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AGRICULTURAL CENSUSES IN THE CZECH REPUBLIC

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***Аннотация:** Agricultural census around the world has already become an integral part of economic statistics. The article considers and analyzes the results of Farm Structure Survey in 2010, 2013 and 2016, as well as compares data for the Czech Republic and the European Union.*

***Ключевые слова:** Farm Structure Survey, European Union, Czech Republic.*

The farm structure survey is a major source of agricultural statistics. A comprehensive survey is carried out by EU Member States every 10 years and is referred to as the agricultural census. This is complemented by intermediate sample surveys, which are carried out three times between each census.

Frequency of data collection in Czech Republic indicated in Regulation (EC) No 1166/2008.

Farm structure surveys contribute to systematic building of European Communities' statistics on structure of agricultural holdings which provide comparable outputs for all EU member states.

The aim of the survey is to obtain detailed and complex information on the whole scale of the Czech agriculture, i.e. its size, structure and development of agricultural holdings, about their equipment, specialization of their production and

other gainful activities. The results are used in classification of agricultural holdings by their production orientation, economic size.

The data obtained in the survey are used for update of the Farm Register, which serves as a basis for yearly surveys in agriculture. Results will be used for agricultural policy forming not only in the Czech Republic but also in the European Union.

The Farm Structure Survey is conducted in all the European Union member countries following requirements of EU/EC legislation.

In the Czech Republic, the survey is conducted on the basis of the Act No 89/1995 Coll., on the State Statistical Service, as amended.

European statistical office (Eurostat) collects results from all Member States and compiles publications summarizing main characteristic features of agriculture in each of them.

Several methodological differences should be taken into account when using data from the Eurostat database:

- According to the EU definitions hop is included in crops grown on arable land. In the Czech Republic, however, hop or hop-gardens are reported as permanent crops according to the Law No 252/1997 Coll., on agriculture, as amended. Due to this different approach, data on total arable area and permanent crops in Eurostat database differ from the data published on the national level. Data on total utilized agricultural area (permanent crops plus arable land) are identical.

- According to the EU definition, nurseries are included in permanent crops. In the Czech Republic, on the contrary, nurseries are reported as crops grown on arable land. Due to this fact, data in Eurostat database differ from the data published on the national level likewise.

- According to the EU methodology, trees and bushes grown for use for energy production only are included in wooded area (of which short rotation coppices). In the Czech Republic, they are included in other permanent crops (of which short rotation coppices). Therefore, in the Eurofarm database, total utilized agricultural area is lower and wooded area is higher than in national data.

- According to the EU definition, temporary grasslands are included in permanent grasslands in the frame of organic farming while on the national level they are included in plants harvested green on arable land (perennial green fodder).

- Tillage methods on outdoor arable land and Soil cover on outdoor arable land during the winter: the area presented in the tables differs due to different classification of nurseries.

Figure shows a system of indicators that are used in the farm structure survey.

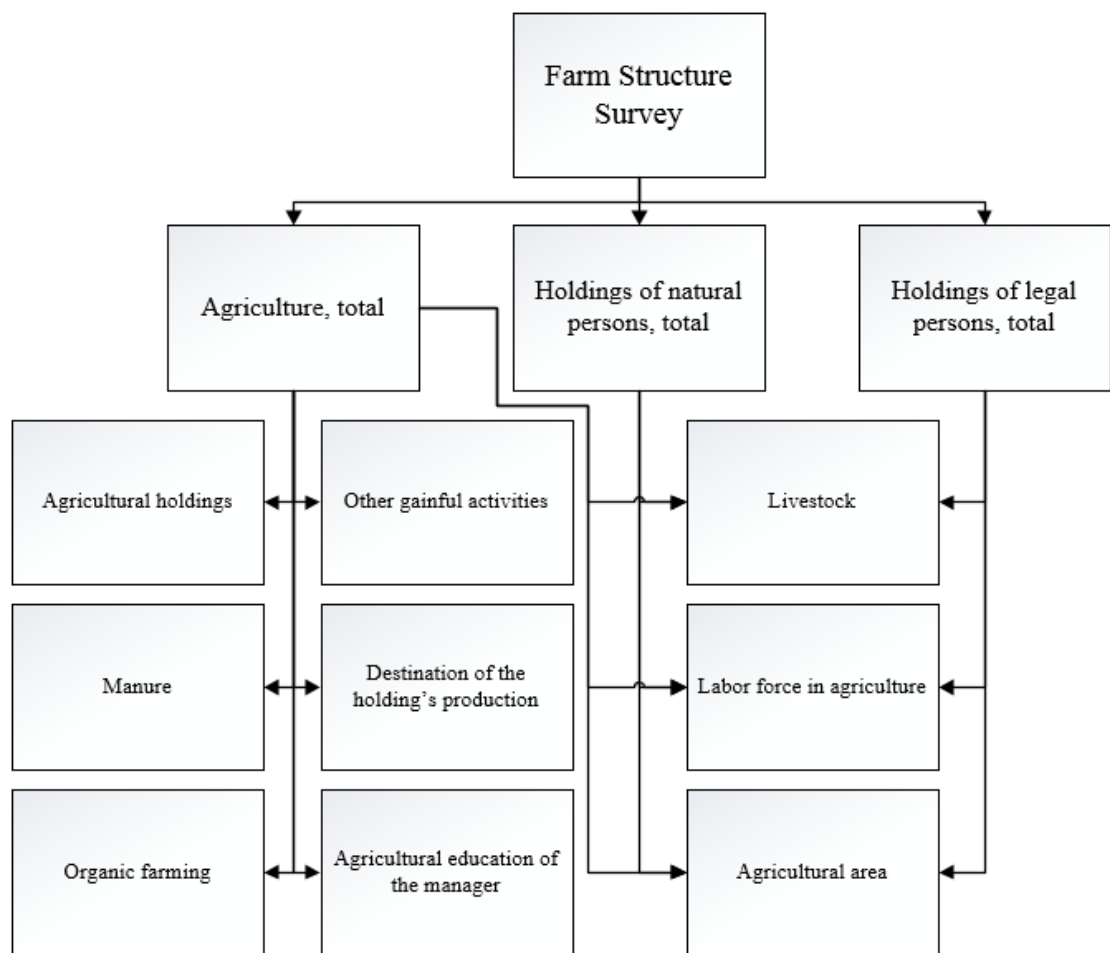


Fig. System of indicators

How you can see from this figure, two groups of holdings and agriculture in general have different groups of indicators. For example, holdings of legal persons and holdings of natural persons have the following groups of indicators: livestock, labor force in agriculture and agricultural area.

Let's analyze the results of Farm Structure Survey in 2013, 2016 years and the result of Agrocensus 2010 in Czech Republic.

In 2016 compared to 2010, the number of agricultural holdings is more by 3.66 thousand, or increased by 16.01%, labor force is decreased by 2.05%, utilized agricultural area is decreased by 0.77%, cereals is decreased by 6.52%, wheat is increased by 1.55%, barely is decreased by 16.47%, area of land is decreased by 4.45%, cattle is increased by 6.08%, dairy cows is decreased by 3.09%, poultry is decreased by 0.86%, pigs is less by 19.17%, sheep is increased by 25.47% and goats is increased by 29.94%.

Sheep and goat numbers in Czech Republic have a long-term increasing trend since approximately 2000. This can be connected with a progress of organic production during this period. The results of livestock statistics conducted for national purposes show the same trend.

Generally, the farmers make efforts to minimize the fallow land/unutilized area. However, the reasons for recording the land as unutilized can also depend on, for example, bad weather conditions during the harvest year.

Table 1 shows indicators of the size of production per agricultural holding in Czech Republic and European Union.

Table 1

Indicators of the size of production per agricultural holding

Indicators	Years			2016 relative to 2010, %
	2010	2013	2016	
Czech Republic				
Labor force, persons	8.14	6.93	6.87	84.43
Area of land, ha	221.86	193.42	182.72	82.36
Utilized agricultural area, ha	152.36	133.04	130.32	85.53
Nominal number of livestock, livestock unit	45.68	40.29	40.68	89.06
Wheel and track tractors, tractors	2.61	2.95
European Union				
Labor force, persons	1.66	2.04	1.96	117.55
Area of land, ha	32.67	20.16	20.07	61.44
Utilized agricultural area, ha	14.49	16.14	16.56	114.28
Nominal number of livestock, livestock unit	6.35	7.80	8.43	132.79

How you can see from this table, in 2016 compared to 2010, all indicators in Czech Republic are lower. Labor force in 2016 is lower by 1.27 people, or -15.57%, area of land (-39.14 ha or 17.64%), utilized agricultural area (-22.04 ha or -14.47%), nominal number of livestock (-3.22 livestock unit or -7.04%). In 2016 compared to 2010 in European Union labor force is higher by 0.29 people, or 17.55%, area of land (-1.26 ha or -38.56%), utilized agricultural area (0.21 ha or 14.28%), nominal number of livestock (2.08 livestock unit or 32.79%).

Table 2 shows production intensification indicators in Czech Republic and European Union.

Table 2

Production intensification indicators

Indicators	Years			Mean	2016 relative to 2010, %	2016 relative to 2013, %
	2010	2013	2016			
Czech Republic						
Per 100 ha utilized agricultural area:						
Labor force, people	5.34	5.21	5.27	5.27	98.72	101.32
Cattle, heads	38.15	39.20	40.78	39.38	106.91	104.04
Dairy cows, heads	10.93	10.60	10.68	10.74	97.66	100.78
Goats, heads	0.49	0.51	0.64	0.54	130.95	123.91
Sheep, heads	5.28	5.71	6.68	5.89	126.45	117.00

Wheel and track tractors, tractors	1.71	2.21	...	1.96
Share of utilized agricultural area in area of land	68.67	68.78	71.32	69.59	103.85	103.68
Poultry per 100 ha cereals, thous. heads	1.75	1.77	1.85	1.79	106.05	104.36
European Union						
Per 100 ha utilized agricultural area:						
Labor force, people	11.48	12.64	11.81	11.98	102.86	93.41
Cattle, heads	48.87	49.94	51.64	50.15	105.65	103.39
Dairy cows, heads	12.97	15.07	13.58	13.87	104.65	90.07
Goats, heads	7.44	12.50	13.90	11.28	186.94	111.27
Sheep, heads	50.07	66.86	70.97	62.63	141.74	106.14
Share of utilized agricultural area in area of land, %	44.35	80.07	82.49	68.97	185.99	103.03

How you can see from this table, agricultural holdings in Czech Republic in 2016 used more efficient means of production. In 2016, labor force per 100 hectares utilized agricultural area is less than 2010 by 0.07 people, or -1.28%, dairy cows per 100 hectares utilized agricultural area is less by 2.34%, but at the same time cattle per 100 hectares utilized agricultural area is 6.91% more, goats per 100 hectares utilized agricultural area is 30.95% more, sheep per 100 hectares utilized agricultural area is 26.45% more, share of utilized agricultural area in area of land is 3.85% more, poultry per 100 ha cereals is 6.05% more. In 2016, labor force per 100 hectares utilized agricultural area is more than 2010 by 0.07 people, or 1.32%, cattle per 100 hectares utilized agricultural area is 4.04% more, dairy cows per 100 hectares utilized agricultural area is 0.78% more, goats per 100 hectares utilized agricultural area is 23.91% more, sheep per 100 hectares utilized agricultural area is 17% more, share of utilized agricultural area in area of land is 3.68% more, poultry per 100 ha cereals is 4.36% more. In the European Union, the situation is similar to the Czech Republic, with the exception that labor force (-6.59%) and dairy cows (-9.93%) are decreasing.

In general, it can be noted that agricultural development trends in the Czech Republic are similar to the European Union. There is an increase in the concentration of production and an increase in its intensity: the number of labor per agricultural holding is decreasing, but at the same time, the number of livestock and the share of agricultural land in land are increasing. It can also be noted that Czech enterprises stand out against the backdrop of the European Union: Czech agricultural holdings are higher in size of production compared to the European Union but European Union agricultural holdings conduct production that is more intensive and use more efficient means of production than Czech Republic. European Union agricultural holdings generally specialize in crop production, while Czech agricultural holdings specialize in crop production and livestock production in approximately the same way.

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ВЕКТОР СУБСИДИРОВАНИЯ ОВОЩНОГО ПРОИЗВОДСТВА РЕГИОНА

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Аннотация: *Определяется значение овощеводства в формировании продовольственной обеспеченности региона. Устанавливается роль отдельных регионов Центрального федерального округа в структуре рынка овощной продукции. Дается анализ использования овощей в конкретном регионе. Обосновывается необходимость субсидирования отрасли овощеводства. Определяются перспективные параметры производства овощей в Московской области. Выявляются диспропорции в субсидировании сельскохозяйственных производителей в расчете на 1 га сельскохозяйственных угодий.*

Ключевые слова: *субсидирование сельскохозяйственных производителей, Московская область, потребление овощной продукции, рынок овощей, личное потребление*

В настоящее время в Москве и Московской области наблюдается повышенный спрос на экологически чистую сельскохозяйственную продукцию. Данная тенденция обусловлена повышением качества жизни жителей этих регионов.

Но, на данный момент времени сельскохозяйственные организации и хозяйства населения данных территорий неспособны обеспечить себя местной продукцией надлежащего качества. Для устранения этой проблемы и наращивания производства и обработки сельскохозяйственной продукции в Московской области реализуется государственная программа «Сельское хозяйство Подмосковья», а Министерством сельского хозяйства РФ были определены приоритетные направления развития агропромышленного