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Agjencia e Statistikave të Kosovës - Agencija za Statistike Kosova - Kosovo Agency of Statistics

Series 2: Agriculture and Environment Statistics

Input Price Index and Prices in Agriculture Q4-2016 (2010=100)



AGJENCIA E STATISTIKAVE TË KOSOVËS
AGENCIJA ZA STATISTIKE KOSOVA
KOSOVO AGENCY OF STATISTICS

Preface

Kosovo Agency of Statistics respectively Agriculture and Environment Statistics Department started to collect data on prices for agriculture input products in November 2003. In the beginning, prices were collected for a limited number of items, the change of base year 2005 = 100 to 2010 = 100 the number of inputs increases, at the moment prices for 77 different input items concerning agricultural input are collected.

The change of the base year, for Output and Input price index in agricultural is done based on the recommendations of Eurostat, relying on Handbook for EU Agricultural Price Statistics Version 2.0 March 2008 from the base year 2005 = 100 in the base year 2010 = 100, where the change of base year is recommended to be carried out in every five years

This is the twenty-nine publications on Input Price Index and Average Absolute Prices for agriculture inputs produced by Statistical Agency of Kosovo (SAK). In this publication, Input Price Index and prices for some major agriculture inputs are presented.

KAS is grateful to the Swedish International Development Cooperation Agency (SIDA) for their support of build up the agro monetary statistics system. ASK also is grateful for their corporation of all co-workers at the regional offices, other respondents of data collection as: agriculture farms, industrial and trade enterprises etc.

Especially grateful to Swedish price statistics experts Mr. Anders Grönvall, Mr Jimmie Enhall and others who directly or indirectly assisted on finalization of this publication.

Suggestions, proposals and remarks for this publication are welcome and can be sent to:

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Abbreviations

KAS	-	Kosovo Agency of Statistics
API	-	Agriculture Price Index
EU	-	European Union
SIDA	-	Swedish International Development Cooperation Agency
Q4	-	Fourth Quarter

Symbols

‰	-	Promile
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In the tables where figures (weight) have been rounded to the nearest final digit might be a slight discrepancy in the sum.

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Agriculture Input Price Index

The publication includes data from October to December 2016 (Q4-2016). To make comparisons and to see changes also data from Q4 2010 – 2016 (2010=100) this publication is based on collection of prices for agriculture input products in Kosovo. The price collection was carried out at agriculture pharmacy enterprises, veterinary pharmacy enterprises, companies, markets, and other places where prices on agriculture input products are available. Some prices on agriculture input products we got from consumer prices (CPI) at KAS.

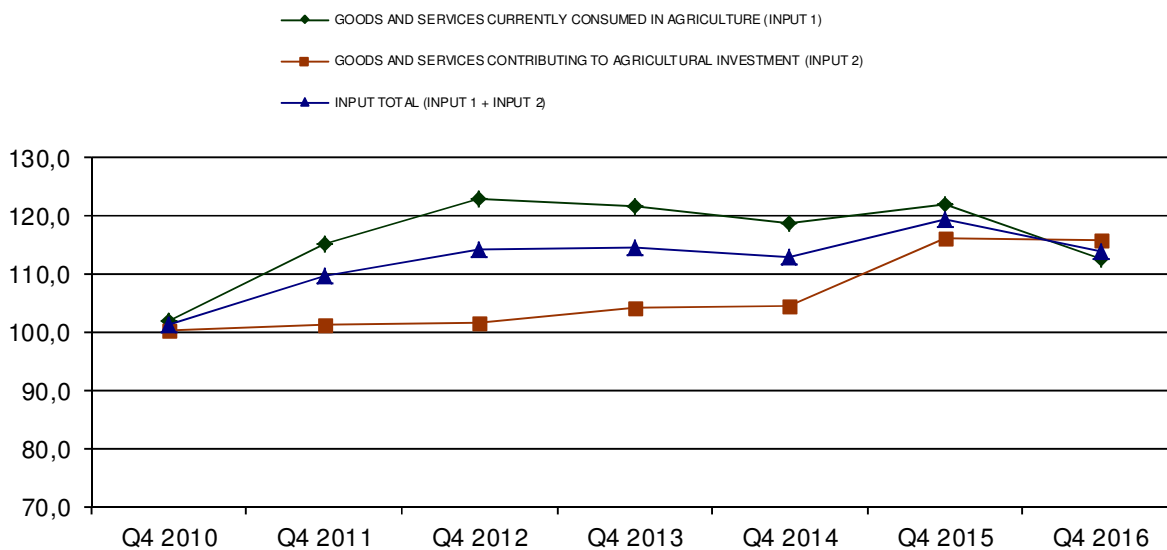
The products which make up the base for the Input Price Index are divided into two main groups: Goods and Services Currently Consumed in Agriculture (Input 1) and Goods and Services Contributing to Agriculture Investment (Input 2). Within Goods and Services Currently Consumed in Agriculture, prices are collected under the following groups; Seeds and Planting Stock, Energy; Lubricants, Fertilizers and Soil Improvers, Plant Protection Products and Pesticides, Veterinary Expenses, Animal Feeding stuffs, Maintenance of Materials, Maintenance of Buildings and Other Goods and Services. Within Goods and Services Contributing to Agriculture Investment, prices are collected for Materials (Machinery and Other Equipment), Buildings (Farm Buildings, other works except land improvements, other buildings, structures) and other.

Figure 1 shows the fourth quarter for Input Price Index from 2010 - 2016 for Total Input as well as for Input 1 and Input 2 (2010 = 100).

The index changes in Q4 2016 compared to Q4 2015 (change in %)

In the fourth quarter 2016 the Input 1 has decreased by (- 7.5 %) compared to Q4 2015. The Index for **Input 2** has decreased increased by (- 0.2 %) compared to Q4 2015. Total Input Index (**Input 1 + Input 2**) has also decreased by (- 4.6 %) compared to Q4 2015.

Figure 1: Q4 Agricultural Input Price Index 2010 – 2016, (2010 = 100)



Agricultural Input price Index Q4**Table 1: Q4 Agricultural Input price Index 2010-2016, (2010=100)**

Input 1 (Goods and services currently consumed in agriculture)										
API code	Description	Weight		Q4 2010	Q4 2011	Q4 2012	Q4 2013	Q4 2014	Q4 2015	Q4 2016
		%	1000 Euro							
200000	GOODS AND SERVICES CURRENTLY CONSUMED IN AGRICULTURE (INPUT 1)	587	110 854	102,0	115,3	123,1	121,7	118,9	122,0	112,8
201000	SEEDS AND PLANTING STOCK	66	12 491	94,5	111,8	108,1	100,6	118,3	188,1	120,0
202000	ENERGY; LUBRICANTS	94	17 699	105,8	118,8	125,1	120,3	113,7	99,9	101,6
202100	Electricity	9	1 757	117,0	117,0	141,4	141,4	159,6	153,1	156,7
202300	Motor fuels	80	15 145	104,8	119,9	124,3	118,7	109,0	93,3	95,6
202400	Lubricants	4	797	98,8	101,2	103,7	104,0	102,6	108,7	93,9
203000	FERTILISERS AND SOIL IMPROVERS	130	24 512	100,2	133,2	146,7	144,2	135,3	131,2	124,0
203100	Straight fertilizers	53	10 050	101,6	134,6	154,5	154,2	143,0	134,1	124,4
203200	Compound fertilizers	77	14 462	99,3	132,2	141,4	137,2	130,0	129,1	123,8
204000	PLANT PROTECTION PRODUCTS AND PESTICIDES	21	4 045	100,1	97,9	99,3	161,7	154,1	104,8	113,3
205000	VETERINARY EXPENSES	65	12 178	102,3	108,3	108,6	107,3	104,0	102,0	100,3
206000	ANIMAL FEEDINGSTUFFS	63	11 959	112,3	122,3	155,1	133,1	121,6	122,7	118,1
206100	Straight feeding stuffs	57	10 763	112,5	124,2	159,4	134,2	123,4	126,7	121,6
206200	Compound feeding stuffs	6	1 196	109,8	105,5	116,4	122,6	105,3	86,5	86,7
207000	MAINTENANCE OF MATERIALS	36	6 711	100,0	100,1	100,4	101,0	99,8	99,0	98,6
208000	MAINTENANCE OF BUILDINGS	6	1 084	100,1	100,7	101,5	100,3	100,7	99,9	97,3
209000	OTHER GOODS AND SERVICES	107	20 175	100,6	102,0	105,1	110,9	111,5	113,0	114,1
Input 2 (Goods and services contributing to agricultural investment)										
210000	GOODS AND SERVICES CONTRIBUTING TO AGRICULTURAL INVESTMENT (INPUT 2)	413	77 920	100,4	101,5	101,5	104,4	104,7	116,0	115,9
211210	TRACTORS	187	35 250	101,1	101,3	101,3	105,5	107,4	131,2	132,36
211290	OTHER	226	42 670	99,9	101,7	101,7	103,5	102,5	103,5	102,2
Input total (Input 1 + Input 2)										
220000	INPUT TOTAL (INPUT 1 + INPUT 2)	1 000	188 774	101,4	109,6	114,2	114,6	113,0	119,5	114,0

Monthly Agricultural Input price Index

Table 2: Monthly Agricultural Input price Index October – December 2016, (2010 = 100)

Input 1 (Goods and services currently consumed in agriculture)						
API code	Description	Weight		2016		
		%	1000 Euro	Oct	Nov	Dec
200000	GOODS AND SERVICES CURRENTLY CONSUMED IN AGRICULTURE (INPUT 1)	587	110 854	111,9	112,9	113,5
201000	SEEDS AND PLANTING STOCK	66	12 491	119,9	119,9	120,3
202000	ENERGY; LUBRICANTS	94	17 699	100,8	101,3	102,7
202100	Electricity	9	1 757	156,7	156,7	156,7
202300	Motor fuels	80	15 145	94,7	95,3	96,9
202400	Lubricants	4	797	93,9	93,9	93,9
203000	FERTILISERS AND SOIL IMPROVERS	130	24 512	122,6	124,6	124,9
203100	Straight fertilizers	53	10 050	123,5	124,4	125,2
203200	Compound fertilizers	77	14 462	122,1	124,7	124,7
204000	PLANT PROTECTION PRODUCTS AND PESTICIDES	21	4 045	113,3	113,3	113,4
205000	VETERINARY EXPENSES	65	12 178	100,3	100,3	100,3
206000	ANIMAL FEEDINGSTUFFS	63	11 959	114,5	119,2	120,6
206100	Straight feeding stuffs	57	10 763	117,6	122,8	124,5
206200	Compound feeding stuffs	6	1 196	87,0	87,0	86,0
207000	MAINTENANCE OF MATERIALS	36	6 711	98,7	98,5	98,5
208000	MAINTENANCE OF BUILDINGS	6	1 084	97,5	97,3	97,3
209000	OTHER GOODS AND SERVICES	107	20 175	113,9	113,7	114,6
Input 2 (Goods and services contributing to agricultural investment)						
210000	GOODS AND SERVICES CONTRIBUTING TO AGRICULTURAL INVESTMENT (INPUT 2)	413	77 920	114,5	114,4	113,8
211210	TRACTORS	187	35 250	132,4	132,4	132,4
211290	OTHER	226	42 670	99,7	99,6	98,4
Input total (Input 1 + Input 2)						
220000	INPUT TOTAL (INPUT 1 + INPUT 2)	1 000	188 774	113,0	113,5	113,6

Changes in Input price Index

Table 3 ; Changes in Input price Index for same month October – December 2016 / 2015 (2010=100)

Input 1 (Goods and services currently consumed in agriculture)						
API code	Description	Wheight		Oct 15 / Oct 16 Changes. in %	Nov 15 /Nov 16 Changes in %	Dec 15 /Dec 16 Changes in %
		%	1000 Euro			
200000	GOODS AND SERVICES CURRENTLY CONSUMED IN AGRICULTURE (INPUT 1)	587	110 854	-8,0	-7,3	-7,3
201000	SEEDS AND PLANTING STOCK	66	12 491	-36,2	-36,2	-36,1
202000	ENERGY; LUBRICANTS	94	17 699	-0,6	0,4	5,5
202100	Electricity	9	1 757	2,6	2,2	2,2
202300	Motor fuels	80	15 145	-0,5	0,9	7,4
202400	Lubricants	4	797	-13,7	-13,7	-13,7
203000	FERTILISERS AND SOIL IMPROVERS	130	24 512	-6,3	-4,8	-5,2
203100	Straight fertilizers	53	10 050	-8,0	-7,3	-6,5
203200	Compound fertilizers	77	14 462	-5,1	-3,0	-4,3
204000	PLANT PROTECTION PRODUCTS AND PESTICIDES	21	4 045	6,9	8,6	8,9
205000	VETERINARY EXPENSES	65	12 178	-2,3	-1,3	-1,4
206000	ANIMAL FEEDINGSTUFFS	63	11 959	-2,6	-0,8	-7,4
206100	Straight feeding stuffs	57	10 763	-2,8	-1,0	-7,9
206200	Compound feeding stuffs	6	1 196	0,1	1,3	-0,6
207000	MAINTENANCE OF MATERIALS	36	6 711	-0,7	-0,7	0,2
208000	MAINTENANCE OF BUILDINGS	6	1 084	-2,5	-2,8	-2,5
209000	OTHER GOODS AND SERVICES	107	20 175	1,5	0,4	1,0
Input 2 (Goods and services contributing to agricultural investment)						
210000	GOODS AND SERVICES CONTRIBUTING TO AGRICULTURAL INVESTMENT (INPUT 2)	413	77 920	-0,4	-0,4	-0,7
211210	TRACTORS	187	35 250	0,8	0,8	1,0
211290	OTHER	226	42 670	-1,6	-1,7	-2,5
Input total (Input 1 + Input 2)						
220000	INPUT TOTAL (INPUT 1 + INPUT 2)	1 000	188 774	-4,9	-4,6	-4,7

Methodology

Prices and price indices in this publication have been calculated according standards for price statistics in European Union. The project for calculation these Prices and Indices was conducted in the frame of the project of "Improving agro monetary statistics" in cooperation with Statistic Sweden and with financial support by SIDA (Swedish International Development Cooperation Agency).

Prices are collected in seven regions: Pristina, Mitrovica, Peja, Gjakova, Prizren, Ferizaj and Gjilan. Prices are collected around the 15th in every month. Since the start the numbers of different prices that are collected have increased step by step.

The purpose of Agricultural Input Price Index is to follow the purchase prices of the means of agricultural production. By definition, the index does not cover factors of production. Thus, wages and wage costs, rent, interest payment, purchase of land and fixed asset animals are not part of the field of observation.

To compare the EU index presented in this publication with other countries, the Eurostat website is recommended (<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home>).

Weights to calculate aggregated indices are mainly based on Economic Accounts of Agriculture (EAA) from 2010, which is the base year in the index (2010=100). These weights are fixed as long as the base of the index is 2010. The index is a price index and is calculated on the basis of the Laspeyres formula.

Calculation of elementary Price Index

Calculations of elementary indices are in general done by using following formula, with un-weighted arithmetic mean price.

$$R_i^t = \frac{\frac{1}{n} \sum P_{ij}^t}{\frac{1}{n} \sum P_{ij}^o} \cdot 100$$

- R_i^t – Elementary index for month t and product i
- P – Collected price
- i – Product i
- j – Price j recorded for product (in general price for region)
- t – Observed month
- 0 – Base month

Calculation of aggregated Price Index

Calculating aggregated index for total Input or subgroups of Input Index is done using following formula.

$$I^t = \sum (R_i^t \cdot \frac{w_i^0}{\sum w_i^0})$$

- I^t – Aggregated index for period t
- w_i⁰ – Weighting factor in base period for product i
- i – Product i
- t – Observed month
- 0 – Base month

Questionnaire

Target definition

Item number	Item name			Quantity	Unit
	Price Collector			Collection place/ Company	
Date					
Price					

<p>Enumerators notes</p> <ul style="list-style-type: none"> - Detailed description of specific variety selected for re-pricing - Changes in the detailed description, date for changes - Treatment of quality change when description changed (information of over-lap price observation, alt. valuation of quality change)
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Kosovo Agency of Statistics

short description

Kosovo Agency of Statistics is a professional institution which deals with collection, processing and publication of official statistical data. As such acts since 1948 and has passed through several historical stages, structured according to state regulation of those times.

On 2 August 1999, the Agency has resumed his professional work (after nine years of interruption of all statistical series detrimental to the interest of Kosovo), as an independent institution under the Ministry of Public Administration. Since 12.12.2011 the Agency operates in the frames of the Prime Minister's Office. Office is funded by the Kosovo Consolidated Budget, but also by donors for specific projects and for technical professional support.

Kosovo Agency of Statistics acts according to the Law No. 04/L-036 which entered into force on 12.12.2011. Programme of Official Statistics 2013/2017 is in implementation for the development of statistical system in correlation with the European Union statistics (EUROSTAT).

Kosovo Agency of Statistics has this organizational structure: production departments; (Department of Economic statistics and National Accounts, Department of Agriculture and Environment statistics and Department of Social statistics. **Support Departments**; Department of Methodology and Information Technology, Department of Policy Planning, Coordination and Communication, Department of Census and survey and Department of Administration. **Within the Agency are also established Regional Offices**; Gjakove, Gjilan, Mitrovica, Peja, Prizren, Pristina and Ferizaj

Number of employees and budget are still limited. In KAS are employed in total 143 workers, of whom 98 (68,58 %) at the headquarters of the Agency, while in the Regional Offices, 45 (31,5%). Agency's educational qualifying structure is as follows: 61,7% with university education, 15,4% with with non-tertiary education, and 17.5% with secondary education.

We have professional and technical cooperation with all Ministries of the Government of Kosovo, especially with the Ministry of Economy and Finance, Central Bank of Kosovo, with international institutions, EUROSTAT, International Monetary Fund, World Bank, Sweden's SIDA, DFID, UNFPA, UNDP, UNVEF, and with the statistical institutions of the countries in the region.

Kosovo Agency of Statistics almost completely covers the territory of Kosovo, based on the statistical structure of the enumeration areas as the basic unit and sole in the country from which it gets first hand information. All surveys conducted in the field use the extension of the samples in these enumeration areas but also a statistical methodology according to international recommendations. During the collection of statistical data and reports from reporting entities are involved professionals, technicians, administrators, servants of the country offices, field enumerators from regional offices, etc.

In 2011, the project of Population Census , Households and Dwellings was successfully implemented, and in 2014 was successfully carried out the Agriculture Census. The result obtained from these censuses will have an important role in the development policies.

The mission of the Agency; to meet the needs of users with qualitative statistical data, objective, in time and space so that users have reliable base to conduct regular analysis in the interest of planning and project development at the municipal and country level. To support government institutions, scientific institutes, research academies, businesses in order to provide proper information for decision-makers and other users in Kosovo.

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