

## Standard revision of price index of agricultural producers

The purpose of revision is updating of the system of price indices especially due to accumulated changes in real described section. This updating is focus on selected files of the representatives and reporting units, weight structure, price base and eventually the methodology of calculation. Revision of price indices is doing every 5 years.

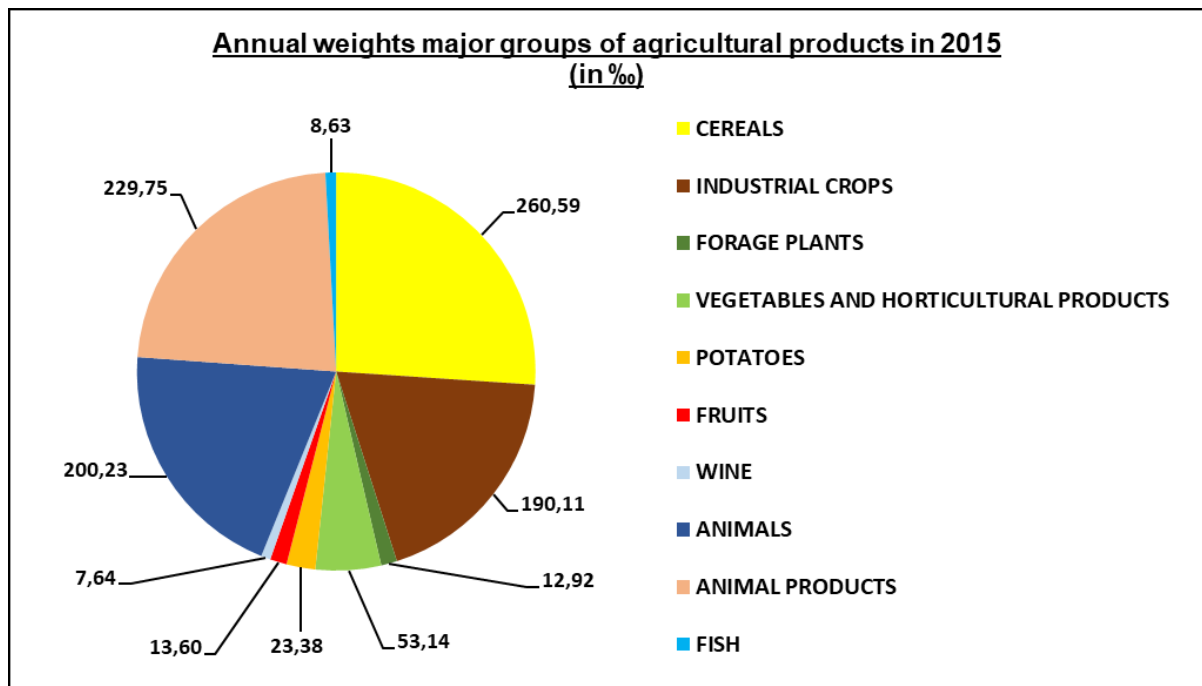
During the year 2022 was the agricultural producer price index subjected to standard comprehensive review.

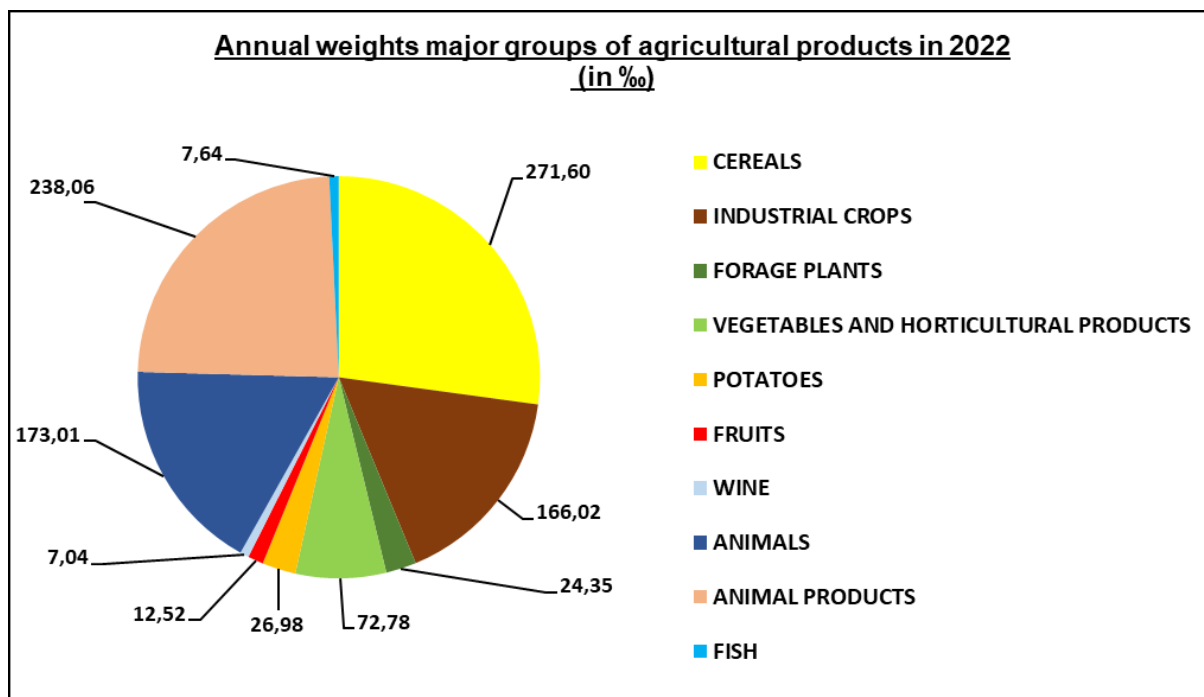
Within this revision was revised selection of representatives and respondents, was set new price and index basis and was introduced a new weighting scheme based on the structure of sales of agricultural production in individual months.

**Agricultural producer price indices** are calculated from January 2023 to the new weighting schemes derived from the average sales for the years 2019, 2020 and 2021. The indices are calculated on the new price base **average of 2020 = 100**

The revised time series of basic price indices calculated on the new weighting scheme for the years 2020, 2021, and 2022, is currently published retrospectively at its first publication for January 2023. This new time series of indices has a base - **average of 2020 = 100**

### **Comparison of weight representation of agricultural products in the previous and the current revised structure of the agricultural producer price index**





Conversely, in the calculation of the price index of agricultural producers some representatives with the lowest volumes of sales at the domestic market in 2019 – 2021 were excluded:

### 3070 Savoy cabbage (Kale)

#### Variable monthly weights of agricultural products in ‰

Kod	Title/Month	1	2	3	4	5	6	7	8	9	10	11	12
000000	Total Agricultural Products including Fishes	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
140000	Total Agricultural Products	991,81	991,46	992,24	991,78	991,15	991,68	991,81	991,65	992,90	994,59	993,22	992,42
141000	Total Agricultural Products (excluding Fruits and Vegetables)	957,24	960,90	868,95	914,84	974,45	942,65	920,05	914,99	915,85	765,79	883,72	948,22
100000	Crop Products	551,64	532,35	575,11	549,47	514,98	544,26	551,35	542,34	611,07	703,67	628,72	584,76
101000	Crop Products (excluding Fruits and Vegetables)	517,07	501,78	451,81	472,53	498,29	495,23	479,59	465,69	534,02	474,87	519,22	540,57
102000	Fruits and Vegetables	34,57	30,57	123,30	76,94	16,69	49,03	71,76	76,65	77,05	228,80	109,50	44,20
010000	CEREALS	290,83	303,35	275,61	292,24	314,61	295,62	291,02	296,87	252,28	192,22	240,83	269,35
011000	Wheat	184,00	191,92	174,37	184,89	199,05	187,03	184,12	187,82	159,61	121,61	152,37	170,41
011110.1011	Milling soft wheat	104,48	108,97	99,01	104,98	113,02	106,20	104,55	106,65	90,63	69,05	86,52	96,76
011110.1012	Feed soft wheat	79,53	82,95	75,36	79,91	86,03	80,84	79,58	81,18	68,98	52,56	65,85	73,65
012000	Rye	5,44	5,68	5,16	5,47	5,89	5,53	5,45	5,56	4,72	3,60	4,51	5,04
012110.1031	Rye for consumption	5,44	5,68	5,16	5,47	5,89	5,53	5,45	5,56	4,72	3,60	4,51	5,04
013000	Barley	60,32	62,92	57,17	60,62	65,26	61,32	60,36	61,58	52,33	39,87	49,95	55,87
013110.1023	Feed barley	27,65	28,84	26,21	27,79	29,91	28,11	27,67	28,23	23,99	18,28	22,90	25,61
013210.1021	Malting barley	32,67	34,08	30,96	32,83	35,34	33,21	32,69	33,35	28,34	21,59	27,06	30,26
014000	Oats	6,05	6,31	5,73	6,08	6,54	6,15	6,05	6,17	5,25	4,00	5,01	5,60
014110.1042	Feed oats	6,05	6,31	5,73	6,08	6,54	6,15	6,05	6,17	5,25	4,00	5,01	5,60

015000	Grain maize	30,91	32,24	29,29	31,06	33,44	31,42	30,93	31,55	26,81	20,43	25,60	28,63
015110.1052	Grain maize	30,91	32,24	29,29	31,06	33,44	31,42	30,93	31,55	26,81	20,43	25,60	28,63
019000	Other cereals	4,10	4,28	3,89	4,12	4,44	4,17	4,10	4,19	3,56	2,71	3,40	3,80
019110.1032	Triticale	4,10	4,28	3,89	4,12	4,44	4,17	4,10	4,19	3,56	2,71	3,40	3,80
020000	<b>INDUSTRIAL CROPS</b>	<b>176,97</b>	<b>147,60</b>	<b>128,25</b>	<b>133,61</b>	<b>143,84</b>	<b>135,16</b>	<b>133,06</b>	<b>135,73</b>	<b>182,83</b>	<b>197,78</b>	<b>216,26</b>	<b>225,46</b>
021000	Oil seeds and oleaginous fruits	132,26	137,89	123,44	128,51	138,35	130,00	127,98	130,55	116,45	92,22	113,87	122,71
021110.1210	Rape	114,19	119,10	108,21	114,74	123,53	116,07	114,26	116,56	99,05	75,47	94,56	105,75
021210.1230	Sunflower	4,37	4,49	2,24						5,50	7,69	7,96	4,26
021910.1220	Poppy seeds	13,70	14,29	12,99	13,77	14,83	13,93	13,71	13,99	11,89	9,06	11,35	12,69
022000	Protein crops	5,08	5,29	4,81	5,10	5,49	5,16	5,08	5,18	4,40	3,35	4,20	4,70
022110.1102	Dried peas for feeding	5,08	5,29	4,81	5,10	5,49	5,16	5,08	5,18	4,40	3,35	4,20	4,70
024000	Sugar beet	39,63	4,42								58,36	77,42	80,93
024110.1510	Sugar beet	39,63	4,42								58,36	77,42	80,93
029000	Other industrial crops									61,98	43,86	20,77	17,12
029210.1310	Hop cones									61,98	43,86	20,77	17,12
030000	<b>FORAGE PLANTS</b>	<b>26,07</b>	<b>27,19</b>	<b>24,71</b>	<b>26,20</b>	<b>28,20</b>	<b>26,50</b>	<b>26,09</b>	<b>26,61</b>	<b>22,61</b>	<b>17,23</b>	<b>21,59</b>	<b>24,14</b>
040000	<b>VEGETABLES AND HORTICULTURAL PRODUCTS</b>	<b>27,82</b>	<b>24,95</b>	<b>117,40</b>	<b>71,10</b>	<b>12,39</b>	<b>16,16</b>	<b>63,72</b>	<b>66,29</b>	<b>57,11</b>	<b>205,79</b>	<b>96,00</b>	<b>36,73</b>
041000	Fresh vegetables	27,82	24,95	15,69	3,35	12,39	16,16	63,72	66,29	57,11	44,97	34,40	36,73
041100	Cauliflower								2,40	2,57	2,38	1,56	
041110.3090	Cauliflower								2,40	2,57	2,38	1,56	
041200	Tomatoes								18,36	15,64	10,00	6,68	
041210.3161	Tomatoes								18,36	15,64	10,00	6,68	
041900	Other fresh vegetables	27,82	24,95	15,69	3,35	12,39	16,16	42,95	48,08	44,73	36,72	34,40	36,73
041910.3100	White cabbage	0,25							1,97	4,76	6,03	5,63	3,67
041910.3101	Red cabbage								0,14	0,40	0,49	1,02	0,45
041920.3200	Lettuce				0,79	0,66	0,53	0,38					
041940.3134	Cucumbers							1,89	3,11	1,32	0,69		
041950.3032	Carrots	13,54	8,54	7,33					22,01	22,48	13,68	12,17	11,82
041960.3172	Onions	5,34	6,80	4,38	2,56	3,42	5,31	6,18	6,40	7,33	7,49	8,21	5,37
041999.3012	Celery	3,79	6,17	3,97							5,98	3,98	4,17
041999.3042	Parsley	4,89	3,44							5,06	4,76	4,64	5,51
041999.3061	Kohlrabi					8,31	8,43	9,09	7,73	5,78	2,29		
041999.3150	Capsicum								0,21	0,20	0,08	0,04	
042000	Plants and flowers			101,72	67,74							160,82	61,60
042100	Nursery products			101,72	67,74							160,82	61,60
050000	<b>POTATOES</b>	<b>23,20</b>	<b>23,64</b>	<b>23,25</b>	<b>20,48</b>	<b>11,63</b>	<b>37,96</b>	<b>29,42</b>	<b>6,48</b>	<b>53,96</b>	<b>32,33</b>	<b>31,17</b>	<b>21,62</b>
051000	Potatoes for consumption	17,99	15,74	10,02	5,17	4,24	37,96	29,42	6,48	41,19	19,48	16,55	15,03
051110.1610	Early potatoes						36,41	29,42	6,48				
051210.1620	Main crop potatoes	17,99	15,74	10,02	5,17	4,24	1,55			41,19	19,48	16,55	15,03
052000	Seed potatoes	0,87	7,90	13,23	15,31	7,39						0,95	0,87
052110.1640	Seed potatoes	0,87	7,90	13,23	15,31	7,39						0,95	0,87
059000	Other potatoes	4,34								12,77	12,86	13,67	5,72
059110.1630	Starch potatoes	4,34								12,77	12,86	13,67	5,72
060000	<b>FRUITS</b>	<b>6,75</b>	<b>5,62</b>	<b>5,90</b>	<b>5,84</b>	<b>4,30</b>	<b>32,87</b>	<b>8,04</b>	<b>10,36</b>	<b>19,94</b>	<b>23,01</b>	<b>13,50</b>	<b>7,47</b>
061000	Fresh fruit	6,75	5,62	5,90	5,84	4,30	32,87	8,04	10,36	19,94	23,01	13,50	7,47
061100	Dessert apples	5,80	5,62	5,90	5,84	4,30	2,42	1,17	1,61	12,02	19,33	12,32	6,52

061110.2011	Dessert apples	3,33	2,79	3,20	3,40	2,07	1,03	0,25	0,70	4,01	10,59	4,64	3,12
061120.2012	Industrial apples	2,48	2,83	2,70	2,45	2,23	1,39	0,92	0,91	8,00	8,74	7,68	3,40
061200	Dessert pears	0,95								2,09	2,27	1,19	0,95
061210.2020	Dessert pears	0,95								2,09	2,27	1,19	0,95
061300	Peaches							0,23	0,51				
061310.2030	Peaches							0,23	0,51				
061900	Other fresh fruit						30,45	6,64	8,24	5,84	1,40		
061910.2060	Cherries							3,58					
061920.2050	Plums								6,91	5,84	1,40		
061930.2111	Strawberries					30,45							
061990.2040	Apricots							0,75	0,33				
061990.2070	Sour cherry							2,31	1,00				
070000	WINE (incl. must)									22,33	35,31	9,37	
072110.1710	Grapes for wine production									22,33	35,31	9,37	
130000	Animals and animal products	440,17	459,12	417,13	442,30	476,17	447,42	440,46	449,31	381,83	290,92	364,50	407,66
110000	ANIMALS	185,26	193,23	175,56	186,16	200,41	188,31	185,38	189,10	160,70	122,44	153,41	171,57
111000	Cattle	54,11	56,44	51,28	54,37	58,54	55,00	54,15	55,23	46,94	35,76	44,81	50,11
111100	Cattle excluding calves	50,90	53,09	48,23	51,14	55,06	51,73	50,93	51,95	44,15	33,64	42,15	47,14
111110.4110	Live bullocks for slaughter	25,07	26,15	23,76	25,20	27,13	25,49	25,09	25,60	21,75	16,57	20,76	23,22
111120.4210	Live heifers for slaughter	8,00	8,35	7,58	8,04	8,66	8,13	8,01	8,17	6,94	5,29	6,63	7,41
111130.4310	Live cows for slaughter	17,82	18,59	16,89	17,91	19,28	18,11	17,83	18,19	15,46	11,78	14,76	16,50
111200	Calves	3,21	3,35	3,05	3,23	3,48	3,27	3,22	3,28	2,79	2,12	2,66	2,98
111210.4410	Live calves for slaughter	3,21	3,35	3,05	3,23	3,48	3,27	3,22	3,28	2,79	2,12	2,66	2,98
112000	Pigs	74,24	77,44	70,36	74,60	80,31	75,46	74,29	75,78	64,40	49,07	61,48	68,76
112110.4610	Live pigs for slaughter	73,27	76,42	69,44	73,63	79,26	74,48	73,32	74,79	63,56	48,43	60,67	67,86
112120.5610	Weanling piglets	0,97	1,01	0,92	0,98	1,05	0,99	0,97	0,99	0,84	0,64	0,81	0,90
115000	Poultry	56,91	59,35	53,93	57,18	61,56	57,84	56,94	58,09	49,36	37,61	47,12	52,70
115100	Chickens	48,10	50,17	45,58	48,33	52,03	48,89	48,13	49,09	41,72	31,79	39,83	44,54
115110.5011	Chickens (live - 1st choice)	48,10	50,17	45,58	48,33	52,03	48,89	48,13	49,09	41,72	31,79	39,83	44,54
115900	Other poultry	8,81	9,19	8,35	8,85	9,53	8,95	8,81	8,99	7,64	5,82	7,29	8,16
115910.5031	Broiler turkeys	5,86	6,11	5,55	5,89	6,34	5,96	5,87	5,98	5,08	3,87	4,85	5,43
115910.5041	Ducks (slaughtered)	2,95	3,07	2,79	2,96	3,19	3,00	2,95	3,01	2,56	1,95	2,44	2,73
120000	ANIMAL PRODUCTS	254,91	265,88	241,57	256,15	275,76	259,11	255,08	260,20	221,12	168,48	211,09	236,08
121000	Milk	229,10	238,96	217,11	230,21	247,84	232,87	229,25	233,86	198,74	151,42	189,72	212,18
121110.4911	Cows milk	229,10	238,96	217,11	230,21	247,84	232,87	229,25	233,86	198,74	151,42	189,72	212,18
122000	Eggs	25,81	26,92	24,46	25,93	27,92	26,23	25,83	26,35	22,39	17,06	21,37	23,90
122110.5512	Sorted fresh eggs	25,81	26,92	24,46	25,93	27,92	26,23	25,83	26,35	22,39	17,06	21,37	23,90
200000	Fishes	8,19	8,54	7,76	8,22	8,85	8,32	8,19	8,35	7,10	5,41	6,78	7,58
211111.5812	Carp 1st quality	7,52	7,84	7,13	7,56	8,13	7,64	7,52	7,68	6,52	4,97	6,23	6,96
211111.5823	Trout	0,67	0,69	0,63	0,67	0,72	0,68	0,67	0,68	0,58	0,44	0,55	0,62

## **Valid methodology**

The valid methodology for calculating the agricultural producer price index is based on EUROSTAT methodology.

According to the 'national concept' all agricultural products are considered as highly seasonal items (weighting proportions in different months are reciprocally diverse). Thus, there is used two-dimension weighting scheme (matrix) for each product. One dimension is intended as a vertical aggregation from a detailed representative up to the highest aggregate index for the whole set of the representatives 'Agricultural products, total'. The second dimension is for 12 months in the year. A nominal sum '1000' equals the sum of constant weights of the highest aggregation 'Agricultural products, total' for all 12 months of the base year. Therefore we use variable weights (clearly shown in the table below) for calculating the price index of agricultural producers.

Together with basic indices calculated to base on the average of 2020 = 100 we still continue in calculating and publishing price indices with derived basics. List of all types of indices is as follows:

- a) Average 2020 = 100 (basic price index)
- b) Corresponding period of the last year = 100
- c) Previous month = 100
- d) Ratio of two rolling averages

**An index of type a), c), d), for any aggregation reflects not only the change in the prices of its subheadings but also change of the weighting structure, such as on the aggregation for the month involved. Conversely, the index type b) compare only the period with the same weight structure and therefore higher aggregation indices reflect only the net change in the price levels of agricultural production.**