



Notes

34th Meeting of Intersecretariat Working Group on Forest Sector Statistics

Virtual meeting hosted by FAO, Rome

09:00-13:00 hrs (GMT+1) on Tuesday-Thursday, 26th-28th January 2021

1) Adoption of agenda

Agenda adopted with addition of discussion of status codes (flags) under data exchange Welcome by Sven Walter (Team leader, Forest Products and Statistics) on behalf of FAO.

Introduction of participants

FAO: Marcella Canero, Ashley Steel, Simona Sorrenti, Roberto Bargigia, Arvydas Lebedys, Iana Arkhipova

ITTO: Jean-Christophe Claudon

ECE: Matt Fonseca, Florian Steierer, Alex McCusker

Eurostat explained they were not able to participate as Rajmund Laczko had moved to another office and no replacement had been chosen yet.

Arvydas Lebedys is Chair, Alex McCusker notetaker.

2) Review of the Joint Forest Sector Questionnaire activities and process in 2020

a) Number and quality of replies

ITTO: received 23/40, slight improvement compared to last year. Despite best efforts in communication and sending reminder emails, still have difficulty to collect the questionnaire for countries which have not submitted the questionnaire for a long time (**Cambodia, dem. Rep. of Congo, Fiji, Thailand, Venezuela**). Quality stays the same.

ECE: had 45 replies out of 53 countries (28 came through Eurostat), equalling the highest receipts ever (JQ2015, 2017). Of these at least 17 provided updated figures. Direct responses totalled 17 (of 21 countries that ECE sends questionnaires to). JQ1 – 45 (four more than in 2018), JQ2- 39 (no change), JQ3 – 37 (one less), ECE/EU 28 (two more). Percentage of data points filled in for JQ1 was 67% (64% in 2017), JQ2 - 87% (7 percentage points less than 2017), JQ3 - 94% (97%), ECE/EU - 98% (96%). This is somewhat surprising, we seem to have more complete production data while having more replies to JQ1. COMTRADE and Trade Data Monitor was used to supplement wholly or partially for trade statistics for 4 countries.

FAO: directly received 6 JQ responses (of 99 countries). Low response was mainly caused by the delayed official dispatch of the JFSQ (September instead of June) due to changes internal procedures. Quality remains unchanged. No reply from Brazil (try to reach with Advisory Committee).

b) Successes/problems

ITTO: in 2020, we sent 8 letters signed by the ITTO Executive Director to focal points of which the country had not submitted the questionnaire for 2 years or more as stipulated by article 27/5 in the ITTA 2006.

These countries were **Albania, Belgium, Cambodia, DRC, Fiji, Gabon, Greece and Trinidad and Tobago.**

- **Belgium, Gabon, Greece, Trinidad and Tobago** acknowledged the letter and sent the questionnaire.
- **DRC and Fiji** acknowledged but did not submit the questionnaire.
- **Albania and Cambodia** neither acknowledged nor submitted the questionnaire.

If the situation remains the same, ITTO will have to send letters in 2021 to the following countries which so far have not submitted the questionnaire for 2 or more years: Albania, Brazil, Cambodia, Côte d'Ivoire, Denmark, DRC, Fiji, India, Latvia (discuss possible contact with ECE), Liberia, Madagascar, Mexico, PNG, Thailand and Venezuela.

ECE: Turkmenistan replied for second time in 20 years, Uzbekistan replied for 2nd year in a row. Good progress with Greece. Some contact (no data) with Albania. Data from new respondent Belgium were essentially unusable although complete. Two countries provided very disaggregated trade data (not really usable without a great deal of work). Revision on hardboard/MDF series by Germany back to 1995.

FAO: questionnaires after a pause were received from Bahrain, Bolivia (first time since 2006) and Paraguay.

Revision of wood-based panel production data for several Asian countries, based on alternative sources.

The major achievement was migration to the new data management environment - Statistical Working System (SWS) in February 2020. SWS is accessible remotely; this ensured timely data handling and dissemination while working from home offices. Still, there are issues with data flags in FAOSTAT (to be dealt with in nearest future).

c) Data dissemination

We discussed issues raised in recent article¹ on Italian removals. ***ECE will discuss this directly with authors of article. FAO could provide text to highlight inevitable uncertainties in all official statistics – for discussion at following IWG.***

Also discussed reference to FAOSTAT forest products statistics in 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 12: Harvested Wood Products, pg. 12-18 which suggests two reasons why increasing trends in production of forest products over time may appear inflated in official figures.

ITTO: updated the online database (21 products including 4 aggregates), for all countries/world in February and August 2020.

¹ Pettenella D, Marchetti M, Motta R, Vacchiano G (2021). Neanche VAIA resiste all'insostenibile leggerezza delle statistiche forestali. Forest@ 18: 1-4. (siseef.org) <https://foresta.siseef.org/contents/?id=efor3733-017&lang=it>

ECE: Continued dissemination problem for Russian data post-2013. Revised *Forest Products Annual Market Review* in August with improved standard table of products and, for first time, incorporated forecasts for 2020. Publicly available from November. Also available in HTML. Plan for forest-data.unece.org to highlight available data in interactive visual style.

FAO: preliminary and final data releases in [FAOSTAT](#) in August and December, [Forest Products Statistics Yearbook \(2018 data\)](#) in August. No publications are printed (except on-demand), 100% digital. Same data on wood removals were published in [FRA2020](#), corporate [Yearbook 2020](#), and [Yearbook of Forest Products 2018](#) (i.e. no conflicting figures for the same topic in FAO's flagships publications). Country profiles include general data on forest products, drawn from FAOSTAT in Tableau.

d) Data validation - discrepancies identified:

ITTO: Lacking consistent efficiency conversion factors for the African region. Planning to work with ATIBT in 2022 when more funds will be available to finance a survey of the African private sector through the ATIBT network to collect more specific factors. The study might be added to the *Biennial Review and Assessment of the World Timber Situation 2021 2022*.

i) Apparent consumption

ECE: Added historical apparent consumption (last 4 years) to review of the two years in JQ, highlighting swings over 20% or 50 (1000 m3 or mt). Our theory is that consumption should not change radically.

FAO: improvements thanks to the new SWS (embedded validation checks through R plug-in). During validation, for apparent consumption focus is more on aggregate items (e.g. fibreboard total, chemical pulp total).

ii) Annual changes

FAO: improvements thanks to the new SWS (embedded validation checks through R plug-in).

iii) Unit price

ECE: Average unit price 2018 for recovered wood calculated at \$38 / mt for imports and \$52 for exports.

FAO: improvements thanks to the new SWS (embedded validation checks through R plug-in).

iv) Global checks

ITTO: Newly calculated world totals are difficult to adjust due to trade discrepancies. We cleared the period 1990-2000. We still have big discrepancies for the period 2000-2015, to be cleared in 2021. Latest years seem to be fine already.

FAO also looks at global trade (5% difference between import and export quantity is acceptable) and top countries to look for inconsistencies in trade

(e.g. global exports increasing while imports decrease). Stocks are not taken into account. Conversion factors also important here.

FAO also looks at top countries and if there has been significant change and regional total changes (at end of validation process).

e) Data exchanges among partner organizations

ECE: Eurostat continued to be efficient in passing on the JFSQs they received. Development of COMTRADE extraction tool with R from FAO was a great step forward, very easy to use – ECE developed a JQ-structure for this. **FAO** has worked to put into JQ structure, **will test with ECE**.

The new FAO status codes pose challenges converting data from ECE to FAO (see Ireland issue). See IWG report last year which shows mapping of status codes, including internal and dissemination flags. FAO is discussing internally with FAOSTAT and **will provide updated flags to partners**.

FAO: Delay from UNECE in November. Unilateral changes communicated back to UNECE twice (differences between FAOSTAT and UNECE's dataset). For the first time mass CSV data upload tested and worked very well in data exchange with ITTO (July and October). Error in upload from ECE system resulted in duplicate country data. **FAO's SWS upload system should look for multiple entries for same country/item (duplicating data points)**.

Statistical working system will be able to indicate share of data by flag status, showing where data come from.

Now FAO upload system only overwrites data that are different from prior (instead of overwriting everything in the past).

Data changes prior to last 5 years are done on irregular basis. Organizations are aware of this and send such updates periodically.

ITTO: urged IWG members to review other sources of trade data for major products and routinely compare this to figures submitted by countries. FAO commented they were by default accepting (uploading through CSV) ITTO's data on industrial roundwood trade, sawnwood, veneers and plywood production and trade, including tropical subitems for non-UNECE countries. Industrial roundwood removals remain checked manually because ITTO reports only industrial roundwood totals (C, NC and NCT) while in FAO database removals for this item are further split into sawlogs/veneer logs, pulpwood and other industrial roundwood.

f) Ancillary statistical activities by individual organizations

ITTO:

- Market Information System (bi-weekly publication).
- Financed a report on India forest and forest products industry undertaken by two consultants. Long and very detailed on India forest products sector which provides good data. ITTO plans to publish the executive summary in the Biennial Review 2019-2020 and will publish the report separately.
- Financed jointly with FAO two studies on plantations in China and Brazil. The studies will be published in 2021 in the FAO Assessment of Industrial

Roundwood from Planted Forests and executive summaries might be published in the Biennial Review 2019-2020.

- Financed a study on conversion factors (from kilo to m³) of tropical industrial roundwood and sawnwood. The consultant will review the major species exported and derive a single conversion factor from a weighted average. The study will be published along the Biennial Review 2019-2020.
- Future plans to undertake a study of African efficiency factors along the ATIBT in 2022 (cf. 2)d)).

ECE:

- Produced Timber Forecast tables (2020-21) and Market Statement for the Committee meeting. Had average (29) number of replies.
- Published 2017 Joint Wood Energy Enquiry results (www.unece.org/forests/jwee), initiated 2019 round
- Development of forest-data.unece.org (public release planned March)
- ECE work on Covid impact (EECCA region of western Balkans and CIS, 2 reports), this will also feed into UNFF report
- Published second set of data on engineered wood products (2016-2018)

FAO:

- Pulp and Paper Capacities survey 2019-2024 [published](#), including [data tables in Excel](#) (several users appreciated having data in this format)
- Work on wood fuel modelling. Previous 2002-2005 model. Reviewed national data, can automatically pull data and incorporate factors and use output in FAOSTAT. See example of improvement from JWEE work (e.g. France tripled).
- [Conversion factors study](#) published in March (and translated to French which will be published in 2021)
- Work on the Classification of Forest Products 2021 (now also aligned with HS 2022). Should be a high priority for printing.
- Pilot study on non-wood forest products (Zambia)
- FAO is developing country profiles of selected FAO data (not just forest) with Tableau.
- Advisory Committee on Sustainable Forest-Based Industry statement on Covid impact (<http://www.fao.org/3/cb1556en/CB1556EN.pdf>), report carbon storage of HWP
- SOFO 2022 is under discussion, may focus on Covid and bio-economy.

g) Pending issues from previous meetings

| <u>Para in IWG 33rd meeting notes</u> | <u>Pending issues/action point</u> | <u>Status</u> |
|---|---|----------------------|
| 2 f) | ECE to FAO: preliminary data with corrections arrived on time. Final dataset arrived on time but did not include several countries' new data received in October. FAO sent preliminary data corrections to ECE and new series review, ECE still to process these. FAO still to send their changes to ECE data as soon as possible. | Done. |

| Para in IWG 33 rd meeting notes | Pending issues/action point | Status |
|--|---|--|
| 2 h) | From prior meetings <ul style="list-style-type: none"> • ECE will continue to work on improving the definition of chips and particles. Not done | Transferred to Team of Specialists for further discussions. |
| 2 h) | <ul style="list-style-type: none"> • ITTO will send an official letter signed by its Executive Director to the member countries, which have not submitted the questionnaire for the last 2 years or more. | Done. Will continue in 2021. |
| 2 h) | <ul style="list-style-type: none"> • ITTO will also work this year on a procedure to work on monthly data in order to forecast the volumes/values of the current year. | Done. |
| 2 h) | <ul style="list-style-type: none"> • [Canada chip production] Should be revised backward or fixed from 1998 onwards and wood residues production from 1993 onwards. Postponed to 2020. | Not done. |
| 2 h) | <ul style="list-style-type: none"> • ECE will be trying to fix this [IRW data 1964-1989] and will share the correction file with FAO. In progress. | Continued. |
| 2 h) | <ul style="list-style-type: none"> • FAO will provide to ECE the last changes discrepancies of January data release by Feb 2019. Not done, postponed to Jan 2020. | Done. 600+ data points sent in Feb 2020, about half have been corrected. |
| 2 h) | <ul style="list-style-type: none"> • Eurostat: during summer 2019, it will download the entire FAOSTAT data in order to check it with the Eurostat data and will communicate the discrepancies found with FAO data. Postponed to 2020. | Postpone to 2021 |
| 2 h) | <ul style="list-style-type: none"> • IWG partners agreed to investigate how to clarify laminated flooring in HS 4411. FAO will go through all national extended HS codes and prepare information for the next IWG. ECE will ask European laminated flooring association. Not done. | Postpone to 2021. |
| 2 h) | <ul style="list-style-type: none"> • ECE to raise with countries the distinction of MDF and hardboard because data is getting misclassified. [Done at ECE/FAO Team of Specialists on Forest Product Statistics (ToS) meeting]. FAO to make a small analysis by comparing trade statistics with EPF hardboard capacity data. Will be done for ToS meeting (March 2020). | Done. Improved the data in 2020. |

| Para in IWG 33rd meeting notes | Pending issues/action point | Status |
|--|---|--|
| 3) a) i) | Possible addition of a “quality” sheet (metadata explanations) [Eurostat] The IWG supported the idea of the quality sheet. It should be clear that this is not to be requested every year. Some of the questions seem too specific (PRODCOM, CPA), not focused enough on JFSQ. FAO will share their data quality sheet (introduced in JQ2017). Partners can add their own specific sheets to the JFSQ. | Postponed to 2021 (generated automatically). |
| 4) a) | FAO will share with partners a table with the latest status once HS2022 correlation tables are published on WCO’s website. | Done |
| 5) | FAO has been using forestry trade flow processing procedures developed in 1996 (see Annex 6). Currently trade flow methodology is being revised. FAO will present the results of this work in next IWG. | See agenda item 4) |

3) The JFSQ cycle in 2021

a) 2020 JFSQ revision/improvements

ITTO: proposed to revert veneer production definition to the previous one i.e. all veneer produced excluding the one used for plywood production as countries responses have not included the definition changes implemented 2 years ago. The new definition has not been assimilated by the countries. Moreover, this new definition creates two problems:

- Breaking of a well-established time series
- Inability to use the new figure given for calculating roundwood availability. The production of veneer excluding the one used for plywood production is still needed anyway for calculating the roundwood balance.

Proposed solutions:

- Either revert the definition
- or include a new item in the questionnaire (all veneer produced except for plywood production)

IWG agreed to revert definition (in production to exclude produced veneer sheets that are used to produce plywood in the same country). This should be explained to countries. Veneer remains a separate item outside wood-based panels.

IWG discussed option of adding 4 additional rows (total veneer, total coniferous veneer, total non-coniferous veneer and total tropical veneer), separating out from veneer for plywood, to questionnaire which could be implemented at next “big bang” (IWG in 2023, when JQ2022 is aligned with HS2022).

ITTO: proposed changing the name convention for the questionnaire. The year used is confusing as people think that questionnaire 2019 for example is the questionnaire which was sent in 2019.

Proposed solutions:

- Either rename the questionnaire to the years it covers such JQ 2019,2020,2021
- Or rename the questionnaire to the year it is sent.

IWG decided to leave as it is, referring to year of last data and suggested full title could refer to years covered.

ECE: On ECE-EU questionnaire “proposal to drop sleepers and stained wood in ECE/EU questionnaire to simplify HS codes was tacitly accepted. This will be discussed at next IWG along with need for 1.2.C. Other.” [from Team of Specialists meeting]

IWG agreed ECE and Eurostat to discuss bilaterally, if possible before FAO produces master copy of questionnaire.

FAO proposed “mt” in questionnaire should be replaced by “t”, to fit FAO’s corporate standard on units of measure.

IWG agreed to change abbreviation “mt” to “t” (meaning: metric tonnes) in all JQ1 and JQ2 and revise footnotes:

- m^3ub = cubic metres of solid volume underbark (i.e. excluding bark)
- m^3 = cubic metres of solid volume
- t = metric tonnes

In addition, “1000m³ub” will be shown in ITTO2 (instead of “1000 m³”) and relevant footnotes will be added in Tables ITTO1, ITTO2, ECE-EU. Use “metric tonnes” to remain in all text definitions.

(EUROSTAT’s sheets EU1, EU2, etc. were removed from master JQ last year).

A question was raised on whether CLT should include mass plywood panels (MPP). The definitions should be reviewed and made explicit about this. [from ToS meeting for EWP]. Same end use, different material. Agreed MPP was different than CLT – ToS could consider adding Mass Timber and include CLT and all other forms or exclude CLT/glulam from an “other EWP”.

Article mentioning Fine OSB “consisting of OSB as core layer and particleboard glued together (“Ever Thought of OSB Variants” in Wood Based Panels International (April/May 2020)). We discussed and decided this was not a secondary product.

IWG agreed to add sentence under OSB; it was also noted that recycled wood is being used to produce OSB.

ECE: Ex-codes problems in item 3.2 and 4 cause problems for countries. Since this will not be fixed in HS2022 we should **consider other solutions at next IWG meeting.**

FAO:

- Change “mt” to “tonnes” (FAO OCS request). Done.
- Sentence: “The particle board category is an aggregate category” (see definitions). **Removed from definitions.**
- French version "Conifères" v.s. "Résineux" (résineux et non résineux v.s. C/NC). Agreed it was equivalent (**no change**).
- French version "Recovered post-consumer wood" (see email from Pierre Bouillon). OK as is.

- Hungary giving total plywood larger than the sum of subitems (see ECE email) due to ex-codes for coniferous and non-coniferous. **Remind correspondents to indicate such decisions.**

b) Deadlines and data exchanges

- As discussed last year, UK to be handled by ECE starting now.
- Brazil to be handled by ITTO.
- ITTO next data release planned for February, with 2020 data based on STIX and COMTRADE.

FAO will prepare master copies by mid-March.

ECE to discuss questionnaire mailing with Eurostat. Importance of getting JFSQ to correspondents in time for ECE and FAO deadlines.

| Agency | Eurostat (to confirm) | UNECE | ITTO | FAO |
|---|--|---|---|---|
| Send out JFSQ to countries | April 5 | April 6 | June 14 | May 17 |
| Deadline for countries responses | May 15/Oct 7 | May 17 | September 30 | August 31 |
| Internal deadline (last day for new data additions) | Oct 9 | June 11 | <ul style="list-style-type: none"> • Mar 2021 (for the Biennial Review) • Oct 1st for JQ 2020 | Final Nov 15 |
| Basic validation | Oct 28 | June 18 | <ul style="list-style-type: none"> • Mar 2021 (for the Biennial Review) • Oct 1st for JQ 2020 | Nov 22 |
| Analytical validation (last day for data changes) | Nov 30 | July 5 | <ul style="list-style-type: none"> • Mar 2021 (for the Biennial Review) • June 2021 data sent to FAO in CSV and Excel Oct 1st for JQ 2019 | July 15/Nov 25 |
| Dispatch to ECE | JQ as received | | | |
| Dispatch to FAO (for checking and final) | | July 6 and Jul 15/ Nov 15 | As received, estimated 2020 dataset in June | |
| Dispatch to ITTO | JQ originals for ITTO countries as received, eliminating any confidential elements | JQs originals as received. July and Nov 14 (forecast). Advise them when final data in December are available (third week) | | Send JQs of non ITTO member which have JQ1 with tropical production data, as received |

| | | | | |
|-----------------|----------|---------------|-------------------|----------------|
| Database upload | December | July/December | February and July | July 30/Nov 30 |
|-----------------|----------|---------------|-------------------|----------------|

- 4) **Incorporating trade data from COMTRADE** (FAO presentation on trade flows work)
 FAO presented their latest work on COMTRADE extractions (using R). Conversion factors were improved, much smoother system able to extract rapidly. Discontinued SAS scripts for trade between countries, no longer publishing aside from 15 selected tables in *Yearbook*. Extending to JQ3 and adding further checks.
- 5) **Input on global classifications**
- a) HS2027 round (initial ideas for new codes, responsibilities and timing)
- i) Initial thoughts for proposals (lead agency):
- Split sleepers (4406), hoopwood (4404) and treated wood (4403.12) into tropical and non-tropical non-coniferous (ITTO)
 - 4403.11 split into pine/etc (ECE/FAO)
 - 4403.12 split into oak/beach/eucalyptus, etc. (ECE/FAO)
 - 4406.11/91 split into pine/etc (ECE/FAO)
 - 4406.12/92 split into oak/beech/eucalyptus, etc. (ECE/FAO)
 - Chips (Latvia's proposal in ToS 26/3/2019):
 - o Tropical, **eucalyptus wood chips under 4401.22** (accepted in CN2021)
 - o split chips by end use (industry, pulp, energy) (ECE to work with ToS on this)
 - Rubber wood added to tropical sawnwood (ITTO / FAO)
 - Separate laminated flooring from 44.11 (ECE/FAO) US has codes already
 - Rosewood (*Dalbergia* and other spp) 4403, 4407, FAO to talk to ATIBT and FAO-FLEGT (FAO/ITTO)
 - Separate shavings from 4401.49 (FAO) (code exists in US, CA)
 - ITTO to check possible tropical species codes under 4403.4x, 4407.2x, 4409.22
 - 44.16 barrels of oak (FAO to check national statistics)
 - Check for pallets code
 - Splitting particle boards by used in construction/other (standards exist, to check if this could be applied to created new HS codes)
- ii) Other work
- Include recommended units after approval, follow up in HS Notes
 - To check the latest CN (October) before any final list
 - Non-wood forest products (FAO)
- b) Timing: HS 2022 proposal was submitted in Apr 2017 and provisionally approved by WCO HS Committee in Sep 2018. Following the same timeline, the proposal for HS2027 should reach WCO in spring 2022 (submission deadline 2-3 months before meeting). This year (2021) should be used for gathering proposals from ToS and Working Party, then preparing background information. IWG 2022 should approve the draft submission for wood products.
- c) Other classifications
- ISIC Rev 5 discussions started (relevant for employment and GDP statistics)
 - CN2022 revision with EPF, chips with EOS, continue discussions with them and Eurostat.

6) **Other Business**

- a) Organizational and staff changes
 - i) FAO – Arvydas Lebedys to move temporarily to IRENA, Ashley Steel to take over responsibility for IWG, no change in other staff.
 - ii) ITTO – Current Executive Director’s contract ends March 2021.
 - iii) ECE – Open Section Chief post.
- b) Place and date of 35th IWG meeting (2022)
 - i. Agreed to hold 2-hour virtual meeting in June-July to be called by FAO.
 - ii. Next full meeting location to be discussed at above meeting.

7) **Meetings of Interest to IWG**

- ECE-FAO: First-ever on-line workshop for EECCA (non-EU Balkans and CIS). February 9-11.
- ECE-FAO on-line Joint Working Party March 22-24 (6 2-hour sessions).
- ECE-FAO Team of Specialists on Forest Products Statistics (mid-April)
- Eurostat Working Group March 18-19
- ITTO-FAO African workshop (tentative in 2021).
- ITTO Council to be held in Yokohama from 2 to 7 November 2021
- Joint session ECE COFFI / FAO EFC October or November 2021.

ANNEX 1: JSFQ distribution in 2021

AFRICA (54):

FAO (41): Algeria, Angola, Botswana, Burkina Faso, Burundi, Cabo Verde, Chad, Comoros, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gambia, Guinea, Guinea-Bissau, Kenya, Lesotho, Libya, Malawi, Mauritania, Mauritius, Morocco, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, United Republic of Tanzania, Tunisia, Uganda, Zambia, Zimbabwe.

ITTO (13): Benin, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic of Congo, Gabon, Ghana, Liberia, Madagascar, Mali, Mozambique, Togo.

ASIA (47):

ECE (10): Armenia, Azerbaijan, Georgia, Israel, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan, Uzbekistan.

Eurostat (1): Cyprus.

FAO(25): Afghanistan, Bahrain, Bangladesh, Bhutan, Brunei Darussalam, Democratic People's Republic of Korea, Iran (Islamic Rep.), Iraq, Jordan, Kuwait, Lao PDR, Lebanon, Maldives, Mongolia, Nepal, Oman, Pakistan, Qatar, Saudi Arabia, Singapore, Sri Lanka, Syrian Arab Republic, Timor-Leste, United Arab Emirates, Yemen.

ITTO (11): Cambodia, China, India, Indonesia, Japan, Malaysia, Myanmar, Philippines, Republic of Korea, Thailand, Viet Nam.

EUROPE (40):

ECE (10): Albania, Belarus, Bosnia and Herzegovina, Montenegro, North Macedonia, Republic of Moldova, Russian Federation, Serbia, Ukraine, United Kingdom.

Eurostat (30): Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland.

NORTHERN AMERICA (2)

ECE (2): Canada, United States of America.

LATIN AMERICA & CARIBBEAN (33)

FAO (20): Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational state of), Chile, Cuba, Dominica, Dominican Republic, El Salvador, Grenada, Haiti, Jamaica, Nicaragua, Paraguay, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and Grenadines, Uruguay.

ITTO (13): Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Mexico, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela (Bolivarian Republic of).

OCEANIA (16)

FAO (12): Cook Islands, Kiribati, Marshall Islands, Micronesia (Federal States of), Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

ITTO (4): Australia, Fiji, New Zealand, Papua New Guinea.

Total (192): ECE - 22, Eurostat - 31, FAO - 98, ITTO - 41

ANNEX 2: JSFQ changes in 2021

In sheet JQ1

| PRODUCTION | | |
|------------|--|---------------------|
| 2 | WOOD CHARCOAL | 1000 t |
| 3 | WOOD CHIPS, PARTICLES AND RESIDUES | 1000 m ³ |
| 3.1 | WOOD CHIPS AND PARTICLES | 1000 m ³ |
| 3.2 | WOOD RESIDUES (INCLUDING WOOD FOR AGGLOMERATES) | 1000 m ³ |
| 4 | RECOVERED POST-CONSUMER WOOD | 1000 mt |
| 5 | WOOD PELLETS AND OTHER AGGLOMERATES | 1000 mt |
| 5.1 | WOOD PELLETS | 1000 mt |
| 5.2 | OTHER AGGLOMERATES | 1000 mt |
| 6 | SAWNWOOD (INCLUDING SLEEPERS) | 1000 m ³ |
| 6.C | Coniferous | 1000 m ³ |
| 6.NC | Non-Coniferous | 1000 m ³ |
| 6.NC.T | of which: Tropical | 1000 m ³ |
| 7 | VENEER SHEETS | 1000 m ³ |
| 7.C | Coniferous | 1000 m ³ |
| 7.NC | Non-Coniferous | 1000 m ³ |
| 7.NC.T | of which: Tropical | 1000 m ³ |
| 8 | WOOD-BASED PANELS | 1000 m ³ |
| 8.1 | PLYWOOD | 1000 m ³ |
| 8.1.C | Coniferous | 1000 m ³ |
| 8.1.NC | Non-Coniferous | 1000 m ³ |
| 8.1.NC.T | of which: Tropical | 1000 m ³ |
| 8.2 | PARTICLE BOARD, ORIENTED STRAND BOARD (OSB) AND SIMILAR | 1000 m ³ |
| 8.2.1 | of which: ORIENTED STRAND BOARD (OSB) | 1000 m ³ |
| 8.3 | FIBREBOARD | 1000 m ³ |
| 8.3.1 | HARDBOARD | 1000 m ³ |
| 8.3.2 | MEDIUM/HIGH DENSITY FIBREBOARD (MDF/HDF) | 1000 m ³ |
| 8.3.3 | OTHER FIBREBOARD | 1000 m ³ |
| 9 | WOOD PULP | 1000 mt |
| 9.1 | MECHANICAL AND SEMI-CHEMICAL WOOD PULP | 1000 mt |
| 9.2 | CHEMICAL WOOD PULP | 1000 mt |
| 9.2.1 | SULPHATE PULP | 1000 mt |
| 9.2.1.1 | of which: BLEACHED | 1000 mt |
| 9.2.2 | SULPHITE PULP | 1000 mt |
| 9.3 | DISSOLVING GRADES | 1000 mt |
| 10 | OTHER PULP | 1000 mt |
| 10.1 | PULP FROM FIBRES OTHER THAN WOOD | 1000 mt |
| 10.2 | RECOVERED FIBRE PULP | 1000 mt |
| 11 | RECOVERED PAPER | 1000 mt |
| 12 | PAPER AND PAPERBOARD | 1000 mt |
| 12.1 | GRAPHIC PAPERS | 1000 mt |
| 12.1.1 | NEWSPRINT | 1000 mt |
| 12.1.2 | UNCOATED MECHANICAL | 1000 mt |
| 12.1.3 | UNCOATED WOODFREE | 1000 mt |
| 12.1.4 | COATED PAPERS | 1000 mt |
| 12.2 | HOUSEHOLD AND SANITARY PAPERS | 1000 mt |
| 12.3 | PACKAGING MATERIALS | 1000 mt |
| 12.3.1 | CASE MATERIALS | 1000 mt |
| 12.3.2 | CARTONBOARD | 1000 mt |
| 12.3.3 | WRAPPING PAPERS | 1000 mt |
| 12.3.4 | OTHER PAPERS MAINLY FOR PACKAGING | 1000 mt |
| 12.4 | OTHER PAPER AND PAPERBOARD N.E.S. (NOT ELSEWHERE SPECI | 1000 mt |

m³ - cubic metres total volume
m³ub - cubic metres total volume under bark (i.e. excluding bark)
t - metric tonne

FOREST SECTOR QUESTIONNAIRE JQ2
PRIMARY PRODUCTS
Trade

Specify Currency and Unit of Value (e.g.:1000 US \$): _____

| Product code | Product | Unit of quantity | TRADE | | |
|--------------|--|---------------------|----------|-------|----------|
| | | | 2018 | 2019 | 2020 |
| | | | Quantity | Value | Quantity |
| | ROUNDWOOD [WOOD IN THE ROUND] | 1000 m ³ | | | |
| 1.1 | WOOD FUEL [INCLUDING WOOD FOR CHARCOAL] | 1000 m ³ | | | |
| 1.1.C | Coniferous | 1000 m ³ | | | |
| 1.1.BC | Non-Coniferous | 1000 m ³ | | | |
| 1.2 | INDUSTRIAL ROUNDWOOD | 1000 m ³ | | | |
| 1.2.C | Coniferous | 1000 m ³ | | | |
| 1.2.BC | Non-Coniferous | 1000 m ³ | | | |
| 1.2.BC.1 | of which: Tropical | 1000 m ³ | | | |
| | WOOD CHARCOAL | 1000 m ³ | | | |
| | WOOD CHIPS, PARTICLES AND RESIDUES | 1000 m ³ | | | |
| 1.1 | WOOD CHIPS AND PARTICLES | 1000 m ³ | | | |
| 1.2 | WOOD RESIDUES [INCLUDING WOOD FOR AGGLOMERATES] | 1000 m ³ | | | |
| | RECOVERED POST-CONSUMER WOOD | 1000 m ³ | | | |
| 1.1 | WOOD PELLETS AND OTHER AGGLOMERATES | 1000 m ³ | | | |
| 1.2 | WOOD PELLETS | 1000 m ³ | | | |
| 1.3 | OTHER AGGLOMERATES | 1000 m ³ | | | |
| | SAWWOOD [INCLUDING SLEEPERS] | 1000 m ³ | | | |
| 1.C | Coniferous | 1000 m ³ | | | |
| 1.BC | Non-Coniferous | 1000 m ³ | | | |
| 1.BC.1 | of which: Tropical | 1000 m ³ | | | |
| | VENEER SHEETS | 1000 m ² | | | |
| 1.C | Coniferous | 1000 m ² | | | |
| 1.BC | Non-Coniferous | 1000 m ² | | | |
| 1.BC.1 | of which: Tropical | 1000 m ² | | | |
| | WOOD-BASED PANELS | 1000 m ² | | | |
| 1.1 | PLYWOOD | 1000 m ² | | | |
| 1.1.C | Coniferous | 1000 m ² | | | |
| 1.1.BC | Non-Coniferous | 1000 m ² | | | |
| 1.1.BC.1 | of which: Tropical | 1000 m ² | | | |
| 1.2 | PARTICLE BOARD, ORIENTED STRAND BOARD [OSB] AND SIMILAR | 1000 m ² | | | |
| 1.2.1 | of which: ORIENTED STRAND BOARD [OSB] | 1000 m ² | | | |
| 1.3 | FIBREBOARD | 1000 m ² | | | |
| 1.3.1 | HARDBOARD | 1000 m ² | | | |
| 1.3.2 | MEDIUM/HIGH DENSITY FIBREBOARD [MDF/HDF] | 1000 m ² | | | |
| 1.3.3 | OTHER FIBREBOARD | 1000 m ² | | | |
| | WOOD PULP | 1000 m ³ | | | |
| 1.1 | MECHANICAL AND SEMI-CHEMICAL WOOD PULP | 1000 m ³ | | | |
| 1.2 | CHEMICAL WOOD PULP | 1000 m ³ | | | |
| 1.2.1 | SULPHATE PULP | 1000 m ³ | | | |
| 1.2.1.1 | of which: BLEACHED | 1000 m ³ | | | |
| 1.2.2 | SULPHITE PULP | 1000 m ³ | | | |
| 1.3 | DISSOLVING GRADES | 1000 m ³ | | | |
| 1.4 | OTHER PULP | 1000 m ³ | | | |
| 1.4.1 | PULP FROM FIBRES OTHER THAN WOOD | 1000 m ³ | | | |
| 1.4.2 | RECOVERED FIBRE PULP | 1000 m ³ | | | |
| 1.5 | RECOVERED PAPER | 1000 m ² | | | |
| 1.6 | PAPER AND PAPERBOARD | 1000 m ² | | | |
| 1.6.1 | GRAPHIC PAPERS | 1000 m ² | | | |
| 1.6.1.1 | NEWSPRINT | 1000 m ² | | | |
| 1.6.1.2 | UNCOATED MECHANICAL | 1000 m ² | | | |
| 1.6.1.3 | UNCOATED WOODFREE | 1000 m ² | | | |
| 1.6.1.4 | COATED PAPERS | 1000 m ² | | | |
| 1.6.2 | HOUSEHOLD AND SANITARY PAPERS | 1000 m ² | | | |
| 1.6.3 | PACKAGING MATERIALS | 1000 m ² | | | |
| 1.6.3.1 | CASE MATERIALS | 1000 m ² | | | |
| 1.6.3.2 | CARTONBOARD | 1000 m ² | | | |
| 1.6.3.3 | WRAPPING PAPERS | 1000 m ² | | | |
| 1.6.3.4 | OTHER PAPERS MAINLY FOR PACKAGING | 1000 m ² | | | |
| 1.6.4 | OTHER PAPER AND PAPERBOARD N.E.S. [NOT ELSEWHERE] | 1000 m ² | | | |

1 = cubic metres under bark [i.e. excluding bark]
2 = cubic metres
3 = cubic metres solid volume

FOREST SECTOR QUESTIONNAIRE ITTO2
Trade in Tropical Species

Specify Currency and Unit of Value (e.g.:1000 US \$): _____

| Product | Classifications HS2017/HS2012/HS2007 | Scientific Name(s)/Trade Name | IMPORT | | | | EXPORT | | | |
|----------------------------------|--|-------------------------------|------------------------------------|-------|------------------------------------|-------|------------------------------------|-------|------------------------------------|-------|
| | | | Quantity (1000 m ³) | Value | Quantity (1000 m ³) | Value | Quantity (1000 m ³) | Value | Quantity (1000 m ³) | Value |
| Industrial Roundwood Tropical | HS2017: ex4403.12 4403.41/49 | | | | | | | | | |
| | HS2012/2007: ex4403.10 4403.41/49 ex4403.99 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Footnote for units also in ITTO1, ITTO2, ECE-EU.

ANNEX 3: JSFQ definition changes in 2021

In TRANSACTIONS

Production

The solid volume or weight of all production of the products specified below. Please note that this includes production from all sources within the country including public, private, and informal sources. **It includes** the production of pulp that may immediately be consumed in the production of paper and paperboard as well as wood chips, particles and residues that are used immediately for energy. **It is reported** in cubic metres of solid volume in the case of ~~roundwood, sawnwood~~ and wood based panels and metric tonnes in the case of charcoal, pulp and paper products.

In PRIMARY PRODUCTS

7 **VENEER SHEETS**

7.C *Coniferous*

7.NC *Non-Coniferous*

7.NC.T *of which tropical*

Thin sheets of wood of uniform thickness, not exceeding 6 mm, rotary cut (i.e. peeled), sliced or sawn. **It includes** wood used for the manufacture of laminated construction material, furniture, veneer containers, etc. [Production Statistics](#) ~~statistics~~ should **include-exclude** veneer sheets used for plywood production [within the same country](#). **It is reported** in cubic metres solid volume.

8.2 **PARTICLE BOARD, ORIENTED STRAND BOARD (OSB) AND SIMILAR BOARD**

A panel manufactured from small pieces of wood or other ~~ligno~~-cellulosic materials (e.g. chips, flakes, splinters, strands, shreds, shives, etc.) bonded together by the use of an organic binder together with one or more of the following agents: heat, pressure, humidity, a catalyst, etc. Particle board is also called *chipboard*. ~~The particle board category is an aggregate category~~. **It includes** oriented strand board (OSB), medium density particle board (MDP), waferboard and ~~flaxboard~~. **It excludes** wood wool and other particle boards bonded together with inorganic binders. **It is reported** in cubic metres solid volume.

8.2.1 **ORIENTED STRAND BOARD (OSB)**

A structural board in which layers of narrow wafers are layered alternately at right angles in order to give the board greater ~~elastomechanical~~ properties. The wafers, which resemble small pieces of veneer, are coated with e.g. waterproof phenolic resin glue, interleaved together in mats and then bonded together under heat and pressure. The resulting product is a solid, uniform building panel having high strength and water resistance. **It includes** *Fine OSB (board with OSB core and outer layers of particle board)*. **It excludes** waferboard. **It is reported** in cubic metres solid volume.