PRICE INDICES IN AGRICULTURE, FIRST QUARTER OF 2024

Producer price indices in agriculture

The producer price index in agriculture for the first quarter of 2024 decreased by 20.5% in comparison with the same quarter of 2023 as a result of a decrease in the price index of crop output by 27.3% and a decrease in the index of animal output by 2.1%. Compared to the previous year, the prices of agricultural output decreased by 8.3%, as in crop output they decreased by 11.7% and in animal output they increased by 1.0% (Table 1).

In the first quarter of 2024, compared to the same quarter of 2023, a decrease was registered in the prices of cereals - by 30.0%, and industrial crops - by 15.9%, as a result of the decrease in the prices of soft wheat - by 30.4%, and sunflower - by 20.6%.

Compared to the corresponding quarter of 2023, the prices of live animals increased by 3.9% as a result of the increase in the prices of cattle - by 4.0%, and chickens - by 8.4%. The prices of animal products recorded a decrease of 7.8%, which is a result of the decrease of the price of sheep and goat milk - by 5.5% and hen eggs for consumption - by 9.9%.

In the first quarter of 2024, compared to 2023, the prices of cereals decreased by 13.5%, as a result of the decrease in the prices of soft wheat - by 14.5%, and in the prices of the industrial crops - by 4.1% as a result of the decrease in the prices of the sunflower - by 7.1%. The prices of vegetables and fruits increased by 11.3%, and the price of potatoes increased by 3.4%.

In animal output, in the first quarter of 2024, compared to 2023, the prices of the animals decreased by 0.8%, as a result of the decrease in the prices of pigs - by 4.9%. The prices of animal products increased by 2.8%, which is the result of the increase in the prices of cow milk - by 4.2%, and in hen eggs for consumption - by 1.2%.
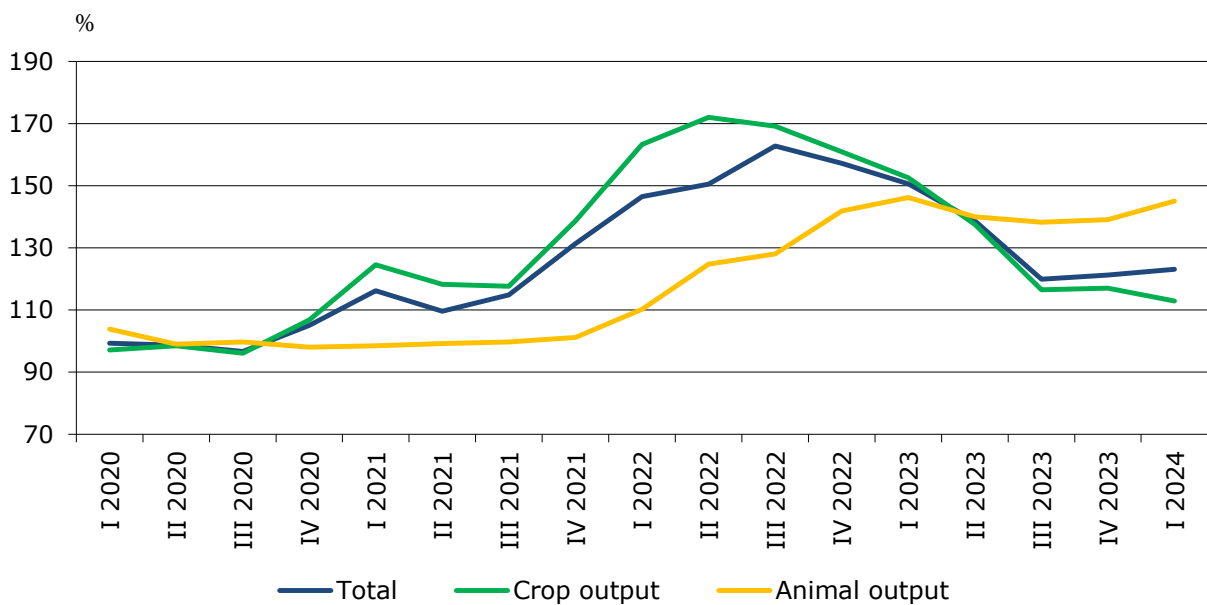
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1. Producer prices indices in agriculture in the first quarter of 2024

(Per cent)

	2020 = 100	Corresponding quarter of 2023 = 100	2023 = 100
Total	**123.1**	**79.5**	**91.7**
Crop output	112.9	72.7	88.3
Animal output	145.0	97.9	101.0

Figure 1. Producer prices indices in agriculture, by quarters
(2020 = 100)

**PRICE INDICES IN AGRICULTURE,
FIRST QUARTER OF 2024**

Price indices of goods and services currently consumed in agriculture

The price index of products and services for current consumption in agriculture for the first quarter of 2024 decreased by 6.8% compared to the same quarter of the previous year and by 4.3% compared to 2023.

In the first quarter of 2024, compared to the corresponding quarter of 2023, an increase was reported in the prices of: seed and planting material - by 6.1%, electricity and fuels - by 1.6%, plant protection products - by 16.0% and veterinary expenses - by 4.9%. The prices of: mineral fertilizers - by 32.2%, and animal feedingstuffs - by 8.1%, have decreased.

In the first quarter of 2024, compared to 2023, an increase was reported in the prices of: seed and planting material - by 5.8%, plant protection products - by 18.1% and veterinary expenses - by 2.9%. The prices of: electricity and fuel - by 0.6%, mineral fertilizers - by 17.8% and animal feedingstuffs - by 5.9% have decreased (Table 2).
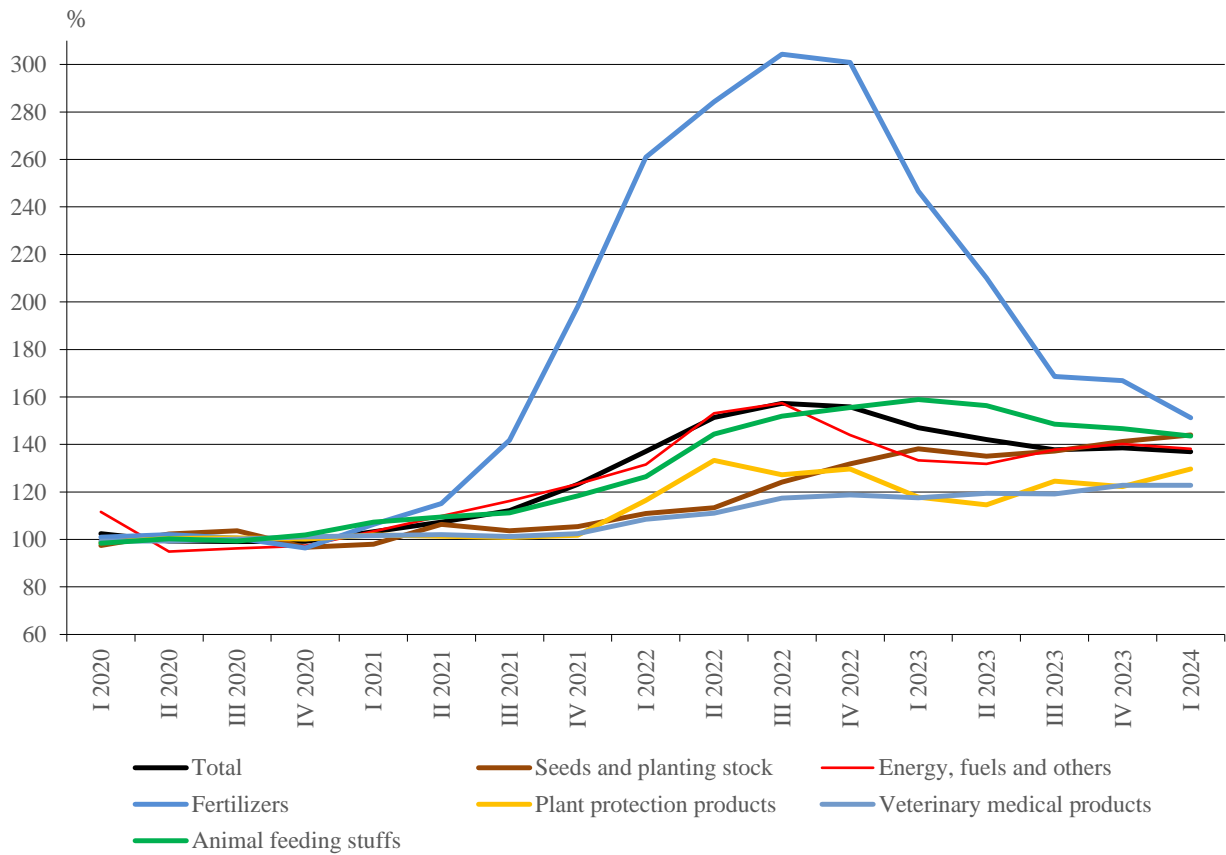
2. Price indices of the goods and services currently consumed in agriculture, first quarter of 2024

(Per cent)

	2020 = 100	Corresponding quarter of 2023 = 100	2023 = 100
Total	**137.0**	**93.2**	**95.7**
Seeds and planting stock	144.0	106.1	105.8
Energy, fuels and others	138.2	101.6	99.4
Fertilizers	151.2	67.8	82.2
Plant protection products	129.7	116.0	118.1
Veterinary medical products	122.8	104.9	102.9
Animal feeding stuffs	143.6	91.9	94.1
Maintenance of materials	126.9	104.6	102.7
Maintenance of buildings	142.2	105.4	103.0
Other goods and services	122.6	105.6	102.9

Figure 2. Prices indices of the goods and services currently consumed in agriculture, by quarters

(2020 = 100)

Methodological notes

Methodology and main definition

The surveys about the prices in agriculture are carried out in accordance with the main requirements of the EU Handbook for Agricultural Price Indices. In this way harmonization with the EU practices in the domain of agricultural price statistics is achieved from the point of view of:

- Definitions used;

- Techniques of price registration;

- Type of calculated indices;

- Survey periodicity;

- Nomenclatures used;

- Defining the selected products by their quality, quantity, variety and other price characteristics.

The objects of observation are the producer prices of the produced by the farm crops, live animals and animal products and prices of products and services of goods and services currently consumed in agriculture.

Producer price in agriculture is the price received by a farm selling its own agricultural products/live animals. It is recorded at the first market stage of goods - 'farm gate price'. Producer price excludes subsidies on agricultural products/animals, transport costs and taxes. VAT is also excluded from the price.

The examination of prices of goods and services currently consumed in agriculture (Input I) includes five surveys which supply information about the prices of:

- Mineral fertilizers;

- Feeding stuffs;

- Plant protection products;

- Veterinary medicinal products;

- Seeds and planting stocks.

The object of observation is the purchase price of goods and services currently consumed in agriculture. The observed unit price is the price that the buyer actually paid for the means of production. It includes taxes and fees and excludes subsidies and VAT refunded.

Statistical unit

Observation units within the surveys of agricultural prices are farms - juridical and physical persons and agricultural and veterinary pharmacies. For each survey, a list of respondents is established and during the years stable number of price registrations of products/livestock categories and means of production is maintained.

The conducted surveys are exhaustive and include all units above a certain threshold defined in value terms. For the survey on the producer prices in agriculture as selection criteria, a value of sales of agricultural products/animals is used and for the surveys on the prices of goods and services currently consumed in agriculture - the expenditures rising from purchases of goods and services for intermediate consumption. The representativeness of prices is assured, both by maintaining a regular number of price registrations and coverage of at least 50% of the value of sales for each product/livestock category or purchase value of goods and services for intermediate consumption in the respective year.

Data sources

The sources of information are statistical questionnaires for the collection of qualitative and quantitative characteristics of agricultural products/live animals and goods and services currently consumed in agriculture and quarterly questionnaires supplying information about the producer prices of agricultural products/live animals and purchasing prices of goods and services currently consumed in agriculture.

The questionnaires on the qualitative and quantitative characteristics of agricultural products/live animals and goods and services currently consumed in agriculture supply data for the establishment of a list of representative products defined by their quantitative and qualitative, variety and other characteristics which may influence the variation of prices. The established lists of products are periodically updated, as usual in the years ending to 0 or 5, when the Eurostat weighting scheme is rebased.

The quarterly questionnaires supply regular data about the prices of the agricultural products/live animals or goods and services currently consumed in agriculture, included in the scope of surveys.

Calculation of average prices

Within the quarterly surveys, average monthly and quarterly prices are calculated. The average monthly prices are calculated as arithmetical mean derived from all registered prices. The quarterly prices are calculated as arithmetical mean from monthly prices.

Type of index and calculation

The calculation of price indices is carried out by the Laspeyres formula. This type of index has a constant weighting scheme so that the base period of weights and prices is the same. For the calculation of producer price indices as weights - the value of sales of agricultural output is used, and for the indices of prices of goods and services currently consumed in agriculture - the value of purchased intermediate consumption. The weights are calculated within satellite economic accounts for agriculture.

The indices are calculated on three bases: the previous year, the corresponding quarter of previous year and the year ending in 0 or 5 (Eurostat base).

The total index of goods and services currently consumed in agriculture (Input I) is calculated on the base of price indices of five groups of products as well as on the indices of goods and services calculated within the Survey on consumer prices index.

Classifications

For the survey of producer prices in agriculture, the Nomenclature of Agriculture, Forestry and Fisheries (PRODAGRO) is used. PRODAGRO is used as a basis for further product breakdown in accordance with their qualitative and quantitative characteristics. For the surveys on prices of goods and services, currently consumed in agriculture, own proper classifications are used. These classifications are compiled within the surveys for the establishment of lists of representative products. For calculation and providing Eurostat with harmonized data of price indices in agriculture classification PRAG (Nomenclature of agricultural prices in the Eurostat New CRONOS database) is used.

Consideration of the impact of quality on the prices of agricultural products

To eliminate differences in prices associated with changes in the quality, type, quantity, and packaging, selected products are defined by quality, quantity, species and other characteristics that affect the changes of prices. When a particular product is dropped down from the list it has to be replaced by a new one defined by the same or approximately similar characteristics. The new product should also be representative.

The calculation of the indices of goods and services contributing to the agricultural investments (Input II)

The calculation of the price index of goods and services contributing to agricultural investments is also done by Laspeyres formula. The values of goods and services, purchased by farms for further investments, calculated within the satellite economic

accounts for agriculture, are used as weights. For calculation of the total index of goods and services, contributing to agricultural investments indices from other surveys conducted by NSI in the domain of the Consumer prices statistics, Foreign trade statistics and Short-term business statistics are also used.

The total index of prices of means of production used in agriculture is calculated based on the indices of goods and services for current consumption in agriculture and goods and on the services with investment intention in agriculture.