

**OECD STATISTICS DIRECTORATE
NATIONAL ACCOUNTS DIVISION
INTERNATIONAL TRADE AND ECONOMIC STATISTICS SECTION**

**Explanatory Notes
Economic Accounts for Agriculture**

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I. PRESENTATION

This document contains the target methodology aimed at providing general information as regards the OECD 's revised questionnaire on Economic Accounts for Agriculture. Most of the points listed below were discussed at the OECD Expert Meeting on EAA, held the 3rd and 4th February 2000. The exchanges of views clearly showed that non-EU countries of the OECD would generally favor the *System of National Accounts 1993*, while EU countries of the OECD would refer to the EUROSTAT *Manual on Economic Accounts for Agriculture and Forestry (Rev.1.1), 1997*.

As an international body, the OECD acknowledges the importance of using a methodology that would ideally cover the definitions used in the EU and Non-EU countries of the OECD area. For the time being, the Secretariat has decided to adopt an intermediate position; as a matter of fact, the OECD' s recommendations generally follow the EUROSTAT' s Manual but have nonetheless been adapted in order to keep data consistent and comparable across OECD Member countries. The OECD' s approach slightly differs with respect to the deflation method used, the conversion into dollars (using OECD PPPs) and a more condensed list of products. The following pages describe the Secretariat' s concepts, notes and definitions used to establish the OECD agricultural accounts. Any deviation from the recommended methodology are indicated in the country notes attached in the Beyond 20/20 database.

1. Basic unit

The basic unit should be the **farm household**. In doing so, OECD recognizes the importance of a real institutional unit, statistically an important aspect when trying to analyze economic behavior or to measure the value of assets and liabilities. To illustrate this point: a very modest (or even negative) farm income may be well compensated by significant off-farm income. Hence, the farm business, be it a smaller or dominant part, is to be considered as one activity within the unit of observation.

2. Activities

The economic accounts for agriculture cover the following agricultural activities:

- Crop growing (including the production of wine and olive oil from grapes and olives grown by the same unit);
- Crop production for animal husbandry;
- Animal farming;
- Agricultural contract work;
- Hunting and related services;
- Groups of producers which produce wine and olive oil;
- Specialized units that provide machines, material and personnel for contract work.

3. Main variables covered

▪ Current account

This account shows the production, distribution and redistribution of income and its use in final consumption.

- Production account: *total output, intermediate consumption and value added*
- Generation of Income account: *net operating surplus*
- Entrepreneurial Income: *entrepreneurial income*

▪ Capital account

This account makes it possible to determine to which extend acquisitions less disposals of non-financial assets have been financed from savings or capital transfers.

- *Capital formation*
- *Changes in stocks*

(See the next pages for more details)

4. Data

Data should be reported as follows:

Reference period	- calendar year; - financial years, for Australia and New Zealand, starting 1 st July and 1 st April respectively.
Time of recording	accrual basis, i.e. when the amount due or claimed is <ul style="list-style-type: none"> - Created - Transformed - Cancelled - Ceased
Quantity	1000 tons (one decimal), 10 000 hl for grape must and wine, life weight for animals
Prices	per ton, per 10 hl
Currency unit	- million of national currency; - billion of national currency for Italy, Japan, Korea and Turkey.
Valuation	data are valued at both <i>current</i> and <i>constant prices</i> .

The OECD has adopted 1995 as base year. Ideally, the price indices and constant data should be submitted to the Secretariat. It is intended to ask for unit prices to establish a direct link to quantities produced. In case of non-availability of specific price indices, OECD takes as proxies the following general deflators:

- Private final consumption deflator for the following entries: subsidies, taxes linked to production, compensation of employees, rent and other payments, interest.
- Gross fixed capital formation deflator for the following entries: all items of capital formation, including depreciation.

5. Output

Definition

The concept used is the *total agricultural output*. It represents the total value of all agricultural products (goods and services) and includes production used in a further agricultural process by the unit itself or by another agricultural unit.

Total output = All products manufactured during the accounting period
 + Goods and services supplied by one basic unit to another of the same institutional unit
 + Goods produced by one basic unit and still in stocks at the end of the production period

Total output consists of

- Intra-unit consumption
- Processing by producers
- Own consumption
- Sales
- Own-account fixed capital goods
- Change in stocks

Valuation and time of recording

Valued at basic price, i.e.

Value at producer price (price actually received by the producer, excluding VAT)
 - Value of taxes on products (other than VAT)
 + Value of subsidies on products

Recorded at the time it is generated or produced.

6. Intermediate consumption

Definition

This variable consists of the value of the goods and services consumed as inputs in the production process, excluding fixed assets whose consumption is recorded as consumption of fixed capital. Unlike in the old methodology, intermediate consumption now excludes the import of livestock serving as stocks.

- Consumption of goods = purchases or acquisitions + initial stocks – final stocks
- Consumption of services recorded at the time they are purchased (cannot be stored); exception made of trade and transport services and permanent services

Valuation and time of recording

Valued at purchaser price – Recorded at the time products (i.e. goods and services) are consumed.

7. Net value added

Definition

Value created by all agricultural units after consumption of fixed capital.

Valuation and time of recording

Valued at basic prices.

8. Net operating surplus

Definition Yield from land, capital and unpaid labor.

9. Entrepreneurial income

Definition Compensation of unpaid labor, remuneration from land and yield from capital.

10. Gross Fixed Capital Formation

Definition

Gross Fixed Capital Formation (GFCF) consists of resident producers' acquisitions, less disposals of fixed assets during a given period, plus certain additions to the value of non-produced assets stemming from the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from production processes that are themselves used repeatedly, or continuously, in other production processes for more than one year.

- Acquisition of fixed assets: new or existing fixed assets which have been acquired (i.e. produced and retained for the producer's own use), major improvements to fixed assets and to non-produced tangible assets, natural growth in cultivated assets (livestock and plantations) and costs associated with the transfer of ownership of non-produced assets;

- Acquisition of new fixed assets: goods and services incorporated into existing fixed capital goods for the purpose of improving them (i.e. rebuilding or reconstructing them), prolonging their useful life or increasing their productivity. These goods and services are recorded with the capital goods into which they are incorporated.

Valuation and time of recording

GFCF is valued at purchaser price – Recorded at the time of transfer of ownership of the fixed assets concerned to a unit intending to use them for production purposes.

Disposals are valued at sales prices = purchaser prices – costs incurred in the transfer of ownership, installation and transfer of charges. Costs of transfer of ownership constitute GFCF by the acquirer.

11. Changes in stocks

Definition

Stocks comprise all goods that do not form part of fixed capital and are held by producer units at a given moment. There are two types of stocks: input stocks and output stocks.

Changes in stocks = stock entries – stock withdrawals and any current losses of goods in stock.

- Input stocks: raw materials and supplies that will be used at a later date as intermediate inputs in production processes.
- Output stocks: stocks of finished products and work-in-progress of the producer. Growing crops and standing timber are not included in stocks. Services are not entered as stocks except for those included in the purchase value of goods placed into stocks.

Valuation and time of recording

In theory, entries should be valued at the date of entry into stock and withdrawals should be valued at the prices prevailing when removed from stocks. Changes in stocks should be valued at basic price (entries, withdrawals, losses of finished products or work-in-progress).

In practice, it is recommended to use a “quantitative method” to evaluate stock entries and withdrawals. This method enables measuring changes in stocks as the difference in volume between the stocks at the opening and closing of the accounting period, valued at the average prices in force during the period concerned.

II. ENTRIES FOR THE REVISED ECONOMIC ACCOUNTS FOR AGRICULTURE

1. PRODUCTION ACCOUNT

TOTAL AGRICULTURAL OUTPUT

Countries are requested to transmit the output items valued at basic prices; if possible, the detailed valuation at producer prices, the subsidies on products and taxes on products should also be given.

In the following list of entries, items with the symbol * are collected by the OECD, the other items are listed for information.

AGRICULTURAL OUTPUT *

Agricultural goods output plus agricultural services output plus miscellaneous.

AGRICULTURAL GOODS OUTPUT *

CROP OUTPUT *

CEREALS (including rice) *

- Wheat and spelt *
 - Soft wheat and spelt
 - Durum wheat
- Rye and meslin *
- Barley *
- Oats and summer cereal mixtures *
- Grain Maize *
- Rice *
- Other cereals *

INDUSTRIAL CROPS *

- Oil seeds and oleaginous fruits (including seeds) *
 - Rape and turnip rape seeds
 - Sunflower
 - Soya
 - Other oleaginous products
- Protein crops (including seeds) *
- Raw tobacco *
- Sugar beet *
- Other industrial crops (including dried pulses) *
 - Fiber plants
 - Hops
 - Other industrial crops: others

FORAGE PLANTS *

- Fodder maize *
- Fodder root crops (including forage beet) *
- Other forage plants *

VEGETABLES AND HORTICULTURAL PRODUCTS *

- Fresh vegetables *
 - Cauliflower
 - Tomatoes
 - Other fresh vegetables
- Plants and flowers *
 - Nursery plants
 - Ornamental plants and flowers (incl. Christmas trees)
 - Plantations

POTATOES (including seeds) *

FRUITS *

- Fresh fruits *
 - Desert apples
 - Desert pears
 - Peaches

- Other fresh fruits
- Citrus fruits *
 - Sweet oranges
 - Mandarins
 - Lemons
 - Other citrus fruits
- Tropical fruits *
- Grapes *
 - Desert grapes
 - Other grapes
- Olives *
 - Table olives
 - Other olives
- WINE *
- Table wine *
- Quality wine *
- OLIVE OIL *
- OTHER CROP PRODUCTS *
 - Vegetable materials used primarily for plaiting *
 - Seeds *
 - Other crop products: others *
- ADJUSTMENT*

ANIMAL OUTPUT *

ANIMALS *

- Cattle *
- Pigs *
- Equines *
- Sheep and goats *
- Poultry *
- Other animals *
- Adjustment *

ANIMAL PRODUCTS *

- Milk *
- Eggs *
- Other animal products *
 - Raw wool
 - Silkworm cocoons
 - Other animal products: others
- Adjustment *

AGRICULTURAL SERVICES OUTPUT *

Agricultural services i.e. charges, fees and expenditures paid to specialized units as part of the production process.

MISCELLANEOUS *

This category is necessary for "balancing" items and to enhance comparability across countries.

Stock variations *

Stock variations might not be entered at the appropriate place. In this case a stock change figure has to be entered here to correct total output by the value of net stock changes.

Forestry *

Forestry should be excluded and reported separately in the questionnaire on EAF. In case this is not possible, forestry figures have to be entered here to avoid a mismatch between output and intermediate consumption.

Other *

This item may include a variety of rather heterogeneous items, such as machine hire, products directly consumed by farm households, the rental value of farm dwellings, income transfers and the like.

NON-AGRICULTURAL SECONDARY ACTIVITIES (INSEPARABLE) *

Activities closely linked to agricultural production for which account information cannot be separated from the main stream of agricultural productive activities.

PROCESSING OF AGRICULTURAL PRODUCTS *

- Cereals *
- Vegetables *
- Fruits *
- Wine *
- Animals *
- Animal products *

 - Milk
 - Other animal products

- Other *
- Adjustment*

OTHER NON-SEPARABLE SECONDARY ACTIVITIES (GOODS AND SERVICES) *

TOTAL INTERMEDIATE CONSUMPTION *

This variable is valued at *purchaser prices*. It includes all goods and services consumed in the production process; however, it now excludes livestock and animal products.

Consumption of goods = purchases or acquisitions + initial stocks – final stocks

Consumption of services recorded at the time they are purchased, exception made of trade and transport services and permanent services (such as insurance services).

FARM ORIGIN *

- Seeds and planting stock *

 - Seeds and planting stock supplied by other agricultural holdings
 - Seeds and planting stocks purchased from outside the agricultural sector

- Animal feeding stuffs *

 - Feeding stuffs supplied by other agricultural holdings
 - Feeding stuffs purchased from outside the agricultural sector
 - Feeding stuffs produced and consumed by the same holding

MANUFACTURED INPUTS *

- Fertilizers and soil improvers *

 - Fertilizers supplied by other agricultural holdings
 - Fertilizers purchased from outside the agricultural sector

- Plant protection products and pesticides *
- Energy; Lubricants *

 - Electricity
 - Gas
 - Other fuels and propellants
 - Other

OTHER INTERMEDIATE CONSUMPTION *

- Veterinary expenses *
- Maintenance of materials *
- Maintenance of buildings *
- Agricultural services *
- Other goods and services *

ADJUSTMENT *

GROSS VALUE ADDED (basic prices) *

Total agricultural output minus total intermediate consumption. This is the standard measure for assessing productivity.

FIXED CAPITAL CONSUMPTION *

- Equipment
- Buildings
- Plantations
- Others

NET VALUE ADDED (basic prices) *

Gross value added at basic prices minus fixed capital consumption.

2. GENERATION OF INCOME ACCOUNT

Compensation of employees *

Includes all payments in cash or in kind by the employers as remuneration for the work done by their employees during the given reference period: they cover gross wages and salaries and employer's social contributions (actual & imputed).

Other taxes on production *

Taxes on production are divided into:

- Taxes on products (VAT-type taxes, taxes and duties on imports other than VAT and taxes on products other than VAT and import taxes);
- Other taxes on production (all taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods & services produced or sold).

Other subsidies on production *

Subsidies are current unrequited payments which general government (or international institutions) makes to resident producers, with the objective of influencing their levels of production, their prices or the remuneration of the factors of production. Subsidies are classified into:

- Subsidies on products (import subsidies and other subsidies on products);
- Other subsidies on production (these payments relate mainly to the assumption of production costs or support for changes in the method of production, ex: subsidies on pay roll or workforce, subsidies to reduce pollution, grants for interest relief, and over-compensation of VAT).

FACTOR INCOME *

Net value added at basic prices minus other taxes on production plus other subsidies on production.

OPERATING SURPLUS / MIXED INCOME *

Factor income minus compensation of employees.

3. ENTREPRENEURIAL INCOME ACCOUNT

Rents and other real estate rental charges to be paid *

Interest paid *

Interest received *

ENTREPRENEURIAL INCOME *

Operating surplus / mixed income minus rents and other charges minus interest paid plus interest received.

4. CAPITAL ACCOUNT

GROSS FIXED CAPITAL FORMATION *

Excluding deductible VAT – Includes GFCF in agricultural products and GFCF in non-agricultural products.

GROSS FIXED CAPITAL FORMATION IN AGRICULTURAL PRODUCTS *

GFCF in plantations *

GFCF in animals *

GROSS FIXED CAPITAL FORMATION IN NON-AGRICULTURAL PRODUCTS *

GFCF in materials *

Machines and other equipment

Transport equipment

GFCF in buildings *

Farm buildings (non-residential)

Other works except land improvement (other buildings, structures, etc.)

GFCF Other *

Intangible fixed assets (e.g. computer software)
Addition to the value of non-financial non-produced assets
Major land improvements
Costs linked to the purchase of land and production rights

*ADJUSTMENT **

NET FIXED CAPITAL FORMATION *

(Excluding deductible VAT) Equals GFCF minus fixed capital consumption

CHANGES IN STOCKS *

CAPITAL TRANSFERS *

Investment grants
Other capital transfers