

African lumber : a world of opportunities for the US market



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This document contains the information provided by Emmanuel Groutel (WALE), Jean Gérard (CIRAD) and Paul Cuveillier (ATIBT) during the webinar organized by ATIBT for IWPA.

The Congo Basin, home to the second largest expanse of tropical forest after Amazonia (Marquant et al., s. d.) plays an essential role in preserving the world's climate and biodiversity. These forests, essential to local ecosystems, are also a valuable source of tropical timber. Renowned for their specific technical properties, tropical lumber are particularly valued in sectors such as joinery and shipbuilding, which require high-performance materials. Sustainable management of these forests is essential to maintain their resilience and ensure their long-term exploitation. Central Africa's forests are therefore at the heart of efforts to conserve biodiversity and combat global warming. This article highlights the opportunity that African tropical lumber represent for the American market. First, the situation of temperate and tropical sawnwood imports into the USA is detailed. Central African species currently imported into the USA and those potentially suited to this market are then presented.

Sawn timber imports into the United States

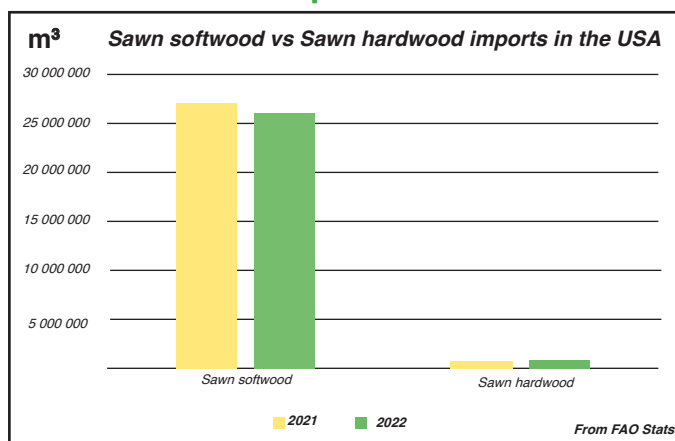


Figure 1: Quantity of sawn timber imported into the USA (hardwood and softwood)

Figure 1 shows the volumes of hardwood and softwood sawnwood imported into the USA, including tropical timber. Softwood lumber dominates American imports³, accounting for between 97.5% and 97%. This predominance of softwoods is directly linked to the importance of the wood construction market in the USA.

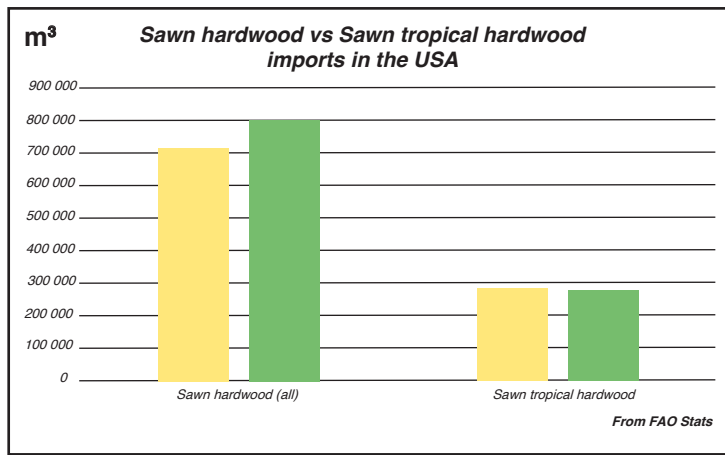


Figure 2 : Quantity of sawn timber imported into the USA for all hardwoods and tropical hardwoods

Focusing on hardwoods, imports of tropical hardwood sawnwoods total between 250,000 and 300,000 cubic meters, compared with 700,000 to 800,000 cubic meters for hardwoods of all origins, i.e. a ratio of 1 to 3. This fact underlines the specific niche occupied by tropical lumber in the American market. Between 2021 and 2022, a slight increase in hardwood imports from all origins was observed, while tropical hardwood volumes fell very slightly. This trend was similar for wood from the three tropical continents.

South-East Asia, South America and Africa are the main supplying continents, with South-East Asia being the main supplier, closely followed by Brazil for South America, and African countries such as Cameroon, the Republic of Congo, and Gabon for Central Africa, as well as Ghana and Côte d'Ivoire for West Africa. In 2023, African countries accounted for just over 30% of tropical sawnwood imports to the USA.

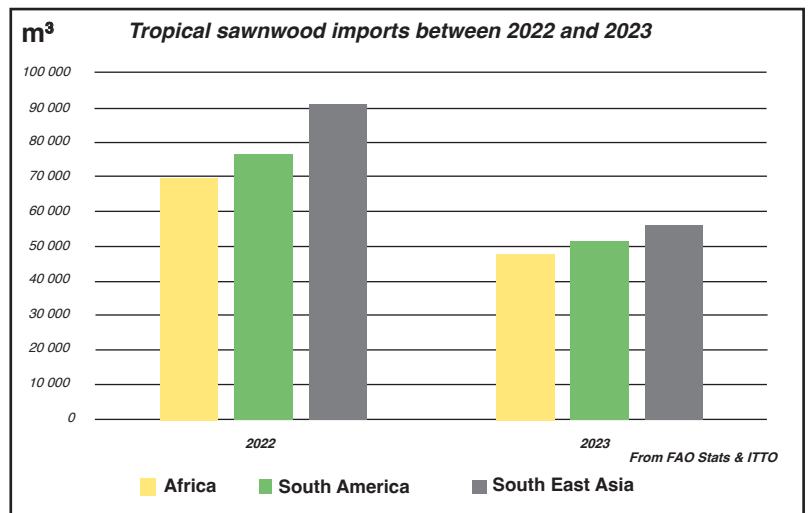


Figure 3 : Quantity of tropical wood to three different continents^{2,3}

Brazil's predominant position and Cameroon's sharp drop in exports by 2023 raise questions about the production and export dynamics of these countries. However, Cameroon, with its well-established timber processing industry and log export restrictions, and Gabon, with similar policies since 2010, remain key players. Ghana, supported by an active diaspora in the United States and the ease of communication afforded by the English language, also maintains a steady flow to the USA.

This low share of African tropical woods is not inevitable. In this article, we present species that could meet the needs of the American market. In an uncertain context where commonly used species may be subject to new restrictions and limitations (e.g. CITES), it is crucial for operators to be able to envisage changes in their supply zones and the import of new species.

The main African wood species already sold on the American market :

This table presents a selection of African wood species already on the American market, with information on their durability, color, density and potential uses. Each species is rated according to its resistance to attack by fungi, dry wood insects, termites and marine borers. All information on these species is taken from CIRAD's Tropix data sheets¹.

These include African mahogany, sapelli, sipo/utile, aniégré/angingeria, iroko, afrormosia and ekki/azobé. The durability and mechanical strength of each of these species make them suitable for a wide range of applications, including shipbuilding, cabinetmaking, interior and exterior joinery, staircases, decking and carpentry.

By adopting these alternative species, US market operators will be able to diversify their sources of supply and adapt to possible future restrictions, while benefiting from the specific qualities of African tropical woods.

Essences	Density	Durability	Use
<p>African mahogany (Khaya anthotheca/ Khaya grandifoliola/ Khaya ivorensis)</p> <p>Color : Red Brun</p> <p>CITES : Appendix II</p>	<p>0,57</p>	<p>Fungi resistance : Classe 3 – moyennement durable</p> <p>Resistance to dry wood insects : class D – durable (distinct sapwood, risk limited to sapwood)</p> <p>Termite resistance : classe S – sensitive</p> <p>Use class covered by natural durability : Class 2 - indoors or under cover (risk of humidification)</p>	<p>Shipbuilding, sliced veneer, joinery, cabinet-making, interior design.</p>

<p>Sapelli (Entandrophragma cylindricum)</p> <p>Color : Brown red</p> <p>CITES : No (there are rumours that it will soon be registered)</p>	<p>0,69</p>	<p>Fungi resistance : Class 3 - moderately durable</p> <p>Resistance to dry wood insects : class D - durable (risk limited to sapwood)</p> <p>Termite resistance : class M - moderately durable</p> <p>Use class covered by natural durability : Class 3.1 - Class 3.2 can be considered with preservative treatment or, without treatment, subject to a sound, draining design.</p>	<p>Carpentry, shipbuilding (planking and deck), cabinetmaking, exterior and interior joinery.</p>
<p>Sipo/Utile (Entandrophragma utile)</p> <p>Couleur : Red brown</p> <p>CITES : No</p>	<p>0,62</p>	<p>Fungi resistance : Class 2 to 3 - durable to moderately durable</p> <p>Resistance to dry wood insects : class D - durable (distinct sapwood, risk limited to sapwood)</p> <p>Termite resistance : class M - moderately durable</p> <p>Use class covered by natural durability : Class 3 - off the ground, outdoors</p>	<p>Cabinetmaking, interior joinery, staircases, interior fittings</p>
<p>Aniégré/Aningeria (Chrysophyllum giganteum, Pouteria altissima, Pouteria pierrei, Pouteria superba, Pouteria spp.)</p> <p>Couleur : White cream</p> <p>CITES : No</p>	<p>0,57</p>	<p>Fungi resistance : Class 4 to 5 - low to non-durable</p> <p>Resistance to dry wood insects : class S - sensitive (risk throughout the wood)</p> <p>Termite resistance : class S - sensitive</p> <p>Use class covered by natural durability : Class 1 - indoors (no risk of humidification)</p>	<p>Cabinetmaking, veneer (sliced or peeled), high-end furniture, interior fittings, interior joinery, molding...</p>

<p>Iroko (<i>Milicia excelsa</i>/<i>Milicia regia</i>)</p> <p>Couleur : Red brown</p> <p>CITES : No</p>	<p>0,64</p>	<p>Fungi resistance : Class 1-2 - very durable to durable</p> <p>Resistance to dry wood insects : class D - durable (distinct sapwood, risk limited to sapwood)</p> <p>Termite resistance : class D - sensitive</p> <p>Use class covered by natural durability :</p> <p>Class 3 - out of contact with the ground, outdoors. This species naturally covers use class 5 (wood regularly or permanently immersed in salt water, seawater or brackish water).</p>	<p>Shipbuilding (planking and decking), carpentry, veneer (sliced or peeled), exterior joinery, stairs, decking, flooring, cooperage...</p>
<p>Afrormosia (<i>Pericopsis elata</i>)</p> <p>Couleur : Yellow brown</p> <p>CITES : Appendix II</p>	<p>0,74</p>	<p>Fungi resistance : Class 1-2 - very durable to durable</p> <p>Resistance to dry wood insects : class D - durable (distinct sapwood, risk limited to sapwood)</p> <p>Termite resistance : class D- durable</p> <p>Use class covered by natural durability :</p> <p>Class 4 - in contact with soil or fresh water</p>	<p>Shipbuilding (planking and decking), veneer (sliced or peeled), exterior joinery, stairs, decking, flooring, cooperage...</p>
<p>Ekki/Azobé (<i>Lophira alata</i>)</p> <p>Couleur : Red dark</p> <p>CITES : No</p>	<p>1,06</p>	<p>Fungi resistance : Class 2 - durable</p> <p>Resistance to dry wood insects : class D - durable (distinct sapwood, risk limited to sapwood)</p> <p>Termite resistance : class D - durable</p> <p>Use class covered by natural durability :</p> <p>Class 4 - in contact with soil or fresh water</p>	<p>Heavy carpentry, interior staircases, frameworks, parquet flooring, ...</p>

Naturally sustainable African wood species of interest to the US market

In addition to the African species most commonly sold and appreciated on the European and American markets, other species with similar technical characteristics can be offered on the American market..

Naturally durable wood species of medium to very high density:

Description :

These species have a density of between 0.67 and 1.00. They have good to very good natural durability and can be used in construction in contact with soil or freshwater, without preservative treatment.

- **Missanda / Tali** (*Erythrophleum guineense*, *E. ivorense*, *E. suaveolens*)
- **Bilinga** (*Nauclea diderrichii*, *N. gillettii*, *N. xanthoxylon*)
- **Niové** (*Staudtia kamerunensis*)
- **Mukulungu** (*Autranella congolensis*)
- **Okan** (*Cylicodiscus gabunensis*)
- **Padouk** (*Pterocarpus soyauxii*, *P. osun*)

The 3 species are less marketed

- **Kanda** (*Beilschmiedia* p.p.)
- **Monghinza** (*Manilkara maboqueensis*, *M. obovata*)
- **Osanga** (*Pteleopsis hylodendron*, *P. myrtifolia*)

Medium-density and moderately durable wood species:

Description :

The density of these species ranges from 0.53 to 0.84. All these species have average durability and are generally used indoors or under shelter, with a risk of dampening. They are not recommended for permanent exposure to humidity.

- **Kosipo** (*Entandrophragma candollei*)
- **Dibétou** (*Lova swynnertonii*, *L. trichilioides*)
- **Gombé** (*Didelotia africana*, *D. brevipaniculata*, *D. idae*, *D. letouzeyi*, *Didelotia* p.p)

The following 5 species are less commercialized

- **Kanda** (*Beilschmiedia* p.p.)
- **Dahoma / Dabéma** (*Piptadeniastrum africanum*)
- **Lati** (*Amphimas ferrugineus*, *A. pterocarpoides*)
- **Mambodé / Amouk** (*Detarium macrocarpum*, *D. senegalense*)
- **Lotofa** (*Sterculia rhinopetala*)

Low to medium density, non-durable wood species for indoor use :

Description :

Ayous and Limba are not very durable woods and should therefore be used indoors, without risk of dampening. The durability of other species varies; they are mainly used for decorative purposes.

- **Obeche / Ayous** (*Triplochiton scleroxylon*)
- **Afara / Limba** (*Terminalia superba*)

Wood species used for decorative purposes :

- **Wengé** (*Millettia laurentii*, *M. stuhlmannii*)
- **Zebrano / Zingana** (*Microberlinia bisulcata*, *M. brazzavillensis*)
- **Awoura** (*Julbernardia pellegriniana*)
- **Scented Guarea / Bossé clair** (*Guarea cedrata*, *G. laurentii*, *Guarea p.p.*): pleasant smell, alternative to Cedro

Why choose sustainable African tropical woods ?

Availability and legality

The forests of Central Africa offer a high availability of certified timber. In the Congo Basin, 5.4 million hectares (= 2.2 million acres) of FSC* or PAFC* eco-certified forests produce between 1 million and 1.5 million m³ of certified wood every year. Certification guarantees compliance with the Lacey Act, a law covering the entire supply chain. Illegal activity at any stage means that the product cannot be legally marketed in the USA. All stakeholders are equally responsible under the law, not just the first to introduce the product to the US market.

Diversity of species :

This article mentions around thirty species, but the ATIBT has listed over 582 pilot species names in its guide/nomenclature of tropical woods (*Nomenclature Générale Des Bois Tropicaux* 2016). In addition, a study has recently been carried out into the use of little-known wood species. Presented during a round table at CIB 2024, you can find more information on the ATIBT youtube channel.

Facilités logistiques :

The logistics of supplying tropical wood are handled by the largest shipping companies operating in Africa to serve the whole world, including the USA. Major U.S. ports are served by companies such as MSC, Maersk, CMA CGM and Cosco Shipping.

With a secure supply in terms of quality and volume, combined with the diversity of species available, sustainable African woods represent an opportunity for American buyers of tropical wood.

To find out more, we recommend that you consult the technical data and additional resources provided by ATIBT, or contact our US representative (contact details below).

Related websites and links :

[Site web ATIBT](#)

[Site web Timber Trade Portal](#)

[La chaine Youtube](#)

[Site web Fair&Precious](#)

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Webography :

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3. <https://www.fao.org/faostat/fr/#data>
4. <https://www.atibt.org/fr>

