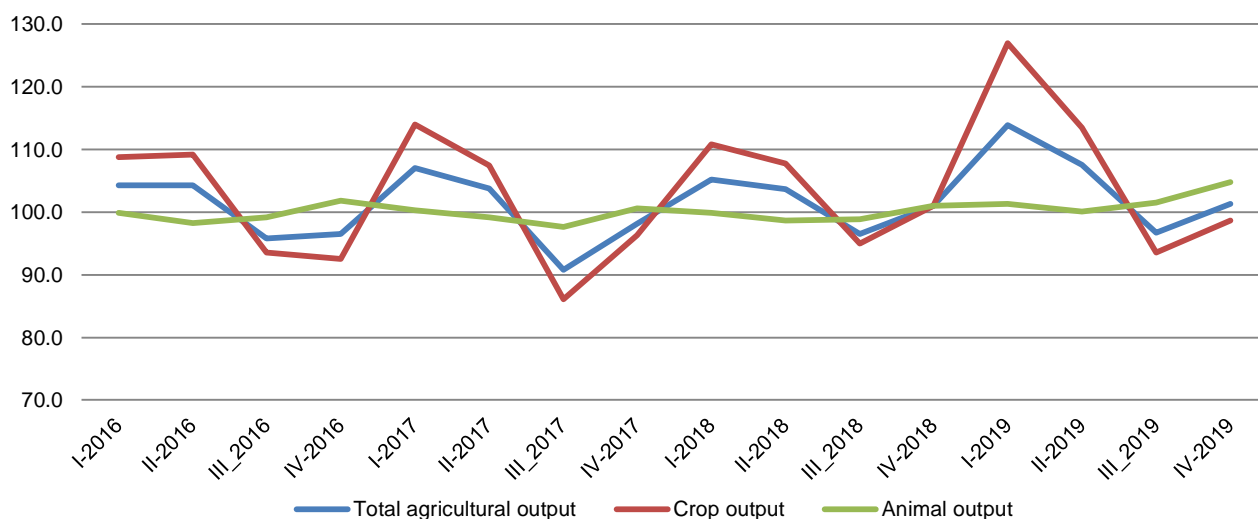


Output Price Index in Agricultural

Year 2019

Tirana, 02 July 2020: In 2019, the annual producer price index for agricultural products (2015=100) reached 104.0, from 101.2 in 2018. This means that in 2019 the output price index increased by 2.7 % compared to the previous year. In 2019, the output price index of crop products increased by 3.0 % and the output price index of animal products increased by 2.4 %, compared with the last year. The figure below shows the values of the indices of “Crop output”, “Animal output” and “Total agricultural output”, by quarter for the period 2016 – 2019.

Fig. 1 Quarterly Output price Indices in Agricultural products, (2015=100)



Annual price changes by main groups:

The biggest increase in prices was for the group “Potatoes” with 46.1 %, followed by the prices of the group “Milk and other animal products” by 2.7 %. The prices of the group “Animal production live weight” increased by 1.8 %, prices of the group “Industrial crops” increased by 1.8%, prices of the group “Permanent crops” increased by 1.4 % and the prices of the group “Vegetables” increased by 1,00 %. The annual prices of the group “Forage plants” decreased by 4.1%, while the prices of the group “Cereals” decreased by 3.2%.

Tab.1 Annual Output price Index in Agricultural products, (2015=100)

Products	Weight in %	2015	2016		2017		2018		2019	
		Base Year	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Total Output Agriculture	100	100	99.9	-0.1%	99.2	-0.7%	101.2	2.0%	104.0	2.7%
Cereals	4.2	100	100.3	0.3%	88.7	-11.6%	87.9	-1.0%	84.7	-3.6%
Industrial crops	0.4	100	102.1	2.1%	124.4	21.8%	133.9	7.7%	135.7	1.3%
Forage plants	3.8	100	102.1	2.1%	95.1	-6.9%	88.6	-6.8%	84.6	-4.6%
Vegetables	23.2	100	98.2	-1.8%	98.3	0.0%	107.2	9.1%	108.2	0.9%
Potatoes	3.1	100	106.1	6.1%	97.7	-7.9%	94.1	-3.7%	140.1	49.0%
Permanent crops	17.2	100	99.4	-0.6%	99.7	0.2%	99.9	0.2%	101.2	1.4%
Fruits	8.2	100	105.8	5.8%	106.7	0.9%	106.3	-0.4%	102.2	-3.8%
Citrus fruit	1.0	100	98.1	-1.9%	100.8	2.8%	99.7	-1.1%	89.6	-10.1%
Grapes	5.5	100	99.9	-0.1%	96.3	-3.6%	97.8	1.6%	103.0	5.4%
Olives	2.5	100	77.9	-22.2%	83.3	7.0%	83.4	0.1%	98.7	18.3%
Wine	2.6	100	108.0	8.0%	122.5	13.5%	127.2	3.8%	131.1	3.1%
Olive oil	1.5	100	102.0	2.0%	100.0	-1.9%	104.5	4.5%	104.9	0.4%
Crop Output	56.0	100	100.0	0.0%	99.1	-0.9%	102.6	3.5%	105.7	3.0%
Animal production	18.6	100	99.5	-0.5%	102.2	2.7%	103.2	1.0%	105.0	1.8%
Cattle	8.3	100	99.9	-0.1%	101.0	1.1%	101.6	0.6%	102.2	0.6%
Pigs	3.1	100	101.8	1.8%	107.1	5.2%	106.7	-0.3%	107.5	0.7%
Sheep & goats	5.1	100	97.2	-2.8%	101.5	4.4%	105.0	3.5%	108.8	3.7%
Poultry	2.1	100	100.2	0.2%	101.4	1.2%	100.3	-1.0%	103.5	3.2%
Milk	19.7	100	101.3	1.3%	97.6	-3.7%	96.9	-0.7%	99.7	2.9%
Cow milk	14.8	100	99.4	-0.6%	97.5	-1.9%	97.2	-0.3%	100.1	3.0%
Other milk	4.9	100	107.0	7.0%	97.7	-8.7%	96.1	-1.7%	98.3	2.4%
Other animal products	5.7	100	95.0	-5.0%	96.3	1.4%	96.6	0.3%	99.2	2.7%
Eggs	2.8	100	89.5	-10.5%	99.2	10.7%	97.5	-1.6%	102.4	5.0%
Honey	2.9	100	99.8	-0.2%	93.2	-6.7%	95.2	2.2%	96.2	1.0%
Animal Output	44.0	100	99.7	-0.3%	99.3	-0.4%	99.5	0.2%	101.9	2.4%

Tab.2 Quarterly Output price Index in Agricultural. 2017 (2015=100)

Code	Products	Weight in %	Quarter I 2017		Quarter II 2017		Quarter III 2017		Quarter IV 2017	
			Index	Annual Change	Index	Annual Change	Index	Annual Change	Index	Annual Change
	Total Output Agriculture	100	107	2.6%	103.8	-0.5%	90.8	-5.2%	98.2	1.7%
1	Cereals	4.2	91.8	-10.7%	91.1	-14.5%	86	-13.5%	86.8	-6.9%
2	Industrial crops	0.4	125.2	25.7%	122.3	27.7%	122.3	23.0%	126.9	13.7%
3	Forage plants	3.8	106.7	-1.7%	97.4	-6.9%	90.9	-8.0%	88.9	-10.2%
4	Vegetables	23.2	127.7	12.2%	109.1	3.5%	70.6	-14.9%	89.3	-2.7%
5	Potatoes	3.1	103.9	1.0%	104.3	-16.7%	90.1	-3.8%	88.8	-1.4%
6	Permanent crops	17.2	101.5	-1.2%	108.7	-5.5%	93.6	-4.3%	100.6	10.7%
6.1	Fruits	8.2	105.3	7.8%	109.9	-7.1%	99.4	-0.3%	111.8	16.6%
6.2	Citrus fruit	1	102.3	-15.2%	-	-	-	-	100	15.9%
6.3	Grapes	5.5	-	-	-	-	89.9	-8.1%	111.6	6.4%
6.4	Olives	2.5	85.8	-11.9%	96.6	17.4%	95.6	23.2%	78.9	6.3%
7	Wine	2.6	119.9	4.4%	119.6	8.3%	123.4	6.7%	124.7	32.2%
8	Olive oil	1.5	100.3	-3.1%	97.6	-7.1%	96.8	-7.1%	103.4	5.7%
	Crop Output	56	114	4.8%	107.5	-1.5%	86.1	-7.9%	96.4	4.1%
9	Animal production	18.6	102	2.0%	101.5	3.2%	101.4	2.1%	103.6	3.2%
9.1	Cattle	8.3	100.7	-0.2%	100.3	0.4%	101.2	1.9%	101.8	2.0%
9.2	Pigs	3.1	106	7.5%	108.2	8.6%	107.4	2.9%	106.7	2.2%
9.3	Sheep & goats	5.1	100.5	-0.2%	98.7	3.8%	99.4	4.1%	105.7	7.6%
9.4	Poultry	2.1	103.9	6.5%	103.5	4.7%	98	-2.6%	100.2	-3.4%
10	Milk	19.7	98.6	-3.6%	98.4	-1.8%	96	-4.4%	97.5	-5.4%
10.1	Cow milk	14.8	97.9	-1.8%	99	0.2%	96.1	-3.2%	96.9	-3.1%
10.2	Other milk	4.9	101.8	-9.7%	96.7	-7.0%	95.7	-7.5%	99.6	-12.2%
11	Other animal products	5.7	99.4	6.3%	94.6	5.8%	92.7	-1.1%	98.7	-4.5%
11.1	Eggs	2.8	103.9	19.7%	98.7	24.8%	92	6.0%	102.1	-3.2%
11.2	Honey	2.9	94.7	-4.7%	90.6	-8.1%	92.6	-7.6%	94.7	-6.3%
	Animal Output	44	100.3	0.4%	99.1	0.8%	97.7	-1.4%	100.6	-1.2%

(-) Seasonal products

Tab.3 Quarterly Output price Index in Agricultural products. 2018 (2015=100)

Code	Products	Weight in %	Quarter I 2018		Quarter II 2018		Quarter III 2018		Quarter IV 2018	
			Index	Annual Change	Index	Annual Change	Index	Annual Change	Index	Annual Change
	Total Output Agriculture	100	105.2	-1.7%	103.7	-0.1%	96.5	6.3%	101	2.9%
1	Cereals	4.2	91.9	0.1%	92.6	1.6%	84.6	-1.6%	83.6	-3.7%
2	Industrial crops	0.4	137.5	9.8%	134.4	9.9%	131.7	7.7%	132	4.0%
3	Forage plants	3.8	98	-8.2%	97.3	-0.1%	84.3	-7.3%	80.6	-9.3%
4	Vegetables	23.2	116.5	-8.8%	110.1	0.9%	94	33.1%	111.7	25.1%
5	Potatoes	3.1	80.5	-22.5%	86.9	-16.7%	96.5	7.1%	114.8	29.3%
6	Permanent crops	17.2	125	23.2%	110.3	1.5%	93.7	0.1%	93.6	-7.0%
6.1	Fruits	8.2	132.3	25.6%	111	1.0%	97	-2.4%	95.9	-14.2%
6.2	Citrus fruit	1	120.6	17.9%	-	-	-	-	88.7	-
6.3	Grapes	5.5	-	-	-	-	91.5	-	112.7	-
6.4	Olives	2.5	102.6	19.6%	103.9	7.6%	97.3	1.8%	75	-4.9%
7	Wine	2.6	122.6	2.3%	130.2	8.9%	128.4	4.1%	125.4	0.6%
8	Olive oil	1.5	104.7	4.4%	104.8	7.4%	104	7.4%	104.7	1.3%
	Crop Output	56	110.8	-2.8%	107.7	0.2%	94.9	10.2%	101	4.8%
9	Animal production	18.6	103.3	1.3%	102.7	1.2%	102.7	1.3%	104	0.4%
9.1	Cattle	8.3	102	1.3%	101.2	0.9%	101.2	0.0%	101.9	0.1%
9.2	Pigs	3.1	107.2	1.1%	106.4	-1.7%	106.2	-1.1%	107.2	0.5%
9.3	Sheep & goats	5.1	106.3	5.8%	104.1	5.5%	104.5	5.1%	105.3	-0.4%
9.4	Poultry	2.1	98	-5.7%	99.8	-3.6%	99.8	1.8%	103.7	3.5%
10	Milk	19.7	96.9	-1.7%	96.8	-1.6%	96.8	0.8%	97.2	-0.3%
10.1	Cow milk	14.8	97.5	-0.4%	97.1	-1.9%	96.7	0.6%	97.4	0.5%
10.2	Other milk	4.9	94.3	-7.4%	95.9	-0.8%	96.9	1.3%	96.5	-3.1%
11	Other animal products	5.7	97	-2.4%	93.2	-1.5%	94.9	2.4%	101.4	2.7%
11.1	Eggs	2.8	98.6	-5.1%	90.3	-8.5%	94.2	2.4%	107	4.8%
11.1	Honey	2.9	94.8	0.1%	95	4.9%	95	2.6%	96	1.4%
	Animal Output	44.0	99.8	-0.5%	98.6	-0.5%	98.9	1.2%	101	0.4%

(-) Seasonal products

Tab.4 Quarterly Output price Index in Agricultural products. 2019 (2015=100)

Code	Products	Weight in %	Quarter I 2018		Quarter II 2018		Quarter III 2018		Quarter IV 2018	
			Index	Annual Change	Index	Annual Change	Index	Annual Change	Index	Annual Change
	Total Output Agriculture	100	113.9	8.3%	107.5	3.7%	96.8	0.3%	101.3	0.3%
1	Cereals	4.2	86.1	-6.3%	86.1	-7.0%	84	-0.7%	82.7	-1.1%
2	Industrial crops	0.4	139.3	1.3%	138.8	3.3%	134.6	2.2%	130.8	-0.9%
3	Forage plants	3.8	86.2	-12.0%	83.1	-14.6%	84.8	0.6%	83.9	4.1%
4	Vegetables	23.2	153.2	31.5%	112.5	2.2%	85.3	-9.3%	90	-19.4%
5	Potatoes	3.1	166.7	107.1%	168.5	93.9%	108.9	12.8%	101.1	-11.9%
6	Permanent crops	17.2	94.6	-24.3%	106.7	-3.3%	97.7	4.3%	104.3	11.4%
6.1	Fruits	8.2	100.8	-23.8%	106.7	-3.9%	98.4	1.4%	101.8	6.2%
6.2	Citrus fruit	1	69.2	-42.6%	-	-	-	-	100.2	-
6.3	Grapes	5.5	-	-	-	-	96.6	-	118.4	-
6.4	Olives	2.5	105.6	2.9%	106.1	2.1%	109.9	12.9%	94.8	26.4%
7	Wine	2.6	129.9	6.0%	136.9	5.1%	125.4	-2.3%	134.1	6.9%
8	Olive oil	1.5	105	0.3%	104.4	-0.4%	104.5	0.5%	105.4	0.7%
	Crop Output	56	127	14.6%	113.5	5.4%	93.6	-1.4%	98.6	-2.4%
9	Animal production	18.6	104.2	0.9%	104.3	1.6%	104.7	1.9%	106.7	2.6%
9.1	Cattle	8.3	102.2	0.2%	102.1	0.9%	102.1	0.9%	102.5	0.6%
9.2	Pigs	3.1	107.4	0.2%	107.1	0.7%	107.4	1.1%	108.1	0.8%
9.3	Sheep & goats	5.1	107.2	0.8%	107.1	2.9%	108.1	3.4%	111.6	6.0%
9.4	Poultry	2.1	102.1	4.2%	102.4	2.6%	103	3.2%	106.7	2.9%
10	Milk	19.7	99	2.2%	97.5	0.7%	99.8	3.1%	103.3	6.3%
10.1	Cow milk	14.8	98.5	1.0%	98	0.9%	100.6	4.0%	103.9	6.7%
10.2	Other milk	4.9	100.8	6.9%	96.3	0.4%	97.6	0.7%	101.1	4.8%
11	Other animal products	5.7	98.7	1.8%	97.1	4.2%	98.4	3.7%	102.6	1.2%
11.1	Eggs	2.8	102.7	4.2%	99.3	10.0%	99.4	5.5%	108	0.9%
11.1	Honey	2.9	94.8	0.0%	95	0.0%	97.4	2.5%	97.5	1.6%
	Animal Output	44	101.3	1.5%	100.1	1.5%	101.5	2.6%	104.8	3.8%

(-) Seasonal products

Methodology

Price indices in agriculture are calculated based on the standards and guidelines outlined in the Handbook for EU agricultural price statistics. Agricultural output prices are collected through a Monthly Survey in the entire territory of the Republic of Albania. The information is gained from farms, slaughterhouses and weekly markets as well as on other places where agricultural products are sold. For domestic products the prices are collected at farm gate level excluding taxes. They are surveyed in Albanian Lek, while the measuring units are in kg, liter or pieces.

Output price index in agricultural products is divided into two main groups: Crop and animal products. For crop products prices are collected for the following groups: cereals, industrial crops, forage plants, vegetables, potatoes and permanent crops. For animal products prices are collected for animals and animal products. Within this framework prices are surveyed for four main categories of animals: Cattle, pigs, sheep and goats as well as poultry based on the live weight of animals for slaughter. Within animal products, prices are collected for the categories: milk, eggs and honey.

Weighting scheme of Output price Index in Agricultural products

To calculate the Output price Index in Agricultural products a weighting scheme is used. The weighting factor attached to each elementary index and aggregate index corresponds to the sales value of the respective product (excluding VAT) during the base period (2015=100) according to Eurostat methodology. Weights are also used to join indices of main groups and aggregate indices. The weighting scheme used complies with the methodology of the Economic Accounts for Agriculture. The total and quarterly weights are fixed over a base period. The weighting scheme of the producer price index for agricultural products changes every 5 years.

Calculation of elementary price index

The elementary index is calculated according to the following formula using absolute average prices.

$$R_{i,t} = \frac{\frac{1}{n} \sum P_{ij}^t}{\frac{1}{n} \sum P_{ij}^0} \cdot 100$$

$R_{i,t}$: Elementary price index for month "t" and production "i"

P: Collected prices

i: Production "i"

j: The registered production price (generally the price for district 1.2. n)

t: Month observed

o: Base month

Calculation of aggregate price index

The aggregate index for product groups, subgroups and the total output of agricultural products is calculated using the following formula:

$$I^t = \sum (R_i^t \cdot \frac{w_i^o}{\sum w_i^o}) \cdot 100$$

I: Aggregate index for period "t"

w_i^o : Weighting factor in base period for production "i"

i: Production "i"

t: Month observed

o: Base month