

Economic accounts for forestry and logging

Methodology

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

Ideas and rules of the Economic accounts for forestry and logging lie in the European System of Accounts ESA 1995, which allows comparison of data among states of Europe (EU). The main concepts and definitions are the same as in the National Accounts. The methodical principles applied for compiling the accounts are based on the similar standard that is used for the Economic Accounts for Agriculture. The statistical office of the European Union Eurostat has been continuing in specification of methodology, therefore some changes are expected to come in future.

Output of standing timber is value of annual increment of standing timber in cultivated forests, intermediate consumption of standing timber is value of removed timber, the difference goes under changes in inventories of work in progress. Forest trees in the Czech Republic are not fixed assets (provide a finished product once only), afforestation and reforestation include trees providing a regular income from non-wood products (e.g. cork, resin).

Economic accounts for forestry and logging include next basic indicators:

1. Output of forestry activities in value statement that represents the whole final output of the forestry sector. The most significant part of the output has timber.

The output is to be valued at the basic prices. The basic price is the price receivable by the producers from the purchaser for a unit of a good or service produced as output plus any subsidy receivable on that 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 the goods and services inserting into the production process.

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

Products used for intermediate consumption should be valued at the purchaser market prices for similar goods and services valid at the same 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 the eventual effect of forestry sector is the difference between the value of output and the value of intermediate consumption. The gross value added is expressed at basic prices according to the methodology.

4. Net value added (NVA) is the value that is calculated according to the formula gross value added minus fixed capital consumption.

5. The compensation of employees is defined as total remuneration, in cash or in 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 that are posted to account within the framework of the generation of income.

7. Factor income that measures the remuneration of all factors of production and represents the total value generated by units engaged in their production activities.

8. Net operating surplus/mixed income that measures the yield from land, capital and unpaid labour. It is the balance of the generation of income, which indicates the distribution of income between the factors of production and the general government sector.

9. Entrepreneurial income that measures the compensation of unpaid 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 pick up the gross fixed capital formation (GFCF) according to particular kinds of fixed assets (machines, equipment and buildings...), changes in inventories and capital transfers.

11. Labour Input - is calculated in compliance with methodology of the European Union and is measured in Annual Work Units (AWU). The number of hours comprising an AWU should correspond to the number of hours actually worked in a full-time job. Employees and self-employed are included in labour input.

Data sources

Basis and data sources for compilation of Economic accounts for forestry and logging are publications, surveys and databases of CZSO, documents of FCR, MoF, MoA, MoE, PGRLF, FMI, FMGRI 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 – Subsidiary and guarantee fund of agriculture and forestry

VAT – Value added tax