Tailored Intelligence Study Tropical Timber

This Tailored Intelligence Study on tropical timber presents an overview of the most significant trade flows of tropical timber to eight countries in the EU from developing countries involved in the Sustainable Trade Initiative Tropical Timber program. In addition, the amount of tropical timber which is consumed in five EU countries is presented accompanied by estimates with regards to which market segments consume which amount of tropical timber.

Introduction

Aim of the Sustainable Trade Initiative (IDH) is to accelerate and up-scale sustainable trade of (amongst other commodities) tropical timber. To be able to remove or minimize practical barriers that prevent trade of sustainable produced tropical timber, on specific sectors, markets or countries, better understanding of the tropical timber markets within different European countries is needed. The IDH Tropical Timber program focuses on sustainable forest management. It consists of five elements. Through three tropical timber programs, concession holders in the Amazon (The Amazon Alternative, TAA), Borneo (The Borneo Initiative, TBI) and the Congo Basin (the Congo Basin Program, CBP) are supported on their way towards sustainable forest management. Tropical timber producer countries in which IDH programs are active are: Bolivia, Brazil, Cameroon, Congo-Brazzaville, DRC, Gabon, Peru and Indonesia. Within this Tailored Intelligence study these countries are referred to as 'IDH Program Countries'.

The other two elements aim to increase the demand for sustainable tropical timber in the Netherlands (cooperation with FSC Netherlands) and in other countries in the EU (the Linking Europe program, LE) respectively. Sufficient demand is an important success factor for sustainable forest management in the production countries. This tailored intelligence study is closely related to the LE program of IDH. Focus EU countries within the LE are: Belgium, France, Germany, Italy and Spain. However, activities within the LE are not limited to these countries.

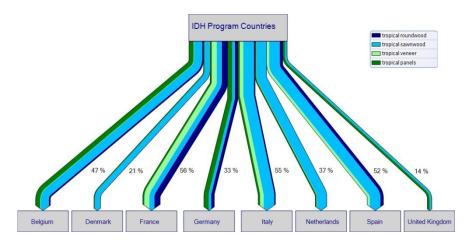
Trade flow analysis of direct import from IDH Program Countries by EU countries

Best expert judgement by Probos and IDH with regards to which EU countries are the main importers of tropical timber, resulted in a short list of the following eight countries: Belgium, Denmark , France, Germany, Italy, Spain, the Netherlands and United Kingdom (UK). The Comext¹ database is used to determine which five of the eight EU countries are the main importers of timber and wood based products out of the IDH Program Countries. The so called combined nomenclature is the coding that is used within the international trade statistics to uniformly classify and identify different products in Europe (CN-code). Products consisting of tropical timber classified in the groups starting with the following 4 digits: 4403 (roundwood), 4407 (sawnwood), 4412 (panels) and 4408 (veneer) are selected to determine the amount of tropical timber: Flowchart 1 presents the importance of the IDH Program Countries within the total import of tropical roundwood, sawnwood,

¹ Comext contains data on the trade in goods between member states of the European Union (intra-EU trade) and between member states and non EU-countries (extra-EU trade) from 1995 onwards. Comext can be used to determine the country of origin of wood based products. Comext data are not very concise, therefor Probos adjusted the data where necessary.

plywood and veneer for each of the eight EU countries. Details over 2008, 2009 and 2010 and import of tropical timber out of other regions are presented in Annex 1.

Flowchart 1. Overview of the importance of the IDH Program Countries within the total import flow of tropical timber divided in product groups for eight EU countries in 2010 (source: Comext, compiled and edited by Probos)



Data on imports show trade relations between producer and consumer countries. Imports have therefore been used to make the selection of countries for which the tropical timber market is studied in more detail. Imports however do not give information on the final consumption of timber products within the country itself. Some countries have large primary wood industries that produce products for the domestic market as well as for exports. For this reason consumption of tropical timber products is used to define the domestic tropical timber market.

In 2010 tropical sawnwood is the main product group imported from IDH Program Countries (flowchart 1). France has the highest share of import out of IDH Program Countries, followed by Italy, Spain, Belgium, Netherlands, Germany, Denmark and United Kingdom. However, related to the total amount of timber imported out of IDH Program Countries the importance of each country changes slightly (table 1).

Table 1. Overview import tropical roundwood, sawnwood, veneer and plywood by eight European countries in 2010 and its origin (source: Comext, compiled and edited by Probos)²

| Country | | x 1,000 m ³ | % | % of total |
|---------|---|------------------------|-----|------------|
| Belgium | Total import tropical timber from IDH Program Countries | 199 | 47 | 15 |
| | Total import tropical timber from other countries | 222 | 53 | |
| | Total import | 421 | 100 | |
| Denmark | Total import tropical timber from IDH Program Countries | 12 | 21 | 1 |
| | Total import tropical timber from other countries | 43 | 79 | |
| | Total import | 55 | 100 | |
| France | Total import tropical timber from IDH Program Countries | 356 | 56 | 27 |

² Note that the total import volume is the sum of the amount of roundwood, sawnwood, plywood and veneer. Strictly speaking these volumes should not be summed up. A m³ of roundwood is something different than a m³ of, for instance, veneer. For this reason timber product volumes are usually recalculated into a common measuring unit called roundwood equivalents (RWE). This in order to, for instance, calculate the total wood consumption of a country. A m³ RWE is the amount of roundwood needed to produce a m³ of that product. As the data here are only used for the country selection, values have not been recalculating to RWE.

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| | Total import tropical timber from other countries | 275 | 44 | |
|-------------|---|-------|-----|-----|
| | Total import | 632 | 100 | |
| Germany | Total import tropical timber from IDH Program Countries | 104 | 33 | 9 |
| | Total import tropical timber from other countries | 208 | 67 | |
| | Total import | 312 | 100 | |
| Italy | Total import tropical timber from IDH Program Countries | 225 | 55 | 17 |
| | Total import tropical timber from other countries | 181 | 45 | |
| | Total import | 406 | 100 | |
| Netherlands | Total import tropical timber from IDH Program Countries | 212 | 37 | 16 |
| | Total import tropical timber from other countries | 367 | 63 | |
| | Total import | 580 | 100 | |
| Spain | Total import tropical timber from IDH Program Countries | 87 | 52 | 7 |
| | Total import tropical timber from other countries | 81 | 48 | |
| | Total import | 169 | 100 | |
| UK | Total import tropical timber from IDH Program Countries | 104 | 14 | 8 |
| | Total import tropical timber from other countries | 646 | 86 | |
| | Total import | 750 | 100 | |
| Total | Total import tropical timber from IDH Program Countries | 1,299 | 39 | 100 |
| | Total import tropical timber from other countries | 2,023 | 61 | |
| | Total import | 3,322 | 100 | |

Of the eight EU countries, Belgium, France, Germany, Italy and the Netherlands are the main importing countries for IDH Program Countries in 2010. However, considerable amount of activities are undertaken in the Netherlands (and the UK) to accelerate the trade in sustainably produced timber. Therefore these countries are not incorporated into the detailed study for market segments of tropical timber. Instead Spain is chosen as the fifth country to conduct the detailed market survey. This means the tropical timber market of Belgium, France, Germany, Italy and Spain have been assessed.

Tropical timber market

For each of the five EU countries a general overview is presented of the consumption³ of tropical timber within the country. In this general overview only the primary timber products sawnwood and plywood are presented. Tropical roundwood and veneer consumed in the country are in general processed within the country to produce sawnwood and panels. In that sense they can be considered as raw materials. Including them in the consumption volume would lead to double counting. Per country a chart is presented of the development of the consumption of tropical sawnwood and plywood from 1999 to 2010. The importance of tropical sawnwood and plywood within the country over the last 11 years can be derived from this chart. This fairly long history has been included to illustrate the tropical timber market before the current economic crisis started in 2008. Data are derived from the Joint Forest Sector Questionnaire (JFSQ) database. This questionnaire collects forest products data from all countries on behalf of UNECE⁴, FAO⁵, Eurostat and ITTO⁶ on a yearly basis. The questionnaires are completed by national experts and based on national statistics and can be considered as more reliable than Comext data.

³ The consumption of sawnwood and plywood is calculated with the following formula: consumption = production

⁺ imports - exports.

⁴ United Nations Economic Commission for Europe

⁵ Food and Agriculture organisation of the United Nations

⁶ The International Tropical Timber Organization

The charts consist of two lines for both sawnwood and plywood. The dotted line presents the actual figures that are based on the country reply to the JFSQ. The solid line refers to calculated five year averages. For instance the value for 2003 is the average of the consumption in the years 2001 to 2005. This solid line is added to the chart to remove extreme values in order to get a clearer picture of the long term trend in the consumption. In addition, recent consumption data for each country are presented for the years 2008, 2009 and 2010 in a table based on the JFSQ database.

The general overview is followed by a description of the importance of different market segments for the use of tropical sawnwood. For this Tailored Intelligence study Probos defined four main market segments: 1) Construction, 2) Outdoor/gardens, 3) Interior design and 4) 'Other'. The following products are incorporated into these segments:

Construction

- Window frames
- Doors
- Stairs
- Beams
- Wood for construction

Outdoor/gardens

Decking and other timber used in gardens

Interior design

- Furniture
- Flooring

Other

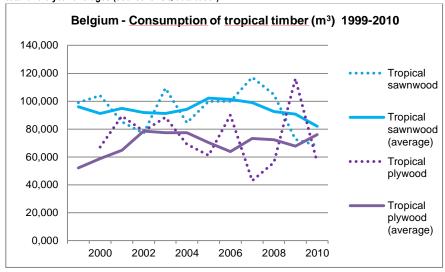
- Groundwork
- Road construction
- Waterworks
- Boat and car interior
- Trailers

The information is collected by means of a questionnaire by email and conducting interviews by phone with market experts in the five selected EU countries. Experts include timber trade federations, research institutes, tropical timber importing companies and environmental non-governmental organisations (NGO's). Since in general there are no specific data available within the countries to use as a basis for the study, experts were asked for their best professional judgement. The results are presented as ranges for each country.

Note that the general overview of the internal consumption are based on JFSQ data from 2008, 2009 and 2010. The ranges presented for each market segment are derived from the questionnaire and interviews and relate to the current (2012) situation. It is important to stress that for all five countries the overall consumption of timber in general has declined since 2008, not just for tropical wood based products. As a consequence the market shares of certain market segments might also have changed as the economic recession might influence certain segments more than others.

Belgium

Chart 1. Consumption of tropical sawnwood and tropical plywood in Belgium from 1999 to 2010 in m³ total and 5 year averages (source: JFSQ database⁷)



As in all five countries and due to the current economic situation, the consumption of tropical sawnwood declined in Belgium (in 2010 35% less than 2008, table 2). The data for the use of tropical plywood shows a severe decline from 2009 to 2010. However the amount of tropical plywood used in 2010 is almost similar to the use in 2008. Restocking might be a possible reason for this sudden increase in the consumption of plywood in 2009. However, it is likely that this sudden increased is (partly) caused by a wrong value in the statistics. For this reason the annual change is not reported in table 2. If the development in the 5 year average value in the period 1999-2010 is considered, the consumption of tropical plywood in Belgium seems to be rather stable (chart 1). In 2009 the market share of certified sustainably produced wood based products on the Belgium market has been assessed (Probos, 2009). According to this study 15% of all wood based products on the Belgium market were certified in 2008. It was estimated that the market share would be around 17% in 2010. No new studies have been performed to update this data.

Table 2. Consumption of tropical sawnwood and tropical plywood in Belgium in 2008, 2009 and 2010 in m^3 product. (source: JFSQ database⁸)

| | 2008 | 2009 | 2010 |
|-------------------|---------|---------|--------|
| Tropical sawnwood | 104,830 | 72,590 | 68,260 |
| Annual change | | - 30.8% | -6% |
| Tropical plywood | 56,000 | 116,230 | 56,090 |

The most important market segments in Belgium for tropical sawnwood are the segments construction and outdoor/garden (table 3).

Table 3. Tropical sawn timber market in Belgium⁹

| Construction | Outdoor/garden | Interior design | Other |
|--------------|----------------|-----------------|-------|
| 40-50% | 30-40% | 10-15% | 1-5% |

 $^{^{7}}$ UNECE/FAO TIMBER database, 1964-2010, updated January 2012.

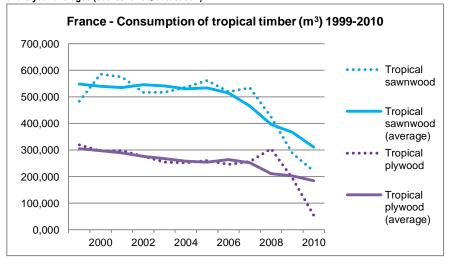
⁸ UNECE/FAO TIMBER database, 1964-2010, updated January 2012.

⁹ The ranges are based on best expert estimates provided by several experts in the timber market.

Opportunities (+) and threats (-) for the trade of sustainably produced tropical timber in Belgium according to Probos:

- + The construction sector (mainly window frames) is a difficult, but well-defined market to target the use of certified sustainably produced timber. Companies manufacturing window frames (joineries) are diverse and wide spread and in most cases not well organised. In most cases they produce a wide range of products for which also non tropical timber is used. This makes it more difficult to persuade individual companies to use more sustainably produced timber. On the other hand, the users of these products (the construction sector) are also wide spread but will be easier to target since the type of products in which tropical timber is used is mainly restricted to window frames. To increase the use of sustainably produced timber it seems wise to target the construction sector and their clients.
- + The use of tropical timber in outdoor and garden is mainly restricted to decking. This means it is fairly easy to focus efforts on one product to increase the demand for sustainably produced timber within this important market segment with an estimated market share of 30-40% of the total consumption of tropical sawnwood in Belgium. If the largest sellers of decking are identified, these companies and their professional clients can be targeted. It will be less easy to target (individual) consumers of decking.
- +/- The market for tropical timber is declining slightly. However, bearing in mind the current economic situation, the market for tropical timber is Belgium is performing quite well.
- There is a lack of knowledge with regards to the specific market segments in which tropical timber is used in Belgium. This makes it difficult to identify the specific sectors which could be targeted to increase the market share of sustainably produced (tropical) timber. A first assessment has been executed within this study but it is recommended to execute a more thorough research.

France Chart 2. Consumption of tropical sawnwood and tropical plywood in France from 1999 to 2010 in m³ total and 5 year averages (source: JFSQ database¹º)



The consumption of tropical sawnwood declined with more than 32% between 2008 and 2009 and by 8% between 2009 and 2010 (table 4). For tropical plywood the decline is even more severe, at 54%. The current level of consumption of plywood seems to be very low compared to the size of France. If the 5 year averages are considered a consumption between 150,000 and 200,000 m³ would be more in line with the trend. The decline in the use of tropical timber can also be seen in the decline in the number of sawmills specialising in hardwoods (688 in 2005, 558 in 2009)¹¹. FSC France commissioned a study to analyse the market for tropical timber in France, focusing on determining the market share of FSC certified tropical timber. According to the study 6.7% of tropical logs imported by France in 2009 were FSC certified. For tropical sawnwood this was 1.8%, tropical veneer 2.6% and tropical plywood 6.7% (Gougeon, 2010).

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¹⁰ UNECE/FAO TIMBER database, 1964-2010, updated January 2012

¹¹ Source: UNECE Market statement France

France is one of the main producers of Okoumé plywood for both internal use and export. For this reason France was importing large volumes of tropical roundwood and veneer. The imports of tropical roundwood have been reduced due to the export bans on logs (roundwood) that came into force in a number of African countries in recent years.

Table 4. Consumption of tropical sawnwood and tropical plywood in France in 2008, 2009 and 2010 in m³ product. (source: JFSQ database¹²)

| | 2008 | 2009 | 2010 |
|-------------------|---------|----------|----------|
| Tropical sawnwood | 423,960 | 287,440 | 264,370 |
| Annual change | | - 32.2 % | - 8 % |
| Tropical plywood | 304,970 | 192,590 | 140,010 |
| Annual change | | - 36.8 % | - 27.3 % |

France is the only country for which a study of, among others, the tropical timber market in 2010 appeared to be available (Serge Lochu consultant, 2012). The vast majority of tropical sawnwood in France is consumed in the construction sector. Outdoor and garden use, mainly consisting of decking, and interior design also entail an important share. In France window frames are often manufactured from tropical timber.

Table 5. Tropical sawn timber market in France (source: Serge Lochu consultant, 2012)

| Construction | Outdoor/garden | Interior design | Other |
|--------------|----------------|-----------------|-------|
| 50% | 24% | 24% | 2% |

Opportunities (+) and threats (-) for the trade of sustainably produced tropical timber in France according to Probos:

- + As in Belgium, the construction sector (mainly window frames) is a difficult, but well-defined market to target the use of certified sustainably produced timber. Companies manufacturing window frames (joineries) are diverse and wide spread and in most cases not well organised. Often they produce a wide range of products for which also non tropical timber is used. This makes it more difficult to persuade individual companies to use more sustainably produced (tropical) timber. On the other hand, the users of these products (the construction sector) are also wide spread but will be easier to target since the type of products in which tropical timber is used is mainly restricted to window frames. To increase the use of sustainably produced timber it seems wise to target the construction sector and their clients.
- + The use of tropical timber in outdoor and garden is mainly restricted to decking. This means it is fairly easy to focus efforts on one product to increase the demand for sustainably produced timber within this important market segment with an estimated market share of 25% of the total consumption of tropical sawnwood in France. If the largest sellers of decking are identified, these companies and their professional clients can be targeted. It will be less easy to target (individual) consumers of decking.
- + Specific data and expertise on the tropical timber market in France is available which makes it easier to identify the target groups needed to increase the demand for sustainably produced (tropical) timber.
- + The French timber sector foresees a rising demand for certified sustainably produced wood based products. There is growing awareness among companies who build offices and warehouses and use packaging of the importance of corporate social responsibility (CSR). Using sustainably produced timber is an important component of CSR. Also the European Timber Regulation (EUTR), entering into force (as of March 3 2013), contributes to this development. Although the consumption of tropical timber is declining in France (partly due to EUTR), the market share of certified sustainably produced timber is expected to increase.
- + The wood products industries produces both for domestic and export markets, including environmental very consciousness markets. This can contribute to the industry using an increasing share of sustainably produced timber as raw material for their products. Through the French

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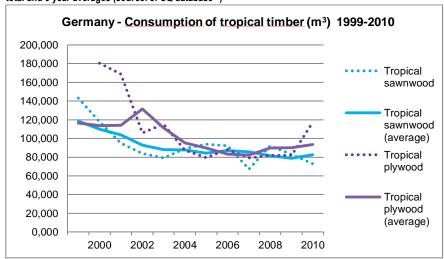
¹² UNECE/FAO TIMBER database, 1964-2010, updated January 2012

producers of Okoumé plywood it might be possible to increase the market share of certified Okoumé plywood on the European market.

- The use of tropical timber is declining. Tropical timber in France does in general not have a good image, due to fears about related deforestation and degradation. There is a shift to substitutes for tropical timber products, such as (treated and thus upgraded) timber from regions where it is (in general) easier to source sustainably produced timber and other materials such as aluminium, steel and WPC¹³. In addition, it is fashionable to use locally produced timber. Environmental concerns and the financial crises in Europe contributes to this development. Experts also point out that the EUTR poses a threat for trade in sustainably produced tropical timber. As of 3 March 2013 the minimum requirement for all imports of timber and timber products on the EU market, within the scope of the EUTR, is that its origin must be proven as being legal. Legal might be good enough for both consumers of timber and companies in producer countries. It is easier to meet legality than sustainability. The precise implications of the EUTR are, however, difficult to predict. It could also mean companies will sooner resort to certified sustainably produced tropical timber, because with sustainability legality is proven and sustainability is an extra unique selling point.

Germany

Chart 3. Consumption of tropical sawnwood and tropical plywood in Germany from 1999 to 2010 in m³ total and 5 year averages (source: JFSQ database¹⁴)



As of 2005 the tropical timber consumption by Germany is fairly stable (chart 3). However, since 2008 the consumption of tropical sawnwood is declining in Germany (table 6). The consumption of tropical plywood partly makes up for this decline. According to experts, the total timber market is fairly stable, but tropical timber is losing slightly market share. More temperate and boreal timber out of (eastern) Europe is being used to replace tropical timber. For a couple of years (dark) tropical timber was fashionable for use in interior design, mainly for parquet. Currently species with a light colour are used for flooring, such as oak (which is non tropical). No data is available on the market share of certified sustainably produced timber in Germany. However, experts have the impression that especially retailers primarily sell certified sustainably produced wood based products (both tropical and non-tropical).

¹³ Wood Polymer Composite (WPC)

¹⁴ UNECE/FAO TIMBER database, 1964-2010, updated January 2012

Table 6. Consumption of tropical sawnwood and tropical plywood in Germany in 2008, 2009 and 2010 m³ product. (source: JFSQ database¹⁵)

| | 2008 | 2009 | 2010 |
|-------------------|--------|---------|----------|
| Tropical sawnwood | 92,000 | 82,920 | 73,060 |
| Annual change | | - 9.9 % | - 11.9 % |
| Tropical plywood | 82,000 | 82,000 | 117,000 |
| Annual change | | 0 % | 42.7 % |

Outdoor and garden, consisting mainly of decking, is the most important market for tropical timber in Germany (table 7). In the past tropical timber was also important in the manufacturing of window-frames. Nowadays around 70% of window frames are made from PVC or aluminium, according to experts. A new trend is covering aluminium window frames with boreal timber species on the interior side to get the wood view indoors but the aluminium on the exterior.

Table 7. Tropical sawn timber market in Germany¹⁶

| Construction | Outdoor/garden | Interior design | Other |
|--------------|----------------|-----------------|-------|
| 20-25% | 60-70% | 5-10% | 1-5% |

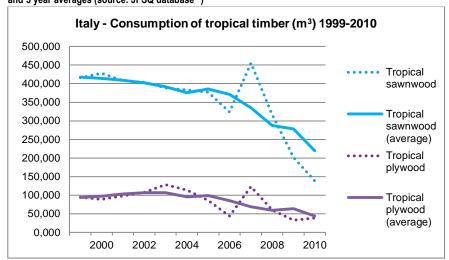
Opportunities (+) and threats (-) for the trade of sustainably produced tropical timber in Germany according to Probos:

- + The use of tropical timber in outdoor and garden is mainly restricted to decking. This means it is fairly easy to focus efforts on one product to increase the demand for sustainably produced timber within this important market segment with an estimated market share of 60 to 70% of the total consumption of tropical sawnwood in Germany. If the largest sellers of decking are identified, these companies and their professional clients can be targeted. It will be less easy to target (individual) consumers of decking.
- + Retailers in Germany have a strong preference for certified sustainably produced timber, making this sector an interesting starting point to accelerate the trade in sustainably produced timber in Germany. However, experts indicate that most of the timber sold in the retail sector is already certified sustainably produced timber, including tropical timber. However, no hard data is available.
- + The market for tropical timber has been fairly stable since 2004. Per capita, however, is the consumption of tropical timber in Germany fairly low.
- No specific data on the market segments for the use of tropical timber or the market share of certified sustainably produced timber is available. However, according to experts decking is the main product for tropical timber and most of the timber sold by retailers is certified sustainably produced.

¹⁵ UNECE/FAO TIMBER database, 1964-2010, updated January 2012

¹⁶ The ranges are based on best expert estimates provided by several experts in the timber market.

Italy
Chart 4. Consumption of tropical sawnwood and tropical plywood in Italy from 1999 to 2010 in m³ total and 5 year averages (source: JFSQ database¹¹)



Italy is an important producer and exporter of furniture. The wood products industry in Italy manufactures for both domestic and export market high value added products such as office, kitchen and home furniture, and mouldings. The consumption of tropical timber in Italy has been declining since 2002 (chart 4). This is caused by the fact that the importance of tropical timber for the Italian furniture industry has decreased, but Italy remains an important importer of tropical timber. However, the current economic crises hits Italy hard, which affects all timber imports, but tropical timber imports even worse (table 8). The consumption of sawnwood declined with 56% from 2008 to 2010. After a strong decline in consumption of tropical plywood, there is a slight increase from 2009 to 2010 (18%)¹⁸. Plywood is mainly used in construction and not in the furniture industry. Manufacturing window frames from (tropical) timber is a long hold tradition. No official data on the market share of certified sustainable timber products is available for Italy. Some importers of tropical timber estimate that approximately 20-25% of the market consists of certified sustainable tropical timber products.

Table 8. Consumption of tropical sawnwood and tropical plywood in Italy in 2008, 2009 and 2010 m³ product. (source: JFSQ database¹⁹)

| | 2008 | 2009 | 2010 |
|-------------------|---------|----------|----------|
| Tropical sawnwood | 317,080 | 201,860 | 139,000 |
| Annual change | | - 36.3 % | - 31.1 % |
| Tropical plywood | 60,110 | 33,090 | 39,000 |
| Annual change | | - 45.0 % | 17.9 % |

Construction is, according to experts of timber importing companies, the most important market for tropical timber in Italy (table 9). Researchers also stress the importance of interior design (eg. furniture and flooring) and 'other', such as naval construction and other ground- and waterworks uses. Experts indicate that the current recession has a very strong effect on the timber market in Italy in general and even worse on the use of tropical timber.

¹⁷ UNECE/FAO TIMBER database, 1964-2010, updated January 2012

¹⁸ Source: review of the italian timber market-with focus on tropical timber by ITTO (www.itto.int/direct/topics/../topics_id=10460000&no=1&disp=inline)

¹⁹ UNECE/FAO TIMBER database, 1964-2010, updated January 2012

Table 9. Tropical sawn timber market in Italy²⁰

| Construction | Outdoor/garden | Interior design | Other |
|--------------|----------------|-----------------|--------|
| 40-50% | 15-25% | 30-40% | 15-25% |

Opportunities (+) and threats (-) for the trade of sustainably produced tropical timber in Italy according to Probos:

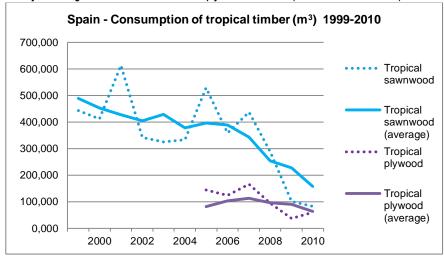
- + As in Belgium and France, the construction sector is a difficult, but well-defined market to target the use of certified sustainably produced timber. Companies manufacturing window frames (joineries) are diverse and wide spread and in most cases not well organised. Often they produce a wide range of products for which also non tropical timber is used. This makes it more difficult to persuade individual companies to use more sustainably produced (tropical) timber. The users of these products (the construction sector) are also wide spread but will be easier to target since the type of products in which tropical timber is used is mainly restricted to window frames. To increase the use of sustainably produced timber it seems wise to target the construction sector and their clients
- +The wood products (furniture) industries produce both for domestic and export markets, including environmental very consciousness markets. This can contribute to the industry using an increasing share of sustainably produced timber as raw material for their products.
- + Tropical timber is often used in naval infrastructure and outdoor (beach) furniture such as costal parks, ports, and touristic (beach) infrastructures. Italy's long coastline make these uses of significant importance within the consumption of tropical timber in Italy (see 'other' in table 9). One academic researcher consulted estimated the market share even up to 35%. This market can be targeted by addressing public authorities who are often responsible for maintenance and development.
- The market for tropical timber is declining rapidly in Italy (also previously to the current economic crises). Tropical timber is currently not fashionable in e.g. the important furniture industry in Italy. Both producers and potential clients might therefore be less eager to invest in sustainably produced tropical timber.
- There is a lack of knowledge with regards to the specific market segments in which tropical timber is used in Italy. This makes it difficult to identify the specific sectors which could be targeted to increase the market share of sustainably produced (tropical) timber. A first assessment has been executed within this study but it is recommended to execute a more thorough research. In addition, no specific data on the market share of certified sustainably produced timber is available.
- The current economic situation has a negative effect on the overall timber market and even worse on the tropical timber market. Most of the tropical timber in Italy is currently being used in the construction sector. The current economic situation hits this sector especially hard. In addition, according to importing companies, there is an increase in temperate hardwoods, for example out of the United States. This has to do with more compatible prices, fashion of lighter timber species and easier sourcing verified legal and sustainably produced timber in these regions.

Source: CBI Market Information Database • URL: www.cbi.eu • Contact: marketinfo@cbi.eu • www.cbi.eu/disclaimer

²⁰ The ranges are based on best expert estimates provided by several experts in the timber market.

Spain

Chart 5. Consumption of tropical sawnwood and tropical plywood in Spain from 1999 to 2010 in m³ total and 5 year averages. Note: no data available for plywood until 2005. (source: JFSQ database²¹)



The consumption of tropical sawnwood is rapidly declining in Spain (chart 5 and table 10). From 2008 to 2010 the decline was 71%. This is most probably due to the current economic crises, which hits the construction sector especially hard. The current construction activities are only a fraction what they were before 2008. Outdoor and garden uses (the main markets for tropical sawnwood in Spain) are directly related to the construction sector. In addition, the general consumption has dropped, most specifically of more luxurious goods. Tropical timber for outdoor and garden uses can be considered as luxurious goods. The consumption of tropical plywood shows a rapid decrease from 2008 to 2009 but in 2010 the amount of plywood consumed in Spain shows a vast increase again. The reason for this increase is not clear.

Table 10. Consumption of tropical sawnwood and tropical plywood in Spain in 2008, 2009 and 2010 m³ product. (source: JFSQ database²²)

| | 2008 | 2009 | 2010 |
|-------------------|---------|----------|----------|
| Tropical sawnwood | 289,170 | 101,860 | 82,880 |
| Annual change | | - 64.8 % | - 18.6 % |
| Tropical plywood | 96,034 | 37,720 | 60,491 |
| Annual change | | - 60.7 % | 60.4 % |

Contrary to Belgium, France, and Italy construction is not the most important sector for tropical timber in Spain (table 11). Also not before the current crises which affects the construction industry most prominently. It is due to the fact that window frames in Spain are mainly made from PVC instead of timber. The main (and it seems only important) market for tropical timber in Spain is outdoor / garden (mainly decking). As mentioned, the current economic crisis is hitting Spain hard. Some experts indicate a decline of around 90% in the amount of imported timber in 2012. Experts do not expect the market to pick up soon as tropical timber is especially used in decking around luxurious houses which are not commonly constructed these days.

²¹ UNECE/FAO TIMBER database, 1964-2010, updated January 2012

²² UNECE/FAO TIMBER database, 1964-2010, updated January 2012

Table 11. Tropical sawn timber market in Spain²³

| Construction | Outdoor/garden | Interior design | Other |
|--------------|----------------|-----------------|-------|
| 5-15% | 70-85% | 1-5% | 1-5% |

Opportunities (+) and threats (-) for the trade of sustainably produced tropical timber in Spain according to Probos:

- + The use of tropical timber in outdoor and garden is mainly restricted to decking. This means it is fairly easy to focus efforts on one product to increase the demand for sustainably produced timber within this important market segment with an estimated market share of 70 to 85% of the total consumption of tropical sawnwood in Spain. If the largest sellers of decking are identified, these companies and their professional clients can be targeted. It will be less easy to target (individual) consumers of decking. However, the current market conditions in Spain make it challenging to invest in sustainability.
- There is a lack of knowledge with regards to the specific market segments in which tropical timber is used in Spain. This makes it difficult to identify the specific sectors which could be targeted to increase the market share of sustainably produced (tropical) timber. A first assessment has been executed within this study but it is recommended to execute a more thorough research. In addition, no specific data on the market share of certified sustainably produced timber is available.
- The current economic situation has a very negative effect on the overall timber market including tropical timber. Most of the tropical timber in Spain is used in decking around luxurious houses and these are currently not frequently constructed. This means a major market segment in which tropical timber is used has vanished.

Tropical timber market in five EU countries with regards to tropical plywood

Opposed to the market segments of tropical sawnwood, the market segments of tropical plywood do not differ between the five European countries. According to the experts, in general 85-95% of tropical plywood is used in construction and 5-10% in other segments, such as boat and car interiors and flooring of trailers. Plywood used in boat interiors are in most cases high quality panels entirely made of tropical timber. Tropical plywood used in construction are in most cases made of layers of non-tropical timber such as poplar with an exterior (veneer) layer of tropical timber. It is worth to mention that the European plywood market is changing rapidly since the start of the recession in 2008. The market is switching from tropical to temperate plywood. The main driver is likely to be the EU Timber Regulation (EUTR), to be enforced from the 3rd of March 2013. The EUTR requires EU importers to demonstrate negligible risks with regards to wood products coming from an illegal source. This is a challenge for wood products that rely on long and complex supply chains, which is often the case with (Chinese) tropical plywood.

Source: CBI Market Information Database • URL: www.cbi.eu • Contact: marketinfo@cbi.eu • www.cbi.eu/disclaimer

²³ The ranges are based on best expert estimates provided by several experts in the timber market.

Trade flows to and from important wood processing countries

Besides direct import of primary timber products out of IDH Program Countries by France, Germany, United Kingdom, the Netherlands, Belgium, Spain, Italy and Denmark, there is also indirect import by amongst others these countries out of the IDH Program Countries. Especially in south east Asia there are several countries which have a large wood processing industry. Domestic supply of raw materials for this sector is in general not sufficient. Therefore large amounts of primary timber products are imported to feed the, often growing, wood processing industry, amongst others out of IDH Program Countries.

Goal of this part of the study is to get an idea of the amount of timber exported by the IDH Program Countries to countries with a large wood processing industry. This timber can end up as a finished product on the European market.

China and three other wood processing countries are studied in more detail. To determine which other three countries to include in this study, Probos studied the import of finished products by France, Germany, United Kingdom, the Netherlands, Belgium, Spain, Italy and Denmark in 2008, 2009 and 2010 by using the Comext database. All CN-codes of finished products made (partly) out of timber, are included. Examples are: Doors and their frames and thresholds²⁴ and Wooden furniture²⁵. Based on this analysis and bearing in mind the interest of the IDH program, the following three countries are selected (next to China):

- 1. Indonesia
- 2. Malaysia
- 3. Vietnam

Determining the exact amount of timber exported by the IDH Program Countries to China, Indonesia, Malaysia and Vietnam is beyond the scope of this study. There are however detailed and recent studies available. Most prominently the Baseline studies developed within the framework of the FLEGT Action Plan²⁶ available for all four countries. Aim of these studies is to provide baseline information on each country in the forestry sector including international timber trade. All information presented in 2.1, 2.2, 2.3 and 2.4 originates from these Baseline studies. The information used focuses on the import out of IDH Program Countries and the import by EU-countries. Additional background information and more details can be found in these Baseline studies (see Bibliography).

China

The information presented with regards to China originates from 'Baseline Study 1, China: Overview of Forest Law Enforcement, Governance and Trade' as compiled by Forest Trends on behalf of FLEGT Asia and published in June 2011²⁷.

²⁴ Of Okoume, Obeche, Sapelli, Sipo, Acajou d'Afrique, Makore, Iroko, Tiama, Mansonia, Ilomba, Dibetou, Limba, Azobe, Dark red meranti, Meranti bakau, White lauan, White seraya, ... (44182080)

²⁵ Wooden furniture (excl. for offices or shops, kitchens, dining rooms, living rooms and bedrooms, and seats) (94036090)

²⁶ The European Commission (EC) published in 2003 the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, which sets out a range of measures available to the EU and its Member States to tackle illegal logging in the world's forests. FLEGT aims to promote good forest governance and by that contributing to poverty eradication and sustainable management of natural resources.

 $^{^{27}}$ © FLEGT Asia, Baseline Study 1, China: Overview of Forest Law Enforcement, Governance and Trade, June 2011

Exports China

Only a limited percentage of all wood based products produced in China is exported. It is estimated that between 8428 and 92% is consumed within China. After the economic downturn, however, this figure is likely to have even increased. Exports of forest products decreased by volume, but barely decreased by value in 2009, reflecting a likely shift in Chinese manufacturing towards higher-value wood products. Furniture and paper continue to be the main staples of the export-oriented industry. The plywood industry posted large increases in domestic production, while plywood exports dropped.

China is now the world's largest "workshop", responding to the demand for furniture, plywood, wood mouldings and flooring from the developed world. In just a period of twelve years (1997-2009) China's forest product exports increased by almost 700% in value, from less than US\$5 to US\$27.3 billion. The major markets remain the US, EU and Japan. Main markets in the EU for China's forest products are:

- 1) the UK, with an export value of approximately US\$1.5 billion in 2009. Followed by:
- 2) Germany (app. US\$700 million);
- 3) France (app. US\$500 million);
- 4) Netherlands (app. US\$400 million)
- 5) Belgium (app. US\$300 million);
- 6) Italy (app. US\$300 million) and
- 7) Spain (app. US\$250 million).

Imports China

China's industry sources its wood materials with both domestically and imported supplies. Great efforts have been made in developing forest plantations, and China's peak domestic production occurred in 2008 when approximately 81 million m³ were harvested. But imports in 2009 (113 million m³ RWE) have been consistently equal or higher than even this peak in domestic production levels. In order to augment domestic supply, the wood products industry depends on imports to meet this supply gap, with some estimating the supply gap (met by import or substitutes) to be between 100 and 150 million m³. The sourcing of raw materials for this large and growing sector is crucial to its long term stability. The majority of China's own plantation forests are mostly consumed by the plywood and pulp / paper industry. China will continue to rely on imports for those products which require tropical hardwood species – such as for high end furniture and wooden flooring, at least in the near future.

Despite the global economic downturn starting in 2007, China's imports of forest products did not significantly decline in 2008, and in fact posted one of its sharpest yearly increases (22%) in 2009 to 113 million m³ RWE. During the first six months of 2010, imports of softwood logs were up 17% from the same period in 2009, reaching the highest level on record. Import levels were high at a time when the volume of exports of wood products declined significantly – indicating either a stockpiling of materials or a further shift in producing for domestic markets. The majority of the increase is due to the imports of virgin wood based pulp, which has steadily increased from approximately 15% to 50% of total imports from 1997 to 2010 respectively.

Logs

Logs remain China's second largest import although decreased from 38% to 25% of the market share between 2007 and 2009.

Sawnwood

Sawnwood has taken an increasing portion of total imports at 12% in 2009. Increased imports of sawn lumber, possibly at the expense of raw log imports, are also indications of potential shifts underway, such as decreasing interest in importing raw logs due to:

²⁸ According to calculations by RISI consultants

²⁹ Estimation by Deutsche Bank over 2007

- increases in log export bans or taxes from major supplying countries such as Russia and Gabon:
- (b) increases in Chinese labour costs, reducing China's competitive advantage by making low-end (log) processing less cost-effective than moving up the value chain.

Domestic sawmills are estimated to be producing 77% of total lumber / sawnwood which are then sent on to furniture mills, construction sites, etc. Trade analysts estimate that China's lumber imports will double between 2007 and 2010, and then double again by 2015³⁰.

Plywood and veneer

Plywood and veneer imports have steadily declined. Russia is the largest supplier of forest products to China, amounting to 20% of all imports. Imports from Canada, Brazil and the United States have also increased while Indonesia's exports to China have decreased, down from 10 to 7 million m³ RWE between 2002 (13% share) and 2009 (6%).

Significant findings for IDH of the FLEGT Asia Baseline Study China

- 1. Amount of timber sourced out of IDH Program Countries:
 - a. The following IDH Program Countries or regions can be identified as the origin of forest products imported by China in 2009: Africa (1-5 million m³ RWE), Indonesia (6-10 million m³ RWE) and Brazil (11-15 million m³ RWE).
 - b. Over 2009 the top 3 of China Forest Products Imports by Product is: 1) Wood pulp (53 million m³ RWE); 2) logs (28 million m³ RWE) and 3) sawnwood (13 million m³ RWE). China imports out of IDH Program Countries, as far as can be identified from the Baseline Study, 11 million m³ RWE of Wood pulp out of Brazil and 5.1 million m³ RWE out of Indonesia. The amount originating from plantation forests cannot be identified. Papua New Guinea supplies China with 1.7 million m³ RWE of logs and Gabon 1.1 million. China imported 26.8% of all its plywood out of Indonesia (0.12 million m³ RWE).
- Within the IDH Linking Europe programme the following European countries are specifically targeted to focus efforts on accelerating the trade in sustainably produced timber: Belgium, France, Germany, Italy and Spain. These countries are (in value) the respectively number 5, 3, 2, 6 and 7 in value of export of Forest Products to the EU by China. United Kingdom ranks first and the total value of China's export to the EU amounts to US\$5.1 billion (18.6% of the total export value of Forest Products by China).
- 3. With regards to which Chinese Forest Products could be targeted by IDH to maximize benefit for the IDH Program Countries: wood furniture and plywood are the second and third largest export product, after paper in volume. In value, wood furniture is even the largest. In addition, tropical timber is commonly used in these products.
- 4. Much has been said about a "leakage effect" in which the higher environmental demands of the markets from the US, EU, Japan and Australia would lead to a shift away from these markets towards less demanding markets such as the Middle East or Central Asia. Research with regards to wooden furniture (Eastin, 2012) showed that after a steady and strong increase in exports of furniture from China to the US from 2001 to 2007, the value of exports dropped in 2007, a year before the implementation of the Lacey Act in the US. A sharp break with the past. As of 2009 the value of exports increased again, but with a less steep trend as before. Indeed, the implementation of the Lacey Act coincide with the worldwide economic crises. However, the value of exports to countries without legal wood legislation rose sharply from the moment the Lacey Act was implemented (a trend much sharper than before 2008). Nevertheless, the markets of the EU, US, Japan and Australia will remain important for a while because of their size (with approximately 60% of total export value in 2009) and can thus make a difference when demanding products made of sustainably produced wood.

³⁰ Wood Markets Press Release, August 30, 2010.

Indonesia

The information presented with regards to Indonesia originates from the report 'Indonesia: Scoping Baseline Information for Forest Law Enforcement, Governance and Trade' as compiled by TRAFFIC on behalf of FLEGT Asia and published in January 2012³¹.

Exports Indonesia

The total RWE volume of wood-based products exported from Indonesia declined from a high of 23.38 million m³ RWE in 2001 to 8.24 million m³ RWE in 2009 and this decline has not been compensated for by the (growing) paper sector. Plywood and, to a lesser extent, mouldings and joinery accounted for most of the decline. The total value of timber sector export from Indonesia in 2009 was US\$3.27 billion and for pulp and paper US\$4.26 billion. Wooden furniture, and mouldings and joinery accounted for more than half of the export value of timber sector products exported from Indonesia during 2009. Plywood accounted for a further third.

Total export value of the timber sector in 2009 to the EU countries was US\$849 million (26%), of the total Indonesian timber export value in 2009. Concerning Indonesia's exports of timber sector products to the EU during 2009, wooden furniture accounted for 40% of the total, mouldings and joinery 30% and VPA core products³² (pre-dominantly plywood) only 15%. Overall and by both RWE volume and export value, the EU was the destination for an increasing share of the timber sector products which were exported from Indonesia during the last decade, even as Indonesia's timber sector exports was declining: from 2.96 million m³ RWE (13,1%) in 2000 to 1.35 (16.3%) in 2009.

Logs

Indonesia has since 2001 prohibited the export of logs. This greatly facilitated the expansion of Indonesia's plywood industry, which accounts for most of the RWE volume consumed by the timber sector and roughly 60% of the RWE volume exported during recent years.

Sawn timber

Indonesia has also prohibited the export of rough sawn timber products, which excludes some categories of planed sawn timber from 2004. However, importing countries' trade statistics indicate that sawn timber continues to be exported in substantial volumes, although these have been declining since 2002. This contrasts with export statistics declared by Indonesia. Indonesia accounted for less than 5% of the tropical sawn timber which was imported into the EU during the last decade (i.e. 2000–2009) but this has decreased significantly to only 5,200 m³ RWE in 2009 although the EU has declared a total import of 42,000 m³ in 2009.

Plywood

The total export of plywood from Indonesia to the EU amounted to 140,000 m³ RWE in 2009, declining from over 600,000 m³ RWE per year in 2000 to 2003. The most important export destination in the EU were Belgium and UK in the early years of the last decade but those countries have been receiving less in the latter part of the decade driven by concerns of illegality and deforestation.

Mouldings and joinery

The EU is the most important market for mouldings and joinery for Indonesia with around 490,000 m³ RWE in 2009 or around 30% of the mouldings and joinery exports of Indonesia, and even higher in the preceding years of the last decade. The key markets in the EU for Indonesia were Netherlands (over 200,000 m³ RWE per year at least or about a third of the total imports), followed by Germany and UK (well over 100,000 m³ RWE each except during 2008 and 2009), and the smaller markets of Belgium, France and Italy.

^{31 ©} EU FLEGT Facility, Jakarta: Scoping baseline information for Forest Law Enforcement, Governance and Trade, January 2012

³² logs, sawn timber, plywood and veneer

Furniture

Furniture exports from Indonesia have been a major foreign exchange earner for the country. Main export has been to the EU countries which values were US\$420 million in 2008, but dropping to US\$330 million in 2009. In RWE EU imports have ranged from 350,000 to 570,000 m³ RWE yearly. The main EU country markets for Indonesian furniture have been UK, France, and the Netherlands, followed by Belgium, Germany and Italy with Denmark the smallest market. Much of the wooden furniture which is exported from Indonesia is made of plantation-grown teak, particularly for outdoor use, and from particleboard or fibre board.

Imports Indonesia

The RWE volume of wood-based products imported into Indonesia is small relative to that which is exported. Pulp and paper account for the bulk of imports. Timber products imports amounted to 1.2 million m³ RWE in 2009, whereas paper sector imports was 6.9 million m³ RWE, mostly dominated by wood-based pulp at 4.8 million m³ RWE and paper at 2.1 million m³ RWE. In 2009, most of the pulp was supplied from Brazil (250,000 m³ RWE), Canada (1.17 million m³ RWE), Chile (858,000 m³ RWE), New Zealand (311,000 m³ RWE), South Africa (539,000 m³ RWE), and Sweden (489,000 m³ RWE). The RWE volume imported for the timber sector increased strongly during the second half of last decade to around 1.6 million m³ RWE in 2008, but fell during 2009. Indonesia's imports of VPA core products were mostly from China, Malaysia, EU, New Zealand and USA. Panels (other than plywood) supplied from Malaysia and Thailand accounted for most of that growth, amounting to 590,000 m³ RWE in 2009. Sawn timber (330,000 m³ RWE in 2009) and, to a lesser extent, plywood (120,000 m³ RWE mainly from mainland China) comprised most of the remainder. Most sawn timber was supplied from the EU, New Zealand, and the USA.

Significant findings for IDH of the FLEGT Asia Baseline Study Indonesia

- 1) Indonesia itself is a IDH Program Country within The Borneo Initiative and for a large majority self-supporting with regards to supplying its wood processing industry with raw materials. A limited amount of wood based products, mainly pulp and paper, is imported out of other IDH Program Countries, such as Brazil. These products might originate from plantations. In addition, wood based products, such as sawn timber, panels and veneer imported by Indonesia out of other major wood processing countries, such as China and Malaysia, might contain fibers out of other IDH Program Countries. Amounts are likely to be minimal.
- 2) Key EU country markets for Indonesian wood based products are: Belgium and UK for plywood; Netherlands (over 200,000 m³ RWE per year at least or about a third of the total imports), followed by Germany and UK (well over 100,000 m³ RWE each except during 2008 and 2009), and the smaller markets of Belgium, France and Italy for mouldings and joinery. In RWE EU imports of Indonesian furniture have ranged from 350,000 to 570,000 m³ RWE yearly). The main EU country markets for Indonesian furniture have been UK, France, and the Netherlands, followed by Belgium, Germany and Italy with Denmark the smallest market.
- 3) Wooden furniture, and mouldings and joinery accounted for 40 and 30% respectively of the export value of timber sector products exported from Indonesia to the EU during 2009. To accelerate the trade in sustainably produced timber, it would seem wise to focus efforts on these industries. However, tertiary processed timber products such as furniture are dominated by small to medium-sized enterprises (SMEs) in Indonesia. SMEs are difficult to target. In addition, a large part of the wooden furniture which is exported from Indonesia is made of plantation-grown teak. Mouldings and joinery are in that sense more effective when aiming at natural forests and easier to target due to a higher level of organization of the sector. Plywood could also be considered to target. Roughly 60% of the RWE volume exported during recent years consists of plywood. But only approximately 15% of the export of plywood is imported by the EU making the EU less influential. However, if forces are joined with other environmental sensitive markets (Japan and US), the share rises to over 50%. In addition, the majority of plywood is

- imported into the EU for construction purposes. Professional markets, like construction, are in general easier to target.
- 4) A substantial quantity of wood based products, most dominantly wood chips and wood-based pulp and paper, is exported from Indonesia. Of all its trading partners the most to China. As finished products, these might end up on the EU-market. For market demand to influence the implementation of legality and sustainable forest management in Indonesia there must be a critical mass. For this reason there is a need to continue focusing on the major Asian markets, also to influence the forest and wood based industry in Indonesia.

Malaysia

The information presented with regards to Malaysia originates from the report 'Malaysia: Scoping Baseline Information for Forest Law Enforcement, Governance and Trade' as compiled by TRAFFIC on behalf of FLEGT Asia and published in January 2012³³.

Exports Malaysia

For the timber sector in 2009, Malaysia's exports to the EU accounted for around 6.5% of total exports or 1.61 million m³ RWE. Peninsular Malaysia dominates exports. For *VPA core products*³4, Malaysia exports to a wide range of countries. For the EU, this has ranged from a peak of 1,368,000 m³ RWE in 2006, to a low of 809,000 m³ RWE in 2009. The dominant EU importers are UK (peak of 627,000 m³ RWE in 2008 in the last decade), and the Netherlands which has been decreasing its imports in the last decade reaching 217,000 m³ RWE in 2009.

Logs

In the sub-region of South East Asia, excluding the Mekong region, only Malaysia exports logs. All the other countries in the sub-region have some form of log export ban in place. Exports of logs are from the States of Sarawak and Sabah. The export of logs from Peninsular Malaysia is prohibited. Malaysia's total export of logs has been decreasing over the years from a high of 5.56 million m³ in 2000 to a low of 1.94 million m³ in 2009. Partly due to the policy of further value added processing in the country, as well as a decrease in the production of logs from State land forests which are exploited more heavily than permanent forest estates which are earmarked for sustainable forest management. Last decade, India displaced Japan as the leading destination for the logs exported from Malaysia. A further 20% were exported to mainland China. At least some of those logs are likely to be transformed for use as the outer ply of plywood which is subsequently exported from mainland China.

Sawn timber

Malaysian exports of sawn timber have ranged from 3.19 million m³ in 2000 to 1.98 million m³ in 2009. Malaysia exports substantially more sawn timber than any other country in South East Asia. The proportion of tropical sawn timber supplied from Malaysia to the EU tended to vary between 10% and 20% of total EU imports, similar to that supplied by tropical South America (predominantly Brazil). Tropical Africa accounted for roughly two thirds of the total sawn timber imported by EU. The EU, which imported a negligible quantity of sawn timber from Sarawak, accounted for 20% -30% of the total exported from Peninsular Malaysia and 10% -20% of that exported from Sabah. In 2009, Malaysia's exports to the EU totalled 209,000 m³ RWE. Main destinations for sawnwood in the EU were in 2009:

- 1) Netherlands (94,000 m³ RWE);
- 2) Germany (29,000 m³ RWE);
- 3) Belgium (26,000 m³ RWE);
- 4) UK (24,000 m³ RWE);
- 5) Italy (15,000 m³ RWE), and

^{33 ©} EU FLEGT Facility, Kuala Lumpur: Scoping baseline information for Forest Law Enforcement, Governance and Trade, January 2012

³⁴ logs, sawn timber, veneer and plywood

6) France (12,000 m³ RWE).

Veneer

Malaysia's exports of veneer declined substantially from 885,000 m³ RWE in 2000 to 281,000 m³ RWE in 2009. Primarily due to a decrease in exports to mainland China (which was developing its own veneer industry—based on similar logs). Africa supplies almost all the EU's tropical veneer imports. Malaysia only supplied 1,000 m³ of veneer to Germany for each of the years between 2005 and 2009.

Plywood

Malaysia (primarily Sarawak) is the world's second largest exporter of plywood after mainland China. Japan dominates the exports of plywood from Malaysia (40% in 2009). Sarawak supplied almost all the plywood which Malaysia exported to the EU during the period, but the EU almost ceased procuring plywood from Sarawak during 2009. Likely attributable to the failure of one supplier to comply with the requirements of the MTCS³⁵ certification scheme (see text box 1). Exports from Malaysia to the EU for plywood increased to about 15% of the total EU imports for plywood. Although the EU (predominantly the UK) accounted for only 5% of the total plywood export of Malaysia in 2009, plywood was exported from Malaysia to the EU in greater RWE volume than any other product group. Between 2001 and 2009, the EU's imports of hardwood plywood from tropical countries declined by two thirds. This decline was more than offset by a very large increase in imports of plywood from mainland China between 2002 and 2007. By 2009, Malaysia and mainland China respectively accounted for roughly 20% and 60% of the total. Malaysia's share of the EU market was reduced, to around 180,000 m³ in 2009. Plywood production in Malaysia is expected to remain stable in the future. This is influenced by among other constraints in log production, competition from other producers like mainland China, and substitution due to concerns about illegal timber trade.

Mouldings and joinery

In South Eastern Asia Malaysia is the second largest exporter of mouldings and joinery after Indonesia. Malaysia's exports focus mostly on the EU. The EU accounted for a quarter of the total throughout the decade, with main destinations in 2009 being:

- The Netherlands (73,000 m³ RWE);
- 2) Germany (68,000 m³ RWE); and the
- 3) UK (59,000 m³ RWE).

Peninsular Malaysia accounted for roughly 60% of the volume of mouldings which were exported from Malaysia during the second half of the last decade. Sabah tended to supply a further 30%. The EU accounted for about 30% of the volume exported from each of Peninsular Malaysia and Sabah (and a small proportion of that from Sarawak).

Furniture

Malaysia is the second largest exporter of furniture in South Eastern Asia after Indonesia. Malaysia has been increasing its furniture exports from a low of less than 500,000 tonnes yearly in the early years of the last decade to 885,000 tonnes yearly from 2005 until 2009. The EU is the second largest importer of furniture out of Malaysia with about 145,000 to 180,000 tonnes yearly between 2004 and 2009, with main destinations being:

- 1) UK (with 59,000 to 77,000 tonnes from 2003 to 2009), followed by
- 2) France and Germany (around 4,000 to 19,000 tonnes from 2003 to 2009) and
- the Netherlands, Belgium and Denmark with smaller quantities.

Peninsular Malaysia supplied the bulk of those furniture exports. Sabah and Sarawak export small quantities of wooden furniture, primarily for outdoor use. Much of the wooden furniture exported from Malaysia is made primarily from particleboard or fibre board. Most of that made either from long established rubber wood plantations (including those in Thailand—which supplies large quantities of such panels to Malaysia) or from the wood residues of mills in Peninsular Malaysia.

³⁵ Malaysia Timber Certification Scheme

The remainder of Malaysia's furniture is made from sawn timber (particularly rubber wood). It is estimated that roughly 80% of wooden furniture in Malaysia is manufactured with rubber wood. Indoor furniture other than that made from rubber wood is likely to be made from either teak or mahogany (both of which are derived from plantations on Java) usually by small businesses. Malaysia probably does not export substantial volumes of indoor furniture made from natural forest wood in Malaysia. The RWE volume of wooden furniture exported from Malaysia was in the order of 2 million m³ during much of the second half of the last decade. Exports are said to account for about 90% of production. It is likely that a small proportion of the wooden furniture which is exported to the EU from Indonesia and Malaysia comprises indoor furniture made from natural forest-grown wood.

Text box 1: Certification in Malaysia

Roughly 150,000 m³ of logs are extracted annually from forest which is certified under the Malaysia Timber Certification Scheme (MTCS). The MTCS was endorsed by the Programme for the Endorsement of Forest Certification (PEFC) during 2009. The MTCS is the only forest certification scheme to collate statistics on the quantity of certified timber which is exported under its brand. However, very little of the timber exported from Peninsular Malaysia is MTCS-certified. Reasons might include lack of demand from customers, poor supply chain management and other reasons which can only be speculated upon. However, more than one hundred enterprises in Malaysia have been certified as able to maintain chain of custody for MTCS-certified products. Most of these now hold PEFC chain of custody certificates. The EU accounts for almost all the timber exported from Malaysia with a chain of custody certificate under the MTCS brand. The Netherlands, the UK and Belgium, respectively, were the destinations for roughly 55%, 25% and 10% of the total exported during the year up to the end of July 2010. Denmark, France and Germany accounted for most of the remainder.

Imports Malaysia

Malaysia's import is large and ranges from 2.3 to 3.3 million m³ RWE per year between 2000-2009 for the timber sector and a substantially larger paper sector imports of between 5 and 8 million m³ RWE per year in the same period. The timber imports were dominated by VPA core products. Malaysia imports a substantial RWE volume of products from neighbouring countries which might subsequently, perhaps after further transformation, be exported to the EU. Indonesia accounts for the great majority of those imports.

Logs

Malaysia's log imports are small. The volume of logs which Malaysia declared as imports from Indonesia declined sharply between 2001 and 2002—reflecting the banning of exports of logs from Indonesia. Official imports of logs into Malaysia from Indonesia are small as Malaysia has a ban on log imports from Indonesia since the latter half of 2002.

Sawn timber

Indonesia prohibits the export of most sawn timber, but its trading partners (including Malaysia) do not have reciprocal regulations prohibiting such imports from Indonesia. Intra-regionally in the last decade, Indonesia declared a small volume (less than 10,000 m³) of sawn timber exported to Malaysia in the years from 2004 to 2009. However, Malaysia's official statistics says the country imported a large volume of sawn timber from Indonesia in the last decade, particularly during the first half when it reached 820,000 m³ in 2004. By 2009, the volume had declined 40,000 m³ due to the export ban on HS4407³6 rough sawn timber from Indonesia (which excludes some categories of planed sawn timber).

Plywood

Import of plywood increased to $68,000~\text{m}^3$ in 2009, mainly out of mainland China (62% in 2009). Malaysia imported $10,000~\text{m}^3$ in 2009 out of Indonesia.

 $^{^{36}}$ Harmonized Commodity Description and Coding System (HS) of the World Customs Organization (WCO), an internationally standardized system of names and numbers for categorizing traded products.

Mouldings and joinery

Imports of mouldings and joinery from Indonesia comprises a significant portion 36% in 2009 of total imports of about 130,000 m³ RWE.

Furniture and paper

The quantity of wooden furniture imported into Malaysia declined rapidly to 25,000 tonnes. Intraregional furniture trade is small, with exports from Indonesia to Malaysia of between 10,000 to 30,000 m³ RWE annually in the last decade. Malaysia imported 5.18 million tonnes of paper in 2009, 20%-30% (1.3 million m³ in 2009) supplied from Indonesia.

Significant findings for IDH of the FLEGT Asia Baseline Study Malaysia

- Malaysia's imports are large. IDH Program Country Indonesia accounts for the great majority of those imports. Brazil came up tops in pulp exports to Malaysia in 2008, but dropping off drastically in 2009.
- 2) Key EU country markets for Malaysian wood based products are: Netherlands with regards to sawnwood (90,000 m³ RWE in 2009), followed by Belgium and Germany with both 30,000 m³ RWE in 2009. Exports to the EU of plywood is dominated by the UK (130,000 m³ RWE in 2009), while Netherlands and Belgium both imported 20,000 m³ RWE in 2009. Netherlands and Germany both imported 70,000 m³ RWE of Mouldings out of Malaysia in 2009 and the UK another 60,000 m³ RWE. The UK has been by far the largest EU market for Malaysian furniture with 77,000 tonnes in 2009, followed by France and Germany with considerable lower imports (up to 19,000 tonnes a year).
- 3) The EU is a leading destination for the sawn timber, furniture and mouldings and joinery which are exported from Peninsular Malaysia. EU countries can have a large impact on these wood based products when demanding certified sustainably produced timber. About 15% of the total EU imports for plywood originates from Malaysia (2009). This equals to only 5% of the total plywood export of Malaysia in 2009. Nevertheless, plywood was exported from Malaysia to the EU in greater RWE volume than any other product group. About 50% of all plywood is exported to environmental sensitive markets. If forces are joined, these markets can make a difference. Demanding certified wood based products from Malaysia will also affect IDH Program Country Indonesia, which account for the great majority of imports. The EU is already the main market for MTCS-certified timber (90% in July 2010), but only a very small share of the timber exported from Malaysia is MTCS-certified.
- 4) A number of logging groups (primarily those of Sarawak), have logging-related interests in other places (among others in IDH Program Countries) such as in the Congo Basin, Guyana, Liberia, Solomon Islands, Indonesia, Papua New Guinea and Brazil. Mainland China seems to be the destination for their output.

Vietnam

The information presented with regards to Vietnam originates from the report 'Baseline study 3, Vietnam: Overview of Forest Governance and Trade' as compiled by Forest Trends on behalf of FLEGT Asia and published in April 2011 .

Exports Vietnam

In 2010, timber export revenue marked the highest level ever, at about US\$3.4 billion, or 15 times higher as compared to the 2000's (Nguyen Ton Quyen, 2011). On average, annual timber export revenue increased about 40% during the 2000-2010 period. The US, EU and Japan account for more than 80% of Vietnam's export market for wood products, consisting primarily of bedroom, dining room, and kitchen furniture products. At a total value of 3 million m³ RWE, furniture made up 80% of the total 3.6 million m³ RWE timber products exported in 2008. This corresponds to over US\$2 billion, by far the highest export value derived from timber products (excluding pulp wood and paper).

Vietnamese exports of forest products to the EU have experienced a steady growth over the past 9 years, increasing from 200,000 m³ RWE in 2000 to over 800,000 m³ RWE in 2008. Vietnam exported US\$716 million worth of forest products to the EU in 2008 (a 600% increase over the 2000 level). Wooden furniture accounted for the majority of total forest products exported to the EU, ranging from 78% to over 88% between 2000 and 2008. Vietnam also exports paper and paper products, moldings and joinery, and other products to the EU. Major export destinations within the EU (over Jan - Nov 2010) are:

- 1) UK (US\$168,263,000);
- 2) Germany (US\$99,913,000);
- 3) France (US\$66,632,000);
- 4) Netherlands (US\$58,212,000);
- 5) Italy (US\$32,621,000), followed by Belgium, Sweden and Spain with smaller quantities.

Main export products are (i) furniture products; (ii) bed room furniture; (iii) chairs; and (iv) raw materials. In addition to timber products, Vietnam exports a large volume of pulp wood and paper. In 2008, the country exported a total 4.6 million m³ RWE of paper-based products (US\$580 million). The market trend indicates the ongoing expansion of pulp and paper exports from Vietnam. Annual sales in the domestic market is estimated at about 1/3 of export market revenue, accounting only for 20% of the market share. 80% is imported, mainly supplied by Chinese, Taiwese, Hong Kong, Malaysian, and Thailand imports. Increasingly stringent requirements of export markets such as the EU Timber Regulation and amendments to the US Lacey Act has made the Vietnamese domestic markets more attractive.

Imports Vietnam

In 2010, about 6.4 million m³ of RWE was needed to support Vietnam's growing wood processing industry. 1.6 million m³ of this supply originated from domestic supply. Vietnam imported 4-5 million m³ RWE, or 80% of the total raw material needed for its wood processing sector. Wood imported to Vietnam come from 600 different vendors from 26 different countries and territories.

In 2008, Vietnam imported more than 8 million m³ RWE of forest products from abroad, of which 4.2 million m³ RWE are paper, and the remaining 4.6 million m³ RWE are timber products (more than double the imported volume in 2003). Of the timber products imported to Vietnam, sawnwood and logs account for 63% of the total volume and 72% of the total import value of 2008. In 2008 Indonesia was the third largest exporter of forest products into Vietnam, after Thailand and Malaysia. Brazil ranked 10th with approximately 300,000 m³ RWE. Indonesia forest products imported to Vietnam have been increasing gradually. In 2008, Vietnam imported more than 900,000 m³ RWE from Indonesia, with paper (around 650,000 m³), wood pulp (170,000 m³), and panels (70,000 m³) making up the main products. No round logs are imported to Vietnam from Indonesia, though in practice, Indonesian logs may be re-exported to Vietnam via other countries (Proforest, 2009). Vietnam imports logs from Papua New Guinea, with an amount of about 85,000 m³ in 2008. Of the timber products imported to Vietnam, sawnwood and logs account for 63% of the total volume and 72% of the total import value of 2008.

Significant findings for IDH of the FLEGT Asia Baseline Study Vietnam

- Amount of wood products sourced out of IDH Program Countries: Vietnam sourced more than 900,000 m³ RWE from Indonesia, mainly consisting of paper (around 650,000 m³), wood pulp (170,000 m³), and panels (70,000 m³). Brazil supplied Vietnam with approximately 300.000 m³ RWE.
- 2) More than 80% of Vietnam's export market for wood products consists of environmental sensitive markets (US, EU and Japan). Within the EU, UK ranked 4th, Germany 6th, France 9th, Netherlands 10th in timber product exports revenues top 10 of 2010 of Vietnam. The EU as a whole ranked second in 2008 with a total of US\$716 million (30,7% of total export value). If markets in these countries demand certified wood products, this might influence the wood processing sector in Vietnam substantially. Since about 80% of raw material needed is imported, demanding certified wood products will

also influence other countries who supply Vietnam with raw materials, such as IDH Program Country Indonesia. Drawback is that since the start of the economic crisis in 2008, many of the industries are switching from high value to medium value products, many of which are more suitable for less valued species such as rubber, acacia, and eucalyptus. The quality of technology used in the Vietnamese wood processing sector is relatively poor and not able to satisfy requirements from larger international buyers who have high quality demands (Nguy Hong, 2010). In addition, as of early 2011 only 233 (less than 8%) enterprises in Vietnam have obtained Forest Stewardship Council (FSC) Chain of Custody (CoC) certificates³⁷. The pace of (FSC) CoC development in the country is slow, as compared to other countries like China, Thailand, and Malaysia. The main reason cited is that most of the about 3,000 wood processing enterprises are small and medium sized and cannot afford (FSC) CoC. This might mean that larger companies with strong capital and resources may be able to capture the opportunity and derive more benefits from using legally and sustainably certified timber and exporting to US, EU, and Japan markets. Small and medium sized enterprises (SMEs) with lower capital and capacity, and weak or no mechanisms for controlling legality of sourced timber, are more at risk. These SMEs may be those most likely to opt for the markets with less sensitive environmental requirements.

3) With regards to which Vietnamese Forest Products could be targeted by IDH to maximize benefit for the IDH Program Countries: in 2008 furniture made up 80% of the total 3.6 million m³ RWE timber products (thus excluding paper products) exported, with a value at over US\$2 billion. This excludes paper products (US\$580 million). If paper products are included, furniture would in 2008 still have a share of around 70%.

³⁷ www.fsc.org, 2011

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Useful websites

- http://www.cbi.eu
- http://www.fao.org/docrep/005/AC628E/AC628E08.htm
- http://www.idhsustainabletrade.com/timber
- http://www.itto.int
- http://www.lecommercedubois.org

This survey was compiled for CBI by Probos (<u>www.probos.nl</u>) in cooperation with (CBI sector expert)

Disclaimer CBI market information tools: http://www.cbi.eu/disclaimer

Annex 2 Overview import Tropical Timber per country³⁸

| BELGIUM | Tropical r | oundwood | (m³) | Tropical | sawnwood | (m³) | Tropical | veneer (m | ı ³) | Tropio | al plywood | d (m³) | | Total (m ³) | |
|------------------------------------|------------|----------|--------|----------|----------|---------|----------|-----------|------------------|---------|------------|---------|---------|-------------------------|---------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | | | 89 | 277 | 274 | 1,436 | 4 | | | | | | 281 | 274 | 1,525 |
| Brazil | | | | 20,743 | 9,735 | 12,695 | | | 59 | 7,327 | 3,762 | 2,255 | 28,070 | 13,497 | 15,009 |
| Cameroon | 5,010 | 7,017 | 4,713 | 61,084 | 41,363 | 59,225 | 11 | 94 | 180 | | | 86 | 66,105 | 48,473 | 64,204 |
| Congo - Brazzaville | 2,600 | 271 | 1,662 | 3,577 | 490 | 974 | 236 | 1,624 | 2,055 | | | | 6,413 | 2,385 | 4,691 |
| DRC | 10,900 | 4,392 | 12,079 | 17,419 | 7,437 | 11,063 | 469 | 429 | | 246 | | | 29,034 | 12,258 | 23,142 |
| Gabon | 7,912 | 6,066 | 2,094 | 4,548 | 3,710 | 25,479 | 2,344 | 1,077 | 2,218 | 140 | 311 | 1232 | 14,944 | 11,164 | 31,024 |
| Indonesia | | | 30 | 3,408 | 1,461 | 1,074 | 25 | | | 56,984 | 51,573 | 58,621 | 60,417 | 53,034 | 59,725 |
| Peru | | | | 62 | 61 | 20 | | | | | | | 62 | 61 | 20 |
| Total import IDH Program Countries | 26,422 | 17,746 | 20,667 | 111,117 | 64,530 | 111,966 | 3,089 | 3,223 | 4,512 | 64,697 | 55,646 | 62,194 | 20,5326 | 141,146 | 199,339 |
| Africa | 211 | 0 | 726 | 15,426 | 8,428 | 12,145 | 3,253 | 3,263 | 3,798 | 8,117 | 4,952 | 4,732 | 27,007 | 16,643 | 21,401 |
| South America | | | | 394 | 391 | 1,009 | 2 | 0 | 0 | 0 | 98 | 3,973 | 396 | 489 | 4,982 |
| South east Asia | 1,762 | 295 | 250 | 39,525 | 29,964 | 30,962 | | | | 21,662 | 21,309 | 10,816 | 62,949 | 51,568 | 42,029 |
| other | 9,382 | 14,609 | 13,974 | 48,074 | 39,037 | 27,605 | 3,505 | 1,952 | 2,259 | 61,615 | 47,452 | 109,829 | 122,576 | 103,050 | 153,668 |
| Total import other regions | 11,355 | 14,905 | 14,950 | 103,418 | 77,820 | 71,723 | 6,759 | 5,215 | 6,057 | 91,394 | 73,811 | 129,350 | 212,927 | 171,751 | 222,080 |
| Total import | 37,777 | 32,651 | 35,617 | 214,535 | 142,351 | 183,688 | 9,849 | 8,438 | 10,570 | 156,091 | 129,457 | 191,544 | 418,253 | 312,896 | 421,419 |

³⁸ The data presented in the tables is derived from Comext. Comext is a statistical database on trade of goods. The database is managed by Eurostat, the Statistical Office of the European Commission. The authors are aware of the fact that the data in Comext have their limitations and sometimes show strange values. The data have been reviewed and a number of quantities have been changed in order to get more realistic quantities. For this reason the data in the tables should be treated and interpreted with some reservations. Comext is however the only data source available that can be used to identify the origin of the tropical timber that is imported by the EU member states.

| DENMARK | Tropica | al roundwoo | od (m³) | Tropica | al sawnwoo | od (m³) | Tropi | cal venee | r (m³) | Tropic | al plywoo | d (m³) | | Total (m³) | |
|------------------------------------|---------|-------------|---------|---------|------------|---------|--------|-----------|--------|--------|-----------|--------|--------|------------|--------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | | | | 27 | 66 | | | | | | | | 27 | 66 | 0 |
| Brazil | 80 | | 151 | 7,020 | 6,274 | 5,885 | | | | 5,853 | 642 | 358 | 12,953 | 6,916 | 6,395 |
| Cameroon | 261 | 345 | 245 | 2,538 | 571 | 1,041 | | | 21 | | | | 2,799 | 916 | 1,307 |
| Congo - Brazzaville | | | 17 | 1,087 | 434 | 1,192 | | | | | | | 1,087 | 434 | 1,209 |
| DRC | 204 | 46 | 73 | 42 | 98 | 77 | | | | | | | 246 | 144 | 150 |
| Gabon | | 80 | 31 | | 31 | 19 | 94 | | | 131 | 146 | 203 | 225 | 257 | 253 |
| Indonesia | | | 18 | 849 | 1,375 | 1,190 | | | | 1,145 | 82 | 993 | 1,994 | 1,457 | 2,201 |
| Peru | | | | | | | | | | | | 2 | 0 | 0 | 2 |
| Total import IDH Program Countries | 545 | 471 | 535 | 11,563 | 8,849 | 9,404 | 94 | 0 | 21 | 7,129 | 870 | 1,556 | 19,331 | 10,190 | 11,516 |
| Africa | 248 | 48 | 24 | 1,141 | 637 | 366 | 550 | 102 | 44 | | | | 1,939 | 787 | 434 |
| South America | 18 | 0 | 0 | 1,325 | 1,132 | 1,203 | | | | 7,837 | 13,414 | 6,340 | 9,180 | 14,546 | 7,543 |
| South east Asia | 224 | 15 | 15 | 3,779 | 2,313 | 1,740 | 317 | 58 | 72 | 7,127 | 5,841 | 5,202 | 11,447 | 8,226 | 7,029 |
| other | 2,462 | 1,300 | 1,032 | 19,627 | 9,324 | 11,800 | 11,143 | 6,079 | 7,661 | 5,777 | 3,555 | 7,724 | 39,007 | 20,259 | 28,216 |
| Total import other regions | 2,952 | 1,363 | 1,071 | 25,871 | 13,406 | 15,109 | 12,010 | 6,239 | 7,777 | 20,741 | 22,810 | 19,266 | 61,573 | 43,818 | 43,223 |
| Total import | 3,497 | 1,834 | 1,606 | 37,434 | 22,255 | 24,513 | 12,104 | 6,239 | 7,798 | 27,870 | 23,680 | 20,821 | 80,904 | 54,008 | 54,739 |

| FRANCE | Tropical roundwood (m³) | | | Tropica | al sawnwoo | od (m³) | Tropi | cal veneer | (m³) | Tropic | al plywoo | d (m³) | Total (m³) | | |
|------------------------------------|-------------------------|---------|---------|---------|------------|---------|---------|------------|---------|---------|-----------|---------|------------|---------|---------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | | | | 1,544 | 1,428 | 1,336 | | | | | | | 1,544 | 1,428 | 1,336 |
| Brazil | | 20 | 28 | 39,845 | 21,894 | 20,673 | 119 | | | 6,000 | 1,032 | 11,190 | 45,964 | 22,946 | 31,892 |
| Cameroon | 12,850 | 10,427 | 15,121 | 61,343 | 47,743 | 50,142 | 583 | 230 | 1,515 | | | | 74,776 | 58,400 | 66,778 |
| Congo - Brazzaville | 31,819 | 19,250 | 44,901 | 8,946 | 5,206 | 12,224 | 10,019 | 7,550 | 5,359 | | | | 50,784 | 32,006 | 62,484 |
| DRC | 71,055 | 29,738 | 40,372 | 1,382 | 789 | 612 | 110 | | | | | | 72,547 | 30,527 | 40,984 |
| Gabon | 187,970 | 150,934 | 25,379 | 19,719 | 8,445 | 6,082 | 123,749 | 90,872 | 95,621 | 11,808 | 14,823 | 12,359 | 343,246 | 265,074 | 139,441 |
| Indonesia | | | | 8,248 | 6,642 | 7,700 | 8 | | 44 | 1,559 | 1,111 | 5,613 | 9,815 | 7,753 | 13,357 |
| Peru | | | | 35 | 72 | 211 | | | | | | | 35 | 72 | 211 |
| Total import IDH Program Countries | 303,694 | 210,369 | 125,801 | 141,062 | 92,218 | 98,980 | 134,588 | 98,652 | 102,539 | 19,367 | 16,966 | 29,162 | 598,711 | 418,206 | 356,484 |
| Africa | 32,408 | 17,207 | 22,525 | 29,416 | 18,317 | 19,148 | 8,469 | 3,943 | 7,812 | 6,300 | 6,107 | 6,412 | 76,592 | 45,574 | 55,898 |
| South America | | | | 983 | 1,244 | 1,551 | 6 | 0 | 0 | 837 | 231 | 582 | 1,826 | 1,475 | 2,133 |
| South east Asia | 35 | 0 | 0 | 23,685 | 17,910 | 21,236 | 47 | 0 | 18 | 149 | 92 | 952 | 23,916 | 18,002 | 22,206 |
| other | 5,394 | 6,088 | 9,331 | 66,793 | 124,220 | 51,488 | 21,689 | 5,953 | 3,730 | 159,057 | 207,401 | 130,400 | 252,933 | 343,662 | 194,949 |
| Total import other regions | 37,836 | 23,295 | 31,856 | 120,877 | 161,691 | 93,423 | 30,211 | 9,896 | 11,560 | 166,343 | 213,832 | 138,346 | 355,268 | 408,713 | 275,185 |
| Total import | 341,530 | 233,664 | 157,657 | 261,939 | 253,909 | 192,403 | 164,799 | 108,548 | 114,100 | 185,711 | 230,798 | 167,509 | 953,979 | 826,919 | 631,669 |

| GERMANY | Tropica | al roundwoo | od (m³) | Tropica | al sawnwoo | od (m³) | Tropi | cal venee | r (m³) | Tropic | al plywoo | d (m³) | | Total (m ³) | |
|------------------------------------|---------|-------------|---------|---------|------------|---------|--------|-----------|--------|---------|-----------|---------|---------|-------------------------|---------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | 73 | | | 31 | 119 | 178 | 40 | | 2 | | | | 144 | 119 | 180 |
| Brazil | 51 | 58 | 103 | 4,415 | 6,423 | 3,368 | 116 | 61 | 94 | 131 | | 7,322 | 4,712 | 6,542 | 10,887 |
| Cameroon | 25,552 | 14,522 | 20,046 | 19,300 | 10,440 | 9,954 | 597 | 208 | 474 | | | 40 | 45,449 | 25,170 | 30,514 |
| Congo - Brazzaville | 1,823 | 1,021 | 2,024 | 2,484 | 2,836 | 1,533 | | | | | | | 4,307 | 3,857 | 3,557 |
| DRC | 219 | 541 | | 227 | 437 | 100 | | 74 | | | | | 446 | 1,052 | 100 |
| Gabon | 25,377 | 14,477 | 6,252 | 411 | 352 | 468 | 384 | 246 | | 75 | | | 26,247 | 15,075 | 6,720 |
| Indonesia | | | | 13,754 | 11,659 | 10,246 | 639 | 712 | 747 | 30,466 | 25,790 | 40,524 | 44,858 | 38,161 | 51,516 |
| Peru | 0 | | | | 43 | 29 | | | | | | | 0 | 43 | 29 |
| Total import IDH Program Countries | 53,095 | 30,619 | 28,425 | 40,621 | 32,309 | 25,876 | 1,776 | 1,301 | 1,317 | 30,672 | 25,790 | 47,886 | 126,163 | 90,020 | 103,503 |
| Africa | 10,147 | 2,303 | 5,613 | 29,481 | 22,140 | 19,200 | 23,602 | 13,744 | 18,444 | 1,230 | 479 | 145 | 64,460 | 38,666 | 43,402 |
| South America | 24 | 42 | 0 | 593 | 1,008 | 1,323 | 78 | 48 | 55 | 0 | 0 | 426 | 695 | 1,098 | 1,804 |
| South east Asia | 1,601 | 501 | 91 | 38,061 | 31,687 | 30,477 | 494 | 594 | 27 | 2,313 | 671 | 1,167 | 42,469 | 33,453 | 31,762 |
| other | 6,172 | 3,407 | 4,897 | 54,243 | 37,082 | 33,390 | 4,972 | 4,169 | 4,754 | 74,111 | 45,663 | 88,306 | 139,498 | 90,320 | 131,348 |
| Total import other regions | 17,944 | 6,253 | 10,601 | 122,378 | 91,917 | 84,391 | 29,146 | 18,556 | 23,280 | 77,654 | 46,813 | 90,044 | 247,122 | 163,538 | 208,316 |
| Total import | 71,039 | 36,872 | 39,026 | 162,998 | 124,226 | 110,266 | 30,922 | 19,857 | 24,597 | 108,326 | 72,603 | 137,930 | 373,285 | 253,558 | 311,819 |

| ITALY | Tropica | al roundwoo | od (m³) | Tropica | al sawnwoo | od (m³) | Tropi | cal veneer | ' (m³) | Tropic | al plywoo | d (m³) | | Total (m ³) | |
|------------------------------------|---------|-------------|---------|---------|------------|---------|---------|------------|--------|--------|-----------|--------|---------|-------------------------|---------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | 25 | | | 1,954 | 814 | 991 | 336 | 104 | 39 | | | | 2,315 | 918 | 1,030 |
| Brazil | 108 | | | 8,654 | 3,580 | 1,848 | 678 | 203 | 292 | 3,823 | 648 | 829 | 13,263 | 4,431 | 2,969 |
| Cameroon | 7,774 | 4,234 | 5,077 | 106,508 | 64,101 | 79,779 | 27,160 | 16,950 | 24,029 | 166 | 144 | 3,637 | 141,608 | 85,428 | 112,522 |
| Congo - Brazzaville | 14,424 | 3,353 | 5,215 | 9,580 | 2,124 | 2,416 | 4,628 | 1,491 | 2,338 | | 45 | | 28,632 | 7,013 | 9,969 |
| DRC | 3,286 | 2,612 | 2,398 | 2,373 | 1,275 | 1,320 | | | | | | | 5,659 | 3,887 | 3,718 |
| Gabon | 20,089 | 11,880 | 5,412 | 53,711 | 27,836 | 49,610 | 13,653 | 16,284 | 19,294 | 19,761 | 13,360 | 16,915 | 107,214 | 69,360 | 91,231 |
| Indonesia | 86 | 4 | | 1,609 | 1,088 | 1,163 | 18 | 17 | 65 | 3,261 | 447 | 2,196 | 4,974 | 1,556 | 3,424 |
| Peru | | | | 450 | 105 | 139 | | | | | | | 450 | 105 | 139 |
| Total import IDH Program Countries | 45,792 | 22,083 | 18,102 | 184,839 | 100,923 | 137,266 | 46,473 | 35,049 | 46,057 | 27,011 | 14,644 | 23,577 | 304,115 | 172,699 | 225,002 |
| Africa | 9,829 | 6,470 | 2,032 | 118,635 | 54,125 | 58,873 | 47,718 | 26,143 | 28,082 | 10,897 | 1,311 | 8,666 | 187,079 | 88,049 | 97,653 |
| South America | 332 | 0 | 0 | 9,528 | 6,524 | 2,377 | 63 | 0 | 0 | 8,951 | 274 | 49 | 18,874 | 6,798 | 2,426 |
| South east Asia | 1,968 | 1,085 | 861 | 21,620 | 15,982 | 14,877 | 287 | 14 | 73 | 3,420 | 1,510 | 2,637 | 27,295 | 18,591 | 18,448 |
| other | 6,528 | 3,481 | 4,892 | 6,524 | 6,291 | 8,550 | 14,697 | 7,172 | 7,088 | 24,672 | 11,530 | 41,438 | 52,421 | 28,473 | 61,969 |
| Total import other regions | 18,657 | 11,036 | 7,785 | 156,307 | 82,922 | 84,677 | 62,766 | 33,329 | 35,243 | 47,940 | 14,625 | 52,790 | 285,670 | 141,911 | 180,496 |
| Total import | 64,449 | 33,119 | 25,887 | 341,146 | 183,844 | 221,942 | 109,239 | 68,377 | 81,301 | 74,951 | 29,269 | 76,367 | 589,785 | 314,610 | 405,498 |

| NETHERLANDS | Tropical roundwood (m³) | | | Tropica | al sawnwo | od (m³) | Tropi | cal venee | r (m³) | Tropio | al plywood | d (m³) | | Total (m ³) | |
|------------------------------------|-------------------------|-------|-------|---------|-----------|---------|--------|-----------|--------|---------|------------|---------|---------|-------------------------|---------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | | | | 4,334 | 4,133 | 1,259 | | | | | | | 4,334 | 4,133 | 1,259 |
| Brazil | 24 | | | 111,561 | 52,961 | 65,309 | 184 | | 13 | 1,848 | 1,598 | 669 | 113,617 | 54,559 | 65,991 |
| Cameroon | 60 | | | 108,795 | 93,142 | 92,998 | | | 25 | | | | 108,855 | 93,142 | 93,022 |
| Congo - Brazzaville | | | | 1,548 | 1,756 | 706 | | | | | | | 1,548 | 1,756 | 706 |
| DRC | | | | 19,899 | 15,053 | 10,297 | | | | | | | 19,899 | 15,053 | 10,297 |
| Gabon | | 1 | | 11,894 | 18,522 | 7,004 | 4,692 | 3,985 | 2,952 | 13,871 | 15,746 | 14,823 | 30,457 | 38,254 | 24,779 |
| Indonesia | | 23 | | 14,153 | 9,086 | 7,010 | | | | 22,398 | 14,882 | 8,789 | 36,551 | 23,991 | 15,799 |
| Peru | | | | 468 | 727 | 466 | | | | | | | 468 | 727 | 466 |
| Total import IDH Program Countries | 84 | 24 | 0 | 272,651 | 195,379 | 185,048 | 4,876 | 3,985 | 2,990 | 38,117 | 32,226 | 24,281 | 315,728 | 231,614 | 212,319 |
| Africa | 24 | 7 | 10 | 24,747 | 14,883 | 12,938 | 37 | 37 | 3 | 11,445 | 237 | 8,371 | 36,252 | 15,164 | 21,322 |
| South America | 176 | 61 | 78 | 14,259 | 4,191 | 5,226 | | | | 20 | 213 | 380 | 14,455 | 4,465 | 5,684 |
| South east Asia | 295 | 67 | 48 | 176,463 | 116,386 | 115,188 | 39 | 14 | 54 | 16,490 | 16,973 | 19,723 | 193,287 | 133,440 | 135,013 |
| other | 6,471 | 5,369 | 3,112 | 52,637 | 31,555 | 42,616 | 9,237 | 7,062 | 5,621 | 124,455 | 87,273 | 153,812 | 192,801 | 131,259 | 205,161 |
| Total import other regions | 6,966 | 5,504 | 3,248 | 268,106 | 167,014 | 175,969 | 9,314 | 7,113 | 5,678 | 152,410 | 104,696 | 182,286 | 436,796 | 284,328 | 367,180 |
| Total import | 7,050 | 5,528 | 3,248 | 540,757 | 362,393 | 361,017 | 14,190 | 11,098 | 8,667 | 190,527 | 136,922 | 206,567 | 752,524 | 515,942 | 579,499 |

| SPAIN | Tropical roundwood (m³) | | | Tropica | al sawnwoo | od (m³) | Tropi | cal venee | r (m³) | Tropic | al plywoo | d (m³) | Total (m³) | | |
|------------------------------------|-------------------------|--------|--------|---------|------------|---------|--------|-----------|--------|--------|-----------|--------|------------|---------|---------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | | | | 4,992 | 1,582 | 659 | | 11 | | | | | 4,992 | 1,593 | 659 |
| Brazil | | | | 30,750 | 14,243 | 11,789 | 353 | 28 | 143 | 540 | | 470 | 31,643 | 14,271 | 12,402 |
| Cameroon | 6,460 | 4,077 | 5,580 | 116,782 | 45,197 | 39,288 | 3,589 | 787 | 2,068 | | | | 126,831 | 50,061 | 46,936 |
| Congo - Brazzaville | 6,564 | 3,497 | 7,720 | 11,126 | 2,745 | 2,757 | 839 | 2,886 | 2,073 | | | | 18,529 | 9,128 | 12,549 |
| DRC | 2,167 | 837 | 1,145 | 1,362 | 282 | 524 | 202 | 83 | 75 | | | | 3,731 | 1,202 | 1,744 |
| Gabon | 23,662 | 16,682 | 3,141 | 4,154 | 1,491 | 1,813 | 1,851 | 4,274 | 7,160 | 46 | 46 | | 29,713 | 22,493 | 12,114 |
| Indonesia | | | | 345 | 144 | 221 | 6 | 23 | 2 | 38 | | 7 | 389 | 167 | 230 |
| Peru | | | | 336 | 919 | 661 | | | 26 | | | | 336 | 919 | 687 |
| Total import IDH Program Countries | 38,853 | 25,093 | 17,586 | 169,847 | 66,604 | 57,711 | 6,840 | 8,092 | 11,547 | 624 | 46 | 477 | 216,163 | 99,835 | 87,321 |
| Africa | 6,635 | 3,259 | 5,083 | 56,826 | 10,569 | 11,590 | 41,812 | 15,540 | 27,427 | 417 | 196 | 225 | 105,690 | 29,564 | 44,325 |
| South America | 46 | 102 | 0 | 9,977 | 5,433 | 2,983 | | | | 602 | 43 | 523 | 10,625 | 5,578 | 3,506 |
| South east Asia | 0 | 17 | 0 | 17 | 155 | 148 | | | | | | | 17 | 172 | 148 |
| other | 12,594 | 3,145 | 3,140 | 16,054 | 7,794 | 8,397 | 7,234 | 6,242 | 7,802 | 6,187 | 1,894 | 13,940 | 42,069 | 19,075 | 33,279 |
| Total import other regions | 19,275 | 6,523 | 8,223 | 82,874 | 23,950 | 23,118 | 49,046 | 21,782 | 35,229 | 7,205 | 2,133 | 14,689 | 158,400 | 54,389 | 81,258 |
| Total import | 58,128 | 31,616 | 25,809 | 252,721 | 90,554 | 80,829 | 55,885 | 29,874 | 46,776 | 7,829 | 2,179 | 15,165 | 374,564 | 154,223 | 168,579 |

| UK | Tropical roundwood (m³) | | | Tropica | al sawnwoo | od (m³) | Tropi | cal venee | r (m³) | Tropio | al plywood | d (m³) | | Total (m ³) | |
|------------------------------------|-------------------------|-------|--------|---------|------------|---------|-------|-----------|--------|---------|------------|---------|---------|-------------------------|---------|
| | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Bolivia | | | | | | | | | 25 | | | | 0 | 0 | 25 |
| Brazil | 2,961 | 196 | | 1,380 | 710 | 567 | | 2 | 1 | 3,900 | 169 | 42,381 | 8,241 | 1,077 | 42,949 |
| Cameroon | 1,450 | 1,529 | 2,757 | 23,683 | 23,320 | 26,992 | | | | | | 50 | 25,133 | 24,849 | 29,799 |
| Congo - Brazzaville | 1,628 | 634 | 1,158 | 7,412 | 8,277 | 9,949 | | | | | | | 9,040 | 8,911 | 11,107 |
| DRC | 1,193 | 620 | 153 | 1,169 | 550 | 961 | | | | | | | 2,362 | 1,170 | 1,114 |
| Gabon | | 82 | | 526 | 79 | 165 | | | | | | | 526 | 161 | 165 |
| Indonesia | 755 | 204 | | 3,316 | 3,267 | 3,229 | | | | 5,496 | 5,499 | 15,342 | 9,567 | 8,970 | 18,571 |
| Peru | | | | 85 | 61 | 323 | | | | | | | 85 | 61 | 323 |
| Total import IDH Program Countries | 7,987 | 3,265 | 4,068 | 37,571 | 36,264 | 42,186 | 0 | 2 | 26 | 9,396 | 5,668 | 57,773 | 54,954 | 45,199 | 104,053 |
| Africa | 2,960 | 2,583 | 2,055 | 30,516 | 24,324 | 25,229 | 1,730 | 1,460 | 1,491 | 39 | 112 | 482 | 35,245 | 28,479 | 29,257 |
| South America | 462 | 106 | 217 | 1,143 | 3,538 | 3,833 | | | | 1,173 | 1,032 | 25,669 | 2,778 | 4,676 | 29,719 |
| South east Asia | 1,194 | 592 | 772 | 36,332 | 23,898 | 24,704 | 102 | 9 | 0 | 48,590 | 49,692 | 144,535 | 86,218 | 74,191 | 170,011 |
| other | 1,204 | 355 | 8,146 | 38,971 | 30,596 | 32,626 | 4,599 | 1,657 | 2,650 | 77,955 | 134,761 | 373,800 | 122,729 | 167,370 | 417,223 |
| Total import other regions | 5,820 | 3,636 | 11,191 | 106,963 | 82,356 | 86,392 | 6,431 | 3,126 | 4,141 | 127,757 | 185,597 | 544,486 | 246,971 | 274,715 | 646,211 |
| Total import | 13,807 | 6,901 | 15,259 | 144,534 | 118,619 | 128,579 | 6,431 | 3,128 | 4,167 | 137,153 | 191,265 | 602,259 | 301,925 | 319,914 | 750,264 |