# Agricultural producer price index (IPPAP) Base and reference year changes to 2015

Producing organisation: INSEE

Read the « Informations Rapides » related to this indicator.

#### Overview

The agricultural producer price index (IPPAP) has been calculated since 1949. IPPAP measures the changes of prices of agricultural products. It is based on the monthly prices of a sample of representative transactions. The structure in production value corresponds to the year 2015. It is currently calculated for 158 products and 46 grouping of products.

#### What does IPPAP measure?

The agricultural producer price index is used to measure changes in prices received by farmers in return for the products they deliver, at a stage as close as possible to the farm's exit. It is also used in the Economic Accounts for Agriculture (EAA).

The agricultural producer price index is composed of three main parts:

- Crop output indices (excluding fruits and vegetables),
- Fruits and vegetables indices (excluding potatoes),
- Animal output indices.

With regard to the prices of agricultural products, the trade function is provided more and more by cooperatives and groupings of producers, manufacturers and wholesalers, and the price is not formed when the goods leave the farm. The nature of the product and the market configuration dictate the content of the price statements: whether or not storage costs, transport costs, subsidies are included.

## **Sources**

Data are provided by:

- Ministry in charge of agriculture SSP (« Service de la statistique et de la prospective ») : fresh fruits and vegetables, cow's milk, rabbits, poultry, eggs ;
- FranceAgriMer (national authority for agriculture and sea products): « boucherie » animals (cattle, pigs, sheep, equidae), potatoes, bananas, cut flowers, wines with a protected geographical indication (PGI) and without a geographical indication
- Trade organisations: PDO wine (Protected Designation of Origin), sugar beet, vegetables for processing, hops, dried vegetables, flax, nursery plants, other milks (goat, sheep), seeds;
- Trade press: Cereals, oleaginous, potatoes seeds, proteaginous.

## Regulation

The agricultural producer price indices meet a European demand. They are communicated each quarter end to Eurostat, the European Statistical Office as part of a gentlemen's agreement discussed by the « Agricultural Accounts and Prices Working Group » (AAPWG). They comply with harmonized rules at European level.

## **Purposes**

Agricultural producer price indices are used for three kinds of purposes:

macroeconomic,
 To prepare Economic Accounts for Agriculture (EAA);

- cyclical,

  To monitor closely changes in sales prices of agricultural products;
- microeconomic,
   To give economic operators the opportunity to monitor agricultural commodity markets.

# Geographical field: France (including DOM)

## Dissemination and revisions

Monthly agricultural producer price indices are released in the month following the reference month, usually on the last business day.

These price indices may be revised in the months following their first publication.

This is especially the case for cows milk price. As it is collected with a lag of one month, the most recent month price is imputed using the previous month's price and the seasonal adjustment coefficients. The month after, a then collected price replaces the imputed one and is used to impute the price of the most recent month. The comments of the cows milk price index changes do not concern the imputed value but the last collected value. For example, in February, the January price is imputed from the December price and it is the latter which is the subject of a comment.

Some product prices are set for periods of 12 consecutive months. They are called "prix de campagne". It concerns, for instance, sugar beet, ewe's milk, cereal seed or potatoes for starch extraction. Until updated data are available, campaign prices are extended at the same level. At the time of the update, from 12 to 24 monthly prices may be revised.

## Methodology

The methodology for calculating agricultural producer price indices is specified in the « Handbook for EU Agricultural Price Statistics ». Its latest version, 2.1, is dated from november 2015.

Products seasonality is a major feature of the methodology for calculating agricultural producer price indices. It shall not be confused with the correction of seasonal variations. Products seasonality is defined in the 2008 manual as follows:

« Seasonality is defined as the expression of the seasonal nature of the agricultural output products. Depending on the grade of seasonality, certain products completely disappear from the market in certain quarters (the value weight for a certain quarter equals zero) or the quarterly weights vary from quarter to quarter. Seasonality in principle should be applied by all the Member States for fresh fruits, vegetables and potatoes but it is allowed and recommended for all output products (crop and animal), if information is available. ».

Seasonal products weights may change from one month to another. When the product is not available, its month weight is zero. In peak season, its weight is the highest. At the beginning or end of the marketing period, its weight may be significantly lower than the peak season one. For example, the strawberries weight reaches its maximum in May. It is lower in April, June and July, and especially at the beginning of marketing period in February and March. From August to January, it is zero.

#### Calculation

The agricultural producer price indices are calculated on the basis of the Laspeyres formula with fixed base year. The base year is fixed for 5 years which means that the weighting structure, representative of the base year, is fixed for 5 years.

**How the weighting structure is defined**: the value weights from the weighting schemes were provided by the 2015 semi final Economic Accounts for Agriculture data. They are valued at the basic price (price received by the producer after deduction of any taxes or levies and including any subsidies).

**Retropolation**: Agricultural producer price indices labeled with 2015 as base and reference year are calculated using the new weighting structure since January 2013. The indices of the previous months are obtained by backcasting the monthly variations of the 2010 base and reference year indices. By construction, monthly changes prior to January 2013 are equal to those previously reported in 2010 base.

**Consequence of seasonality**: Since the Agricultural producer price index basket of products is variable, index values can not be compared from one month to the next. The comparison is only possible between index values of the same month from different years. For any product category that does not include seasonal products, however, monthly comparisons are possible as their basket of products is fixed. The same goes for any aggregate that does not include seasonal products.

Case of fresh fruits and vegetables: The monthly indices of products and product groupings are calculated by INSEE from the collected price data. The product grouping indices are weighted averages of the elementary indices. Exceptions to these principles are data on fresh fruits and vegetables that are sent directly to INSEE as indices by the Statistics Service (SSP) of the Ministry of Agriculture.

**Seasonal adjustment**: Producer price indices are seasonally adjusted (CVS), systematically for all agricultural products available throughout the year, which was not the case before (in 2010 base, fresh fruits and vegetables and potatoes prices were not seasonally adjusted). The seasonal adjustment coefficients are updated each year. Excluding fresh fruits and vegetables, the seasonal adjustment is made at the level of the elementary series and the CVS series of the more aggregated product groupings are then the weighted average of the elementary CVS series. For fresh fruits and vegetables available throughout the year, elementary series are also seasonally adjusted. The aggregated series of fresh fruits and vegetables are subject to separate seasonal adjustment. For any product not available each month, the seasonal adjustment is not a relevant question.

## New products of the 2015 base year indices

The base year change to 2015 of the agricultural producer price indices allowed to introduce new products, especially for fruits and vegetables (chard, broccoli, spinach). The addition of new products in the monthly variable basket results of the change in consumption habits since the previous base year change (5 years ago).

# To go further

Agricultural producer price indices are available on the INSEE website, under the webpage : « Agricultural price indices ».