according to the law.

Mitigation recommendations: The harvest permits, and management plans should be assessed to ensure that they have been issued legally and fulfil legal requirements. Local competent authorities could be contacted to confirm the legality and sufficiency of documents.

For Taxes and Fees, there is a risk that payments are being evaded. Also, the list of tax rates applies to the forest section is not updated, or there is a list of official prices applied to all producers and for all the species that are commercialized and/or exported—but the lowest rate is always applied by them, thus avoiding the higher fee rates.
**Mitigation recommendations:** Documents providing evidence of payments should be assessed. It should also be evaluated if the correct prices are being applied to the material to ensure correct tax payment. Competent authorities could be contacted to confirm the validity of payments.

For **Timber Harvesting Activities**, there is a risk that logging is conducted illegally without the required authorization, or by so called “ghost” companies (especially for bubinga species, which requires a special permit). There is also risk that species, dimensions and area limitations are not followed in harvesting operations. In addition, there is risk of harvesting without meeting environmental and employment requirements, such as health and safety.

**Mitigation recommendations:** to mitigate harvest level risks, it is recommended to implement on-site evaluation of forest operations. According to the risks specified activities should include evaluation of the harvest area, species and volumes harvested, as well as assessing the respect of legislation related to employment, such as health and safety. Where non-compliance is found, actions should be implemented to meet legal requirements.

For **Third Parties’ Rights**, there is a risk that the mechanisms for distributing the forest benefits between the parties are not applied in a way to ensure benefits to all the community. The distribution of the benefits coming from the forest resources suffers from deviation between the parties, according to the information obtained during the surveys, bribes were registered between officials, companies and companies with the local authorities. Also, there is a risk that companies improperly occupy community and traditional ancestral forests, recognized by the national laws. Such occupation is illegal due to absence of government authorizations and absence of contracts with the local population owner of the forest. Not all companies hire local workers where they have Leases for Forest Use (CAAF), and many companies with Asian investor mostly use foreign workers.

**Mitigation recommendations:** Issues to local community right to land and access should be evaluated on-site. To assess legal compliance records of permits, management plans etc., should be evaluated and interviews with relevant stakeholders from local communities, civil society organisations and government representatives should be conducted.

For **Trade and Transport**, there is a risk that volumes and classification are not measured correctly prior to export and that species are mis-recorded to illegally trade protected species.

**Mitigation recommendations:** in order to verify the range of risks present in the trade and transport category it is recommended to conduct on-site verification of documents and conduct species identification. During evaluation documents from the supply chain should be evaluated to confirm consistency and correctness of information. Document control should be supported by interviews of relevant government authorities to assess if documents have been illegally manipulated.

For **Processing**, there is risk that companies operate without the required registry documentation and that operations are established without doing a previous environmental and social impact assessment, which implies the lack of an environmental license. Also, it is found that there is a lack of fulfilment of the hygiene and safety requirements for the companies and that employees work without a work contract or are working without a required registration. It is also found that operations often do not comply with the requirement to hiring at least 70% national workers.

**Mitigation recommendations:** On-site evaluation of processing facilities is recommended in order to evaluate if they operate legally with the required permits and registrations and are fulfilling legal requirements for environmental protections, as well as laws related to work conditions.
16 Gabon

16.1 Bans and restrictions on exports

16.1.1 Logs and timber

There is currently a ban on the export of logs from Gabon.

16.1.2 Species

Forest products stemming from *Dacryodes buettneri* (ozigo) must undergo second transformation while forest products originating from *Guibourtia* (kevazingo) must undergo third transformation before export from Gabon.

16.1.3 CITES

Gabon acceded to the CITES convention in 1989. At present there are no tree species listed in either Appendix I, II or III that are applicable to Gabon.

16.2 Legal timber sources

There are five sources of legal timber in Gabon (table 30).

*Table 30: Main sources of timber for export in Gabon.*

<table>
<thead>
<tr>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Permits (<em>Permis forestier associé</em> - PFA).</td>
<td>Private estate. Public call for tender (unless unsuccessful bidding process in which case the State acts at its own discretion). PFA can be attributed to nationals only. They are in the permanent forest estate (except for classified forests). The surface area of a PFA may not exceed 15,000 ha when it is integrated into a CFAD and 50,000 ha when the permit holder oversees forest management.</td>
</tr>
<tr>
<td>Sustainably managed Forest Concession (<em>Concession forestière sous aménagement durable</em> - CFAD).</td>
<td>Private estate. Public call for tender (unless unsuccessful bidding process in which case the State acts at its own discretion). CFAD are located in the permanent forest estate (except in classified forests). They are under an obligation of management and local processing. The surface area of a CFAD varies from 50,000 to 200,000 ha. In all cases, the total area of several CFADs allocated to the same permit holder must not exceed 600,000 ha.</td>
</tr>
<tr>
<td>Mutual agreement permits (<em>permis de gré à gré</em> - PGG).</td>
<td>National estate. Agreement with state authorities at their own discretion. PGG are issued within rural forest exclusively to nationals and for local processing. They allocate a maximum of 50 trees in perimeters previously identified and materialized by the Water and Forestry Administration.</td>
</tr>
<tr>
<td>Timber logging authorisation for pit-sawing (<em>authorisations de coupe de</em>).</td>
<td>National estate. Agreement with state authorities at their own discretion.</td>
</tr>
</tbody>
</table>
16.3 Legal requirements for harvest

Gabon has strong legal requirements regarding the management of forests. For example, all productive forests must have a Management Plan, even those attributed to private operators.

16.3.1 Sustainably Managed Forest Concessions (CFAD)

CFAD concessionaire holders are selected through a bidding process after which they shall sign a Provisional Convention with the State. Upon signing the Provisional Convention, the beneficiary commits to the development and submission of a Management Plan within three years. Once the Management Plan is approved by the Minister of Water and Forests, the final concession contract is issued. Management Plans shall be completed with a Specifications Note.

The development of the Management Plan must comply with applicable technical regulations including strictly mandatory prescriptions of carrying out the forest inventory.

Each Management Unit dividing the forest must have a corresponding Management Planning Document. Management planning documents can be rejected by forest authorities within a 3 months delay.

Management Units are in turn divided into Annual Harvest Area. AACs must be covered by an Annual Operations Plan approved by local forest authorities who issue Harvesting Authorization.

Trees to be harvested and trees to be protected must be marked on the field prior to harvesting operations. Operators must record all harvested trees in a Logbook. Various technical harvesting rules apply on operations and are detailed in the Forest Code and subsequent regulations.

Harvesting operators must provide the forest authorities with a summary of their log production every trimester. The sale of roundwood is under specific regulations and must be accompanied by a Specification Notice signed and stamped by forest authorities upon demonstration of related taxes payment.

Excepting Gabonese who operate their own concessions forest, all other registered operators are subject to a quota production. The quota will depend on market fluctuations, and within the limits of the management plan.

The Minister of Water, among other species and Forests establishes the quota for the maximum annual production for *Aucoumea klaineana* (okoume), which is the country’s biggest export species, and *Dacryodes buettneri* (ozigo). Agencies responsible for forest products marketing are required to establish monthly trade statistics of exported...
products as well.

16.4 Legal requirements for processing and transport

16.4.1 Processing

Timber processing and wood products manufacturing enterprises must have the appropriate licenses and permits to operate in Gabon. They are required to keep clear records documenting their work and to provide proof of legal compliance. Licenses related to timber processing plants should be available for inspection by Gabonese officials. An industrialization plan is required and must be approved by the Ministry. To legally operate in Gabon, industries must comply with prescribed steps when making an industrialization plan.

16.4.2 Transport

The transport of timber products must be accompanied by a Transport Licence. The Transport License must always be valid and up to date and one copy shall always accompany the timber products being transported. Timber trading companies shall be able to identify the origin of their purchased timber with the presentation of the Transport Notice.

16.5 Legal requirements for export

Companies dealing in Gabonese wood products must pay all appropriate fees, royalties, and taxes. Tax returns on timber production, processing, and trade must be done in compliance with rules and regulations. Companies exporting timber products must pay exit taxes, which are calculated based on the respective market values according to species. Exporters must develop monthly summaries of the products and volumes they export. Exported timber products must be accompanied by a Specification Notice. Packing and loading of timber products into shipment containers must be assisted by forest authorities. Products to be exported must be declared to custom authorities along with the submission of various documents including the export declaration, certificate of origin, sales documents and phytosanitary certificates. The two main ports of timber exports are Owendo and Port-Gentil.

16.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for Gabon, along with recommendations for importers of timber from Gabon.

For Legal Rights to Harvest there is a risk of non-compliance with the procedures of allocating forest exploitation rights, for example, due to lack of involvement of local communities. Moreover, there is risk that exploitation rights are not respected or illegally transferred between parties. There is risk that management plans are either inadequate in detail or not adhered to.

Mitigation recommendations: In order to mitigate these risks is required to conduct on-site evaluation to review documentation of allocation of harvest rights, as well as interviews with community representatives in adjacent areas and government officials to evaluate if legal requirements related to involvement of local communities are met. Also, it should be evaluated if harvest rights are legally obtained and there are adequate and approved management plans in place.

For Taxes and Fees there is risk of non-payment of forest harvest and trade taxes for wood products as well as fraud in profit declarations.

Mitigation recommendations: Evaluation of tax payments should include on-site evaluation of
documentation and interviews with company employees and relevant government representatives to ensure that relevant taxes and fees have been paid.

For **Timber Harvesting Activities** there is risk of non-compliance with legal logging requirements regarding the planning and execution of activities along with non-compliance with environmental requirements. Moreover, there is risk that legal labour and health and safety requirements are violated.

**Mitigation recommendations:** Regarding harvesting activity risks, on-site evaluation is necessary to assess the level of legal compliance of operations. This would entail reviewing management plans and harvest permits and observe harvest practices in the field. Also, ESIA reports should be evaluated and assessed relating to performance to meet requirements. Forest workers should be interviewed, and their contracts reviewed to ensure that they are employed and working under legal conditions.

For **Third Party Rights** there is risk that the customary rights of the communities are not respected by the companies involved in forest certification.

**Mitigation recommendations:** On-site evaluation should be conducted to evaluate the community relations procedures of the company, along with interviews of company employees and community members, as well as relevant government representatives.

For **Trade and Transport** there is a risk that timber may be transported under falsified documents, stating incorrect volumes among other things.

**Mitigation recommendations:** Document verification should be conducted to evaluate the status of these. This could be done by interviewing or contacting government representatives responsible for issuing documents. On-site evaluation of harvest records and transport documents should be included as a mitigation measure.

For **Processing** there is risk that mandatory environmental measures are not implemented by non-certified forest operations. Additionally, there is risk that employers do not meet legal employment as well as health and safety regulations.

**Mitigation recommendations:** To evaluate and mitigate this risk, on-site evaluation is necessary to evaluate the operations of processing facilities – including management of health and safety requirements and implementation of necessary actions according environmental requirements.
17 Ghana

17.1 Export bans and regulations

17.1.1 Logs

There is currently a ban on the export of logs from Ghana.

17.1.2 Species

There is currently a ban on the export of *Pterocarpus erinaceus* (rosewood). Though the ban is currently in force, there has been four liftings and impositions of the ban since 2017. The action on the lifting was in part to allow selected companies who were given salvage permits to evacuate already felled rosewood to export them. There are however reports that these actions have been flooded with corrupt practices by involved officials.

17.1.3 CITES

Ghana ratified the CITIES Convention in 1975 while it entered into force in 1976. *Pericopsis elata* (African teak) and *Pterocarpus erinaceus* (rosewood) are the species in Ghana found in CITES Appendix II. *Pericopsis elata* is classified as Scarlet star species (threatened in Ghana by over-exploitation) under Ghana’s species conservation star ratings and therefore protected. *Cedrela odorata* (Spanish cedar) is included in appendix III. *Cedrela odorata* is an introduced plantation species in Ghana. It is found in both plantations in forest reserve areas and private plantations in off forest reserve areas. Nevertheless, exporters of this species are required to obtain a permit from the Forestry Commission.

17.2 Legal timber sources

There 6 main sources of legal timber in Ghana (table 31)

Sources of legal timber are mainly split between the two land classifications of forest reserve and off-forest reserve, and the two main forest types of natural forest and plantation, resulting in four main source types (see the table 31 below). Aside to these, there are Submerged forest (timber from dams, harvested using underwater use rights and salvage permits) and other salvaged or abandoned/confiscated timber.
Table 31: Main sources of timber for export in Ghana

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural forest in forest reserves</td>
<td>Natural forest within Ghana’s forest reserves (permanent forest estates). These forests are on stool/skin lands and vested in the stools/skins in trust for the subjects but vested in the president in trust for the stool/skins and managed by the Forestry Commission.</td>
</tr>
<tr>
<td>Natural forest off forest reserve</td>
<td>Natural forest outside of Ghana’s forest reserves, on land owned by chiefs, families, individuals, and public institutions.</td>
</tr>
<tr>
<td>Plantation in Forest Reserves</td>
<td>Plantation within Ghana’s forest reserves (permanent forest estates). Plantations established by the Forestry Commission are managed by the Forestry Commission, whereas private plantations are under special benefit sharing arrangements with investors.</td>
</tr>
<tr>
<td>Plantation off forest reserve</td>
<td>Plantations outside forest reserves, on lands which may be owned by stool (community), family, individuals or public institutions. The plantations are privately managed, and the Forestry Commission conducts monitoring and issues the Plantation Production Certificate.</td>
</tr>
<tr>
<td>Submerged forest</td>
<td>Underwater forests, off reserve, on stool and family lands. Timber harvesting rights are granted by the Forestry Commission through underwater use rights and salvage permits.</td>
</tr>
</tbody>
</table>
| Timber sourced through other permits | i) Salvage Permits from areas undergoing development such as road construction, human settlement, farming etc  
 ii) Certificate of Purchase from the legal disposal of confiscated/abandoned timber                                                                                        |

17.3 Legal requirements for harvest

17.3.1 Natural forest in and outside Forest Reserves

Rights to harvest natural forest (both on forest reserve and off-forest reserve) are granted through the award of small- and large-Scale Timber Utilization Contracts (TUCs). Large-scale TUCs are awarded through a competitive bidding process while small-scale TUCs go through competitive allocation and are issued by the sector Minister and ratified by Ghana’s Parliament.

Contracts with the winning bidders include Timber Operational Specifications (TOS) which cover social and environmental instructions of forest management for the TUC. These instructions are over and above those conditions laid out in the Logging Manual, which prescribes a Code of Practice to be adhered to by all TUC holders.

Also included is the requirement to conclude Social Responsibility Agreements (SRAs) with forest fringe communities to ensure that timber harvesting is conducted in a way that respects the rights of the communities and for the communities to benefit directly and financially from the exploitation of timber resources from their area.

Once a TUC is awarded, the TUC holder is required to prepare a TUC Area and 5-year operational plans for vetting and approval by the Forest Service Division (FSD) of the Forestry Commission. Annual operating plans are then also prepared by the company and must be verified and endorsed by the FSD. The FSD monitors harvesting operations on-site, including stumpage capturing and fee payments, through harvest and post-harvest inspections by FSD Technical Officers. The Forestry Commission also conducts quarterly monitoring of field inspections through its
Resource Management Support Centre.
The TUC holder must have the list of trees approved for harvesting by the Forestry Commission (approved yield). The TUC must also have a harvesting plan for each harvesting area (e.g. compartment logging plan) approved by the Forestry Commission as part of the yield approval process. Prior to the approval of yield for harvesting in natural forest, the FSD conducts an inventory of all trees from which the yield is selected and approved. For each tree felled, a Tree Information Form (TIF), which captures the volume, species, compartment, the forest and other relevant information, is prepared by the Range Supervisor of the FSD. The logging company then completes a Log Information Form (LIF) for logs produced from each tree felled. For each truck load of timber leaving the forest, the TIFs and the LIFs covering the logs are submitted to a second FSD official who reconciles the information on the two documents and when satisfied, prepares a Log Measurement and Conveyance Certificate (LMCC) as the official waybill.

17.3.2 Plantations in Forest Reserves
Timber rights for plantations in Forest Reserves managed by the Forestry Commission are granted by an Entry Permit. Like TUCs, these are awarded through a competitive bidding process and evaluation by the Timber Right Evaluation Committee of the Forestry Commission. Harvesting requirements are set out in the permit conditions. As for TUC holders, the permit holder for harvesting plantations must have the approved yield from the Forestry Commission. Inventories are also conducted in plantations, but the TIF and LIFs for natural forests that document the trees and logs produced from them are replaced by a Plantation Production Certificate.

17.3.3 Private off Forest Reserves
Any person/group/entity who plants trees or establishes forest plantation on private land (Off-reserve) has the right to harvest. Such plantations must be registered with the FSD. When such plantations are due for harvesting, private plantation owners are given a special identification mark. Transporting of trees harvested from private plantations for commercial purposes can only be done with prior approval from the Forestry Commission.

17.3.4 Submerged Forests
Submerged forest can be harvested under a Salvage permit and Underwater use rights, granted by the Forestry Commission. Key harvest requirements then include the preparation of a blocking report, which is a list of potentially harvestable tree species, extraction plans for underwater logging (specifying extraction methodology and providing space to serve as terrestrial log yards or similar provisions for temporal log storage), maps of delineated or blocked area, and signed Social Responsibility Agreement (SRA) with forest fringe communities.

17.3.5 Other permits
The Chief Executive of the Forestry Commission may issue Salvage Permits for salvaged trees or abandoned/confiscated timber, and Certificates of Purchase, which prove legal ownership of seized/abandoned timber. Harvesting requirements are set out in the permit conditions of the Salvage Permits. The permit holder is required to have a yield marking, which is the list of trees approved for harvesting by the Forestry Commission (similar to the approved yield for other source types). Salvage permit holders are also required to negotiate SRA with the affected communities at a value of five percent of the stumpage fee.

17.4 Legal requirements for processing and transport
Timber processing in Ghana apart from being a business and industrial activity and required to meeting the relevant business and industrial regulations are is also overseen by the Timber Industry Development Division (TIDD) of the Forestry Commission. A registered business entity who wants to process and/or export timber...
products must in addition to its business registration, required to register with the TIDD. Requirements for application for registration with the TIDD for the establishment of a new processing facility includes a business plan and feasibility report and source of raw material for the company. The certificate is issued by when satisfied with the application. The certificate can be renewed annually.

Processing companies are required to keep records of materials along their timber supply chain from raw material source through processing to point of sale or export to include material input and product outputs for its different mills. Processing companies are also required to maintain a simple procedures/work instruction to cover different processes of its processing operations. Wood processors are also required to obtain valid operating Environmental Permit from the Environmental Protection Agency and a valid Factory, offices and shops operating certificate from the Department of Factories Inspectorate, Ministry of Employment and Labour Relations based on periodic inspections. The TIDD is also required to periodically carry out inspection in processing facilities to ensure that health and safety requirements are complied with, relying especially on routine reports from Factory Inspectorate Unit of the Department of Labour.

17.5 Legal requirements for export

Log export is banned in Ghana and only processed timber is allowed for export. Trade in logs and processed timber is allowed on the domestic market. Only holders of a valid special property mark are allowed to trade in logs on the domestic market.

Logs and other forest products can only be transported from the forest when accompanied by a Log Measurement and Conveyance Certificate (LMCC), which can only be issued by the Senior Range Supervisor of the Forestry Commission. These are generally issued at points of where forest roads converge so that all transported logs are covered with LMCCs without every operational site having to be visited.

Timber product traders and exporters are required to register and hold valid certificate from the TIDD. Export of timber products by exporters with valid registration certificate is preceded by vetting and approval of the export contract by the TIDD. Vetting and approval of export contract among others check to confirm that the agreed timber prices at the time of the contract fall within the Guiding Selling Prices (GSP) as published by the TIDD. The GSP is one of the measures to control the practice of transfer pricing.

Finished products for export or movement from the processing site is inspected by the TIDD. The inspection checks product quality and other product contract specification, relevant legal records on material input and product output for the products being inspected (e.g. the TIFs and LMCCs for the input logs, output volume records and the resultant conversion factors)

When satisfied, the TIDD issues inspection and conveyance/transport certificate (for example, Lumber Inspection Certificate, Veneer Inspection Certificate etc.) to cover the movement of the inspected product. Export of timber products can only be done with the possession of an export permit issued by the TIDD. Supporting documents to the export permit application by the exporter include: 1) approved TIDD contract of sale, 2) Approved Bank of Ghana Exchange Control Form A4) 3) TIDD inspection report endorsed by the grader, 4) Packing list of the products from the exporter, 5) Evidence of payment for the export or letter of credit and payment of applicable levies and fines including an export levy for air-dried lumber.

The Ministry of Food and Agriculture issues Phytosanitary Certificates at exit points to cover all timber exports. The Customs, Division of the Ghana Revenue Authority collects and account for all duties, taxes, revenue, and penalties payable under Customs.
17.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for Ghana, along with recommendations for importers of timber from Ghana.

For **Legal Rights to Harvest**, there is risk that not all the forest reserves have the legally required strategic management plans. As of 2016, 40 of the 55 production forest reserves in the country had approved management plans. The Forestry Commission is seeking to develop plans for the remaining 15 production forest reserves. There is no specific information on the harvest management and planning relevant to off forest reserves and submerged forest, but risks may also be present for these source types.

**Mitigation recommendations:** It should be confirmed that strategic management plans are in place and approved for all forest source types.

For **Timber Harvesting Activities**, there is risk that protected species and areas are illegally harvested. For example, illegal harvesting and export of *Pterocarpus erinaceus* (rosewood) has been widely reported both by national and international media. Besides, it has been found that some companies do not fully comply with the relevant legal requirements for Health and Safety. In some cases, PPE is not supplied to workers and in others, the use of PPE is not enforced, despite its being supplied. These issues are common to both the forest level operations and wood processing entities. There is additionally a risk that employment regulations are violated among other things due to the lack of employment contracts and lack of paying the obligatory insurance. There are also risks that companies do not allow employees to collectively bargain, or do not implement parts of agreements such as leave entitlement.

**Mitigation recommendations:** Regarding trade in protected species, any risk is mitigated by ensuring that only species allowed for harvesting and export are purchased. For risks related to employment, such as health and safety and employment regulations, on-site evaluation is recommended to evaluate how workers are managed in the forest and if they receive the benefits and protection they are entitled to.

For **Trade and Transport**, there is a risk that the CITES listed species *Pterocarpus erinaceus* (rosewood) is illegally harvested, transported, exported and CITES-licensed. According to an undercover investigative report, bribery and corruption by government and public officials are the forces behind the illegal harvest, transport, export, and CITES-licensing of rosewood. The findings of this report have been disputed by the Forestry Commission.

**Mitigation recommendations:** Any timber of CITES species should be accompanied by correct documentation. It is also recommended to evaluate the validity of documentation with the relevant authorities to obtain confirmation of validity.

Separately, for **Processing**, there is a risk that processing entities do not have a valid operating environmental permit obtained from the EPA along with the risk that Personal Protection Equipment are not provided to or used by workers and workers do not have contracts and obligatory insurance.

**Mitigation recommendations:** Environmental permits should be evaluated to ensure compliance. Also, on-site evaluation of workers conditions and employment contracts is recommended.
18 Laos

18.1 Bans and restrictions on exports

18.1.1 Logs and timber

There is currently a ban on the export of all raw logs and timber from Laos. This also includes processed wood, roots, branches, and trees from natural forests. All types of wood must be turned into a finished product before they are exported.

There is currently a ban on selective logging operations in Production Forests.

18.1.2 Species

The following timber species cannot be cut, purchased, or sold without a special permit:

- *Pterocarpus macrocarpus* sp. (Burma padauk)
- *Dalbergia cochinchinensis* (Siamese rosewood)
- *Dalbergia bariensis* (Burmese rosewood)
- *Cunninghamia Sinensis* (Chinese fir)
- *Michelia Champaca* (champak)
- *Diospyros* spp. (ebony)

18.1.3 CITES


The timber species *Aquilaria spp* (agarwood), *Gyrinops spp*, and *Dalbergia cochinchinensis* (Siamese Rosewood) are listed on CITES Appendix II.

To conduct international commercial trade in these listed species, it is necessary to ensure all the proper CITES documentation from the exporting or re-exporting country are compiled and accurate. The CITES Management Authority in the Department of Forestry is responsible for CITES import permits, export permits and re-export certificates.

18.2 Legal timber sources

There are four main sources of legal timber from Laos (table 32).

Most of the legal timber from Laos continues to be sourced from conversion activities due to the ban on selective logging within production forests.
Table 32: Main sources of legal timber from Laos.

<table>
<thead>
<tr>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber sourced via selective logging</td>
<td>There is currently a ban on logging operations in Production Forests. Timber from the Production Forest sourced via selective logging under the National logging plan for selective logging.</td>
</tr>
<tr>
<td>Conversion timber</td>
<td>Can be sourced from Conservation Forests, Protection Forests or production forests under the national annual logging plan for conversion timber. Areas for conversion include areas of forestlands for government-approved development projects (geological prospecking, mining, road and hydropower dam construction, establishment of agriculture plantations)</td>
</tr>
<tr>
<td>Plantation timber – concessions</td>
<td>Timber from Plantation Production Forest concessions allocated only on degraded forest or barren forestland. Registration is required for areas of 1,600 m² or more. For plantations larger than 5 ha also require a management plan</td>
</tr>
<tr>
<td>Plantation timber – smallholders</td>
<td>Timber from Plantation Production Forests located on village agriculture land allocated within the state forest. Land is managed by small holders, up to 3 hectares can be held per household. Three-year temporary land use certificates for tree planting, the permission on logging from Provincial or Vientiane Capital Agriculture and Forestry Office</td>
</tr>
</tbody>
</table>

18.3 Legal requirements for harvest

18.3.1 Timber sourced via selective logging

There is a ban on timber harvested via selective logging why this is currently not a legal source of timber. Companies that harvest timber via selective logging shall be legally established and possess a valid Business registration certificate. The company shall demonstrate adequate capacity to implement logging operations which is approved by the respective Provincial Agriculture and Forestry Offices. There are two fundamental documents that allow logging operations. These are a signed logging contract between Provincial Agriculture and Forestry Offices and the operator (comprised of duty, responsibility, and instructions that logging contractors need to strictly follow), and a logging permit.

Selective logging must be undertaken with the approval, supervision and monitoring of government officials in addition to being undertaken in accordance with the Annual Logging Plan as specified under the Forest Law. Before commencement of any selective logging in natural forests, it is a requisite that inventory, survey, and forest management planning have been conducted, and based on a pre-logging survey.

18.3.2 Conversion timber

Permission for timber harvesting under development and conversion projects (logging contracts and logging permits) is granted by specially appointed supervision and management committees, or by “a specific taskforce to be responsible for the management”. Contracts on logging in areas with infrastructure development, mining, tree, and industrial crop plantations shall be awarded through bidding to companies which meet technical and capacity requirements. Also, any private entity that want to carry out harvesting activities under development and conversion projects must possess a valid business registration.

As with timber sourced via selective logging, the harvesting of timber from development and conversion projects must be undertaken with the approval, supervision and monitoring of government officials in addition to being undertaken in accordance with the Annual Logging Plan as specified under the Forest Law.
18.3.3 Plantation timber – concession

Companies who harvest timber from forest plantations under a concession agreement shall hold a valid business registration.

Concessions for tree plantations are granted upon approval by the Ministry of Natural Resources and Environment or the Provincial Agriculture and Forestry Offices, depending on the category of land (degraded forest land or barren forest land), the size of the concession, and the duration of concession agreement. The legitimacy of concession rights is confirmed by a concession registration certificate, while the terms and conditions are defined in the concession agreement.

Harvest of timber in a commercial tree plantation shall comply with that plantation’s management plan and be approved by a permit issued by the District Agriculture and Forestry Office, which shall report to the Provincial Agriculture and Forestry Office on the permits issued.

18.3.4 Plantation timber – smallholders

Any entity harvesting timber from a smallholder forest plantation shall initially have a three-year temporary land use certificate for tree planting. This certificate is issued by District Offices of Natural Resources and Environment or District Agriculture and Forestry Offices in coordination with District Administrative Authority and the Village Administrative Authority. More land can be requested from village and district authorities. If managed properly during the initial term, then the lessee may request the Land Management Office to issue a Land Title for long-term use.

Harvest of timber in a commercial tree plantation shall comply with that plantation’s management plan and be approved by a permit issued by the District Agriculture and Forestry Office, which shall report to the Provincial Agriculture and Forestry Office on the permits issued.

While there seems to be a clear protocol that logs from smallholders should be included in the annual logging plan, it is unclear how (or whether) smallholder plantation volumes are actually included, and whether the legality of this timber can be demonstrated subsequently.

18.4 Legal requirements for processing and transport

18.4.1 Processors

Any private entity involved in wood processing shall hold a valid business registration, including those involved in the for the importation and selling of forestry and wood-transport equipment.

Wood processors and manufacturers are required to operate under a license issued by MoIC which is issued in line with operational standards and principles. Around 50 per cent of mill licenses are issued at the national level, with remaining approved at Provincial level. Licenses are issued for 3 to 5 years.

Timber processors shall conform with environmental regulations hereunder conduct an ESIA in addition to health and safety and legal employment provisions.

18.4.2 Transport

Natural timber

The transport of timber from natural forests from log yard I to II must be undertaken on designated roads with transportation to other areas requiring a transport permit from the provincial agriculture and forestry sector. As a rule, transportation of logs (from log yard I and II) is prohibited from 1 June to 31 October due to operational constraints associated with the wet season, even when the logging plan has not been fully. Exemptions may be granted, and usually in association with infrastructure projects that are time critical. In such circumstances, specific
routes must be used for timber transportation to prevent negative effects on the environment, or on national and public roads.

A log list, which is used to calculate timber values and to generate transport and/or export permits, is created at log yard II, where all logs are to be measured and graded. Logs stored at log yard II shall be thoroughly measured, graded, and recorded in a log list according to regulations. Provincial and District Agriculture and Forestry Offices staff are responsible for making log lists at log yard II, and for handover of log lists to the Provincial Office of Industry and Commerce. Measurement, scaling and registering of logs at log yard II is used for valuation, payment of fees, royalties etc.

All logs from natural forests are identified using a PM (Forestry) marking hammer (as defined under Article 3.37 of the FL) which can only be used by a forestry official (Article 133 of the FL). Article 29 requires that natural trees that are to be harvested are marked with ‘PM’. Log, flitch, sawn wood, stump, and gall that are transported under a permit must also be marked and stamped as “PM” (Article 35 of the FL).

Shipments of logs and wood products must be transported on pre-determined routes, equipped with weighing stations, during the right season and time, and with declarations made at prescribed check points. Every shipment containing timber is to be accompanied by a set of documents issued by the relevant authority, including a sale contract and calculation of timber royalties to be paid, registered by MoF as well as a transportation permit for timber commodities, for finished and semi-finished timber products within the country, and for export.

Cargo trucks transporting timber products shall also have a valid transport enterprise licence approved for import, and registration for use for logging and timber transport from MAF and the Ministry of Public Works and Transport.

**Plantation timber**

Transport permits are required for plantation timber and shall contain the relevant required information on quantity and quality (Regulation 196/AF, 2000 Article 14). The tier of government body approving transportation depends on the point of shipment. Transportation of plantation timber within the same province can be approved by a Village Forest Organisation, while transportation of plantation timber out of a province is to be approved by a District Agriculture and Forestry Office and reported to a Provincial Agriculture and Forestry Office. Permits for export abroad are issued by a Provincial Agriculture and Forestry Office. The transport of household plantations must be from areas with a plantation registration certificate.

**18.5 Legal requirements for export**

Timber harvested through selective logging in natural forests is considered state property and is required to be sold through a bidding process under joint ministerial responsibilities. Minimum costs (royalties) per cubic metre of timber bought from log yard are set and updated periodically by the Ministry of Industry and Commerce according to species and grade. An estimation of royalties is made based on the volume and species of wood plus costs and fees associated with inventory, resources, and regeneration. The royalty value forms the minimum auction price against which bids are made.

Exporters of timber products from Laos shall possess a valid Export license in addition to an Enterprise Registration Certificate clearly stating that the certificate holder may conduct trade in timber products. Exports from Laos must be accompanied by a Certificate of origin, sales contract with foreign company, phytosanitary certificates, Customs declaration form as well as copies of proof of payments of relevant taxes and royalties.

To promote the export of semi-finished and finished products, the Government of Laos has introduced numerous bans on the export of logs and sawn timber from natural forests. The government is the only body authorised to
consider and agree on specific cases in regard to the grant of permission to export unfinished products (logs, sawn timber, stumps, wood galls and semi-finished timber products) made of natural timber. Domestic processing of wood from plantations is also encouraged, but such wood may be exported as logs or sawn wood if it cannot be processed domestically. Provincial Offices of Industry and Commerce are authorised to issue export permits for non-prohibited, special or controlled species of planted timber in the form of logs and sawn timber based on a certificate of origin of timber certified by a Provincial and Capital Agriculture and Forestry Office. For prohibited, special and controlled species, the exporter is required, by a letter from the Permanent Office of the Ministry of Agriculture and Forestry, to verify the origin of timber.

18.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the key risks specified in the risk assessment for Laos, along with recommendations for importers of timber from Laos.

For **Legal rights to harvest**, there is risk of conflict over land tenure, and a lack of business registration specifically for plantations. There is risk that forest concessions are being granted in violation of regulations. Moreover, there is risk that Annual Logging Quotas are being based on inadequate inventories and requests from districts besides being prepared in the office without conducting actual field surveys, leading to approvals for logging not reflecting the resources available on the ground. Additionally, corruption, lack of certification and approval procedures for harvesting permits and other documents, may result in harvesting outside official demarcated areas and permits issued despite lack of documentation.

**Mitigation recommendations:** To evaluate the risks and mitigate them it is recommended that on-site evaluation is conducted to evaluate land tenure issues as well as the validity of concession licenses. It is also recommended to evaluate that harvested volumes to ensure compliance with logging quotas, as well as assessing of harvest is taking place only within allocated areas covered by a valid license.

For **Taxes and Fees**, there is a risk of inconsistent application of taxes and fees at the provincial level. For example, there has been cases of smallholders lacking business registration, and therefore do not pay taxes.

**Mitigation recommendations:** Documentation should be evaluated to ensure that relevant taxes and fees have been paid. This process may require on-site visit to interview relevant governmental departments to verify the validity and completeness of documentation.

For **Timber Harvesting Activities**, there is risk that harvesting regulations are not met. The logging plan is often seen as a quota giving the right to cut a certain volume, and harvesting practice driven by needs to supply the sawmills. There is risk that legal requirements covering protected tree species are being ignored and protected species being harvested without official authorization. There is risk of non-compliance with health and safety rules, for example, that logging crews do not have safety equipment or protective gear, and/or live under very basic conditions. Also, there is risk that workers do not have a contract or do not receive their salary.

**Mitigation recommendations:** The mitigation of the risks related to harvesting activities are recommended to include on-site evaluation of all relevant harvesting activities. This would include confirming that harvest quotas have been met and that protected species have not been harvested, as well as evaluation of the conditions of workers – including the use of PPE.

For **Third Parties’ Rights** there is a risk of conflicts on tenure rights as the government maintains a highly centralized system of forest governance with inadequate recognition of customary tenure rights. There is also risk that local communities are not adequately compensated when communal lands are re-allocated to a company.

**Mitigation recommendations:** It is recommended to apply on-site evaluation of issues relating to land
tenure conflicts and compensation of local communities. Such evaluation could include review of documents and procedures for tenure arrangements, procedures, and records of conflict management, as well as interviews. Interviews should include government officials at relevant levels, as well as affected local communities and their representatives.

For **Trade and Transport**, there is risk that harvested logs either lack proper registration or are transported under falsified documents. Additionally, there is risk of violation of the ban on export of logs and timber.

**Mitigation recommendations:** Documents accompanying logs should be evaluated and preferably be validated on-site through interviews with local authorities and referencing archives to verify document validity and information completeness.

For **Processing**, there is risk that business registration certificate for processors are wrongfully awarded, including to those involved in the for the importation and selling of forestry and wood-transport equipment. There is risk that legal requirements for processors are generally ignored. Environmental regulations are frequently violated such as lack of conducting or adhering to the results of an ESIA. Furthermore, there is risk that both health and safety as well as legal employment requirements are violated. For example, workers are often not provided with personal protective equipment and many employment contracts informal and subject to termination without recourse.

**Mitigation recommendations:** For risks at processing level it is recommended that on-site evaluation is conducted to evaluate the legality of the operations, according to the risks identified. This includes legal registration, compliance with environmental regulations and employment related issues such as health and safety and employment requirements.
19 Nigeria

19.1 Export bans and regulations

19.1.1 Logs and timber

There is currently a ban on the export of roundwood (including industrial roundwood, fuel wood and poles).

19.1.2 Species

It is prohibited to harvest the following timber species:

- *Triplochiton scleroxylon* (African whitewood, obeche)
- *Nauclea diderrichii* (bilinga, opepe)
- *Khaya senegalensis* (African mahogany)
- *Pericopsis elata* (African teak, afrormosia)
- *Afzelia Africana* (African oak)
- *Detarium senegalense* (yellow wood)
- *Diospyros crassiflora* (Benin ebony)
- *Diospyros mespiliformis* (ebony)

Trade in these species can only be conducted under exceptional circumstances.

19.1.3 CITES


To conduct international commercial trade in the species listed in the CITES appendices, it is necessary to ensure all the proper CITES documentation from the exporting or re-exporting country are compiled and accurate. The Wildlife and CITES Management Division in the Department of Forestry is responsible for CITES import permits, export permits and re-export certificates.

Trade in *Pterocarpus erinaceus* (African rosewood) to and from Nigeria is currently suspended by CITES. However, this suspension may be lifted premised on the conclusion of a scientifically based Non-Detriment Finding for trade in the species to the satisfaction of the CITES Secretariat.
19.2 Legal Timber sources

Table 33: Main sources of legal timber from Nigeria.

<table>
<thead>
<tr>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural forest in Forest Reserve</td>
<td>Natural forests located within gazetted Forest Reserve boundaries</td>
</tr>
<tr>
<td>Free Areas</td>
<td>Areas outside gazetted Forest Reserves boundaries and that are not under strict management by the State Forestry Departments</td>
</tr>
<tr>
<td>Plantation in Forest Reserve</td>
<td>Area within the Forest Reserve that is reforested with plantation species</td>
</tr>
<tr>
<td>Private plantation</td>
<td>Plantations on land owned by non-government individuals, groups, or corporate organizations.</td>
</tr>
</tbody>
</table>

19.3 Legal requirements for harvest

19.3.1 Forest Reserve

Exploitation rights to Natural and Plantation forests in Forest Reserves are granted through a concession. In addition, the harvesting of trees within the concession areas requires either a Harvest Permit or can be made through the Out-Turn Volume system (OTV). A Forest Management plan is mandatory. The annual harvesting permit specifies the quantity of different timber species that can be harvested within a demarcated area and shall be obtained from the relevant Department of Forestry. Harvested trees shall be pass hammered by forestry officials as a seal of authority of Government.

The OTV system enables the harvesting of trees without the possession of a Harvest Permit. This method is common in many of the high forest states, where there are many large commercial trees in the forest. The OTV system allows timber merchants to pay only for the actual volume of wood taken from the forest. This requires the measurement and calculation (by estimation) of the volume of each log that is removed. Based on the estimated volume, the monetary value of each log is calculated in accordance with the approved state tariff. As such, is more precise than a per-tree fee, which does not consider differences in height and girth.

19.3.2 Free areas

Exploitation rights in Free areas are secured through the granting of a Certificate of Occupancy. In Nigeria, lands are invariably held in trust by the State governments for the citizens. In effect, the Government leases lands to private individuals while communal lands are held in trust for the people by the head of the community. For a piece of land to be held in perpetuity by an individual, a Certificate of Occupancy (C of O) usually lasting for 99 years must be obtained from the State Government.

The harvesting of timber in Free Areas requires a Harvest Permit before any exploitation can take place. To obtain a Harvest Permit, the forest operator must be registered with the relevant Ministry as a Timber Contractor and it shall have experience or technical expertise in timber harvesting or engage an expert. In addition, the company must pay a fee on every economic tree felled as permittees contribute to the regeneration programme of the State Government, a non-refundable application fee in respect of Forest Reserve allocation or revalidation of forest allocation as well as a non-refundable application fee for allocation of different tree species.

19.3.3 Private plantation

It has not been possible to obtain information on harvesting requirements for private plantation.
19.4 Legal requirements for processing and transport

19.4.1 Transport

Most states in Nigeria have in place requirements guiding all aspects of trade and transportation of timber within and outside the country. These include the transport documents which should accompany wood from the point of harvesting to sale, for example, the transport permit or the Tariff table, which shall accompany the transport of round wood.

Each transport log shall carry an official hammer mark before leaving the harvesting sites and upon entering the designated points of sale. The Forestry Inventory Unit of the respective State Departments of Forestry are responsible for classifying timber in terms of species, volume, and qualification prior its processing, sale, and movement. The Federal Department of Forestry is, on the other hand, responsible for inspecting the content of the final log export at the exit points.

19.4.2 Processing

Timber processors in Nigeria must possess a valid Business Registration Certificate and be registered according to the guidelines stipulated in the Company and Allied Matters Act, 2004. The company must have a Memorandum and Article of Association which must clearly indicate interest in forestry related activities. Furthermore, any timber processor shall hold a valid licence to operate a sawmill issued the respective State Forestry Department.

Timber processors shall conform with basic standards applicable to other industries in Nigeria in aspects concerning good labour practices as well as health and safety issues. The National Policy on Occupational Safety and Health stipulates that the safety, health and safety of workers in wood processing industries shall be of paramount consideration. Besides, the Nigerian Labour law among others requires that workers must be trained in appropriate techniques to minimize the occurrence of job-related accidents. Also, they must be provided with the appropriate tools and PPE equipment.

For larger milling operations, an EIA must be completed before commencement of activities. The National benchmark in respect of all industries (including wood-related) for air quality, waste, and water management, use of chemicals and other environmental requirements are clearly stipulated in the Environmental guidelines of the Federal Ministry of Environment.

19.5 Legal requirements for export

Any exporter of timber products from Nigeria shall obtain an export registration certificate from the Nigerian Export Promotion Council along with a pre-shipment certificate and letter of Support for Export from the Federal Ministry of Environment. The Nigeria Customs Service is responsible for issuing the Bill of Lading and overseeing the final exits of logs out of Nigeria. Furthermore, a tax clearance from the Federal Inland Revenue Service is mandated before any export.

19.6 Key risks and recommendations for Vietnamese importers

The following provides an overview of the risks specified in the risk assessment for Nigeria, along with recommendations for importers of timber from Nigeria.

For Legal Rights to Harvest, there is a risk of non-compliance with the procedures of allocating forest exploitation rights in addition to the risk that exploitation rights are not respected by forest operators and local communities alike. For example, concessions are usually short term and granted mostly based on administrative/political decisions rather than technical or professional advice. Moreover, the process of obtaining the Certificate of
Ownership is very tedious and time consuming especially at the rural levels. There is risk that forest operators lack a forest management plan.

**Mitigation recommendations:** It should be verified that the allocation of exploitation rights have been done according to the law, and that a forest management plan is in place and approved. This could be done remotely by evaluating documents and contacting relevant authorities to provide a confirmation of the rights allocation and management plans.

For **Taxes and Fees**, there is a risk that there is non-payment of taxes and fees, among other things, because of fraudulent declarations on quantity and quality of transported timber products and lack of trained personnel to conduct inspection. Also, some companies may not transact their business through the regular banking system leading to under-payment of taxes to government.

**Mitigation recommendations:** Mitigation could include evaluation of documents confirming tax payments, as well as evaluation of trade and transport documentation to assess consistency in species and quantities. Also contact could be taken to competent authorities to gain confirmation on the document information validity. In addition, documents confirming legal transactions could be requested to avoid material traded through irregular channels.

For **Timber Harvesting Activities**, there is a risk that that prescriptions in the officially approved management plan are not followed along with the risk that companies are not complying with environmental regulations such as failure to conduct EIA prior to logging operations. Moreover, there is a risk that workers engaged in forest operations are not registered for social protection by their employers and some forest operations also do not pay the current monthly minimum wage. There is risk that health and safety regulations are not met.

**Mitigation recommendations:** In order to mitigate forest level harvesting risks, it is recommended to conduct on-site evaluation of operations. In the case of Nigeria risks specified for activities related to harvesting and provision of legal employment measures, such as health and safety, should be evaluated on-site by observation and interviews with the company, workers, as well as relevant government authorities.

For **Third parties' right**, there is a risk that The Land Use Act has never been fully operational as most people especially the rural dwellers are unaware of the Act with very few applying for Certificate of Occupancy. Not to mention that the few individuals who apply for Certificate of Occupancy are discouraged by a tedious and long application process.

**Mitigation recommendations:** Mitigation could include on-site stakeholder engagement to assess the extent to which the right of local communities have been respected in connection with harvesting operations.

For **Trade and transport**, there is a risk that timber is illegally transported and/or exported due to lack of enforcement. For example, forestry officials are not among the government agencies mandated to control export of goods through the Nigerian ports. Not to mention that the agencies with the statutory responsibilities to monitor and control export of goods from the Nigerian ports do not have the required skills to ascertain forest related products. Additionally, there is risk that CITES species are illegally exported from Nigeria due to the lack of proper inspection e.g. lack of training in the identification of CITES species.

**Mitigation recommendations:** Supply chain evaluation could be conducted to evaluate the risk that illegal timber has been transported and exported. This evaluation should assess the full scope of the supply chain through to export, to ensure that the legally required documents and permits are in place and the species traded are approved for export. For CITES species the required CITES certificates shall be in place and the validity can be verified by contacting the competent authority to confirm authenticity.

For **Processing**, there is a risk that wood processors fail to carry out ESIs and/or implement their identified
measures. There is risk that health and safety regulations are not met. For example, timber processing companies may not have health service centres to provide medical examinations before employment as well as periodic medical examinations to ensure they are fit for work. Furthermore, there is risk that workers are not adequately trained to perform their tasked duties.

**Mitigation recommendations:** For risk in processing, it is recommended to conduct on-site evaluation of the performance of the operations. Such an evaluation should include assessment of the company’s activities and procedures to meet legal requirements related to environmental, as well as employment requirements.
Annex 1: Summary of trade data discrepancy

**Trade Data Discrepancy Analysis and Results**

This analysis for two sets of bilateral trade flows uses Vincent’s (2004) equations to arrive at a relative measure of discrepancy in trade data, which denotes imports and exports by the following variables:

- $I_{ij}^R$: Reported imports by country $i$ from country $j$
- $E_{ij}^R$: Reported exports by country $j$ from country $i$

Equation (1) defines the relative measure, which can also be rewritten as equation (2), which gives the ratio of reported imports to reported exports:

$\Delta_{ij} \equiv \frac{I_{ij}^R - E_{ij}^R}{I_{ij}^R + E_{ij}^R}$

\[
\frac{I_{ij}^R}{E_{ij}^R} = \frac{1 + \Delta_{ij}}{1 - \Delta_{ij}}
\]

The relative measure ($\Delta_{ij}$), the left-hand side of equation (1), ranges from $-1$ to $+1$. Vincent (2004) explains:

Positive values indicate that the importer reports a larger trade flow than the exporter, and negative values indicate the reverse. The index has the maximum value of +1 when the importer reports a trade flow but the exporter does not ($I_{ij}^R > 0$ and $E_{ij}^R = 0$) and the minimum value of −1 when the opposite conditions hold, i.e. the exporter reports a trade flow but the importer does not ($E_{ij}^R > 0$ and $I_{ij}^R = 0$). It equals zero only when there is no discrepancy ($I_{ij}^R = E_{ij}^R$).

For example, reported imports are twice as large as reported exports if $\Delta_{ij} = +0.33$ and half as large if $\Delta_{ij} = -0.33$. If $\Delta_{ij} = +0.2$, reported imports are 50 percent larger than reported exports; if $\Delta_{ij} = -0.2$, they are two-thirds as large. If $\Delta_{ij} = +0.1$, reported imports are about 20 percent larger than reported exports; if $\Delta_{ij} = -0.1$, they are about 20 percent smaller.

**Data and Results from Figures 1 & 2 related to Cameroon-Vietnam Bilateral Trade**

<table>
<thead>
<tr>
<th>Year</th>
<th>USD - Roundwood Logs/Squared Logs (4403)</th>
<th>m3- Roundwood Logs/Squared Logs (4403)</th>
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<tbody>
<tr>
<td></td>
<td>Cameroon Export</td>
<td>Vietnam Import</td>
</tr>
<tr>
<td>2014</td>
<td>$91,318,700</td>
<td>$187,518</td>
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<tr>
<td>2015</td>
<td>$133,529,428</td>
<td>$243,756</td>
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<tr>
<td>2016</td>
<td>$164,280,698</td>
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<tr>
<td>2017</td>
<td>$207,579,452</td>
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<td>2018</td>
<td>$215,854,338</td>
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**Data and Results from Figures 3 & 4 related to Laos-Vietnam Bilateral Trade**

<table>
<thead>
<tr>
<th>Year</th>
<th>USD - Sawnwood/Lumber (4407)</th>
<th>m3- Sawnwood/Lumber (4407)</th>
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<tbody>
<tr>
<td></td>
<td>Cameroon Export</td>
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<tr>
<td>2014</td>
<td>$16,460,250</td>
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<td>2015</td>
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<td>$53,591,100</td>
<td>$183,706</td>
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### USD - Roundwood Logs/Squared Logs (4403)

<table>
<thead>
<tr>
<th>Year</th>
<th>Laos Export</th>
<th>Vietnam Import</th>
<th>Delta ij (relative measure)</th>
<th>Ratio of Imports to Exports</th>
<th>Laos Export</th>
<th>Vietnam Import</th>
<th>Delta ij (relative measure)</th>
<th>Ratio of Imports to Exports</th>
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<tr>
<td>2014</td>
<td>$95,372,665</td>
<td>$149,455,547</td>
<td>0.22</td>
<td>1.57</td>
<td>178,274,794</td>
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<td>2015</td>
<td>$69,443,587</td>
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<td>2016</td>
<td>$3,109,862</td>
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<td>0.51</td>
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<td>2017</td>
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<td>$1,197,461</td>
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<td></td>
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<tr>
<td>2018</td>
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<td>$457,665</td>
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<td>$2,444</td>
<td>1.00</td>
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### USD - Sawnwood/Lumber (4407)

<table>
<thead>
<tr>
<th>Year</th>
<th>Laos Export</th>
<th>Vietnam Import</th>
<th>Delta ij (relative measure)</th>
<th>Ratio of Imports to Exports</th>
<th>Laos Export</th>
<th>Vietnam Import</th>
<th>Delta ij (relative measure)</th>
<th>Ratio of Imports to Exports</th>
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<td>2016</td>
<td>$8,139,445</td>
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<td>2017</td>
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### US Dollar ($) per cubic meter (m³) of Cameroon-Vietnam and Laos-Vietnam Bilateral Trade Data

<table>
<thead>
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<th>Year</th>
<th>$/m³ - Roundwood Logs/Squared Logs (4403)</th>
<th>$/m³ - Sawnwood/Lumber (4407)</th>
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<tbody>
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<td>2016</td>
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<tr>
<td>2017</td>
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<td>$4,541.48</td>
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<tr>
<td>2018</td>
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<td>$4,541.48</td>
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</table>

<table>
<thead>
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<th>Year</th>
<th>$/m³ - Roundwood Logs/Squared Logs (4403)</th>
<th>$/m³ - Sawnwood/Lumber (4407)</th>
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<td>2014</td>
<td>$0.53</td>
<td>$0.55</td>
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<tr>
<td>2015</td>
<td>$0.75</td>
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<td>2018</td>
<td>$187.27</td>
<td>$732.85</td>
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Annex 2: References for PART I


Cameroon COMCAM company-level export data of logs and sawn wood export volumes. Received by personal communication from M. Rougeron to Marc Vandenhaute (FAO). July 2019.


Dougala Forest Administration Data. July 2019. Export data collected from forest administration in Douala. Received by personal communication from Adolphe Serge Lamont Ondoua to Christian Sloth.


ECCDA, 2017. SME situation assessment report on “Support legal timber production through improved competitiveness for small and medium timber processing enterprises in Lao PDR”.


EIA, 2018. Serial Offender Vietnam’s continued imports of illegal Cambodian timber. Available at: https://reports.eia-international.org/serialoffender


121 Background analyses for VPA support project in Cameroon, Laos and Vietnam
Background analyses for VPA support project in Cameroon, Laos and Vietnam

Phuc Xuan To and Sango Mahanty, 2019: Vietnam’s cross-border timber crackdown and the quest for state legitimacy. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0962629818304608?via%3Dihub


Phuc Xuan To, Cao Thi Cam, Tran Le Huy, Nguyen Ton Quyen, VIFORES, and Huynh Van Hanh, 2019. Presentation: Overview of timber and timber products export and import in 2018. 67 slides.


Phuc, Xuan To, Cao Thi Cam, Tran Le Huy, Nguyen Ton Quyen and Huyanh Van Hanh, 2018. Vietnam’s import of African timber materials. Forest Trends, Vietnam Timber and Forest Products Association (VIFORES), Binh Dinh Timber and Forest Products Association (FPA Binh Dinh) and Handicraft and Wood Industry Association of Ho Chi Minh City (HAWA).


122 Background analyses for VPA support project in Cameroon, Laos and Vietnam
SEPBC Statistics through December 2018 [Statistiques SEPBC Année 2018 A Fin Decembre - Diffusion Clients]. No date. SEPBC, Bureau Veritas, Bollore Ports. Presentation sent from M. Rougeron to Marc Vandenhaute (FAO) and Paolo Cerutti (CIFOR) to Christian Sloth (NEPCon). 26 slides.


Smith, H. F. and Alounsavath, O., 2015. Forestry Legality Compendium for Lao PDR. Department of Forestry and Department of Forest Inspection, supported by FAO/World Bank Cooperative Programme, GIZ / Pro-FLEGT VPA Support Programme, SUFORD – SU Project (DOF - Finland / World Bank), 271 pp.


VCCI [Vietnam Chamber of Commerce and Industry] 2014. Research report on assisting the association in undertaking strategic research on the development of the wood processing industry.

Vientiane Times 2nd September, 2016. More than a thousand furniture plants ordered to shut down. Available at: https://opendevelopmentmekong.net/news/more-than-a-thousand-furniture-plants-ordered-to-shut-down/

Annex 3: List of abbreviations

AAC | Annual Allowable Cut, or Annual Harvest Area (in French: Assiette annuelle de coupe)
ABC | Annual Bidding Coupe
ACBSL | Timber logging authorisation for pit-sawing (in French: Autorisations de coupe de bois pour le scieage de long)
AEB | Harvested timber removal licence (in French: Autorisation d’enlèvement des bois abattus)
AEC | Annual Exploitation Certificate
AFD | French Development Agency (in French: Agence Française de Développement)
AIS | Independent System Auditor (in French: Auditeur indépendant du système)
AOP | Annual Operations Permit
APC | Personal cutting authorization (in French: Autorisation personnelle de coupe)
APG | Asia/Pacific Group on Money Laundering
API | Integrated Priority Action (in French: Action prioritaire intégrée)
ARB | Wood recovery authorization (in French: Autorisation de récupération de bois)
ASEAN | Association of Southeast Asian Nations
ATIBT | International Tropical Timber Technical Association (in French: Association Technique Internationale des Bois Tropicaux)
ATIGA | ASEAN Trade in Goods Agreement
AVE | Export Verification Certificate (in French: Attestation de Vérification à l’Exportation)
BIFA | Binh Duong Furniture Association
BL | Bill of Lading
BMZ | German Federal Ministry of Economic Cooperation and Development (in German: Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)
C of O | Certificate of Occupancy
CAC | Corporate Affairs Commission
CAFI | Central African Forest Initiative
CAPEX | Capital Expenditures
CAR | Central African Republic
CAT | Management and Processing Agreement (in French: Convention d’aménagement et de transformation)
CC | Joint Council (in French: Conseil Conjoint)
CCC | Specifications Note (in French: Cahier des clauses contractuelles)
CCCN | Customs Cooperation Council Nomenclature
CCS | Joint Monitoring Committee in charge of following VPA implementation (in French: Comité conjoint de suivi de la mise en œuvre de l’APV FLEGT)
CCV | Control and Inspection Cell (in French: Cellule de Contrôle et Vérification)
CED | Center for Environment and Development (in French: Centre pour l’Environnement et le Développement)
CEFDHAC | Conference on Dense and Wet Forest Ecosystems of Central Africa (in French: Conférence sur les Ecosystemes de Forêts Denses et Humides d’Afrique Centrale)
CEMAC | Central African Economic and Monetary Community (in French: Communauté économique et monétaire de l’Afrique Centrale)
CF | Community Forest (in French: Concession forestière sous aménagement durable)
CFAD | Sustainably Managed Forest Concession
<table>
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<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CIFOR</td>
<td>Center for International Forestry Research</td>
</tr>
<tr>
<td>CITES</td>
<td>The Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
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<tr>
<td>CLFT</td>
<td>Forest Legality and Traceability Cell (in French: La cellule de légalité et de la traçabilité forestière)</td>
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<td>CNIAF</td>
<td>National Center for Inventory and Management of Forest and Wildlife Resources (in French: Centre national d’inventaire et d’aménagement des ressources forestières et fauniques)</td>
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<td>CNS</td>
<td>National Monitoring Committee (in French: Comité national de suivi)</td>
</tr>
<tr>
<td>CNSS</td>
<td>Social Security Office (in French: Caisse Nationale de Sécurité Sociale)</td>
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<td>CN</td>
<td>Combined Nomenclature</td>
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<tr>
<td>COC</td>
<td>Chain of Custody</td>
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<td>COMCAM</td>
<td>Commercial Forestry Database of Cameroon</td>
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<td>COMIFAC</td>
<td>Central African Forests Commission (in French: Commission des Forêts d’Afrique Centrale)</td>
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<td>CPA</td>
<td>Community Protected Area</td>
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<tr>
<td>CPI</td>
<td>Corruption Perception Index</td>
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<td>CRTP</td>
<td>Certificate of Registration as a Timber Processor</td>
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<td>CSO</td>
<td>Civil Society Organisation</td>
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<td>DAFO</td>
<td>District Agriculture and Forestry Office</td>
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<td>DDEF</td>
<td>Departmental Direction of Forest Economy Direction (in French: Départementale de l’Economie Forestière)</td>
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<td>DFID</td>
<td>UK Department for International Development</td>
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<tr>
<td>DGDA</td>
<td>Directorate-General for Customs and Excise</td>
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<td>DGE</td>
<td>Department for Large Corporations (in French: Direction des grandes entreprises)</td>
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<td>DGRAD</td>
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<td>DOF</td>
<td>Department of Forestry</td>
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<tr>
<td>DOFI</td>
<td>Department of Forest Inspection</td>
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<td>Environmental Compliance Certificate</td>
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<td>National Forest Fund (in French: Fonds Forestier National)</td>
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<td>Forest Governance Markets and Climate Programme</td>
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<td>Forest Harvesting Unit</td>
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<td>Full Form</td>
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<td>FL</td>
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<td>Forest Management Unit</td>
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<td>FOB</td>
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<td>FPIC</td>
<td>Free, Prior and Informed Consent</td>
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<td>GDFETI</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>IIED</td>
<td>International Institute for Environment and Development</td>
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<td>IM-FLEG</td>
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<td>INDEFOR-AP</td>
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<td>INGO</td>
<td>International Non-Governmental Organization</td>
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<td>Independent Observation of Forestry Activity</td>
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<td>ISA</td>
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<td>ISO</td>
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<td>ITC</td>
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<td>Joint Implementation Committee</td>
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<td>Reconstruction Credit Institute (in German: Kreditanstalt für Wiederaufbau)</td>
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LVS  Legality Verification System
LP  Logging Permit
MAF  Ministry of Agriculture and Forestry
MAFF  Ministry of Agriculture, Forestry and Fisheries
MALFE  Ministry of Agriculture, Livestock, Forestry and Environment
MARD  Ministry of Agriculture and Rural Development
MCIG  Multi-stakeholder Implementation Core Group
MEF  Ministry of Forest Economy (in French: Ministère de l’Economie Forestière)
MESD  Ministry of Environment and Sustainable Development
MINFOF  Ministry of Forests and Wildlife
MoE  Ministry of Environment
MoEM  Ministry of Energy and Mines
MOF  Ministry of Finance
MoH  Ministry of Health
MoIC  Ministry of Industry and Commerce
MoICT  Ministry of Information, Culture and Tourism
MoL&SW  Ministry of Labour and Social Welfare
MoNRE  Ministry of Natural Resources and Environment
MOPS  Ministry of Public Security
MOT  Ministry of Transport
MoU  Memorandum of Understanding
MPI  Ministry of Planning and Investment
MTL  Minimum Tax Liability
NAIPA  National Investment Promotion Agency
NCS  Nigeria Customs Services
NEPCon  Nature, Economy, and People Connected
NESREA  National Environmental Standards and Regulations Enforcement Agency
NFA  Nigeria Forestry Act
NFR  National Forest Reserve
NGO  Non-Governmental Organization
NIMS  National Information Management System
NNPS  Nigeria National Park Service
NPA  National Protected Areas
NPFE  Non-permanent Forest Estate
NSEDSP-8  Lao’s 8th National Socio-Economic Development Plan 2016-2020
NSI  National Statistics Institute
NSTA  National Science and Technology Authority
NTFP  Non-Timber Forest Products
OCIPEF  Forest species control, information and promotion office (in Spanish: Oficina de control, información y promoción de las especies forestales)
ODI  Overseas Development Institute
OFAC  Central African Forest Observatory (in French: Observatoire des Forêts d’Afrique Centrale)
OFR  Off-Forest Reserve
OI-FLEG  Independent Observer of Forest Law Enforcement and Governance
OLB  Bureau Veritas’ Timber Origin and Legality (in French: Origine et Légalité des Bois)
OPP Office of the Public Prosecutor
OSH Occupational Safety and Health
OTP Open Timber Portal
OTV Out Turn Volume
PAFO Provincial Agriculture and Forestry Office
PAO Annual Operations Plan (in French: Plan Annuel d’opérations)
PEBO Timber Exploitation License (in French: Permis d’Exploitation des Bois d’œuvre)
PEFC Programme for the Endorsement of Forest Certification
PD Production Domain
PDR People’s Democratic Republic
PFA Production Forest Area
PFA Forest Permits (in French: Permis forestier associé)
PFE Permanent Forest Estate
PGG Mutual agreement permits (in French: Permis de gré à gré)
PoFI Provincial Office of Forest Inspection
PPA Potential Plantation Area
PPE Personnel Protection Equipment
PMO 15 Lao’s Prime Ministerial Order No. 15 on Strengthening Strictness of Timber Harvest Management and Inspection, Timber Transport and Business
PNG Papua New Guinea
POC Provincial Office of Industry and Commerce
PPD Preservation or Protection Domain
PPP Public-Private Partnership
ProFEB Programme on Protection and Sustainable Use of Forest Ecosystems and Biodiversity
RBUE EU Timber Regulation (in French: Règlement Bois de l’Union Européenne)
RECOFTC Regional Community Forestry Training Center for Asia and the Pacific
REDD+ Reducing emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks.
RIE Export and Import Registration
RIL Reduced-impact Logging
RWE Round Wood Equivalent
SATA Tropical African Sawn Wood (in French: Sciages Avivés Tropicaux Africains)
SCPFE Service for the Control of Forest Products for Export
SEPBC Cameroon timber yards operating company (in French: Société d’Exploitation des Parcs à Bois du Cameroun)
SEZ Special Economic Zone
SF Submerged Forest
SFD State Forestry Department
SFM Sustainable Forest Management
SIGIF Computerised Forest Information Management System (in French: Système informatisé de gestion de l’information forestière)
SLC Social Land Concessions
SME Small and Medium Enterprise
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>SMIG</td>
<td>Statutory Minimum Interprofessional Guaranteed Wage</td>
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<tr>
<td>SNR</td>
<td>National Reforestation Service (in French: <em>Service National de Reboisement</em>)</td>
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<tr>
<td>SNR</td>
<td>Strict Nature Reserves of Nigeria</td>
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<td>SOP</td>
<td>Standard Operating Procedure</td>
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<td>SP</td>
<td>Special timber permit</td>
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<tr>
<td>SRA</td>
<td>Social Responsibility Agreement</td>
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<tr>
<td>SV IWP</td>
<td>Sector Project International Forest Policy (in German: <em>Sektorvorhaben Internationale Waldpolitik</em>)</td>
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<td>TIDD</td>
<td>Timber Industry Development Division</td>
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<tr>
<td>TIF</td>
<td>Tree Information Form</td>
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<tr>
<td>TLAS</td>
<td>Timber Legality Assurance System</td>
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<tr>
<td>TOS</td>
<td>Timber Operational Specifications</td>
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<td>TPU</td>
<td>Timber Processing Unit</td>
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<td>TUC</td>
<td>Timber Utilization Contracts</td>
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<tr>
<td>TVD</td>
<td>Timber Validation Department</td>
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<tr>
<td>TWG-FR</td>
<td>Technical Working Group on Forestry Reform</td>
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<tr>
<td>UFA</td>
<td>Forest Management Unit (in French: <em>Unité forestière d’aménagement</em>)</td>
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<tr>
<td>UFE</td>
<td>Forest Harvesting Unit (in French: <em>Unité Forestière d’exploitation</em>)</td>
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<td>UXO</td>
<td>Unexploded ordonnance</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNDP-GEF</td>
<td>UNDP Global Environmental Finance</td>
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<td>UNODC</td>
<td>United Nations Organisation for Drugs and Crimes</td>
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<td>VAT</td>
<td>Value-Added Tax</td>
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<tr>
<td>VC</td>
<td>Cut timber sale (in French: <em>Vente de coupe</em>)</td>
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<tr>
<td>VCC</td>
<td>Classic cut sales (in French: <em>Vente de coupe Classique</em>)</td>
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<tr>
<td>VCCI</td>
<td>Vietnam Chamber of Commerce and Industry</td>
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<td>VCPD</td>
<td>Development project cut sales (in French: <em>Vente de coupe projet de développement</em>)</td>
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<tr>
<td>VIFORES</td>
<td>Vietnam Timber and Forest Product Association</td>
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<tr>
<td>VNTLAS</td>
<td>Vietnam’s Timber Legality Assurance System</td>
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<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreement</td>
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<tr>
<td>WCO</td>
<td>World Customs Organisation</td>
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<tr>
<td>WGI</td>
<td>World Bank Worldwide Governance Indicators</td>
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<td>WRI</td>
<td>World Resources Institute</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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<td>WTS</td>
<td>Wood Tracking System</td>
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<td>WWF</td>
<td>World Wildlife Fund</td>
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<tr>
<td>WWF-GTFN</td>
<td>WWF Global Forest &amp; Trade Network</td>
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Background analyses for VPA support project in Cameroon, Laos and Vietnam