

Wood Resource Monitoring in Germany

Sebastian Glasenapp*, Dominik Jochem, Holger Weimar, Matthias Dieter

Thünen Institute of Forestry

* Presenter



Wood Resource Monitoring

Introduction

What?

The **Wood Resource Monitoring** enables **regular recordings** of production and capacities of the first processing stage of the wood industry, their raw material demand and the use of wood for energy as well as residential wood energy use.

Why?

The use of forest products in Germany is often **under-recorded** or **completely unknown**.

Official statistics in Germany do not or insufficiently cover the forest product market.

How?

In 1999 Prof. Udo Mantau at **University Hamburg** initiated the Wood Resource Monitoring, funded through extrabudgetary research projects. Since 2022 the **Thünen Institute** is tasked by the Federal Ministry of Food and Agriculture (BMEL) to **permanently** conduct the monitoring.

Wood Resource Monitoring

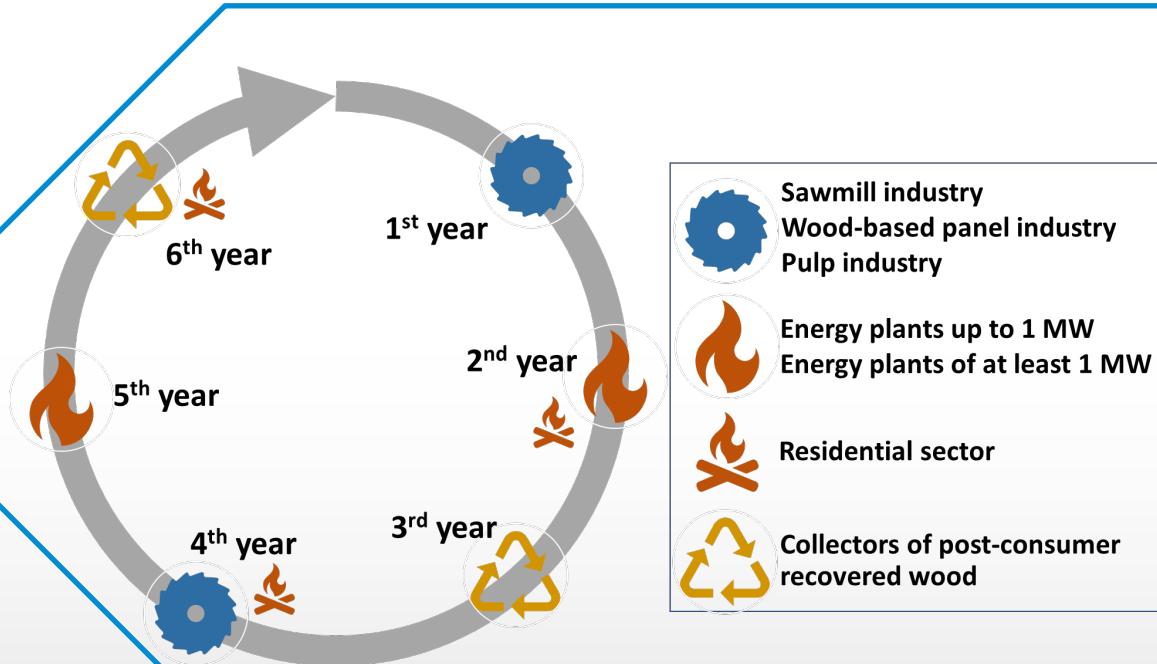
Methodology

Methodology

- Empirical surveys for each relevant sector
 - Full population survey
 - Sample survey

Potential future sectors

- Biorefineries
- Growing media industry



Sources: Glasenapp et al. (2023)

Wood Resource Monitoring

Results (indirect)

Wood flow (all woody sources)

Sources →

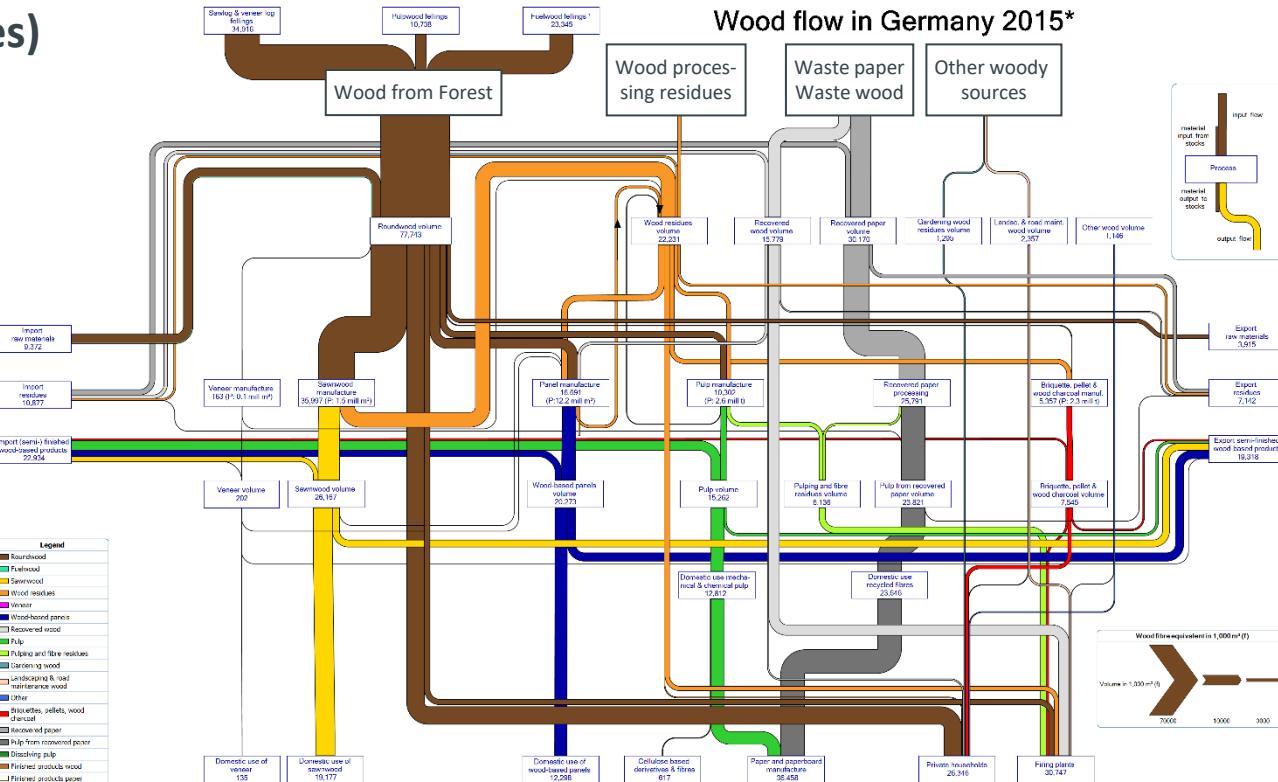
Supply
Wood raw materials →

Processing of wood →

Wood products of
1st processing stage →

Domestic use:

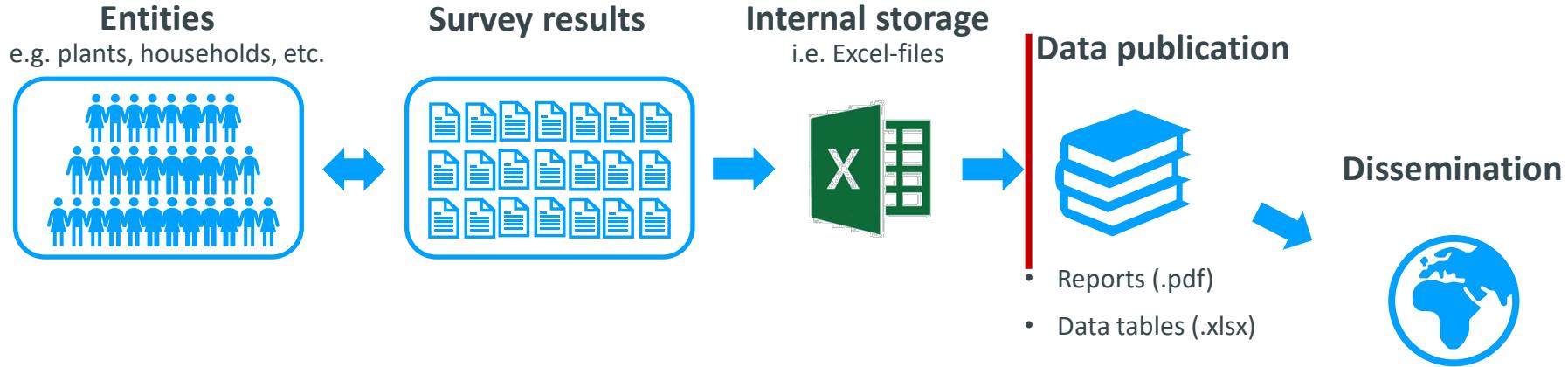
- Semi-finished (material use)
- energetic use



Sources: Weimar (2011; 2019)

Wood Resource Monitoring

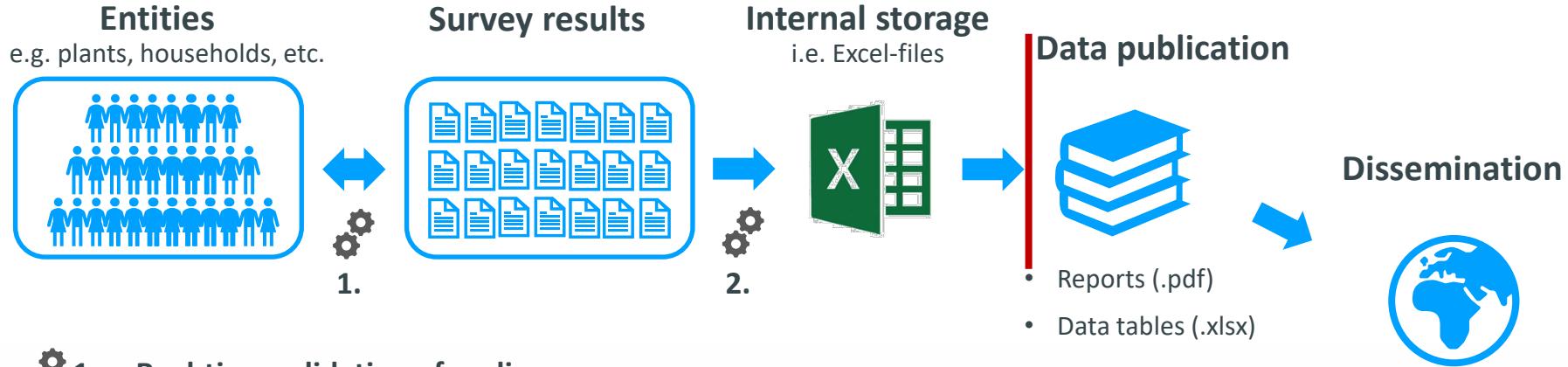
Data-evaluation: to date



- Scientific community
- Website
- Policy advice
- Reporting

Wood Resource Monitoring

Data-evaluation: to date



1. Real-time validation of replies

(e.g. during online-surveys or phone-surveys)

2. Ex-Post validation of replies, through...

- literature review (e.g. company website)
- expert opinion
- statistical models (e.g. descriptive statistics, approaches from machine learning)

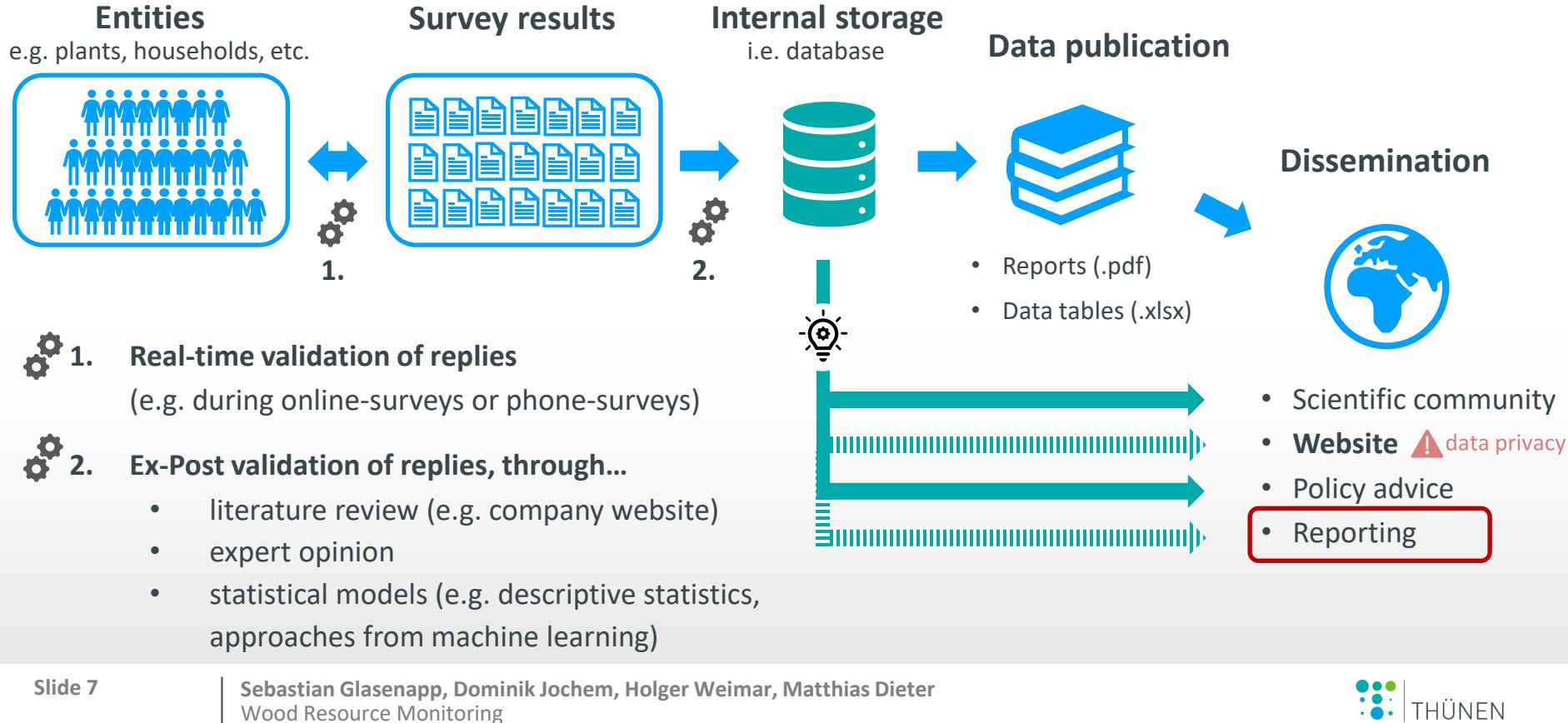
Dissemination



- Scientific community
- Website
- Policy advice
- Reporting

Wood Resource Monitoring

Data-evaluation: outlook



Wood Resource Monitoring

Dissemination

>> Enquiries from Federal Ministry of Food and Agriculture (BMEL)

national reporting

TI-WF

Estimation of fellings & removals



TI-WF

Wood Balances



BMEL

Economic Accounts for Forestry



AGEE-Stat

German Energy Balance



TI-WF = Thünen Institute of Forestry

international reporting

UNECE/FAO/Eurostat/ITTO

Joint Forest Sector Questionnaire



UNECE/FAO

Joint Wood Energy Enquiry



IEA/Eurostat/UNECE

Energy Quest. - Renewables & Wastes



Eurostat

European Renewable Energy Reporting
(EU 2018/1999)



Destatis/Eurostat

European Forest Accounting



Data submission to UNECE/FAO

JFSQ and JWEE

JFSQ input data

• Official Statistics

- Production statistics
- Trade statistics

data transfer

manual

API

manual

manual

• Wood Resource Monitoring

• Industry Associations



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www.suegindustrie.de



e.V.



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DIE PAPIERINDUSTRIE

JWEE input data

• Official Statistics

- Production statistics
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data transfer

manual

API

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• Wood Resource Monitoring

• Industry Associations



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Thank you for your attention!

Sebastian Glasenapp

Tel: +49 (0)40 73962-302

Mail: sebastian.glasenapp@thuenen.de

Thünen Institute of Forestry

Leuschnerstr. 91

21031 Hamburg, Germany

Web: www.thuenen.de

The Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries – Thünen Institute in brief –
consists of 15 specialized institutes that carry out research and provide policy advice in the fields of economy, ecology and technology.

Sources

- Glasenapp S., Jochem D., Weimar H., Mantau U., Dieter M. (2023): Rohstoffmonitoring Holz: Eine neue Daueraufgabe am Thünen-Institut. Fakten schaffen – die Vermessung des Holzmarktes geht weiter. Nummer 17, Holz-Zentralblatt.
- Weimar H (2011; 2019): Der Holzfluss in der Bundesrepublik Deutschland 2009: Methode und Ergebnis der Modellierung des Stoffflusses von Holz. Hamburg: vTI, 36 p, Arbeitsber Inst Ökon Forst Holzwirtsch vTI 2011/06 (https://literatur.thuenen.de/digbib_extern/bitv/dn049777.pdf); aktualisiert 2019.