



METHODOLOGICAL EXPLANATION

Helena Puc

AGRICULTURAL INPUT PRICE INDICES

This methodological explanation relates to the data releases:

- Agricultural input price indices, Slovenia, monthly (First Release)
- Agricultural input price indices, Slovenia, annually (First Release)



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1 PURPOSE

The purpose of publishing the data on the agricultural input price indices is to present the monthly, quarterly and annually price movement in the prices of goods and services currently consumed in agriculture as well as in the prices of goods and services contributing to agricultural investment.

Key statistics published:

- Agricultural input price indices

2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\)](#) (only in Slovene)
- [National Statistics Act](#) (OJ RS, No. 45/95 and 9/01)
- Gentlemens Agreement with Eurostat

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The unit described by the published data is a product/service currently consumed in agriculture or a product/service contributing to agricultural investment (agricultural input), respectively.

By agricultural input we observe the price paid by agricultural producers to purchase individual product/service for agricultural production.

4 SELECTION OF OBSERVATION UNIT

Observation unit is a good or a service for agricultural production.

Data on observation units are collected from reporting units, i.e. enterprises that offer goods and services for agricultural production on the slovene market. Reporting units are selected on the basis of representativeness.

The list of goods and services selected in the calculation of agricultural input price indices is defined by Eurostat and it is in line with the Economic Accounts for Agriculture.

The lists of:

- the groups of goods and services (i.e. the list of groups and corresponding subgroups) and
- of the goods from the groups "energy", "fertilizers" and "animal feedingstuffs"

are stated in the Eurostat's Handbook for EU Agricultural Price Statistics (Agricultural Product and Input Price Statistics, Handbook edition 2020, pages: 45-55).

5 SOURCES AND METHODS OF DATA COLLECTION

Data on prices are monthly collected. Selected units send to the Statistical Office monthly (or at price changes) price lists of their goods/services or only prices of selected goods/services.

Data on prices of goods and services for current consumption and investment in agriculture are collected with:

- the statistical survey »**Agricultural input prices KME-INPUT/M**« (for those goods and services mainly used in agriculture). Data sources are selected trade organizations, production organizations (those selling their products for agricultural production as well as to final consumers), service organizations (e.g. insurance companies and veterinary organisations).
- the statistical survey »**Average retail prices of agricultural, food and non-food products and services CENE-DPC**« (for those goods and services used also outside agriculture).

Data for the survey are not obtained from administrative sources.

6 DEFINITIONS

Price of the good/service for the current consumption/investment in agriculture (of agricultural input): the price paid by agricultural producers to purchase individual product/service for agricultural production. The price of a product/service includes eventual taxes directly linked to the product/service (e.g. excise), while value added tax (VAT) is excluded.

The base period is the period to which the data refer:

- for calculating base prices of selected goods and services and
- for calculating two schemes of weights (first for calculation of average monthly prices of goods/services and second for calculation of price indices of groups of goods and/or services).

The base period (year) changes every 5 years (base year represents the year that ends on "0" or "5").

Base prices of selected goods/services are represented by their average annual prices in the base year.

7 EXPLANATIONS

7.1 CLASSIFICATIONS

The codes (numerical marks) used for groups of goods and services for current consumption and investment in agriculture are defined by Eurostat (codes NewCRONOS for Agricultural Price Statistics in the EU) and they are in line with the classification of the Economic Accounts for Agriculture.

7.2 DATA PROCESSING

DATA EDITING

Data editing was not performed.

WEIGHTING

Weighting was not performed.

SEASONAL ADJUSTMENT

Seasonal adjustment is not applicable.

DATA PROCESSING OTHER

CALCULATION OF AVERAGE PRICES OF GOODS/SERVICES

Where possible, we calculate the average monthly price for a certain product/service. In the calculation we utilize appropriate weights. These weights represent an estimation of market shares of certain goods/services or an estimation of market shares of selected reporting units in the base period.

The average annual price of a certain product/service is calculated by the common arithmetic mean of actually recorded prices (so-called "last known quotations" are not considered).

7.3 INDICES

CALCULATION OF AGRICULTURAL INPUT PRICE INDICES

We calculate agricultural input **monthly base** price indices according to Laspeyres formula, which means that we compare prices of selected goods/services in the current period (month) with their prices in the base period (average annual prices in the base year).

For calculating agricultural input price indices for the current period (month) we take into account agricultural input prices valid in the period from 1st to 15th day in the current month, but consider changes of prices from 16th day of the current month on in the calculations of agricultural input price indices for the next month. If a price of a certain product is not available in a certain month (e.g. by seasonal products), we take into account the last recorded price of the product for price index calculation.

For the needs of the Eurostat, from 2006 on we calculate also quarterly agricultural price indices. **Quarterly base** agricultural input price indices are calculated by the common arithmetic mean of monthly base price indices, while **annual base** agricultural input price indices are calculated by the common arithmetic mean of quarterly base price indices.

In calculating price indices of groups of goods and/or services, we utilize weights for each selected good/service.

WEIGHTS FOR CALCULATING PRICE INDICES OF GROUPS OF GOODS/SERVICES

For groups of goods and/or services the primary data source for calculating their weights is the estimations of their consumption values in Economic Accounts for Agriculture of national economy in the base year. For subgroups of goods/services, for which we cannot obtain data from Economic Accounts for Agriculture, and for certain goods/services we calculate their weights by estimating their consumption values in the base year concerning other sources (e.g. data from other statistical surveys, administrative sources, etc.).

CALCULATION OF OTHER AGRICULTURAL INPUT PRICE INDICES

Other agricultural input price indices are calculated from the base price indices. As the base year now represents the year 2020, the other price indices are calculated through the average prices of 2020. The following price indices are being calculated:

- **Monthly index**, which shows price changes in the current month compared to the previous month

(Example of calculation: **Mar 2024/Feb 2024** = $\text{Mar 2024}/\emptyset 2020 : \text{Feb 2024}/\emptyset 2020 \times 100$);

- **Annual index**, which shows price changes in the current month compared to the same month of the previous year

(Example of calculation: **Mar 2024/Mar 2023** = $\text{Mar 2024}/\emptyset 2020 : \text{Mar 2023}/\emptyset 2020 \times 100$);

- **Quarterly index**, which shows price changes in the current quarter compared to the previous quarter

(Example of calculation: **Q1 2024/Q4 2023** = $\text{Q1 2024}/\emptyset 2020 : \text{Q4 2023}/\emptyset 2020 \times 100$);

- **Annual average index**, which shows price changes in the current year compared to the average of the previous year

(Example of calculation: $\bar{\text{Ø 2024}} / \bar{\text{Ø 2023}} = \bar{\text{Ø 2024}} / \bar{\text{Ø 2020}} : \bar{\text{Ø 2023}} / \bar{\text{Ø 2020}} \times 100$).

FORECASTS OF ANNUAL BASE PRICE INDICES OF GROUPS OF GOODS/SERVICES

In the last quarter of the current year for the main groups of agricultural inputs a forecast of their annual base price indices is calculated. The calculation of the forecast is based on the price movement of defined groups in the October-December period in the previous years and on the estimations of the price movement of defined groups in the October-December period in the current year. The calculated forecasts are published in November in the SiStat Database (Agricultural input price indices, Slovenia, annually).

RECALCULATION OF PRICE INDICES OF GROUPS OF GOODS/SERVICES

For longer comparisons of agricultural price index series due to the base year alteration on every 5 years (base year is the year that ends on 0 or 5), recalculation of price indices for the previous base period is required. Recalculation of price indices on a new base year (base) consists of three main changes: change of the reference year, change of weights, and harmonization of concepts and methods of calculations.

Because data of Economic Accounts for Agriculture, which represent the primary data source for calculating new weights for price index calculation on the new base, are available with a temporal delay, it is expected that agricultural price indices on a new base year are usually available in the third year that follows the new base year (years that end on "3" or "8").

7.4 PRECISION

The survey is not conducted on the basis of random sample.

7.5 OTHER EXPLANATIONS

According to recommendations of the Eurostat, agricultural input prices should be recorded in the last marketing stage. This principle applies mainly for the groups "energy", "fertilizers" and "feedingstuffs", while for the other groups of goods and services the prices from other marketing stages (e.g. producer prices, wholesale prices) or price indices of other statistical surveys (e.g. consumer price indices, producer price indices, etc.) can be also taken into account. In our case we follow the principle of price recording in the last marketing stage by all groups of goods and services.

8 PUBLISHING

- SiStat Database: [Agriculture, Forestry and Fishery](#) – **Agricultural Price Statistics – Agricultural Input Price Indices**: absolute data (weights) and monthly/annual base price indices are published at the level of the groups of goods and services.
- First Release (Agriculture, Forestry and Fishing, Prices in Agriculture):
 - »**Agricultural input price indices, monthly**«. Every three months (together with data for March, June, September, December) we publish also quarterly agricultural input price indices.
 - »**Agricultural input price indices, annually**«.
 - EUROSTAT (Statistical Office of the European Union)

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

Monthly data for the current year are provisional. With each release the data can be corrected and completed with new data. Monthly data get the status of final data with the publication of annual data (at the latest at the end of February next year).

Publishing of provisional and final data is planned. Due to the needs of users for timely information, provisional data are published that meet the criteria of the quality of official statistical data but do not meet the quality that can be met with complete coverage. Data are revised when recent, more complete and better data can significantly contribute to the quality of data-based decision-making.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

There are no breaks in time series, so all points in time are comparable. By the agricultural price indices the time series is broken when the base year is changed. The base year is changed every 5 years (the base period or year, respectively, represents the year that ends on "0" or "5"). For longer comparisons of agricultural price index series the recalculation of price indices for the previous base period is so required.

10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURS's website are available at <https://www.stat.si/statweb/en/Methods/QuestionnairesMethodologicalExplanationsQualityReports>.

- Questionnaire:
 - SURS does not collect data for this survey by using a questionnaire.
- Quality report for the survey:
 - Agricultural input prices (KME-INPUT/M)

Theme: Agriculture, Forestry and Fishery, SubTheme: Prices in Agriculture

- ESMS (Reference Metadata in Euro SDMX Metadata Structure), (Price indices of agricultural products (apri_pi) available on:

http://ec.europa.eu/eurostat/cache/metadata/en/apri_pi_esms.htm

- Handbook for EU Agricultural Price Statistics (Agricultural Product and Input Price Statistics, Handbook, edition 2020) available on:

https://ec.europa.eu/eurostat/cache/metadata/Annexes/apri_ap_esms_an_1.pdf