



**FOREST POLICY TRADE AND FINANCE INITIATIVE**  
REPORT | SEPTEMBER 2022

# **TURBULENT TIMES FOR INDIA'S TIMBER TRADE: A 2021 UPDATE OF 'INDIA'S WOODEN FURNITURE AND WOODEN HANDICRAFTS: RISK OF TRADE IN ILLEGALLY HARVESTED WOOD'**





## Acknowledgments

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## Key Messages

This report focuses on recent changes in India's international timber trade, especially over the 2019–2021 period, and the implications (of identified changes) for India's sourcing of illegally harvested or traded timber. The paper thus provides an update of Forest Trends' 2020 report *India's wooden furniture and wooden handicrafts: risk of trade in illegally harvested wood* (Norman & Canby 2020).

The findings of the 2020 Forest Trends' report as regards to the long-term timber illegality risk profile of India's timber trade remain valid. Although the illegality risk level of India's timber imports has been lower over the 2019–2021 period than the preceding years, this is almost certainly due to COVID, and therefore short-term. In the absence of timber import regulations, the pre-COVID risk levels will probably be re-established when India's domestic demand picks up this is projected to rise fast through the 2020s.

The probable explanatory factors for the overall fall in India's timber imports from high-risk sources over the 2019 to 2021 period are:

- A drop (probably temporary) in domestic consumption of some high-risk imported species;
- Supply-chain disruption from a number of high-risk sources, where in general, imports were up from higher income countries that were able to advance faster with their vaccination programmes and bring COVID under control;
- Increased substitution of high-risk imports by domestic production, despite noted lack of elasticity of domestic timber supply; and
- Covid outbreaks in source countries, which continued to impact India's timber supply chain in 2021.

We are therefore probably observing a short-term trend. The long-term trend will only become clear once data from 2022 and beyond becomes available. However, we expect that short-term factors including remaining COVID-related impacts, the war in Ukraine and a sharp rise in inflation will likely influence India's timber trade for oncoming years.

The main findings of the updated analysis as regards the trend in India's timber imports and exports from 2019 to 2021 are:

- **India's timber export value fell by 3 percent from 2019 to 2020, before increasing very sharply (almost 60 percent) from 2020 to 2021.** Over the 2019–2021 period, in contrast to imports, the export value rose by over half. The main explanation for the sharp increase in exports in 2021 was the release of pent-up international demand, and India's export-led (especially from the US) economic recovery from COVID.
- **Wood furniture exports, which comprised almost three-fifths of total value, were up 58 percent.**
- **The USA and the EU/EFTA region have continued to be the dominant markets for India's timber exports.** In 2021 these two markets accounted for 70 percent of the export value, a slight increase from 2019 when they accounted for 67 percent
- **India's domestic timber consumption in 2020 was estimated to be 57 million m<sup>3</sup>.** The sub-sectoral breakdown of the country's domestic consumption in 2020 was 42% construction, 22% pulp and paper, 21% panels and plywood, and 15% furniture.



- **India's domestic supply has risen slowly.** Over the 2010–2019 period, national roundwood production rose only 5 percent. The main timber tree species grown in India are used mostly for furniture production.
- **India's timber import value fell sharply (35 percent) from 2019 to 2020, before recovering (by 37 percent) from 2020 to 2021 — but to a level slightly (10 percent) below the pre-COVID (2019) level.** The drop in imports was clearly due to the economic downturn caused by two major waves of COVID (in 2020 and 2021) and the 2020 India lockdowns. It was probably exacerbated by supply chain disruption, especially from tropical country sources.
- **While log and veneer imports were about the same in 2021 as 2019, sawnwood imports were down 17%.**

Log imports fell 23 percent from Ghana (fifth main source), 47 percent from Suriname (eighth source), 27 percent from Solomon Islands, and 52 percent from PNG, but increased 35 percent from Ecuador (fourth source). Sawnwood imports rose 46 percent from Ukraine (third main source), 22 percent from Benin (fourth source), 66 percent from Ecuador, and 126 percent from Russia.

Veneer imports rose 48 percent from Indonesia but fell 9 percent from Gabon (both main sources), 28 percent from Myanmar (fourth main source) and 66 percent from Vietnam.
- For India's total timber imports according to the illegality risk levels, **there was a sharp fall in 2020 in the import value of all the risk categories except 'medium-risk' sources. This was followed by an almost equally sharp rebound in 2021 of all categories except 'conflict state' timber, which experienced a further slight fall.**
- **India's imports from sources with timber export restrictions generally went down in 2021 compared to pre-pandemic years.** India's log imports from countries with log export restrictions, in line with total log imports, fell by 50 percent from 2019 to 2020 before rising again in 2021 — but only to a level well below (24 percent) the 2019 or pre-COVID import level. There was little change on India's sawnwood imports from countries with sawnwood export restrictions from 2019 to 2021.
- **Although official timber imports from Myanmar fell over the 2019–2021 period it is likely that clandestine imports of *keruing*, teak and *pyinkado* have increased following the military coup in February 2021.**
- **Based on an analysis of India's imported timber species, eight of the top ten imported species, comprising 81 percent of the 2017–2021 import value, were high-risk species.** Only two (pine and spruce) were low-risk species.

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## Acronyms

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<b>CITES</b>	Convention on International Trade in Endangered Species of Wild Fauna and Flora
<b>DRC</b>	Democratic Republic of Congo
<b>EU/EFTA</b>	European Union / European Free Trade Association (countries)
<b>GDP</b>	Gross Domestic Product
<b>IMF</b>	International Monetary Fund
<b>ITTO</b>	International Tropical Timber Organization
<b>IUCN</b>	International Union for Conservation of Nature
<b>PNG</b>	Papua New Guinea
<b>SMEs</b>	Small and medium enterprises
<b>TOF</b>	trees outside forests

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# 1 Introduction

## 1.1 Aims and Context: A Recap of the 2020 Report

This report focuses on recent changes in India's international timber trade, especially over the 2019–2021 period, and the implications (of identified changes) for India's sourcing of illegally harvested or traded timber. The paper thus provides an update of the 2020 report India's wooden furniture and wooden handicrafts: risk of trade in Illegally harvested wood (Norman & Canby 2020).

It is therefore useful to reiterate the main findings of the 2020 report, with its focus on the 2010-2019 decade:

- About two-fifths of India's timber imports (by value<sup>1</sup>) in 2019 were rated as being at a high risk of having been illegally logged in, or traded from, source countries; 44 percent of the import value of logs, 42 percent of sawnwood imports and over 75 percent of veneer imports were assessed as coming from high-risk sources.
- India's top 10 high risk source countries for logs, sawnwood and veneer in 2019 were Gabon, Ecuador, Brazil, Ghana, Suriname, Benin, Ukraine, Tanzania, Colombia, and Togo.
- 38 percent of India's log, sawnwood and veneer imports were species assessed as Near Threatened, Vulnerable, Endangered or Critically Endangered on the International Union for Conservation of Nature (IUCN) Red List.
- Species identified as being at "potentially high risk when listed in Indian-manufactured furniture and handicrafts" included: teak (*Tectona grandis*); rosewoods/dalbergias, including *Sheesham* (*Dalbergia Sissolo*) and India rosewood (*Dalbergia latifolia*); imported mahogany (*Khaya ivorensis*); merbau (*Intsia*); ebony (*Diospyros crassiflora*); and red sandars or sandalwood (*Pterocarpus santalinus*).
- Although most of India's furniture and handicraft products were made from low-risk plantation species and 'trees outside forests', their traceability and legality verification were a major challenge.

## 1.2 Methodology

Similar to the Forest Trends 2020 India Report (Norman & Canby, 2020), the findings of this paper are based on desk research and the analysis of the official trade data reported by the Government of India to UN Comtrade (United Nations 2020). The trade data analysis has been supplemented by information obtained from interviews in July 2022 with several key informants, including: a large-scale timber importer and domestic supplier; a packaging firm (involving wood packaging of machinery) and boutique furniture maker; two retired forest service officials, one with experience in timber outlook assessments and another with in-depth knowledge of agroforestry and the plywood sector; a timber shop operator; a 'turnkey' contractor specialized in housing interiors/furniture; and two timber certification specialists. This report also draws on a comprehensive ITTO study on the supply of, and demand for, India's timber (Kant & Nautiyal 2021).

<sup>1</sup> Unless otherwise specified all the import and export data in this report are presented in terms of their value (in US dollars) rather than volume. This is due to data availability and reliability.

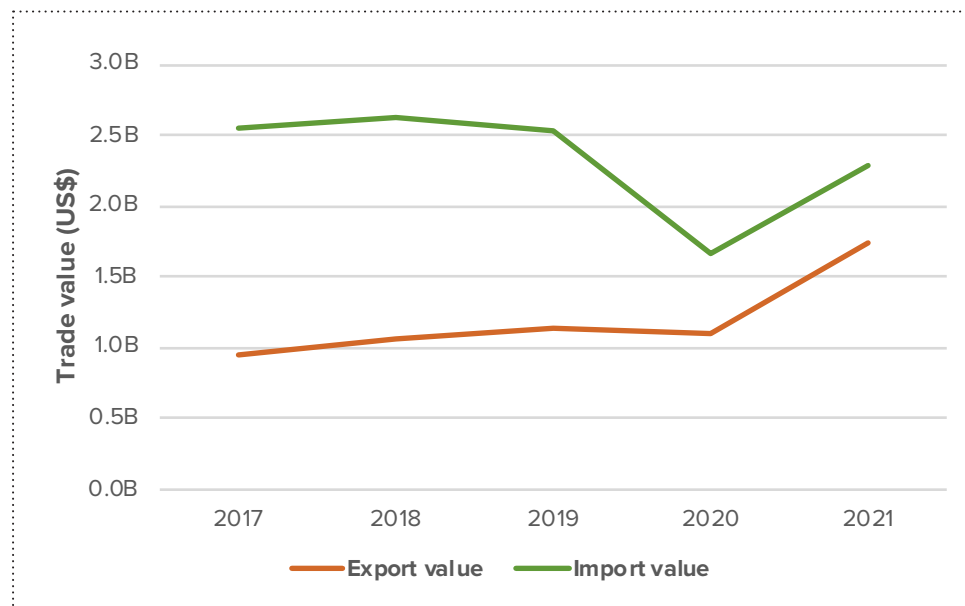


### 1.3 Overview of India's Timber Exports and Imports 2019–2021

The main observations of India's timber import and export trends over the 2019–2021 are:

1. A sharp fall (35 percent) in imports from 2019 to 2020 due mainly to the first COVID wave (Box 1), but only a modest (3 percent) fall in exports;
2. While both imports and exports rebounded sharply from their 2020 levels in 2021 (by 37 percent and 59 percent respectively), India's timber export value rose to a level (\$1.75 billion) 54 percent above the (pre-COVID) 2019 export value, whereas the timber import value in 2021 was 10 percent below that of 2019.
3. The gap between the import and export value was much narrower in 2021 compared to 2019: in 2019 the timber import value was over double the export value, but in 2021 it was only about 30 percent higher (Figure 1).

**Figure 1 | India's Timber Product Imports and Exports 2017–2021 (US\$)**



Likely reasons for the differential behaviour of India's timber imports and exports over the 2019–2021 period were:

- (a) International demand for timber recovered more sharply in 2021 than domestic demand:<sup>2</sup> the sharp increase in exports was due to the robust global economic rebound in 2021, reflecting a high demand from internet furniture and do-it-yourself (DIY) sales during the pandemic as wealthier consumers renovated homes and set up home offices in the main destination countries (e.g., USA, EU/EFTA region, UK, UAE, Australia, Bhutan, Canada and Saudi Arabia<sup>3</sup>). Meanwhile, however, demand from India's construction/real estate, hospitality and tourism sectors collapsed due to the lockdowns and high COVID infection rates (FAS 2020).

<sup>2</sup> Economic indicators reveal that economic activity in India started rebounding in mid-2021 with the ebbing of the second COVID wave; there was a steady recovery to October, prior to a downturn in January and February 2022 due to the third COVID wave (Reserve Bank of India, April 29, 2022). Key informants also noted that a sharp bounce-back in demand from the real estate sector in late 2021 and 2022 resulted in increased demand for solid wood, panels and plywood, although where imported wood was concerned, the higher economic turnover of suppliers was more likely to reflect the higher value or cost rather than increased volume.

<sup>3</sup> These eight markets between them accounted for 86 percent of the 2021 timber export value; USA and EU/EFTA region combined accounted for 71 percent of the total.



- (b) In 2021 India's timber import supply chains continued to be seriously affected by the COVID outbreaks in source countries.
- (c) Sharply rising costs for timber importers, starting with the significant timber price hike linked to the international shortage and cost of containers; key informants also report a sharp increase in importers' working capital requirements due to the need to pay 40-45 percent of the import value upfront for release of the assignment and slower payments by buyers/consumers. This has been especially problematic for small and medium enterprises (SMEs) which find it difficult to pass on higher costs to consumers (Soni 2022). Other exacerbating factors were the stronger US dollar and a shift in the point of incidence of the Goods and Services Tax (GST) from the point of sale to the point of import.
- (d) India's timber import value was already on an erratically downward trend before COVID, reflecting India's slowing economic growth in the second half of the decade<sup>4</sup> — from a peak of almost \$30 million in 2013 and 2014, it had fallen to \$25.4 million in 2019. In particular the import value of logs experienced a sharp and continuous fall from 2014 to 2019 while sawnwood and veneer imports rose gradually.


**BOX 1**

### The Three Covid Waves and Impacts on India's Timber Sector\*

India, like almost all of Asia, has been hit by three main COVID waves:

- The first COVID cases were reported in January 2020, and lockdowns started in late March 2020; the infection rate peaked in September 2020 with 90,000 cases per day before declining to a more manageable level (Safi 2021);
- The second, more deadly, COVID wave started in March 2021 and peaked in May 2021 with 400,000 cases per day, the first country in the world to report this number of cases per day (The Hindu, 2021), before falling to about 40,000 cases per day by July 2021 following a big vaccination push — the second wave resulted in lockdowns in several states and union territories, but not a national lockdown (Dugal, 2021);
- The third wave began in December 2021, when India reported just under 80,000 active COVID cases. It has so far proved less devastating due to both the lower virulence of the Omicron variant and India's vaccination programme: by January 2022 over 1.7 million doses had been administered, and 720 million fully vaccinated (UNSDG, 2022).

As elsewhere, COVID had a major dampening impact on the manufacturing sector, as well as the economy in general. India's GDP contracted 7.3 percent in the 2020–21 financial year (finishing March 2021) (World Bank 2021). The negative economic impact was greater in 2020 due to the two-month national lockdown imposed in March 2020, and which caused a large proportion of the urban labor force to return to their home villages.

*(continued)*

<sup>4</sup> India's economy entered a cyclical downturn in 2017 culminating in a growth rate of 3.7 per cent in the 2019–20 financial year, a much slower growth rate than before 2017 (Reserve Bank of India, April 29, 2022).



### BOX 1 *(continued)*

COVID caused temporary halts to timber manufacturing\*\* in both 2020 and 2021 due to a combination of the lockdowns and high infection rates (Maskayu 2021). As reported by World Bank (2021) the informal sector, in which most of India's labor force is employed, was especially affected. But it was also noted that the government implemented a "a comprehensive policy package to mitigate the impact on the poorest households (through various social protection measures) as well as on small and medium enterprises (through enhanced liquidity and financial support)" (World Bank 2021).

Virtually all wood sector businesses closed in the 2020 lockdown; most, but not all of them re-opened after the lockdowns. Businesses using imported wood were particularly challenged after the lockdowns due to the significantly higher timber import prices (typically up 50-75 percent) linked to the international shortage of containers and rise in container prices.

Another effect of COVID on India's timber sector has been a surge in the on-line demand for office furniture for working at home, and a corresponding increase in companies responding to this demand.

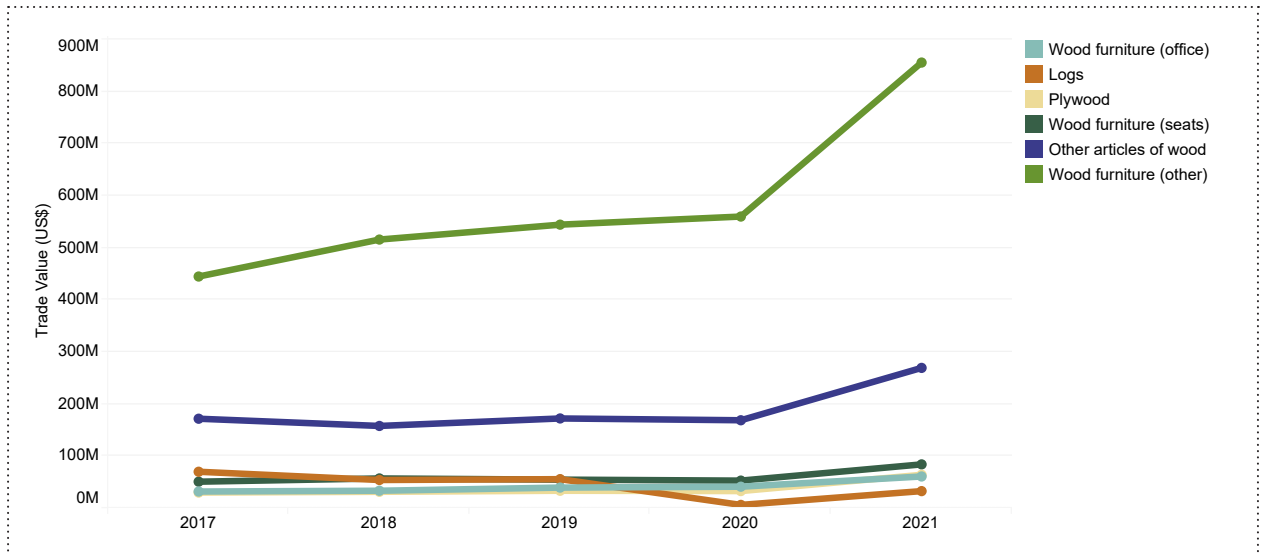
\*Box 1 is partly based on information from interviewed key informants.

\*\*Although simultaneously on-line office/home furniture sales were booming, and have continued to boom, due to the working from home policy.





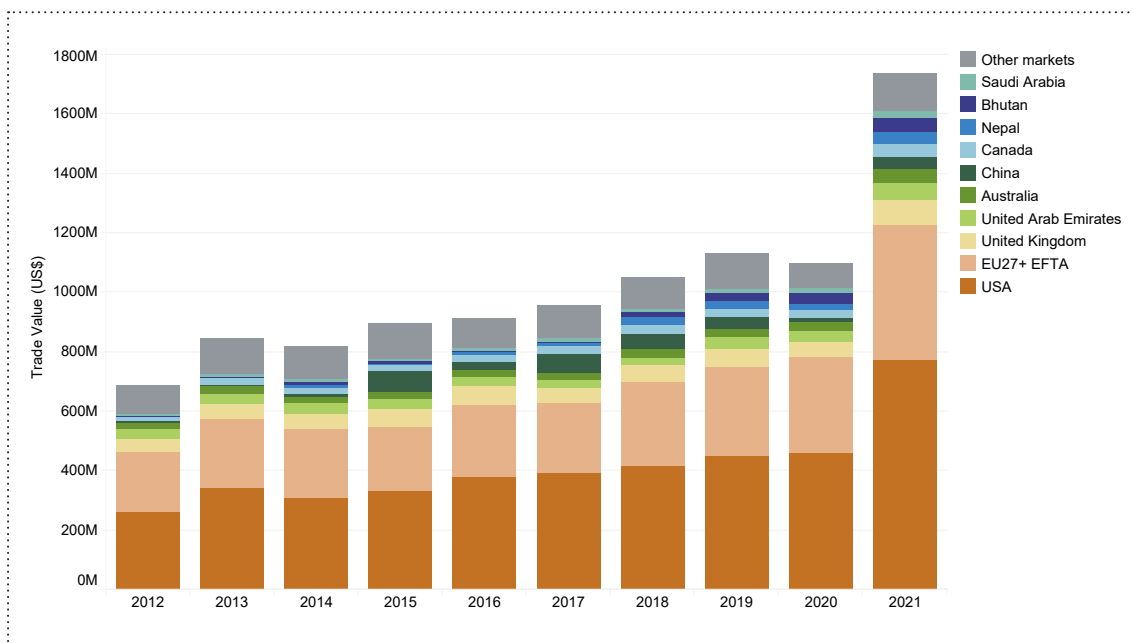
Figure 3 | India's Top Six Timber Product Exports 2017–2021 (US\$)



### 2.1.2 Destination markets for India's timber exports

The USA and the EU/EFTA region have continued to be the dominant markets for India's timber exports (Figure 4). In 2021 these two markets accounted for 70 percent of the export value, a slight increase from 2019 when they accounted for 67 percent. Over this period the USA increased its share of the market from 40 percent to 44 percent. More broadly it can be noted that the recovery in India's timber exports over 2020–2021 was due to the release of the pent-up international demand, and that this demand injection was related to (a) consumers coming out of lockdowns, and (b) countries' progress on their vaccination programmes. In 2021 India's timber exports increased sharply to all the main markets except China in 2021 — to most destinations they rose by over half, including to several South Asian markets (Bhutan, Nepal and Sri Lanka). They doubled (in value) to several destinations, including Saudi Arabia, Turkey, Qatar, Israel, Singapore and Vietnam.

Figure 4 | India's Timber Product Exports by Destination Country 2012–2021 (US\$)

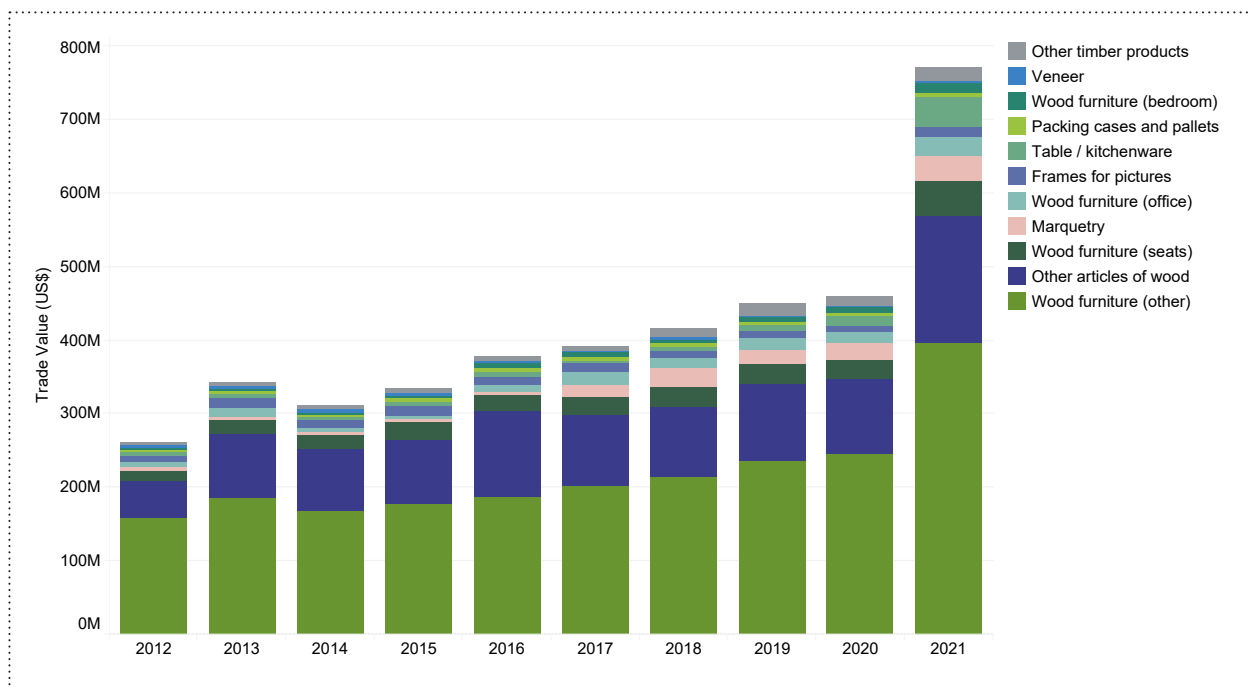


### 2.1.3 India’s timber product exports to the United States

India’s timber product exports to the US rose sharply in 2021 to an export value of \$772 million — an increase of 72 percent from 2019, and 68 percent from 2020; there was also a very slight (2 percent) rise in exports to the US from 2019 to 2020. As shown by Figure 5, the dominant export product to the US was wood furniture — this comprised 63 percent of China’s export value to the US in 2021. China’s wood furniture exports to the US were up 71 percent in 2021 over 2019. The second main export to the US was ‘Other articles of wood’ — this comprised 22 percent of the export value in 2021, and was up 64 percent on 2019.

The exports experiencing the fastest rise from 2019 to 2021 were wood furniture (kitchen) (618%), table/ kitchenware (466%), plywood (160%), wood furniture (bedroom) 126% and wood furniture (seats) 78%. Sawnwood exports to the US also rose 124% in 2021, but from a very low base — they were only 0.1% of India’s timber product exports to the US in 2021.

Figure 5 | India’s Timber Product Exports to the United States 2012–2021 (US\$)



### 2.1.4 India’s timber product exports to the EU and EFTA region

India’s timber product exports to the EU/EFTA region rose by about half from 2019 to 2021 to an export value of \$456 million; there was only a negligible difference between 2019 and 2020. Wood furniture comprised 78 percent of the export value to EU/EFTA in 2021. China’s wood furniture exports to EU/EFTA increased by about half from 2019 to 2021. The second main export to EU/EFTA was ‘Other articles of wood’ comprising 11 percent of the export value in 2021, up 56 percent from 2019.

The exports experiencing the fastest rise in 2021 over the pre-COVID level were sawnwood (461%), wood furniture (188 percent), plywood (144 percent), charcoal (118 percent), tools (111 percent) and wood furniture (office) 93 percent). However, some of these items were insignificant or relatively small — sawnwood comprised 0.1 percent of India’s timber exports to EU/EFTA in 2021, plywood comprised 1.1 percent, charcoal 0.6 percent, and tools 2.9 percent.

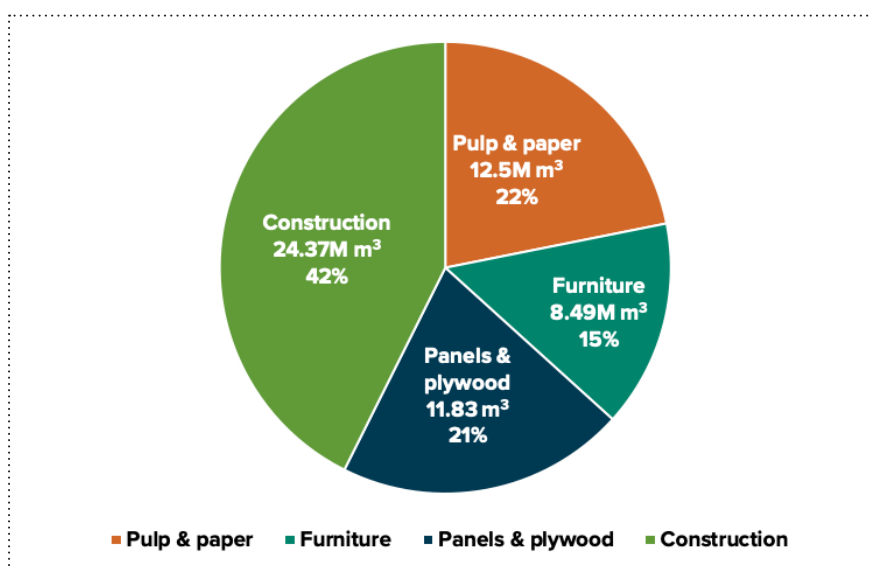


## 2.2 Domestic Demand

There are no precise data on India’s domestic timber consumption — the best available estimate in the 2020 analysis was 34 million m<sup>3</sup> roundwood equivalent (excluding firewood), but this was based data from only the housing, furniture and agricultural sectors (Shrivastava & Saxena 2017), and did not include the pulp and paper sector. It was recognised by Norman & Canby (2020) as likely to be a “gross underestimation.” This view was confirmed by the 2021 ITTO report “India Timber Supply and Demand 2010–2030” (Kant & Nautiyal 2021). Based on comprehensive calculations of timber utilization in the various timber industry sub-sectors, although still depending on multiple assumptions, it was estimated that India’s domestic timber consumption in 2020 was about 57 million m<sup>3</sup>.

The sub-sectoral breakdown (construction, pulp & paper, panels & plywood, and furniture) of domestic timber consumption is presented in Figure 8. As reported by Kant & Nautiyal (2021) teak accounted for almost half of wooden furniture, while sal and deodar (combined) accounted for about 20%. The remainder was comprised of mahogany, cedar, walnut, sandalwood, dalbergia, ebony, rubberwood, and other species. It was also noted that rubberwood and bamboo material boards (BMB) were increasingly used in place of plywood. Future national timber consumption or demand, based on various recent demand projection studies, is discussed in Appendix 1.

Figure 8 | India’s Domestic Timber Consumption in 2020 (Kant & Nautiyal 2021)





## 3 India's Timber Supply

### 3.1 Domestic Production

The ITTO study (Kant & Nautiyal 2021) makes it possible to update the domestic supply data reported by Norman & Canby (2020). According to the ITTO report, in 2019 India produced about 48 million m<sup>3</sup> of roundwood (excluding fuelwood); this was comprised of 2.2 million m<sup>3</sup> from state forests (under State Forest Development Corporations) and about 46 million m<sup>3</sup> from trees outside forests, including agroforestry. In Norman & Canby (2020) national timber supply was reported as 53 million m<sup>3</sup> — the difference is that this included 5.4 million m<sup>3</sup> of bamboo production.<sup>5</sup>

As noted by Kant & Nautiyal (2021) the domestic timber supply has risen only very slowly due to a policy (based on the 1988 National Forest Policy) favoring conservation over production objectives. Industrial roundwood output has been in the range 45–48 million m<sup>3</sup> since the 1990s — this is in spite of about two million hectares of plantations being established annually on private and public land in recent years. Over the 2010-2019 period national roundwood production rose only 5 percent. An inelastic supply of domestically produced timber has clear implications for future import levels, assuming that the predicted strong increase in national demand (Appendix 1) materialises.

Another key factor is the relatively small diameter of much of India's timber, and inferior quality of many wood products compared to imports. For example, much of the national demand for beds and sofas has been met by imports; another import is upholstered chairs, given the difficulty of obtaining appropriate upholstery material in India (Price Waterhouse 2021).

The main timber tree species grown in India, predominantly outside forests, and used mainly for furniture production, are (Kant & Nautiyal, 2021):

- Sal (*Shorea robusta*)
- Mango (*Mangifera indica*, *Mangifera caesia*)
- Sheesham (*Dalbergia sissoo* or *sisola*)
- Teak (*Tectona grandis*)
- Pine (mainly *Pinus roxburghii* and *Pinus wallichiana*)
- Neem/Indian lilac (*Azadirachta indica*)
- Jackfruit (*Artocarpus heterophyllus*)
- Laurel (*Lauraceae*)
- Indian laurel (*Terminalia tomentosa*)
- Rosewood (*Dalbergia latifolia*)
- Mahogany (*Swietenia spp.*)
- Himalayan poplar (*Populus ciliate*)
- Eucalypts (*Eucalyptus globulus*)

<sup>5</sup> A reason bamboo was excluded from the 2021 timber production estimate is that in 2017 the government amended the 1927 Indian Forestry Act to reclassify bamboo grown outside designated forest areas as "grass" rather than "trees," a reform expected to stimulate non-state bamboo plantations. Bamboo is mainly used by the pulp and paper industry, and also to some extent in furniture making.



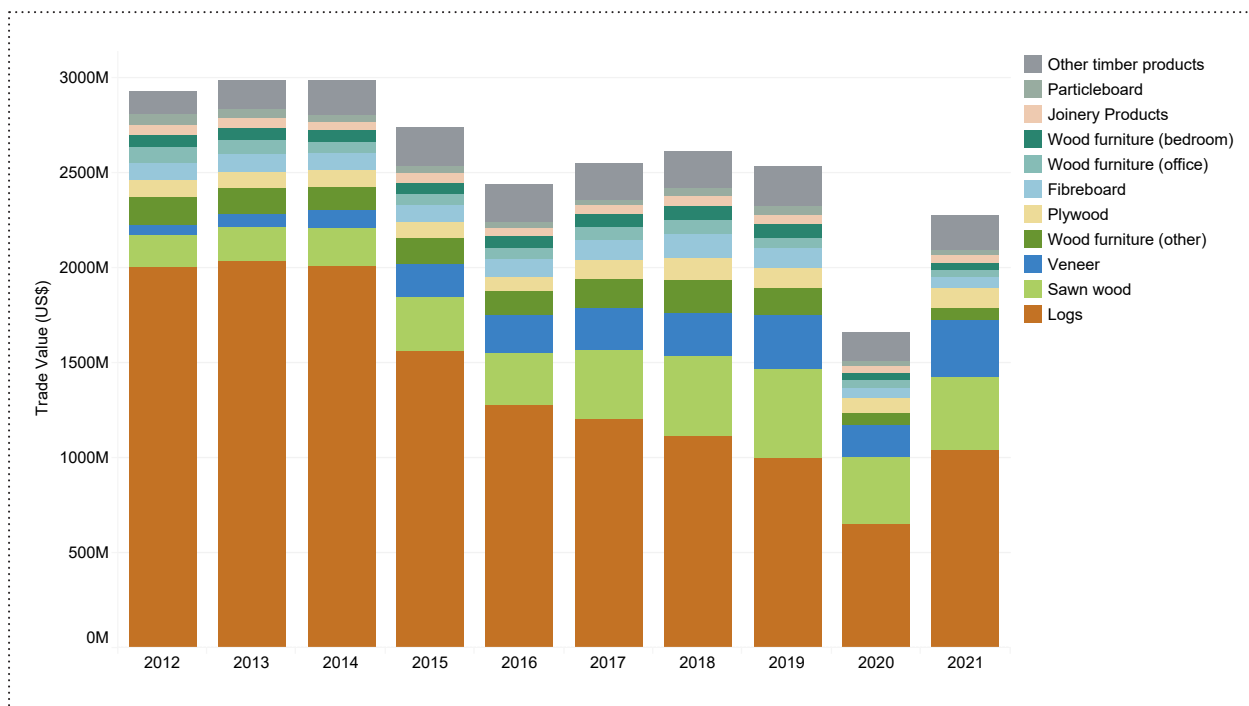
- Casuarina (*Casuarina equisetifolia*)
- Acacias
- Cotton tree (*Bombax spp.*)
- Lagerstroemia flos-reginae
- *Morus spp.*, especially mulberry

## 3.2 Imports

### 3.2.1 Timber imports by product type

India’s timber product imports rose quite rapidly in the first half of the 2010s, but as shown by Figure 9, they peaked in 2013-2014 before levelling off from 2015 to 2019 in line with the slow-down in India’s economic growth rate. The average import value over the 2017–2019 period was about 12 percent less than the 2013-2015 average. Thus, before COVID timber imports seemed to be experiencing a long-term downwards trend. As already noted in 2020 the timber import value fell 35 percent from 2019 to 2020 before recovering (by 37 percent) in 2021; the 2021 import value was, however, still 10 percent below the pre-COVID (2019) value.

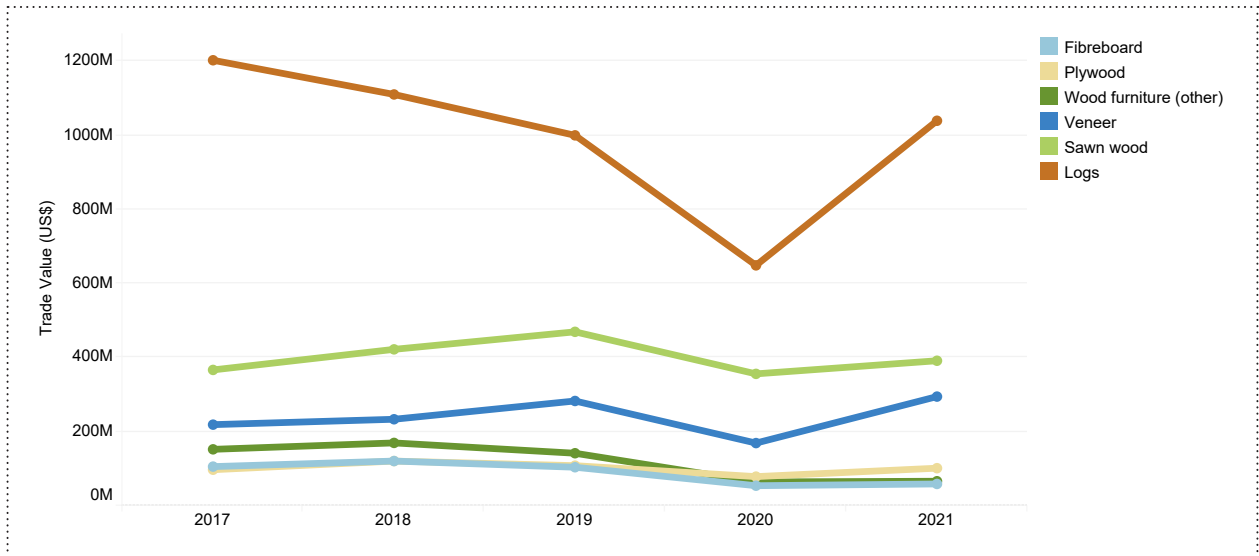
Figure 9 | India’s Timber Product Imports 2012–2021 (US\$)



Logs continued to be the main timber import in 2021 as shown by Figure 10 with a slight (4 percent) increase in value and enhanced share of the total timber import value — 46 percent in 2021 compared to 39 percent in 2019. Imports of sawnwood, the second main timber import, and wood furniture (all categories) were down 17 percent and 39 percent respectively. In 2021, veneer replaced wood furniture as India’s third most import timber import (by value) but with a similar volume to 2019. Plywood imports in 2021 were similar to 2019, but fiberwood imports fell sharply (43 percent).



Figure 10 | India's Top Six Timber Product Imports 2017–2021 (US\$)

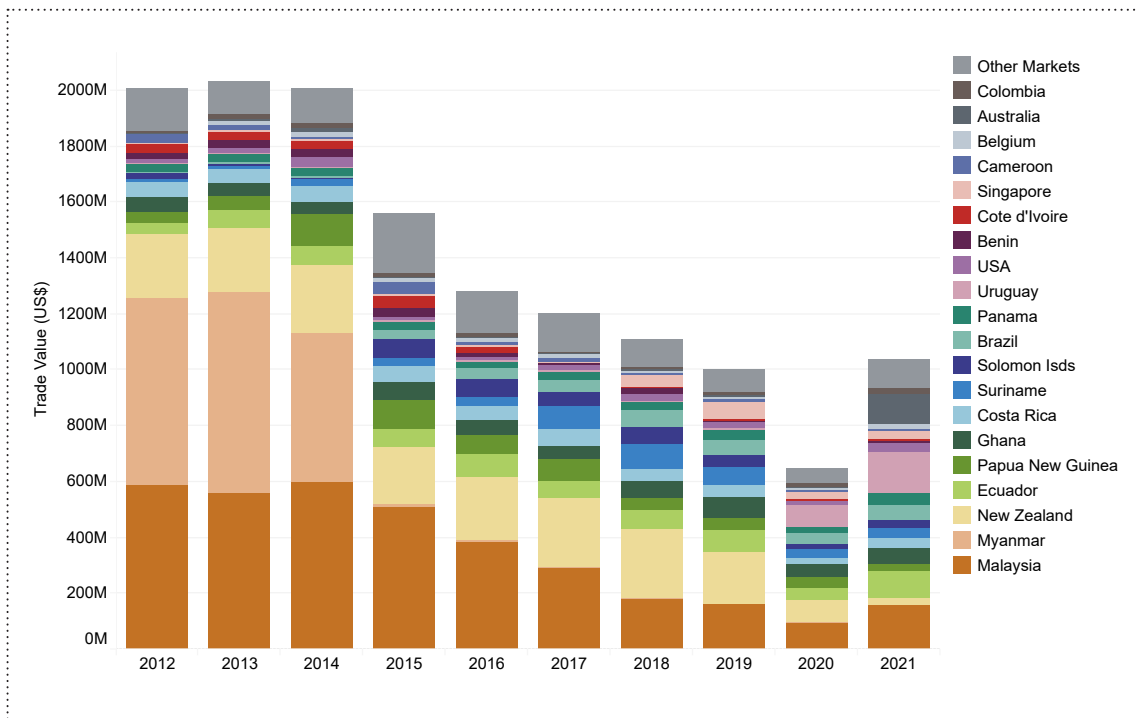


### 3.2.2 Sources of India's main timber imports

#### Log imports

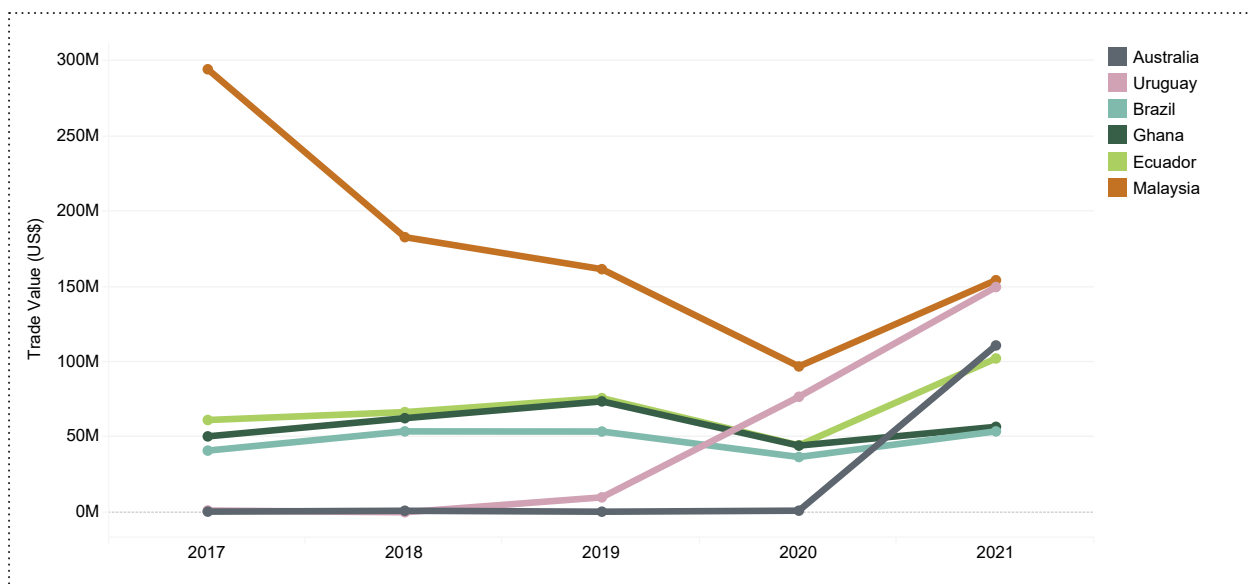
There were significant changes in the sources of India's log imports between 2019 and 2021 (Figure 11). In 2019 New Zealand was the main source of India's logs (19 percent of the log import value) followed by Malaysia (16 percent), Ecuador (8 percent) and Ghana (7 percent). In 2021 the main sources were Malaysia (15 percent) with a slightly reduced value, Uruguay (14 percent), Australia (11 percent) and Ecuador (10 percent).

Figure 11 | Sources of India's Log Imports 2012–2021 (US\$)



As shown in Figure 12, log imports from 2019 to 2021 rose dramatically from Australia (156-fold) and Uruguay (fifteen fold increase), while the biggest fall was from New Zealand (down 86 percent). In the case of New Zealand, this is explained by the exporting country’s ban on using methyl bromide as a fumigation agent, while India maintained its use as an import requirement.<sup>6</sup> India also increased its log imports from other Latin American sources, notably from Ecuador (up 35 percent) and Panama (up 15 percent). By contrast log imports from several other tropical country sources have fallen over the period, including from Papua New Guinea (51 percent down), Suriname (47 percent), Solomon Islands (27 percent), Ghana (23 percent), Costa Rica (19 percent) and Malaysia (5 percent). As regards Malaysia, which was a major source in the first half of the 2010s, this appears to reflect a longer-term trend — the 2021 log import value was about half of the 2017 value. All these countries were hit badly by the second COVID wave in 2021, and it therefore seems likely that a significant part of the explanation was supply chain disruption.

**Figure 12 | Top Six 2021 Sources of India’s Log Imports (2017–2021)**



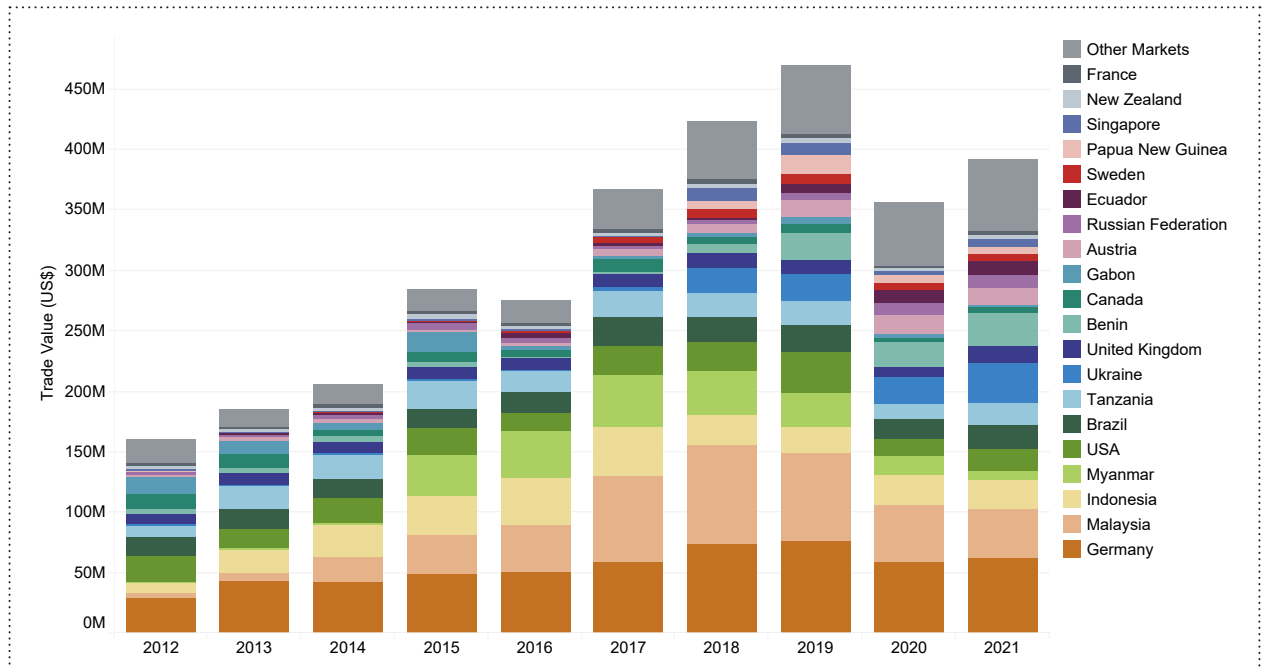
**Sawnwood imports**

The picture for India’s sources of sawnwood imports was similarly erratic (Figures 13 and 14). In 2021 Germany and Malaysia continued to be the main sources of India’s sawnwood imports, but with a reduced value — the 2021 sawnwood import value, compared to 2019, was down 19 percent from Germany and 44 percent from Malaysia. The US was the third main source of sawnwood (7 percent) in 2019, but in 2021 dropped to sixth with an import value about half of what it was in 2019. In 2019 Myanmar was the fourth main supplier of sawnwood; following a 70 percent fall, it dropped to thirteenth in 2021. This was however only in terms of the official import data — as discussed by Norman & Canby (2020) Myanmar has been a major clandestine supplier of *keruing* (*Dipterocarpus spp.*), teak and *pyinkado* (*Xylia xylocarpa*) timber (Box 2).

<sup>6</sup> This situation could change following India’s agreement in April 2022 to accept logs treated with ethanedinitrile (EDN), a more environmentally acceptable alternative (RNZ, 2022).

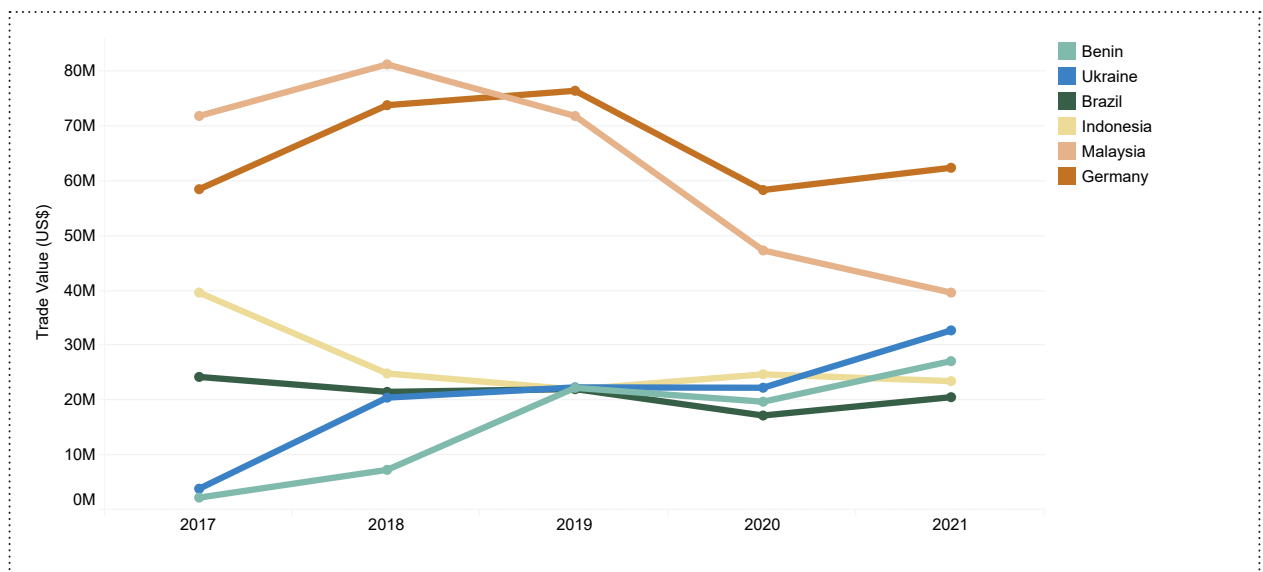


Figure 13 | Sources of India's Aawnwood Imports 2012–2021 (US\$)



Partially compensating lower imports from the main 2019 sources, imports rose significantly from Ukraine (by 46 percent from 2019 to 2021), Ecuador (66 percent), Benin (22 percent), UK (22 percent) and Russia (126 percent). Ukraine became the third main source of India's sawnwood imports in 2021 (8 percent of the import value) and Benin (7 percent) the fourth source. With Russia supplying 2.6 percent of India's sawnwood import value, over 10 percent of sawnwood imports in 2021 were from the two countries at war (at mid-2022). Among smaller suppliers, sawnwood imports from PNG and Gabon in 2021 were 58 percent and 64 percent lower in 2021 than 2019.

Figure 14 | Top Six 2021 Sources of India's Sawnwood Imports (2017–2021)



**BOX 2**  
**How have India’s imports from Myanmar changed since the 2021 coup?**

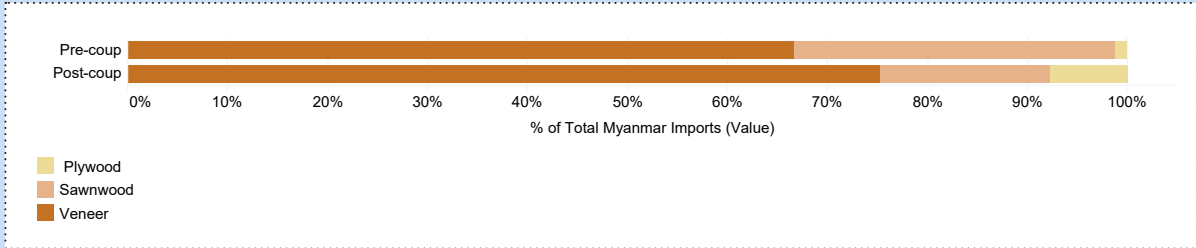
Following the military coup on February 1st, 2021, the EU, US, UK, Switzerland, and Canada have all sanctioned the Myanmar Timber Enterprise (MTE), the State-owned Enterprise that runs Myanmar’s timber sector and maintains sole legal authority to export timber, and in April 2022, the MTE itself announced a one-year moratorium on all logging throughout the country.

Despite an overall drop in India’s timber imports from Myanmar, India remains a critical market for Myanmar’s timber sector, second only to China. Between the coup and June 2022, global markets have declared (to UN Comtrade) \$303 million in timber imports from Myanmar; this is likely an underestimate as not all countries have up-to-date reporting. Over \$71 million, or 23%, of this trade has gone to India.

Analysis of shipment-level Indian import data show an overall decrease in imports from Myanmar from 2020 to 2021 of 14%. This is significant, but less so compared with a 37% drop the previous year (from 2019 to 2020), indicating that the initial onset of COVID-19 was more disruptive to the India-Myanmar timber trade than the coup. However, markets seem to have rebounded in 2022; from January to April, 2022 India’s imports from Myanmar nearly doubled year-over-year, from \$13 million to \$24 million.

Recent data indicates the product mix may be shifting, with a larger proportion of imports from Myanmar declared as plywood. In the two years leading up to the coup, roughly one third of imports were in sawnwood form, and two thirds in veneer, with plywood comprising just 1% of trade. In 2021, however, nearly 80% of imports were in veneer form, and plywood imports quintupled, then doubled again in the January–April 2022 period.

**Figure A | India’s Imports from Myanmar by Top Three Products, % of Total, Pre- and Post-coup\***



Source: Panjiva 2022, compiled and analyzed by Forest Trends.

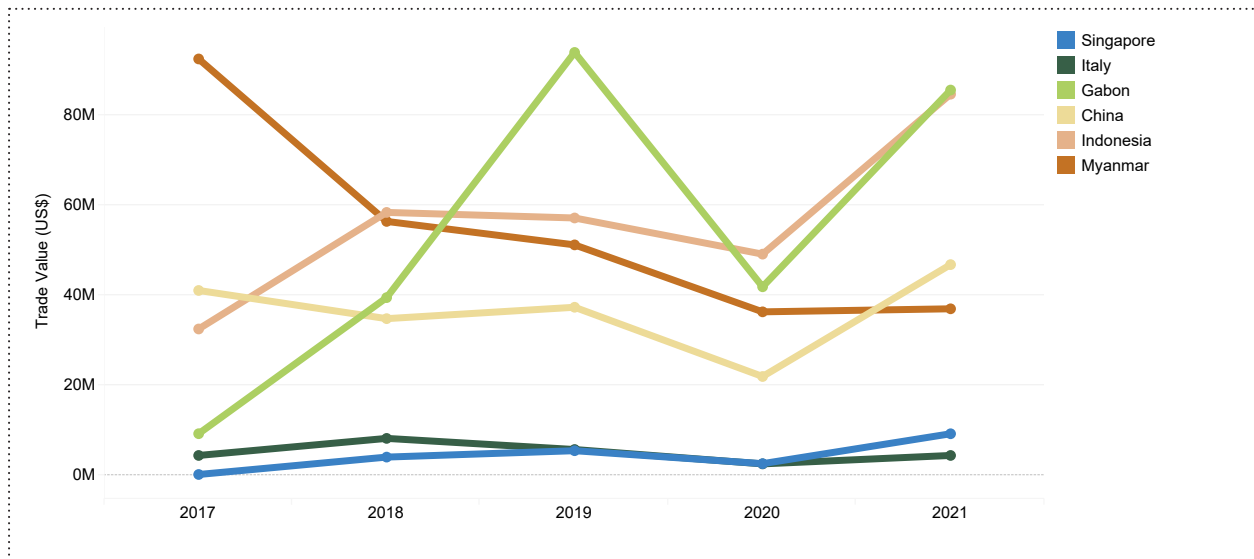
Species information gleaned from shipment data show that since the coup, nearly three quarters of India’s timber imports from Myanmar have been *keruing* (*kanyin*) (*Dipterocarpus spp.*), largely in veneer form; this represents an increase from 2019–2020 when just over half of imports were *keruing* and a far more significant proportion, nearly two thirds, were *teak*. Other significant species include *pyinkado* (*Xylia xylocarpa*) and rubberwood.

(continued)



China became the third main source in 2021, having been fourth in 2019, with a 25 percent increase in the import value, while Myanmar slipped from third to fourth following a 28 percent fall (Figure 16). Among smaller suppliers, veneer imports in 2021 were significantly up from Singapore (70 percent from 2019), Malaysia (36 percent) and Spain (27 percent), and down from Vietnam (66 percent), the US (38 percent) and Italy (23 percent).

Figure 16. Top Six 2021 Sources of India's Veneer Imports (2017–2021)





## 4 Timber Illegality Risk Analysis

### 4.1 Analysis by Illegality Risk Levels in Source Countries

Forest Trends has developed a risk assessment approach that follows a growing body of work using existing data and metrics related to national governance, corruption, conflict, and harvest-risk indicators to highlight the likelihood that timber may have been illegally logged in a source country, or the likelihood that illegal wood may have entered a supply chain.<sup>7</sup> Based on this approach, producer countries are grouped in 'higher risk', 'medium risk', 'lower risk' and 'conflict state'<sup>8</sup> categories.

From the analysis in Section 3.2.2, the main high-risk sources for India's imports of logs, sawnwood and veneer (combined) were Ecuador (the fourth main source of India's timber), Ghana (fifth), Brazil (sixth), Suriname (eighth), Solomon Islands (12th), Argentina (14th), Papua New Guinea (15th), Colombia (16th), Benin (17th) and Togo (20th). From 2019 to 2021 the combined import value fell 23 percent from Ghana, 47 percent from Suriname, 27 percent from the Solomon Islands, 51 percent from Papua New Guinea, and 6 percent from Togo. In contrast there was an increase of 35 percent from Ecuador, a very sharp increase from Argentina, for which no import value was recorded in 2019, 51 percent from Colombia, and 93 percent from Benin. The import value from Brazil in 2021 was the same as in 2019.

Figure 17 presents India's total timber imports according to the four illegality risk levels. It reveals there was a sharp fall in 2020 in the import value of all the risk categories except 'medium-risk' sources. This was followed by an almost equally sharp rebound in 2021 of all categories except 'conflict state' timber, which experienced a further slight fall. Compared to 2019, 'conflict state' timber fell 43 percent, the 'higher risk' import value was about the same, 'medium risk' imports were up 81 percent, and 'lower risk' imports were down 20 percent. In 2019 about 45 percent of India's timber imports (by value) were from a 'higher risk' source and 12.5 percent were from 'conflict states.' In 2021 the percentage from higher risk sources was the same, but the proportion from 'conflict states' fell to 7.2 percent. Adding these two categories together, the percentage of imports from high-risk sources fell from 57 percent in 2019 to 52 percent in 2021.

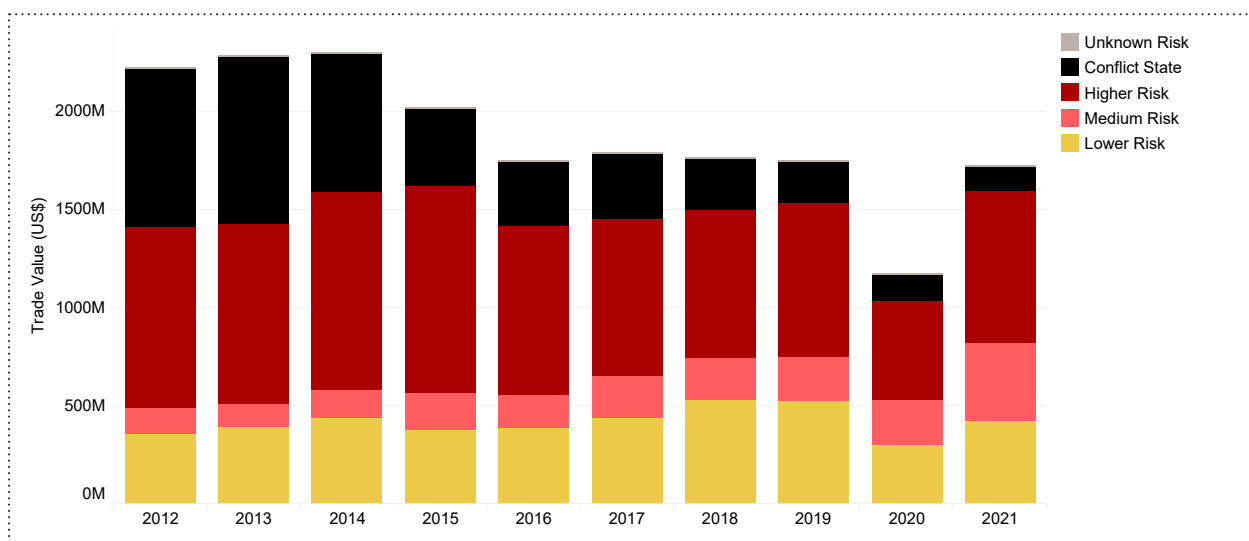
<sup>7</sup> See underlying methodology at Forest Trends ILAT Risk website, <https://www.forest-trends.org/fptf-ilat-home/>

The risk categories of "low", "medium" and "high" are based on an ILAT Risk score between 1 and 100 assigned by Forest Trends. Countries scoring less than 25 out of 100 are categorized as "lower risk", while countries scoring between 25 and 50 are categorized as "medium risk". Countries scoring above 50 are categorized as "higher risk". Research on these issues shows that complicity of government officials in corruption in many countries can undermine the enforcement of laws and regulations relating to forest protection and management, as well as the reliability of chain of custody systems. As such, countries associated with corruption and governance challenges are deemed at higher risk for illegal logging and associated trade. The category of "conflict state" is based on whether a country is listed on the World Bank Harmonized List of Fragile Situations for 2020. Conflict states are listed as a separate category because, while it remains possible to buy legal wood in a fragile and conflict-affected state, the political instability, weak governance, and violence inherent to these situations indicates an elevated risk of buying illegal wood.

<sup>8</sup> The main conflict state suppliers of timber to India were Solomon Islands and Papua New Guinea. Myanmar was another conflict state, but there were no official (Myanmar to India) import data for 2021.



Figure 17 | India’s Log, Sawnwood and Veneer Imports by Risk Profile 2012–2021 (US\$)



## 4.2 Imports from Sources with Timber Export Restrictions

Over the period 2016-2019 about 60 percent of India’s log imports and 20 percent of its sawnwood imports were from countries with forest product export restrictions (FPERs) (Norman & Canby 2020). This included a high proportion of the main tropical log species imported by India — teak (*Tectona grandis*), meranti (*Shorea spp.*), merbau (*Intsia*), balau (*Shorea maxwelliana*), kapur (*Dryobalanops lanceolata*), keruing (*Dipterocarpus spp.*), nyatoh (*Palaquium burckii*), and padauk (*Pterocarpus soyauxii*). These imports appear to have contravened specific provisions in source country export restrictions, and were at a high risk of illegality. The presence of an FPER signals a need for additional risk assessment and mitigation actions to ensure that the imports do not violate specific laws and regulations of the source country.

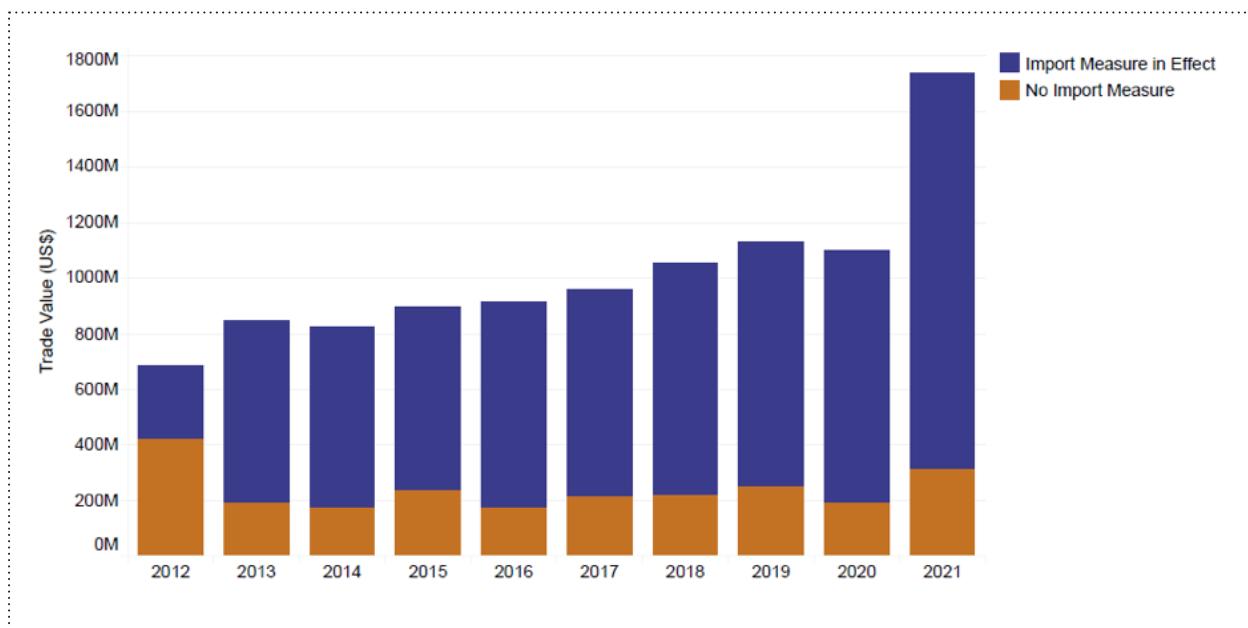
India’s log imports from countries with log export restrictions, in line with total log imports, fell by 50 percent from 2019 to 2020 before rising again in 2021 — but only to a level well below (24 percent) the 2019 or pre-COVID import level (see Figure 18). Imports from countries with log export restrictions fell more (from 2019 to 2021) than overall log imports — in 2021, 65 percent of India’s log imports were from countries with log export restrictions compared to 89 percent in 2019 (and 79 percent in 2020).



### 4.3 India’s Timber Product Exports to Unregulated Markets

A high proportion of India’s timber product exports go to regulated timber markets, and this proportion has slightly risen since 2019 (Figure 20). Over the 2017–2019 period 78 percent of the export value went to regulated markets; and in both 2020 and 2021, 82 percent went to regulated markets showing little change in this indicator.

Figure 20 | India’s Timber product exports to markets with operational timber legality import regulations

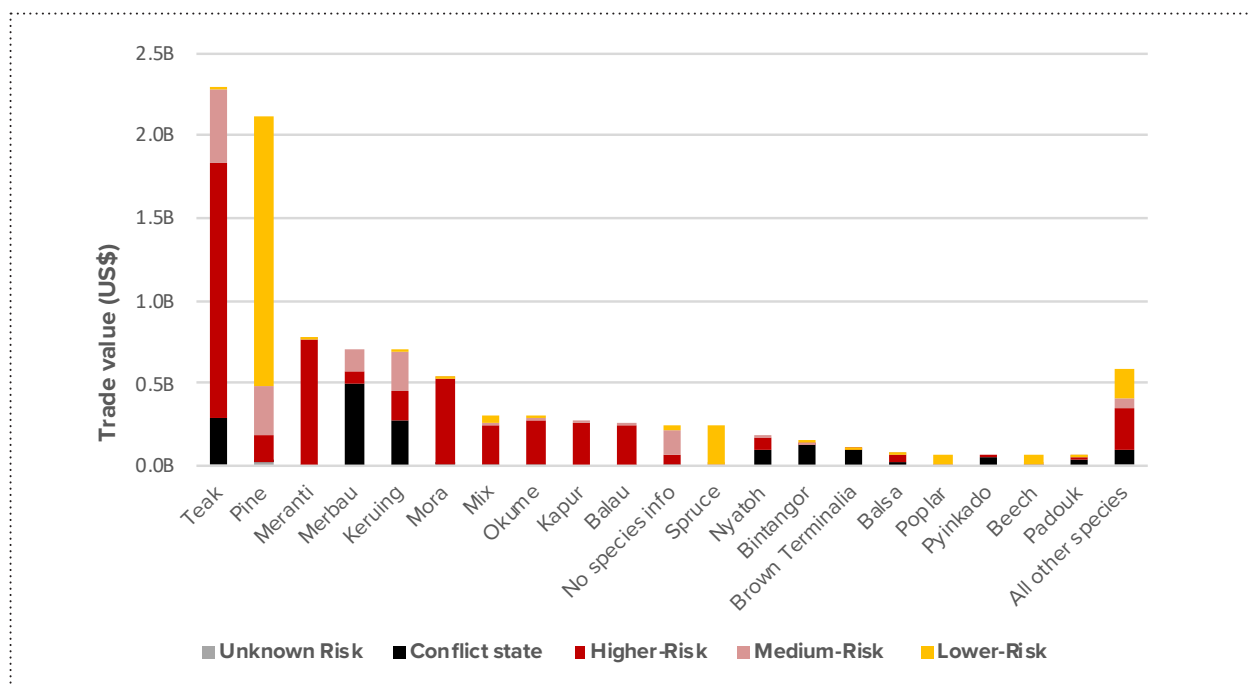


### 4.4 Analysis of Imported Timber Species

The risk profile of India’s main imported timber species, based on the risk levels of source countries (Figure 21). This was based on an analysis by Forest Trends of import shipment records — the name of the species was specified on 97 percent of the records. According to these data, eight of the top ten (named) imported species, comprising 81 percent of the 2017–2021 import value, were high-risk species and two (pine and spruce) were low-risk species.



Figure 21 | India's Imports of Timber Species by Risk Profile of Source Countries 2017–2021



In order to assess the trend in imports of higher and lower risk species, a percentage risk factor was assigned to each species — this was simply the addition of the percentage of imports of each species over the 2017–2021 period from 'higher risk' and 'conflict state' sources. As presented in Table 1, the species were then grouped into three risk levels:

- Level 1 risk species comprised of 11 species with a risk factor of at least 95 percent;
- Level 2 risk species made up of three species with risk factors between 65 and 81 percent;
- Level 3 risk species comprised of four species with a risk factor below 10 percent.

Table 1 | Percentage Risk Factors for Imported Timber Species

Common Name	Latin Name	% Risk Factor	Risk Level	% of 2017–2021 Import Value*
Meranti	Shorea spp.	100	1	7.7%
Brown terminalia	Terminalia brassii	100	1	0.9%
Pyinkado	Xylia xylocarpa	100	1	0.7%
Padouk	Pterocarpus soyauxii	100	1	0.5%
Mora	genus Mora, subfamily Caesalpinioideae	99	1	5.3%
Kapur	Dryobalanops lanceolata (dipterocarp)	99	1	2.6%
Nyatoh	Palaquium burckii	99	1	1.7%
Balau	Shorea maxwelliana	98	1	2.5%
Balsa	Ochroma pyramidale	97	1	0.7%

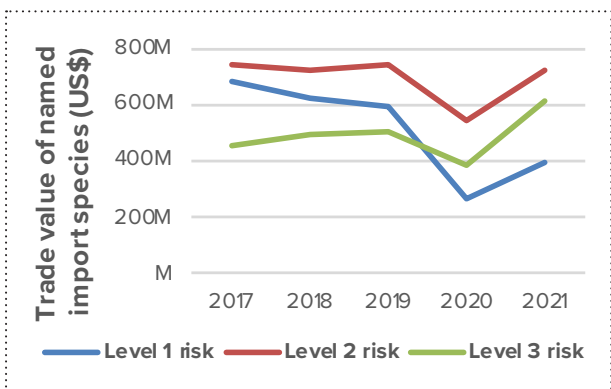
Common Name	Latin Name	% Risk Factor	Risk Level	% of 2017–2021 Import Value*
Bintangor	Calophyllum pulcherrimum	96	1	1.4%
Okume	Aucoumea klaineana	95	1	3.0%
Merbau	Intsia	81	2	7.1%
Teak	Tectona grandis	80	2	22.7%
Keruing	Dipterocarpus spp, especially elongatus	65	2	6.9%
Pine	Pinus spp., especially radiata & sylvestris	8	3	21.1%
Beech	Fagus sylvatica	4	3	0.6%
Spruce	genus Picea	3	3	2.5%
Poplar	Populus deltoides	1	3	0.7%

The final column of Table 1 presents the share of each species in India’s total 2017–2021 log, sawnwood and veneer<sup>9</sup> import value. This reveals that Meranti, Mora, Kapur and Balau were the main Level 1 risk species, Level 2 risk species were dominated by teak, but Merbau and Keruing were also significant imports, and Level 3 risk species comprised of temperate and coniferous species, especially the pines. Level 1 risk species comprised 27 percent of the import value, Level 2 risk species made up 37 percent, and Level 3 risk species 25 percent. The remaining 11.5 percent were a combination of other species with smaller import values and imports for which the species was not recorded.

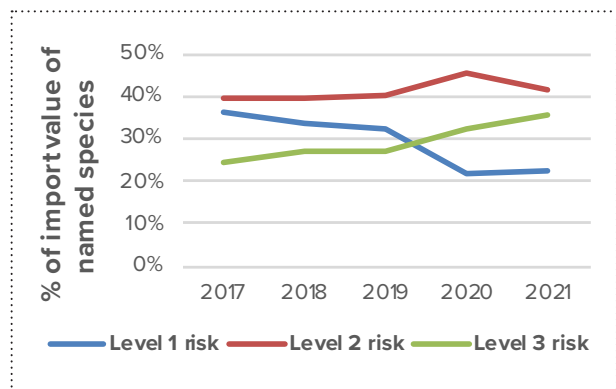
It was then possible to assess how these three risk categories have changed over time. From 2017 to 2019 imports of the three risk categories was quite flat (Figure 22a) In 2020 the supply of Level 1 risk species fell most sharply from 2019, more than halving in value, before rebounding in value in 2021, as did the other risk categories. This chart probably reflects the greater supply interruption (from COVID) to Level 1 risk sources comprised predominantly of lower income and conflict state countries. The fall in the proportion of Level 1 risk species and increase in Level 3 species from 2017 to 2021 (Figure 22B).

**Figure 22 | Log, Sawnwood and Veneer Imports by Species’ Risk Levels 2017–2021**

**A. By import value (US\$) of each risk level**



**B. Percentage of species’ risk category in each year**



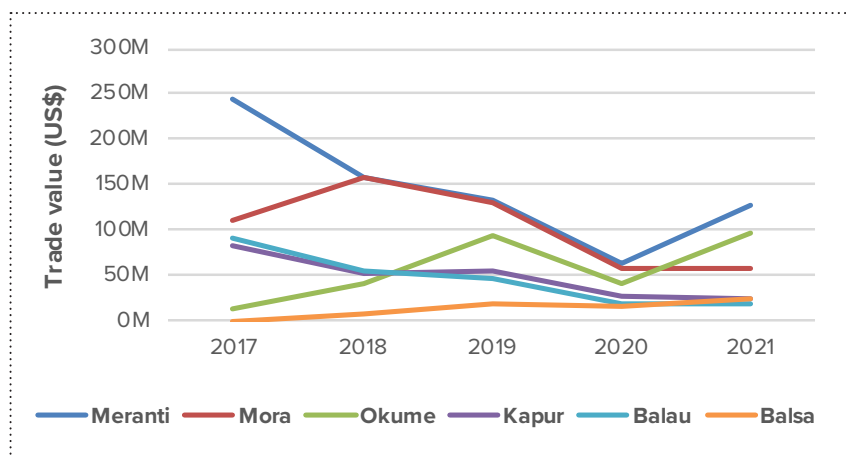
<sup>9</sup> It can also be noted that India’s veneer imports are subject to a high risk of illegality — 64 percent of the 2019 veneer import value was composed of IUCN Red List species (Norman & Canby 2020).



The trend of the six main (by value) Level 1 risk species is shown in Figure 23. This reveals a mixed picture:

- All the species except Balsa fell sharply from 2019 to 2020;
- From 2020 to 2021 imports of Meranti and Okume bounced back sharply, while Mora, Kapur and Balau imports remained quite flat, and Balsa imports continued a strong upward trend;
- Meranti imports were on a sharp downwards trend prior to COVID, almost halving from 2017 to 2019; they halved again in 2020 before recovering to a level slightly below the 2019 import value;
- Okume imports experienced a generally upwards trend while Mora, Kapur and Balau imports were on a downwards trend.

**Figure 23 | Imports of the Six Main Level 1 Risk Species 2017–2021 (US\$)**



## 4.5 Risk Level of Domestic Timber Supply

As documented by Norman and Canby (2020), the main legality risks of domestic timber production concern legal rights to harvest and third parties' rights, non-payment of taxes and fees, and non-compliance with national laws and regulations covering timber-harvesting operations, transport and trade (based on a report by Preferred by Nature 2017). However potential high-risk species like mahogany and teak are mainly plantation-grown and heavily regulated, the Indian rosewoods<sup>10</sup> (*Dalbergia sisolo* and *Dalbergia latifolia*) are mainly grown in agroforestry systems or plantations, and there is an export ban on the CITES Appendix 2 listed<sup>11</sup> Red sandars or sandalwood. In general, it seems that the legality profile of India's domestic timber production by Norman & Canby (2020) remains valid.

Key informants in the wood processing sector also opined that the illegality risk level of domestic timber production has been trending downwards due to shifting market trends, as well as due to the legal/judicial controls and interventions. For example, it was noted that there is a marked trend towards the use of agroforestry species for the wood strips of plywood, blockwood and panelwood: it is often only the front/back facing layers that use high-quality imported veneer.

<sup>10</sup> Although the two *Dalbergia* species are listed in CITES Appendix 2, wood that is certified by India's Export Promotion Council for Handicrafts (EPCH) under the VRIKSH certification scheme is exempted.

<sup>11</sup> This was at the instigation of the government of India. However, as reported by Norman & Canby (2020), illegal exportation of the species is a significant problem.

## 4.6 Conclusions on Illegality Risks

The analysis presented above shows that the illegality risk level of India’s timber imports fell slightly from 2019 to 2021. As indicated by Table 2 this appears to conform to a longer-term trend that started before COVID. Possible explanatory factors are a combination of:

- A drop (probably temporary) in domestic demand or consumption of some high-risk imported species;
- Supply-chain disruption from the conflict-state and some other high-risk sources (also noting the rise in supply of lower risk species from higher income countries that were able to advance faster with their vaccination programmes and bring COVID under control);
- Increasing substitution of some higher risk import species by domestically produced species (on the other hand India’s national timber output is quite inelastic).

**Table 2 | Timber Illegality Risk Indicators Linked to India’s Timber Product Imports and Exports 2017–2021 (US\$)**

Timber Illegality Risk Indicator	2017	2018	2019	2020	2021
% timber imports from conflict states & ‘higher risk’ sources	63	58	57	54	52
% log imports from countries with log export restrictions	94	92	89	79	65
% sawnwood imports from countries with SERs	44	41	36	39	39
% timber product exports to unregulated import markets	23	21	22	18	18

We are therefore probably mainly observing short-term trends related to COVID. The long-term trend will only become clear when COVID-related supply and demand factors have abated. Having said that the picture in 2022 and beyond could also be complex as regards disentangling shorter-term factors, such as the war in Ukraine and sharp rise in inflation, from longer-term supply and demand factors.

## 4.7 What Is the Prospect for Timber Import Regulations?

There appears to be little current appetite for or interest in timber import regulations in the government of India according to several key informants, including retired senior Indian Forest Service officers. The main policy focus continues to be on the sustainability and legality of domestic timber production, and more broadly on forest conservation objectives, a policy focus that is perceived to have been successful. According to one anecdote, a senior government official supposedly commented that all government work starts with a ‘file’ — and there was no file on the legality of timber imports.

Key informants felt that this situation will only change if more discerning middle-class consumers start demanding legal and/or sustainable furniture products, and that this will require strong support or leadership from high-end, and organized sector, furniture producers. One such key informant (although relatively small-scale) commented that while his personal commitment was to avoid buying wood from unknown origins, most of his (mainly wealthy) customers were not currently interested in, or did not know about, such considerations as legality or sustainability.



## Appendix 1: Projections of India's Timber Demand

Numerous projections have been made of India's demand for timber, but a limitation of these studies, principally done in 2021, is that they assume a rapid recovery from COVID (which may be correct) and do not take account of the current (mid-2022) global economic situation, dominated by the war in Ukraine, the related sharp rise in inflation, and increasingly predicted global economic downturn. The bullish demand projections of India's timber consumption should therefore be treated with caution.

Underlying any demand projection is the macro-economic situation. The International Monetary Fund (IMF) has predicted that India's economic growth in 2022 will be about 8 percent, the highest rate among the larger economies, and that by 2027 India will become the world's fifth largest economy with a GDP of about five trillion dollars (The Economist 2022). India's (predicted) robust economic recovery from COVID is attributed at least partly to the fact that the "government and the Reserve Bank of India took several monetary and fiscal policy measures to support vulnerable firms and households, expand service delivery (with increased spending on health and social protection) and cushion the impact of the crisis on the economy" (World Bank 2021).

All the studies predict a strong surge in demand for timber products through the 2020s on the basis of rapid and sustainable economic growth:

- Modelling conducted as part of the ITTO study (Kant & Nautiyal 2021) predicts national roundwood demand will rise from 58 million m<sup>3</sup> in 2020 to 98 million m<sup>3</sup> in 2030. This includes an increase in demand for wood furniture from 9 million m<sup>3</sup> to 13 million m<sup>3</sup> (about 50 percent), and a fourfold increase in demand for plywood and panels. The latter prediction is based on noting a sharply increased use of plywood in the construction sector (rather than solid hardwood such as teak and Sheesham). As regards furniture, it was predicted that office furniture and other furniture items will be increasingly made from non-wood materials due to the increasing cost, including maintenance, of wooden furniture.
- A study by Price Waterhouse (2021) on behalf of IKEA predicted that the value of the Indian furniture market would rise from \$12.6 billion in 2019 to \$17 billion in 2030. This stems partly from observing that in 2019 India's per capita consumption of furniture products was about US\$5 compared to the global average of \$235. It is also noted that the Government of India has identified the furniture industry as a key contributor to its "Make in India" strategy to drive exports and growth. The report also identifies four main drivers of this growth: urbanization, rising disposable incomes, younger customers, and strong tourism and hospitality sectors. It also identifies a high potential for improved efficiency and value-added in the furniture sector.<sup>12</sup>
- An even more bullish prediction<sup>13</sup> from ResSeer (2021) is that India's furniture market will increase in value to US\$ 22.5 billion in 2030. This was based on predictions of a threefold growth in shoppers from 2021 to 2026, and an almost doubling of expenditure per shopper; the market for on-line furniture sales was predicted to increase from about \$400,000 in 2021 to \$2.2 billion in 2026.

<sup>12</sup> Price Waterhouse (2021) also highlighted four main structural and economic problems in the furniture sector: 80 percent of sales were from the highly fragmented "unorganised sector" (while noting a trend towards the organised sector due to increasing brand/quality awareness); 60 percent of output value was in the form of "low-value primary products"; three-quarters of furniture export products were low value-added products; and the lack of high quality Indian furniture products meant that most of the demand for finished products, including beds and sofas, was met by imports. The report identifies the potential to increase the value of India's furniture exports from \$2 billion in 2020 to \$26 billion in 2026.

<sup>13</sup> Although there were discrepancies in the base year values of the furniture industry (whether 2020 or 2021) between the various studies.



- Another study by Renub (2021) also predicted that India's furniture industry would more than double in value from 2020 to 2026.
- A study by IMARC (2021) forecasts that the value of India's plywood market will increase about 40 percent from 2021 to 2016 (to a value of about US\$ 4.5 billion), although Renub (2021) also noted that bamboo was being increasingly used as a substitute for plywood.

All the studies predict a sharp rise in India's timber imports. A fundamental cause of this is the national policy preference towards conservation objectives in state forests, so that it is mainly left to 'trees outside forests' to meet industrial demand. India's timber imports are likely to be in the range 30-35 million m<sup>3</sup> by 2030 according to Kant & Nautiyal (2021).



## References

- Dugal, Ira. 2021. "Covid Second Wave: Economic Impact Not Trivial But May Be Less Enduring, Say Economists." *BQ Prime*, May 3. <https://www.bqprime.com/business/covid-second-wave-economic-impact-not-trivial-but-may-be-less-enduring-say-economists>
- FAS. 2020. *COVID-19 Impact on Indian Forest Products Sector*. Global Agricultural Information Network, United States Department of Agriculture, Foreign Agricultural Service (FAS). Report Number IN2020-0144, October 15, 2020. <https://www.fas.usda.gov/data/india-covid-19-impact-indian-forest-products-sector>
- Forest Trends. 2020. *Global Illegal Logging and Associated Trade (ILAT) Risk Data Tool. Summary of Data and Methodology*. Washington DC: Forest Trends. <https://www.forest-trends.org/wp-content/uploads/2020/02/ILAT-Risk-Project-Methodology.pdf>
- Forest Trends. 2020. *India's Wooden Furniture and Wooden Handicrafts: Risk of Trade in Illegally Harvested Wood*. Washington, DC: Forest Trends. <https://www.forest-trends.org/publications/indias-imports-of-illegally-harvested-wood/>
- IMARC. "Indian Plywood Market: Industry Trends, Share, Size, Growth, Opportunity and Forecast FY 2022 to FY 2027." IMARC Group Press Release, 2022. On the IMARC Website. <https://www.imarcgroup.com/indian-plywood-market>
- Kant, Promode and Raman Nautiyal. 2021. *India Timber Supply and Demand 2010-2030. An analysis of supply, demand and end use of timber in India and projections to 2030*. Yokohama: International Timber Trade Organization. <https://teaknet.org/download/IndiaTimber%20Supply%20and%20Demand%202010%E2%80%932030.pdf>
- Maskayu. 2021. *Indian Timber Market: Exploring its Market Potential*. Kuala Lumpur: Malaysian Timber Industry Board. [https://www.mtib.gov.my/muaturun/eMaskayu\\_Publication/eMaskayu\\_2021/eMaskayu%20Vol%206\\_2021.pdf](https://www.mtib.gov.my/muaturun/eMaskayu_Publication/eMaskayu_2021/eMaskayu%20Vol%206_2021.pdf)
- Narasimhan, T.E. 2020. "India's first coronavirus case: Kerala student in Wuhan tested positive." *Business Standard*, January 31. [https://www.business-standard.com/article/current-affairs/india-s-first-coronavirus-case-kerala-student-in-wuhan-tested-positive-120013001782\\_1.html](https://www.business-standard.com/article/current-affairs/india-s-first-coronavirus-case-kerala-student-in-wuhan-tested-positive-120013001782_1.html)
- NDTV. 2021. "Coronavirus highlights: 6,317 new Covid cases in India, 203 Omicron Cases so far." *NDTV*, December 23. <https://www.ndtv.com/india-news/coronavirus-india-live-updates-coronavirus-cases-today-covid-19-cases-in-india-omicron-covid-cases-india-covid-cases-22-december-2664291>
- NEPCon. 2017. "Timber Legality Risk Assessment India." Copenhagen: NEPCon. <https://www.nepcon.org/sites/default/files/library/2017-06/NEPCon-TIMBER-India-Risk-Assessment-EN-V1.pdf>
- Price Waterhouse & Co. 2021. *Strategic Roadmap for Furniture Sector of India*. London: Price Waterhouse & Co. LLP in collaboration with IKEA. [https://www.ikea.com/in/en/files/pdf/78/62/78623ce0/thought-leadership-paper\\_full\\_strategic-roadmap-for-furniture-sector-of-india.pdf](https://www.ikea.com/in/en/files/pdf/78/62/78623ce0/thought-leadership-paper_full_strategic-roadmap-for-furniture-sector-of-india.pdf)
- RedSeer. 2021. "Furniture and home market is geared to become \$40 billion by 2026." RedSeer Strategy Consultants. <https://redseer.com/newsletters/furniture-and-home-market-is-geared-to-become-40-billion-by-2026/>
- Renub. 2021. "India Furniture Market, Impact of COVID-19, Industry Size, Growth Trends, Opportunity Company Analysis, Financial Insight. Renub Research press release, June 2021. On the Renub website. <https://www.renub.com/india-furniture-market-p.php>
- Reserve Bank of India. 2022. *Report on Currency and Finance: Chapter 1: Scars of the Pandemic*. Mumbai: Reserve Bank of India. <https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/4SCARSOFTHEPANDEMICFE3A153493524026B1C02EB2FD2CB5C9.PDF>

- RNZ. 2022. "Forestry sector hopes fumigation alternative unlocks Indian market." *RNZ*, April 12. <https://www.rnz.co.nz/news/country/465133/forestry-sector-hopes-fumigation-alternative-unlocks-indian-market>
- Safi, Michael. 2021. "India's shocking surge in Covid cases follows baffling decline." *The Guardian*, April 21. <https://www.theguardian.com/world/2021/apr/21/india-shocking-surge-in-covid-cases-follows-baffling-decline>
- Shrivastava, Soujanya, and Ajay Kumar Saxena. 2017. *Wood is Good: But, is India doing enough to meet its present and future needs?* New Delhi: Centre for Science and Environment. [http://cdn.cseindia.org/attachments/0.39269300\\_1505297987\\_wood-is-good.pdf](http://cdn.cseindia.org/attachments/0.39269300_1505297987_wood-is-good.pdf)
- Soni, Sandeep. 2022. "SMEs facing elevated working capital pressures largely due to rising receivables: India Ratings." *Financial Express*, April 8. <https://www.financialexpress.com/industry/sme/msme-fin-smes-facing-elevated-working-capital-pressure-largely-due-to-rising-receivables-india-ratings/2485291/>
- The Economist. 2022. "India is likely to be the World's fastest growing big economy this year." *The Economist*, May 14. <https://www.economist.com/briefing/2022/05/14/india-is-likely-to-be-the-worlds-fastest-growing-big-economy-this-year>
- The Hindu. 2021. "Coronavirus: India becomes first country in the world to report over 4lakh new cases on April 30, 2021." *The Hindu*, April 30. <https://www.thehindu.com/news/national/coronavirus-india-becomes-first-country-in-the-world-to-report-over-400000-new-cases-on-april-30-2021/article61817889.ece>
- The Telegraph Online. 2022. "Illegal Burmese teak seized." *The Telegraph Online*, July 25. <https://www.telegraphindia.com/west-bengal/illegal-burmese-teak-seized/cid/1876297>
- UNSDG. 2022. *United with India: Supporting India's Covid-19 vaccination drive*. New York: United Nations Sustainable Development Group. <https://unsdg.un.org/latest/stories/united-india-supporting-indias-covid-19-vaccination-drive>
- Vogt, Adrienne, Julia Hollingsworth, Brett McKeehan, and Ivana Kottasová. 2021. "May 1 coronavirus news." *CNN World*, May 1. [https://edition.cnn.com/world/live-news/coronavirus-pandemic-vaccine-updates-05-01-21/h\\_cdd6ab036620523ad156b8347c47448f](https://edition.cnn.com/world/live-news/coronavirus-pandemic-vaccine-updates-05-01-21/h_cdd6ab036620523ad156b8347c47448f)
- World Bank. 2021. "The World Bank in India." The World Bank. <https://www.worldbank.org/en/country/india/overview>
- Zalen News. 2022. "Illegal timber caught on the Indian side of the Myanmar border." *Zalen News*, March 25. <https://www.facebook.com/1722606901293507/posts/3295711670649681/>
- Zalen News. 2022. "The Assam Rifles arrested 8 vehicles of timber smugglers coming from the Myanmar side." *Zalen News*, April 2. <https://www.facebook.com/1722606901293507/posts/3301670433387138/>



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