

## **Methodology**

**The Economic Accounts for Agriculture (EAA)** are the basic systematic implements for measurement of the economic size and efficiency of the agriculture sector, tangibly agricultural basic industry within national economy.

**EAA include next basic indicators:**

**1. Output of agricultural activities** in value statement that represents the whole final output of the agriculture sector.

The production account records transactions relating to the production process. It consists of available resources on one hand and uses of these resources on the other hand. The available resources include usable output and initial stocks. Uses are made up from intra-unit consumption, processing by producers, own final consumption, domestic sales to other agricultural units or outside of the industry, sales abroad, own-account produced fixed capital goods and final stocks.

Since the purpose of the EAA is to measure, to describe and to analyse the formation of income from agricultural economic activity (which, in the Member States of the EU, is almost exclusively a commercial activity), it was decided to exclude units that produce solely for own final consumption, e.g. kitchen gardens and private livestock rearing. This type of "small" unit should be recorded if it is above the minimum threshold used in the survey on the structure of agricultural holdings. It should, however, be pointed out that agricultural production for own final consumption by holders larger than the minimum size must be recorded in the EAA.

The output is valued at the basic prices according to the revised manual from the year 1997. The basic price is the price receivable by the producers from the purchaser for a unit of a goods or services 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. The final version of EAA for the years 2010 and 2011 was compiled in this manner. The whole production account was expressed at the basic prices. Cereals, industrial crops and forage plants are evaluated in average prices for marketing year, whereas seasonal products in average prices for calendar year.

On the basis of Eurostat decision (Working Group in November 2004) data for the latest year will not be sent as final but as semi-definitive. This way EAA 2011 contains semi-definitive data.

The EAA includes item 17. "Non-agricultural secondary activities (inseparable)" it consists of 2 sub items 17.1 "Processing of agriculture products" and 17.2 "Other inseparable secondary activities (goods and services). These activities are closely linked to agricultural production but they are not monitored separately in accounting; they cannot be distinguished from the main agricultural activity.

**2. Intermediate consumption** as the complex of all inputs into the agricultural units at the value statement.

It includes intra-unit consumption of animal feedingstuffs, purchases of goods and services for intermediate consumption from outside the industry for items seeds and planting stock, energy and lubricants, fertilisers and soil improvers, plant protection products and pesticides, animal feedingstuffs, maintenance of materials, maintenance of buildings, veterinary expenses and others.

Products used for intermediate consumption should be valued at the purchaser market prices for similar goods and services valid 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).

In accordance with the Commission of the European communities regulation No 909/2006 of 20 June 2006 the item "FISIM" (financial intermediation services indirectly measured) should be recorded as intermediate consumption of the agricultural industry. The value of these costs should be subtracted from the interest paid by borrowers and added to the interest received by depositors and so the value of the entrepreneurial income is not affected. According to this regulation "FISIM" was included into EAA retrospectively for the whole line of its assembling.

**3. Gross value added** which represents the eventual effect of agricultural 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** is the value that is generated by all agricultural units after the deduction of the fixed capital consumption.

**5. Other taxes /other subsidies on production** that are posted to account within the framework of the Generation of Income Account.

**6. Factor income** that measures the remuneration of all factors of production and represents 1 the total value generated by units engaged in their production activities.

**7. Net operating surplus/mixed income** that measures the yield from land, capital and unpaid 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.

**8. 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 agricultural industry, as it is possible to determine the part of interest and rents linked exclusively to agricultural activity.

**9. Elements of the capital account** pick up the gross fixed capital formation (GFCF) according to particular kinds of estate. On the basis of Eurostat decision (Regulation No 138/2004 of 5 December 2003) there are not expressed its items in such detailed classification as in previous years.

## **Agricultural Labour Input**

Data on Agricultural Labour Input (ALI) have formed an integral part of the calculation of the three income indicators derived from agricultural production. ALI is calculated in compliance with standardised methodology of the European Union. The agricultural labour 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 within agriculture. Therefore it does not include public holiday, paid annual holidays, sick leave, breaks for meals, etc. Data on agricultural labour input should be classified according to salaried, non-salaried and total ALI (which sum up both two previous categories).

Salaried labour refers to those persons who, by agreement, work for another residential unit (public or private) and who receive in exchange a remuneration in cash or in kind (recorded as compensation of employees in the EAA). Non-salaried labour refers to persons whose work is paid through the income generated by agricultural activity. They are mostly sole-owners or joint-owners of unincorporated enterprises.

The principal objective of calculating agricultural labour input statistics is to provide a systematic and comparable overview of the volume of labour in the agricultural industry and to monitor the trends in agricultural income.

Since 2000, data have been revised according to Agrocensus 2010 results.

## **Agriculture Income Indicators**

Measurement of agricultural income and its trends is one of the main goals set up by Economic Accounts for Agriculture; three indicators are derived from the EAA for that purpose. Agriculture Income Indicators are described as follows:

### **Indicator A: Index of the real income of factors in agriculture, per annual work unit**

This indicator corresponds to the real (deflated) net value added at factor cost of agriculture per total annual work unit. Net value added at factor cost is calculated by subtracting intermediate consumption, depreciation and other production taxes from the value of agricultural output at basic prices (i.e. including subsidies on products and excluding taxes on products), and adding the value of other production subsidies. Indicator A is obtained by deflating this net value with the implicit price index of gross domestic product at market prices and dividing by the volume of total labour in agriculture.

### **Indicator B: Index of real net agricultural entrepreneurial income, per unpaid annual work unit**

This indicator presents the changes in net entrepreneurial income over year, per non-salaried annual work unit. Net entrepreneurial income is obtained by subtracting the compensation of employees and interest and rent paid from the net value added at factor cost and adding the interest received. This figure is deflated with the price index (as it is described in connection with indicator A) and divided by the volume of non-salaried labour in agriculture.

**Indicator C: Real net entrepreneurial income from agriculture**

*This indicator defines the change in the real (deflated) net entrepreneurial income as a separate value. It differs from Indicator B in it, which compares that change with a trend of non-salaried ALI. It could be said that the Indicator C is a base for the Indicator B.*

*To calculate indicators B and C, more information is therefore needed than for calculating Indicator A, data must contain: the compensation of employees, rents and interest paid and received, and on the breakdown of labour input into its salaried and non-salaried components.*