# Recent trend of tropical timber trade – From the ITTO "Biennial review and assessment of the world timber situation 2019-2020" -1

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#### 1. Introduction

International trade in tropical timber has been blamed as the major driver of tropical forest destruction for a long period of time. With the progress of the efforts toward sustainable forest management and improvement of wood processing capacity in wood producing countries since 1990s, tropical timber trade has shifted from roundwood exports to processed products exports. Recently, situation surrounding tropical timber trade are drastically changing, with China's huge amount of roundwood imports, limited availability of roundwood caused by strict regulation on illegal activities in Indonesia and Malaysia, and relocation of wood processing industry from China to Vietnam.

This article introduces the most recent trends of tropical timber trade in the world, based upon the ITTO "Biennial review and assessment of the world timber situation 2019-2020," which was published in August 2021.

The article first explains the overview of ITTO and its biennial report, followed by major trends of tropical timber trade, focusing on tropical roundwood and tropical plywood. Descriptions of this article fully relies on the report and its statistical annexes, unless otherwise specified.

## 2. ITTO (International Tropical Timber Organization)

## (1) Overview

ITTO is an international organization established in 1986 under the "International Tropical Timber Agreement (ITTA)." The headquarters of ITTO are located in Yokohama, Japan. ITTO is one of a few international organizations whose headquarters are situated in Japan.

The objectives of ITTO are "to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests." Currently, there are 73 member countries, consisting of 36

<sup>&</sup>lt;sup>1</sup> Translation of Japanese article published in the monthly journal of "Sanrin" No.1653 (February 2022): 54-62.

tropical timber consuming countries and 37 producing countries, as well as EU.

#### (2) Activities

# (a) Policy guidance

ITTO develops guidelines and criteria/indicators for tropical forest management. In 1992, ITTO developed the world fist criteria/indicators of sustainable forest management, the "ITTO guidelines for the sustainable management of natural tropical forests". Since then, ITTO has been developing a range of guidelines for sustainable management of tropical forests, including forest fire prevention, biodiversity conservation, or gender equality.

ITTO also collects and analyzes data on tropical timber production and trade in the world as a basis for its policy guidance. ITTO provides the results of analyses in its publications, such as semimonthly "Tropical Timber Market Report" and biennial review and assessment, which is referred in this article.

## (b) Project assistance

ITTO assists projects of wood producing countries for the on-the-ground implementation of sustainable forest management and the promotion of legal and sustainable timber trade. Since its establishment, ITTO has assisted more than 1,000 projects in wood producing countries, equivalent to 44 billion yen of funding.

The themes of the projects include the establishment of timber legality verification system, strengthening of monitoring system against illegal activities, and introduction of sustainable forest management in local communities.

# (3) Japan's contribution

When ITTO was established in 1986, Japan invited the headquarters of ITTO to Yokohama, for the stable supply of tropical timber as the world largest wood importing country at that time, as well as for the contribution to the international community. Since then, Japan has been contributing to the management of ITTO, mostly through its voluntary contribution to projects in wood producing countries. As of FY2021, Japan's annual voluntary contribution amounts to 93 million yen (78 million yen from the Forestry Agency and 15 million yen from the Ministry of Foreign Affairs). In addition, the Forestry Agency also contributes 22 million yen to ITTO for the general expenses of headquarters every year.

#### 3. ITTO biennial review and assessment

ITTO has been publishing the biennial review and assessment every two years since 1987 (every year until 2012), in accordance with article 28 of ITTA. ITTO published its 28<sup>th</sup> report for the period of 2019-2020 in August 2021.

This edition of the report provides the overview of world wood market trends in 2019-2020 with its focus on tropical timber. The report consists of four chapters (46 pages) and appendices (176 pages). Chapter 1 describes overall trends of major wood markets, Chapter 2 analyzes data of production, consumption, and trade of tropical timber including roundwood, lumber, veneer, and plywood, Chapter 3 analyzes data on secondary processed wood products including wooden furniture, and Chapter 4 reports India's wood supply and demand. Note that the definition of "tropical timber" in this report is "tropical wood for industrial uses, which grows or is produced in the countries situated between the Tropic of Cancer and the Tropic of Capricorn", and "covers logs, sawnwood, veneer sheets and plywood", in accordance with the article 2 of ITTA, meaning that coniferous wood may be included in "tropical timber."

## 4. Current trends of tropical timber trade

## (1) Tropical roundwood (p16-21 of the report)

#### (a) Production

In 2020, the volume of tropical roundwood production in ITTO member countries was 285 million m³, a 3.1% decline from the previous year (World total in 2020 (including non ITTO members): 330 million m³.) Indonesia (80 million m³), India (48 million m³), Vietnam (36 million m³), Brazil (29 million m³), and Thailand (17 million m³) account for three fourth of total ITTO members' production. In terms of regions, Asia-Pacific accounts for 78%, Latin America for 14%, and Africa for 8%.

In Indonesia, almost all tropical roundwood is consumed domestically. Recently, roundwood production from industrial plantations for pulp and paper industry and land use conversion for farmland is increasing.

In Thailand, almost all tropical roundwood is rubberwood or other planted species.

In Malaysia, production from natural forests is decreasing due to the reduction of annual allowable cut and strict regulation on illegal activities.

#### (b) Exports

In 2020, the volume of tropical roundwood exports by ITTO member countries was 8.60 million m<sup>3</sup>, a 19% decline from the previous year (World total in 2020: 11.5 million m<sup>3</sup>).

Papua New Guinea (PNG) is the world largest tropical roundwood exporting country with the export volume of 29 million m³ in 2020, a 29% decline from the previous year. PNG accounts for 25% of world total exports. 87% of PNG's roundwood exports is destined to China. Roundwood exports from PNG are expected to continue to decline due to the imposition of log export taxes in 2020 and the government's intention to halt roundwood exports by 2025.

Solomon Islands also exports huge amount of roundwood to China, with the export volume of 2.40 million m<sup>3</sup> in 2019. Harvesting in Solomon Islands is considered as beyond sustainable level, and forest resources in the country are expected to be depleted in ten years.

Recently, pressure toward alternative roundwood suppliers in Latin America and Africa is intensifying, as the availability of roundwood from Asia-Pacific countries declines. In 2020, the volume of tropical roundwood exports from Latin American countries was 2.20 million m³, nearly doubled from 2016. Among them, Brazil accounts for 1.40 million m³, although the volume had been only negligible until 2018. Most of Brazil's production is from Eucalyptus plantations. The volume of tropical roundwood exports from Africa is declining, following the peak of China's demand in 2016. In 2020, the export volume of African countries was 2.20 million m³, a 32% drop from the previous year. Most of exports are destined to China, Vietnam, and India.

#### (c) Imports

The volume of tropical roundwood imports by ITTO member countries has been declining since 2014, down to 12.2 million m³ in 2020, a 16% decline from the previous year (World total in 2020: 12.3 million m³). The figure was the lowest since the beginning of the survey in 1987.

China (70%), India (11%), and Vietnam (9%) account for 90% of the tropical roundwood exports in the world. The major trade flows include (i) from PNG and Solomon Islands to China, (ii) from Malaysia to India and Indonesia, and (iii) from Equator Guinea, Congo (R), Cameroon, and Brazil to China.

The volume of China's tropical roundwood imports in 2020 was 8.60 million m<sup>3</sup> with an 11% decline from the previous year. (China's total roundwood imports was 59.50 million m<sup>3</sup>.) China effectively contained COVID-19 pandemic by the

first quarter of 2020, and resumed economic activities and imports from the second half of the year, much earlier than other consuming countries. PNG and Solomon Islands account for 58% of China's tropical roundwood imports in 2019. Equator Guinea, Congo (R), Cameroon, Mozambique, and Brazil also supply substantial amounts of tropical roundwood to China. India imports tropical roundwood mostly from Malaysia for plywood processing. Vietnam has shifted its tropical roundwood supply for manufacturing from Southeast Asia to Africa. In 2019, Vietnam imported 1.20 million m³ of tropical roundwood, 76% of which was from African countries, including Cameroon and Congo (R).

Japan had been the world largest tropical roundwood importing countries until 1998, but, in 2020, the volume of Japan's imports was as small as 76 thousand m<sup>3</sup>, with the share of 0.6% in the world.

# (2) Tropical plywood (p27-32 of the report)

#### (a) Production

The volume of tropical plywood production in ITTO member countries increased every year during 2016-2019, but dropped by 2% to 46.30 million m³ in 2020 (World total in 2020: 46.70 million m³). Recently, competition with coniferous plywood, temperate non-coniferous plywood and other panel products is becoming intensified.

China (59%), India (22%), Indonesia (8%), and Malaysia (3%) account for 92% of tropical plywood production in the world.

China is the world largest plywood producing country with the production amount of 27.40 million m<sup>3</sup> in 2020. China dominates 57% of plywood production, and 59% of tropical plywood production in the world, consuming almost all the production domestically.

India has been expanding its tropical plywood production in these ten years. The volume of its production was 10.00 million m<sup>3</sup> in 2020, with its material input depending on tropical roundwood imports from Malaysia.

Tropical plywood production in Indonesia and Malaysia has been dwindling due to the restriction of roundwood availability in these countries. In 2020, the volume of tropical plywood production in Indonesia was 3.5 million m<sup>3</sup>, less than half of the volume in 2000. Similarly, production in Malaysia was 1.60 million m<sup>3</sup>, less than one third of that in 2006.

## (b) Exports

The volume of tropical plywood exports by ITTO member countries increased every year during 2015-2018, but began to decline in 2019, dropping to 5.70 million m<sup>3</sup> in 2020 with a 20% decline from the previous year (World total in 2020: 6.60 million m<sup>3</sup>).

Indonesia (35%), Vietnam (22%), and Malaysia (20%) accounts for 77% of tropical plywood exports in the world. Exports from Indonesia and Malaysia decreased due to the short supply of roundwood and labor shortage under the COVID-19 crisis, as well as the restricted availability of ocean transportation containers.

Indonesia is the world largest tropical plywood exporting country. In 2020, Indonesia exported 2.30 million m³, a 22% drop from the previous year. Major export destinations include Japan (27%), South Korea (15%), the US (13%), and Malaysia (6%). Among them, exports to the US are rapidly increasing. In the same year, the volume of tropical plywood exports from Malaysia was 1.30 million m³, a 17% drop from the previous year. The major export destinations include Japan (52%), South Korea (9%), the US (7%), and Taiwan (6%). Most of its exporting plywood products are concrete formwork panels.

In contrast, Vietnam is increasing its tropical plywood exports, exporting almost all its production. In 2020, the Vietnam's tropical plywood exports reached 1.50 million m³ with a 32% increase from the previous year, exceeding Malaysia's exports for the first time. Nearly half of Vietnam's exports are destined to the US market.

The volume of China's exports of tropical plywood decreased from 810 thousand m<sup>3</sup> in 2017 to 500 thousand m<sup>3</sup> in 2020.

#### (c) Imports

The volume of tropical plywood imports by ITTO member countries continued to increase from 2016, but dropped by 15% in 2020 from the previous year, reaching 5.80 million m³ (World total in 2020: 6.60 million m³). While Japan's imports decline, the US imports are increasing.

The volume of Japan's tropical plywood imports has been declining, due to the shift of demand toward domestically produced coniferous plywood for structural uses. In 2020, the volume of imports declined to 1.99 million m³ with a 29% drop from the previous year. Japan's share in the world imports also declined to 18%, exceeded by the US for the first time.

The volume of the US imports of tropical plywood has been rapidly increasing since 2017. In 2020, the volume of US imports reached 1.70 million m³, more than doubled from 2017, due to the sharp increase of wood demand in housing construction and repair/remodeling after the first wave of COVID-19 pandemic. The share of the US in the world tropical plywood imports reached as high as 25% in the same year.

The major supplying countries to the US include Vietnam (35%), Indonesia (28%), and Malaysia (9%). Until recently, China has been one of the most important suppliers of the plywood to the US, but the US began to impose anti-dumping and countervailing duties from 2017 and additional duties from 2019 on hardwood plywood imported from China. In response, Chinese manufacturers have relocated their plywood production facilities to Vietnam. As a result, the US imports from China decreased, while those from other countries including Vietnam increased.

It should be noted that the US Department of Commerce initiated an inquiry into whether imports of hardwood plywood completed in Vietnam, using components from China, are circumventing countervailing duties imposed on hardwood plywood from China in June 2020, following the surge of imports from Vietnam<sup>2</sup>.

#### (3) Tropical sawnwood

## (a) Exports

In 2020, the volume of tropical sawnwood exports from ITTO producing countries was 9.20 million  $m^3$  with a 10% drop from the previous year (World total in 2020: 9.60 million  $m^3$ ).

Thailand is the world largest tropical sawnwood exporting country with the export volume of 3.60 million m³, mostly produced from rubberwood plantations. 99% of its sawnwood exports are destined to China. In the first half of 2020, the rubberwood sector in Thailand was hard hit by the drop of demand and disruption of supply chains in China caused by COVID-19 pandemic. Malaysia is the world second largest tropical sawnwood exporting country with the export volume of 1.20 million m³ in 2020. Its major destinations are China, Thailand, India, and Philippines.

#### (b) Imports

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<sup>&</sup>lt;sup>2</sup> USDOC (2020) Press Release "U.S. Department of Commerce initiates circumvention inquiry on hardwood plywood completed in Vietnam" (June 10, 2020)

In 2020, the volume of tropical sawnwood imports by ITTO member countries was 9.80 million m³ with a 2% drop from the previous year (World total in 2020: 10.50 million m³). The volume of tropical sawnwood imports in the world is equivalent to only 7% of global softwood sawnwood imports.

China is the world largest tropical sawnwood importing country with the import volume of 6.60 million m<sup>3</sup> in 2020, accounting for 63% of world's imports. 59% of China's tropical sawnwood imports are rubberwood products from Thailand. Most of imported rubberwood sawnwood is used for manufacturing of furniture (45%), wooden doors (24%), and cabinets (26%) in China. Japan's imports of tropical sawnwood in 2020 was 66 thousand m<sup>3</sup>.

#### 5. Conclusion

Regarding tropical roundwood, China imports huge amount of tropical roundwood mostly from PNG and Solomon Islands, dominating 70% of world trade volume. Although Japan was once the world largest tropical roundwood importing country, Japan's imports of tropical roundwood is close to extinction, with the last domestic plywood mill sourcing imported tropical roundwood was dissolved in March 2021.

Regarding tropical plywood, Indonesia and Malaysia, the major producing countries, are decreasing its production and exports of tropical plywood, due to the limited availability of roundwood under the strict regulation on illegal activities. In contrast, Vietnam is increasing its production and exports, with the relocation of processing industry from China. Although Japan had been the world largest tropical plywood importing country for a long period of time, its imports are decreasing due to the demand shift toward softwood plywood for structural uses. In 2020, Japan was downgraded to the second largest importer for the first time, exceeded by the US.

As the situation surrounding tropical timber trade dynamically changes, the significance of tropical timber trade for Japan is becoming smaller. Considering such changes, Japan's contribution to ITTO needs to be reconsidered, since the objective of ITTO is the promotion of tropical timber trade.

In 2020, the COVID-19 pandemic severely damaged economies of wood producing countries dependent on wood exports, with the sudden drop of export demand. Given such volatility in wood exports, ITTO proposed the expansion of wood consumption in wood producing countries, pointing out that "dependence on exports of unprocessed wood products should be reconsidered" and

"domestic consumption has proven to be a stabilizer for tropical timber production in previous economic crises."

Based upon the ITTO proposal, the Japan's Forestry Agency decided to start a new initiative for the promotion of sustainable wood use in wood producing countries in FY 2022, with the new budget program, named as the "Japan's wood use system dissemination projects."

Under this program, the Forestry Agency will provide voluntary funding to ITTO for the assistance of sustainable wood use promotion projects in wood producing countries. At the same time, the Forestry Agency will also provide valuable advice to the planning and implementation of those projects, taking advantage of Japan's rich experiences of wood use promotion activities.

The projects intend to develop people's understanding on the advantages of wood as a "sustainable" material, in comparison to carbon-intensive materials such as plastic, concrete, or steel, focusing on urban societies with the prospects of economic and population growth. Consumers' preference of wood to plastic, concrete, or steel would enhance their demand for domestic wood products, helping promote sustainable management of forests in each country, in a manner different from the expansion of international trade.

Japan will continue its contribution to sustainable management of tropical forests through ITTO, while carefully monitoring the trends of tropical timber trade in the world.

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<sup>&</sup>lt;sup>3</sup> ITTO (2020) Impacts of the COVID-19 pandemic on tropical timber production (November 2020): https://www.itto.int/direct/topics/topics pdf download/topics id=6575&no=1