

Economic accounts for forestry and logging

Methodological notes

Economic accounts for forestry and logging follow-up to previously published Economic Accounts for Forestry (EAF) with some differences in methodology introduced (e.g. standing timber). They are a part of the Integrated Environmental and Economic Accounting for Forests (IEEAF). The Economic accounts for forestry and logging are basic systematic implements for measurement of economic size and efficiency of the forestry sector, particularly of basic forestry industry, within national economy. The main purpose of the Economic accounts for forestry and logging is an analysis of the production process and of the primary income by it generated.

Ideas and rules of the Economic accounts for forestry and logging are based on the European System of Accounts ESA 1995, which allows a comparison of data among European countries (EU). The main concepts and definitions are the same as in the National Accounts. The methodical principles applied in compilation of the accounts are based on standards similar to those used in the Economic Accounts for Agriculture. The statistical office of the European Union – Eurostat – continues to deal with specification of methodology used; therefore some changes are expected to appear in future. Data for the year 2011 were revised (correction of source data in relation to the national accounts).

Output of standing timber means value of annual increment of standing timber in cultivated forests; intermediate consumption of standing timber is represented by value of removed timber; the difference is reflected in changes in inventories of work in progress. In the Czech Republic, forest trees are not considered as fixed assets (as they provide a finished product only once); planting of trees (afforestation) includes only trees providing a regular income from non-wood products (e.g. cork, resin).

Economic accounts for forestry and logging include the following basic indicators:

1. Output of forestry activities expressed in value which represents the whole final output of the forestry sector. Timber constitutes the most significant part of the output.

The output is to be valued at the basic price. The basic price is the price receivable by the producers from the purchaser for a unit of goods or services produced as output plus any subsidy receivable on this unit as a consequence of its production or sale minus any tax payable on that unit as a consequence of its production or sale.

2. Intermediate consumption as the value of goods and services used as inputs in the production process.

It includes intermediate consumption for items as e.g. plants, energy, lubricants, plant protection products and pesticides, or forestry services.

Products used for intermediate consumption should be valued at the purchaser prices for similar goods and services applicable at the time of their insertion into the production process. This price includes taxes less subsidies on products (but excluding deductible taxes like VAT on the products).

3. Gross value added (GVA) which represents final effect of forestry sector is the difference between the value of output and the value of intermediate consumption. According to the methodology, the gross value added is expressed at basic prices.

4. Net value added (NVA) is the value calculated as gross value added minus fixed capital consumption.

5. The compensation of employees is defined as total remuneration, cash/kind, payable by an employer to an employee in return for work done by the latter. The compensation of employees includes gross wages and salaries and employers' social contributions.

6. *Other taxes /other subsidies on production are posted to the account in the framework of the generation of income.*
7. *Factor income which measures the remuneration of all factors of production and represents the total value generated by production activities of all engaged units.*
8. *Net operating surplus/mixed income which measures the yield from land, capital and non-salaried labour. It is the balance of the generation of income account which indicates the distribution of income between the factors of production and the general government sector.*
9. *Entrepreneurial income which measures the compensation of non-salaried labour, remuneration from land belonging to units and the yield arising from the use of capital. Although entrepreneurial income is not always calculated for industries, it can generally be evaluated for the forestry industry as it is possible to determine the part of interest and rents linked exclusively to forestry activity.*
10. *Elements of the capital account which pick up the gross fixed capital formation (GFCF) according to particular kinds of fixed assets (equipment and buildings...), changes in inventories and capital transfers (in particular investment grants).*
11. *Labour Input is calculated in compliance with the methodology of the European Union and is measured in Annual Work Units (AWU). The number of hours comprising an AWU corresponds to the number of hours actually worked in a full-time job. Both employees and self-employed persons are included.*

Data sources

Basis and data sources for compilation of Economic accounts for forestry and logging are publications, surveys and databases of the CZSO, documents of FCR, MoF, MoA, MoE, PGRLF, FMI, FMGRI, L.E.S. CR spol. s r.o., etc.

Abbreviations

CZSO – Czech Statistical Office

EAF – Economic Accounts for Forestry

EU – European Union

FCR – Forests of the Czech Republic, state enterprise

FMGRI – Forest Management and Game Research Institute

FMI – Forest Management Institute

GFCF – Gross fixed capital formation

GVA – Gross value added

MoA - Ministry of Agriculture of the Czech Republic

MoE - Ministry of the Environment of the Czech Republic

MoF - Ministry of Finance of the Czech Republic

NVA – Net Value Added

PGRLF – Supporting and Guarantee Agricultural and Forestry Fund

VAT – Value added tax