Joint Forest Sector Questionnaire - Synthesis of quality reports

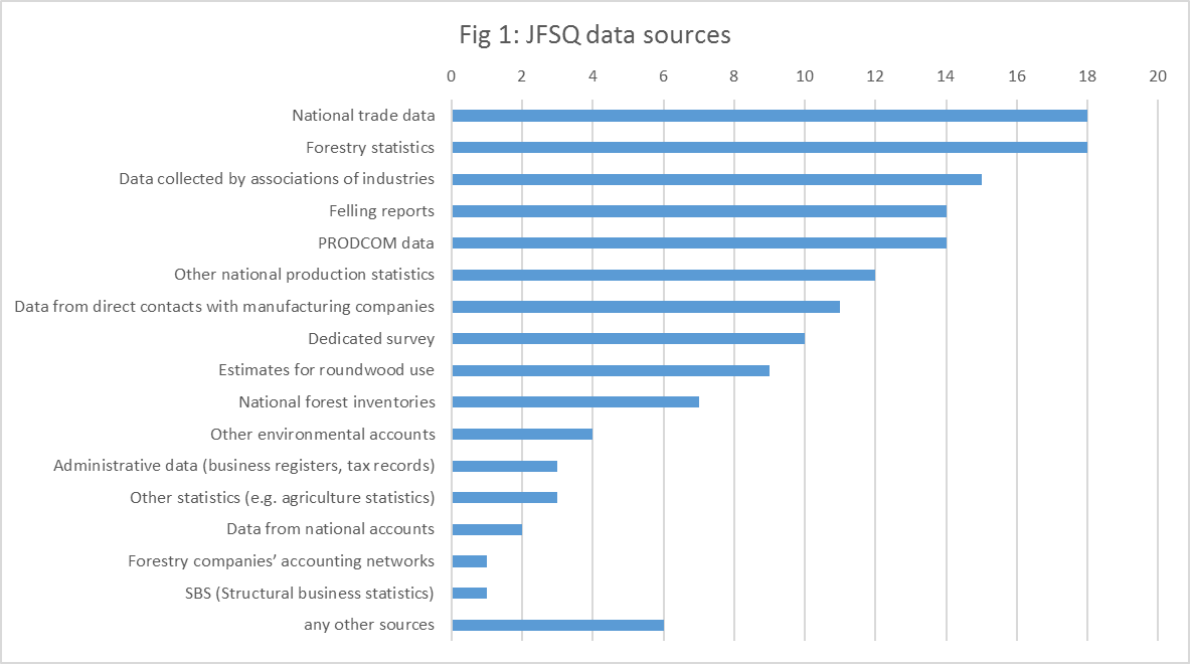
Status after closing the 2022 data collection cycle

Over the past three data collection rounds, 24 countries (20 Member States and 4 non-EU countries) completed – at least partially – the Joint Forest Sector Questionnaire (JFSQ) quality report about metadata, added to the JFSQ template. The report asks for information on data sources and methods as well as procedures in place in their countries to assure quality of the JFSQ data. The information provided improves the transparency with regard to JFSQ data production and helps to identify best practices and issues for further data developments as well as identify benefits from cross-country experience sharing and collaboration.

Below, the findings from an analysis of the answers to selected questions of the quality reports are presented.

1. Data sources

Overall, countries use a wide range of data sources for the compilation of JFSQ (Fig 1). These categories are not all mutually exclusive, and some are used to provide data for one single item, others are used for whole tables.



The majority of the respondents (18) rely on *national trade data* issued by different national authorities, i.e. customs databases, statistics institutes, revenue agencies.

Forestry statistics is a wider category including national inventories, surveys and felling statistics as well, thus it is also widely used by 18 countries. Several countries use annual reports of governmental bodies or of the relevant statistical yearbook. E.g.: Statistical Yearbook of Forestry 2021, Poland.

Industry associations also provide data to several compilers (15). In some cases only for verification, but more typically for certain product categories: wood based panels, paper and pulp are the most frequent items, but there are associations for sawmills, pellets, furniture manufacturers, etc. Data can also be provided by larger groups, e.g. foresters association or forest industries. E.g. Association for pulp and paper producing companies in Portugal: CELPA, Romanian Foresters Association: ASFOR.

Felling reports are available in many countries (14), either as part of national statistics or yearbooks, or separately as a periodic report. Many countries responded that these reports provide data on different owner types, i.e. both on public / state owners and private owners, but also with detail on the end user. E.g.: felling report in Austria.

PRODCOM data are used by 14 data compilers, usually as initial data or only for data that were not available from other sources at the time of reporting.

Other national production statistics are accessible in several countries (12) to complement JFSQ reporting: energy balances, waste statistics, surveys targeting industrial production, trade statistics. *Data from direct contacts with manufacturing companies* are used by 11 respondents. Data are collected either by direct interviews, phone calls or special questionnaires focusing on a certain group of (missing) items, or a certain group of manufacturers (non-respondents). In some cases direct data collection is used only for confirmation of compiled data.

Dedicated surveys are carried out by 10 respondents. These surveys are usually carried out annually, sometimes every few (3-10) years. The surveys most often focus on wood raw materials, roundwood and wood energy, either on stock, production or use. Both households and enterprises are targeted with the surveys on energy in several countries.

Roundwood use is estimated by 9 respondents. Two countries use estimates of research institutes, others estimate the figures based on available production data, wood balance or complementary information. Seven countries have *national forest inventories* and use them to provide data on roundwood removals.

Less than five respondents use *other environmental accounts* (4), including EFA data and data on recycled paper, *administrative data* (3) including tax records and business registers, *other statistics* (3) on waste and recovered post consumer wood, data from *national accounts* (2), *structural business statistics* (1) and *forestry companies' accounting networks* (1).

Under *'any other sources'* (6) data compilers listed mostly scientific studies, but also other administrative data sources (information from the forestry department of the ministry of agriculture, data of a public corporation in charge of forests, data from government agencies), trade circulars.

2. Methodology

There are still some pending methodological (classification or measurement) issues in some countries. Countries use their own conversion factors for certain products. A list of conversion factors is attached to the questionnaire from 2023 onwards.

There is a break in time series for wood harvests and sawn timber in France in 2020 due to a change in the method of treating non-response.

Most of the overbark wood fuel data for Liechtenstein cannot be allocated to coniferous and non-coniferous wood, therefore the total figure is much larger than the sum of the subcategories.

There is a peak in fuelwood data in the Netherlands in 2015. Due to improved data availability, fuelwood data since then include chips and shreds produced from branches and stumps, both from forests and outside forests.

3. Data validation

Twenty countries confirmed that they check the quality of produced JFSQ statistics ahead of the data reporting to Eurostat. Most countries use the embedded check tables and data are compared to the previous year's data.

12 countries compare JFSQ data with different data sources or perform other cross-checks. Most often quoted alternative reference sources are national customs data, wood balance and PRODCOM, but comparisons are also carried out with industry reports, available publications. Specifically, consistency checks are undertaken between the JFSQ data and European Forest Accounts (10 countries) and business, energy and agricultural and foreign trade statistics (9 countries).

4. Users

Nine countries reported on the national relevance of JFSQ data. The main users of the data are governmental bodies: ministries, statistics institutes who need the data to compile annual reports or further data on EFA, or help strategic decision making / forest management, but also the science community and international institutions are listed. Data are also used to define indicators for sustainable forest management of Austrian forests, further national indicators of commercial timber production in Croatia.

5. Dissemination

Seven countries disseminate their JFSQ data at a national level in the form of forest strategic documents, statistical yearbooks, or through a website. Some countries disseminate data only on request. Two countries have a description of national JFSQ methodology/metadata and national quality documentation.