

## SUPPORT OF AGRICULTURAL SECTOR IN THE SLOVAK REPUBLIC

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### **Abstract**

*The Common Agricultural Policy belongs to the oldest and most important policies of the European Union. One of its aims is to support economic performance of farms. The objective of the paper was to analyse the support of agricultural sector in the Slovak Republic from 2010 to 2017. The second part of the paper provides an overview of agricultural support in other countries of the world by using the Producer Support Estimate. The results show that support from EU funds as well as from the state budget was very important for maintaining competitiveness of the Slovakia's agriculture sector. Provided support was classified to five basic groups: market organization in agricultural commodities, direct payments, rural development, state aid with national measures and general services. The most important tool for supporting farmers is direct payments. They aim to stabilize farmers' income, improve the competitive position of farmers, prevent the negative impact of cross-border subsidy competition from neighbouring countries and revitalize livestock production.*

**Key words:** agricultural sector, subsidies, Common Agricultural Policy, economic performance

### **INTRODUCTION**

The Slovak Republic, as a part of the EU area, follows principles and rules of the Common Agricultural Policy (CAP), which provides income support to farmers in order to provide EU citizens with quality, safe and affordable food products.

According to [12] “the Common Agricultural Policy of the EU is one of the oldest European policies. It is characterized by large and diversified groups of beneficiaries, diversity of objectives, multi-level decision-making and an important budget”.

The importance of the CAP has not changed over the years of its existence, despite the ever-changing conditions and situation in the world. The challenges facing not only farmers but also society as a whole are also changing. These include climate change, political and economic instability or the growing importance of the world trade [4].

The Ministry of Agriculture and Rural Development of the Slovak Republic (MARD SR) creates and implements the regulatory and legislative framework in accordance with the EU policies and legislation. Agriculture in the Slovak Republic has joined the new conditions within the globalization of the

world economy and thus gained new opportunities arising from the common market within the EU CAP, where all trade barriers for the free movement of goods and services between Member States have disappeared [13].

The concept of agricultural subsidy can generally be understood as any measure of state institutions, which affects the amount of income/profit of the producer [17]. “The impact of such subsidies on farmers' income and farm profitability is obvious and many farms would generate a loss without subsidies” [6]. According to [8] “it is not only this indicator that the subsidy policy has a significant impact on. Subsidies also affect production volume, amount of costs and production efficiency”.

[2] states that the influence of subsidies is much wider, because they affect real conditions in specific markets. Part of the economic cost of subsidies has the ability to intervene in market conditions and distort market signals. According to [11] and [5] direct subsidies are often multidirectional and depend on different conditions. The same instrument can positively affect the economy of a farm in one country and harm farms in another. Accurate determination of the effects

of agricultural subsidies requires thorough empirical research and on-going verification of theoretical knowledge.

[10] states that „agricultural subsidies have been criticized for distorting agricultural markets and labour allocation in the economy by constraining or preventing structural change that is essential for economic growth and development. At the same time, proponents of agricultural subsidies have argued that such policies are crucial to support incomes of farmers and to sustain rural communities by creating jobs and preventing out-migration from rural areas”.

According to [14] “subsidies are also used to influence production and consumption decisions. The aim of agricultural policy is to ensure that farmers are able to achieve a reasonable profit within average, regional or specific conditions of a given country with the help of targeted support”. Subsidies are tools of implementing goals of a particular policy. The choice of these tools and their mutual combination should be based on a clarified strategy, on the knowledge of the environment and on the overall economic situation of the given state [3].

“Agricultural subsidy - support policies influence the optimal decisions of farmers through various mechanisms. Production efficiency and support policies are decisive factors influencing the income situation and the economic stability of agriculture. Other determinants include: optimal structure of production, efficiency of cost factors with an impact on employment, renewal of fixed capital and secured sales of production” [7]. According to [9] within the support policy of Slovak agriculture, subsidies are provided to help to achieve the prosperity of agricultural enterprises, to ensure adequate incomes, assistance to implement strategic objectives of agricultural and nutrition policy of the state in practice and to achieve other goals, such as a wide range of maintaining and developing decent living conditions for the rural population, the rural environment as well as ensuring the consumption of agricultural products.

The aim of the paper is to analyse the support for agricultural sector in the Slovak Republic.

In addition to an overview of Slovak support, the paper also provides an overview of agricultural support in other countries of the world, cooperating with the OECD, by using the Producer Support Estimate (PSE).

## MATERIALS AND METHODS

The support provided to Slovak agriculture was evaluated for the years 2010 - 2017 and divided into five main groups:

- market-oriented expenditure (MOE),
- direct payments,
- rural development,
- state aid and national measures and
- general services.

Each of the above mentioned groups includes other more specific groups of subsidies. The Agricultural Paying Agency (APA) is responsible for the implementation of all market and trade instruments of the CAP in Slovakia.

Basic mathematical-statistical methods, index method, comparative analysis were used for processing the paper. Information sources of the paper were data from the Ministry of Agriculture and Rural Development of the Slovak Republic, OECD, and materials from the APA as well as other available information from Internet sources.

## RESULTS AND DISCUSSIONS

Applicants in the Slovak Republic in the field of agriculture have the opportunity to apply for funding activities from European sources. The 2013 reform was the last stage in the still open process of adapting and shaping the CAP (Regulations (EU) No. 1303 to 1308/2013, of 20 December 2013). The main guidelines of the CAP for the period 2014-2020 relate to the conversion of decoupled aid into a multifunctional support system. Following the CAP reform, the structure of direct payments has changed. The new system of direct payments consists of a multi-component support system and, for the first time, a greening component has been introduced into the first pillar of the CAP.

Measures, which will contribute to the adaptation of crops and livestock to rising air

temperatures and changes in precipitation, are needed to mitigate the impact of climate change on soil and its productive function. The wide range of existing instruments under the second pillar of the CAP has been simplified to focus on promoting competitiveness, innovation, knowledge-

based agriculture, young start-ups, sustainable management of natural resources and harmonious territorial development.

The following Table 1 presents the development of total expenditures to agriculture sector of Slovakia in years 2010-2017.

Table 1. Total expenses to Slovakia's agriculture sector in the years 2010-2017 (in million €)

Type of support	2010	2011	2012	2013	2014	2015	2016	2017	Index 2017/2010
Market-oriented expenditures	13.6	13.1	9.8	12.0	10.9	13.7	11.5	17.3	1.27
Direct payments	337.6	365.2	370.3	365.2	405.1	385	408	410.5	1.22
Rural development	481.1	408.5	345.8	224.1	189.0	373.8	162.4	233	0.48
Operational Program Fisheries	2.0	1.7	3.2	1.5	2.3	2.6	0.4	-	-
State aid and national measures	18.9	8.1	9.1	16.1	7	6.1	4.6	9.3	0.49
General services from budget chapter	97.6	93.8	99.5	94.3	91	89.4	107.8	105.9	1.09
<b>Total expenditures</b>	<b>950.8</b>	<b>890.4</b>	<b>837.7</b>	<b>713.2</b>	<b>705,3</b>	<b>870.6</b>	<b>694.7</b>	<b>776.1</b>	<b>0,82</b>

Source: Ministry of Agriculture and Rural Development of the Slovak Republic (MARD SR), Agricultural Paying Agency (APA) [15, 1].

In total, 6.44 billion EUR was paid to the agriculture sector in the Slovak Republic for the period 2010 – 2017. Total expenditure on agriculture consisted of following basic groups of expenditures: the organization of the market in agricultural commodities (Market-Oriented Expenditure), direct payments, rural development, state aid and national measures and general services to agriculture. Direct payments (47%) and rural development payments (38%) had the largest share on the total volume of support (Fig. 1).

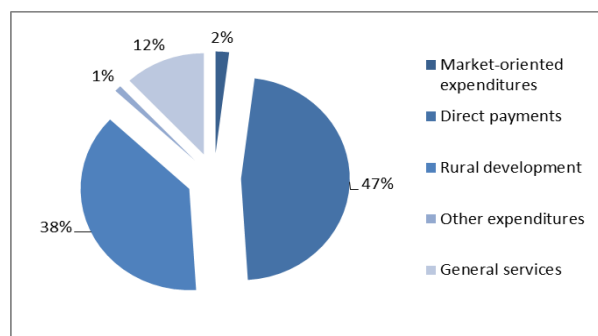


Fig. 1. Structure of support to agriculture in the years 2010-2017

Source: APA, MARD SR. [1, 15].

The structure of support has changed and fluctuated; in 2010 the most significant was the support for rural development. Total expenditure on agriculture in the mentioned period decreased and increased year-on-year differently, the highest volume was in 2010, the lowest in 2014, it was caused by the introduction of the new Rural Development Program 2014-2020.

### Market organization - Market Oriented Expenditures (MOE)

Market-oriented expenditures are expenditures on supporting the export of agricultural products outside the EU and on stabilizing the market for agricultural production. They are financed by the European Agricultural Guarantee Fund (EAGF), which is a part of the EU's general budget. Activities related to market organization are provided by the APA - Market Organization Section. Some of the market measures were co-financed from the state budget (e.g. the "School Milk" Program, the "National Program for the Stabilization and Development of Slovak Beekeeping" and

assistance to producer organizations and producer groups under operational programs). The use of market-oriented expenditures depends on the measures within the market organization in a given year and also on the current situation on the market for the given commodity (Table 2). In the Slovak Republic, it was mainly the drawing of funds under measures in the field of vineyards, fruit and vegetables, milk and dairy products, bees, promotion and export refunds, which was mainly influenced by competitiveness and market opportunities of individual products on markets of third countries.

In the viticulture sector, subsidies were paid, e.g. for the restructuring of vineyards from the National Support Program within the common

organization of the market in wine for the years 2014 - 2018.

In the fruit and vegetables sector, funds were disbursed for operational programs of producer organizations. The “School Fruit and Vegetables” Program is a part of the support mechanisms within the EU Common Organization of Agricultural Markets. The “School Milk” Program has been implemented in the Slovak Republic since 2004. Funds for the supply of milk and dairy products to pupils in school facilities are provided by the EU and the state budget of Slovak Republic. The National Program for the Stabilization and Development of Beekeeping was co-financed by the EU in the amount of 50% as well as by the state budget in the amount of 50%.

Table 2. Support for market-oriented expenditures in the years 2010-2017 (in million €)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	Index 2017/2010
Market-oriented expenditures in total	13.6	13.1	9.8	12.0	10.9	13.7	11.5	17.3	1.28
thereof: expenditures of the EU	10.9	9.9	7.4	9.7	8.1	11.5	7.9	12.1	1.11
Expenditures from state budget	2.7	3.2	2.4	2.3	2.8	2.2	3.6	5.2	1.93

Source: APA, MARD SR. [1, 15].

### Direct payments

Direct payments (Tables 3, 4 and 5) represent direct income support for farmers under pre-established eligibility conditions and form a significant part of EU agricultural expenditure. They are paid in the form of current transfers to non-financial entities directly managing the land, which meet the conditions for their provision. The aim of supporting farmers through direct payments is to: stabilize farmers' income, improve the competitive position of farmers, prevent the negative impact of cross-border subsidy competition from neighbouring countries, develop value-added industries in the Slovak Republic and revitalize livestock production.

Direct payments were paid from the European Agricultural Guarantee Fund (EAGF) based on the fulfilment of conditions set out in Council Regulation (EC) No. 73/2009 establishing common rules for direct support schemes for farmers under the CAP.

The payment deadline is from December the 1<sup>st</sup> of the current year to June 30<sup>th</sup> of the following year. The second source of support is the state budget.

Payments requests on individual direct support schemes were administered by the APA in compliance with current legislation. Approximately 90% of direct payments were paid in December of the relevant year. APA notified and paid direct payments to applicants each year in the form of: single area payment (SAPS), dairy cow payment, complementary national direct payments, specific sugar payment, specific fruit and vegetables payment, transitional payment for cultivation of tomatoes, transitional national payments.

The system of direct support, implemented since 2015, aims to achieve a direct positive impact on the actual performance of agricultural holdings, more efficient distribution of support within individual areas, increase of food security, employment and

improve the overall standard of living of the rural population. Separate direct payments since 2015 have been paid in the form of:

-Single area payment - simplified basic payment scheme,

-Payment for agricultural practices beneficial for the climate and the environment,

-Payment for young farmers.

Table 3. Direct payments rates in the years 2010-2014 (in €)

Indicator	Unit	2010	2011	2012	2013	2014	Index 2014/2010
<b>SAPS - Single Area Payment Scheme</b>	ha	142.4	155.4	174	188.5	205.57	1.44
<b>Specific sugar payment</b>	ha	273.9	597.5	597.5	594.4	597.96	2.18
<b>Payment for dairy cow</b>	pieces	60.84	79.16	86.15	98.86	209.13	3.44
<b>Specific fruits and vegetable payment</b>	ha	52.71	55.15	55.56	56.63	56.47	1.07
<b>Transitional payment for cultivation of tomatoes</b>	ha	477.9	538.4	-	-	-	-
<b>Payment for cultivation of hops</b>	ha	387.8	300.6	269.8	269	269	0.69
<b>Livestock unit payment</b>	livestock unit (LU)	143	150	135	138	140	0.98

Source: MARD SR. [15].

Table 4. Direct payments rates in the years 2015 - 2017 (in €)

Decoupled direct payments	Unit	2015	2016	2017	Index 2017/2015
Transitional simplified basic payment scheme	ha	132.38	134.04	135.45	1.02
Payment for agricultural practices beneficial for the climate and the environment	ha	70.8	71.17	71.7	1.01
Payment for young farmers	ha	60.41	60.41	60.41	1.00
according to § 15 section 2 of the government regulation No. 342/2014, payment coefficient of financial discipline	%	1.280254	1.358046	1.323995	
<b>Coupled direct payments</b>					
Payment for sugar beet cultivation	ha	369.8	374.11	362.36	0.98
Payment for hops cultivation	ha	605.46	406.99	410.13	0.68
Payment for cultivation of selected fruit varieties with high labour intensity	ha	268.48	155.32	134.26	0.50
Payment for cultivation of selected fruit varieties with very high labour intensity	ha	392.48	244.75	255	0.65
Payment for cultivation of selected vegetable varieties with high labour intensity	ha	51.76	45.87	47.87	0.92
Payment for cultivation of selected vegetable varieties with very high labour intensity	ha	101.5	70.48	113.81	1.2
Payment for cultivation of tomatoes	ha	862.69	555.71	508.22	0.59
Payment for ewes, ewe lambs and goats	pieces	19.09	17.01	17.33	0.91
Payment for selected categories of livestock fattening	livestock unit	213.82	223.03	216.08	1.01
Payment for cows reared in a market milk production system	pieces	250.21	274.6	278.59	1.11
according to § 16 of the government regulation No. 36/2015, payment coefficient of financial discipline	%	1.280254	1.358046	1.323995	
<b>Transitional national payments</b>					
Complementary national area payment	ha	0	0	0	-
Complementary national hops payment	ha	0	0	0	-
<b>Complementary national livestock unit payment:</b>					
according to § 4 section 2 letter a), b), c) a f):	livestock unit	0	0	0	-
according to § 4 section 2 letter d):	livestock unit	105	98	91	0.87
according to § 4 section 2 letter e):	livestock unit	68.25	63.7	59.15	0.87

Source: MARD SR. [15].

Since 2015, coupled direct payments have been structured as follows:

- Payment for sugar beet cultivation,
- Payment for hops cultivation,
- Payment for cultivation of selected fruit varieties with high labour intensity,
- Payment for cultivation of selected fruit varieties with very high labour intensity,
- Payment for cultivation of selected vegetable varieties with high labour intensity,
- Payment for cultivation of selected vegetable varieties with very high labour intensity,
- Payment for cultivation of tomatoes,
- Payment for ewes, ewe lambs and goats,

-Payment for selected categories of livestock fattening,

-Payment for cows reared in a market milk production system.

The provision of direct payments was regulated by the Government Regulation no. 342/2014 Coll., which lays down rules for providing support for agriculture sector in connection with schemes of separate direct payments; and by the Government Regulation no. 36/2015 Coll., which lays down rules for providing support for agriculture sector in connection with schemes of coupled direct payments, as amended by the Government Regulation no. 122/2016 Coll.

Table 5. Direct payments in the years 2010-2017 (in million €)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	Index 2017/2015
<b>Single area payment</b>	259.8	285.9	336.6	332.6	355.4	48.04	0	0	-
<b>Dairy cow</b>	0	10.2	12.2	12.4	24.6	3.56	0	0	-
<b>Separate sugar payment + other direct payments</b>	13.2	20.1	20.1	19	19.2	1.29	0.01	0.01	0.008
<b>Complementary direct payments (transitional national payments), thereof:</b>	64.6	49	1.4	1.1	6	5.96	5.57	5.17	0.87
Complementary area payments	2.9	0.007	0.002	0	0	0	0	0	-
Arable crops	0	0	0	0	0	0.01	0	0	-
Tobacco	0	0	0	0	0	0	0	0	-
Hops	0.1	0.1	0.01	0.01	0.01	0	0	0	-
Livestock unit	61.6	48.9	1.4	1.1	5.9	5.95	5.57	5.17	0.87
<b>Simplified basic payment scheme (new SAPS)</b>						181.7	217.17	222.92	1.23
<b>Payments beneficial for the climate and the environment</b>						97.99	116.73	119.5	1.22
<b>Payment for young farmers</b>						0	0.26	0.45	-
<b>Coupled direct payments, thereof:</b>						41.54	63.24	57.39	1.38
Payment for sugar beet cultivation						6.22	7.83	6.71	1.08
Payment for hops cultivation						0.06	0.04	0.04	0.67
Payment for cultivation of selected fruit varieties with high labour intensity						0.22	0.17	0.17	0.77
Payment for cultivation of selected fruit varieties with very high labour intensity						0.6	0.43	0.4	0.67
Payment for cultivation of selected vegetable varieties with high labour intensity						0.05	0.07	0.08	1.60
Payment for cultivation of selected vegetable varieties with very high labour intensity						0.37	0.37	0.44	1.19
Payment for cultivation of tomatoes						0.27	0.27	0.04	0.15
Payment for ewes, ewe lambs and goats						3.93	6.01	5.30	1.35
Payment for selected categories of livestock fattening						5.63	9.06	8.90	1.58
Payment for cows reared in a market milk production system						24.19	39.01	35.31	1.46
<b>Reimbursement of financial discipline</b>						4.96	4.96	5.05	1.02
<b>Transferred financial resources to Central Control and Testing Institute</b>							0.08	0	-
<b>Direct payments in total</b>	<b>338.0</b>	<b>365.0</b>	<b>370.3</b>	<b>365.2</b>	<b>405.2</b>	<b>385.0</b>	<b>408.0</b>	<b>410.5</b>	1.07

Source: MARD SR. [15].

### Rural development

The Rural Development Program of the Slovak Republic 2007 - 2013 covered Slovakia's entire territory and it was implemented on the basis of EU legislation. The Rural Development Program of the Slovak Republic 2014 - 2020 (RDP SR 2014 - 2020) is also intended for the entire territory of Slovakia (NUTS I). Based on this document, assistance is provided under 16 measures (including the "Technical Assistance" measure) contributing to the six rural development priorities.

The Commission Implementing Regulation (EU) 2015/831 was changed by the Commission Implementing Regulation (EU) 2016/526. Based on the mentioned change (modification of the RDP SR 2014-2020), public contributions for the implementation of the rural development program were increased from EUR 2,079,595,129 to the level of EUR

2,099,199,696 and the maximum EAFRD contribution from EUR 1,545,272,844 to EUR 1,559,691,844.

The 2013 reform retains many of the main characteristics of rural development policy from the previous programming period (2007-2013), such as: improving the strategic approach to rural development programming, strengthening the content of rural development measures, simplifying the rules, respectively where possible, reduce the related administrative burden, link rural development policy more closely with other European Structural and Investment Funds. An overview of drawing funds for rural development in the Slovak Republic is given in Table 6 and Figure 2.

The support for rural development reached its highest level in 2010. After this year, we can observe a gradual decline. The only exceptions were the years 2015 and 2017.

Table 6. Rural development support in the years 2010-2017 (in million €)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Rural Development Program (2007-2013)	481.1	408.5	345.8	224.1	119.3	313.8	0.0	0.0
Rural Development Program (2014-2020)	0.0	0.0	0.0	0.0	69.7	60.0	162.4	233.0
Rural development in total	481.1	408.5	345.8	224.1	189.0	373.8	162.4	233.0

Source: MARD SR. [15].

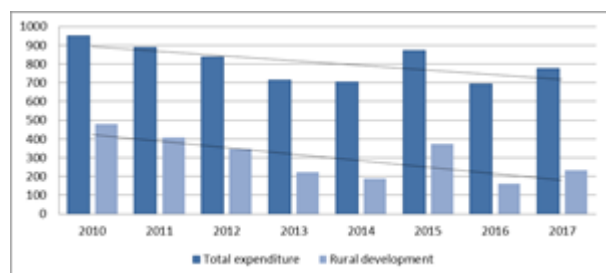


Fig. 2. Total expenditure on agriculture and rural development support (in million €)

Source: MARD SR. [15].

### Operational Program Fisheries of the Slovak Republic

The Operational Program Fisheries of the Slovak Republic 2007 - 2013 covered the entire territory of Slovakia and it was implemented on the basis of Council Regulations (EC) and implemented from the European Fisheries Fund in accordance with the Council Regulation (EC) No. 1198/2006 and 1303/2013. The aim was to ensure sustainable development of the fisheries sector, fisheries areas and inland fisheries in

accordance with the principles of the Common Fisheries Policy. The total amount of public funds for the given programming period 2007 - 2013 was € 18,922,750, of which € 13,688,528 from EU funds and € 5,234,222 from the state budget of the Slovak Republic for co-financing.

The Fisheries Operational Program 2014 - 2020 was approved by the EC in 2015. The total volume of public expenditure for the seven-year programming period was € 20,832,779 (of which European Maritime and Fisheries Fund: € 15,785,000; state budget: € 5,047,779). It builds on the support implemented in the 2007-2013 programming period, in particular in the field of investment in aquaculture and the processing of fishery and aquaculture products. The support for complementary activities through the diversification of income from aquaculture and measures to comply with rules of the EU Common Fisheries Policy in the field of data collection and control activities, including

enforcement, is a new element in the 2014-2020 programming period. Expenditures for the Operational Program Fisheries in the years

2010-2017 are shown in Table 7. The highest level of support was achieved in 2012.

Table 7. Expenditures on Operational Program Fisheries (in million €)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	Index 2017/2010
<b>Operational Program Fisheries</b>	2.0	1.7	3.2	1.5	2.3	2.6	0.4	0.9	0.45

Source: MARD SR. [15].

### State aid and national measures

State aid and national measures were intended mainly for the development of small and medium-sized enterprises operating in primary agricultural production (Table 8). The basis for the provision of state aid is the legislation of the European Community, implemented into the legal framework of the Slovak Republic, together with the Regulation of the Government of the Slovak Republic no.

369/2007 Coll. on certain support measures for agriculture as amended. State aid may be granted for: activities in primary agricultural production, activities in the processing of agricultural products and the production of food products, activities in the marketing of agricultural and food products, etc. The highest share of state support on total support was in 2013 (2.3 %) and the lowest share in 2015 and 2016 (0.7 %).

Table 8. State aid and national measures in the years 2010-2017 (in million €)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	Index 2017/2010
<b>Total support</b>	950.8	890.3	837.7	713.2	705.3	870.6	694.7	776.1	0.82
<b>State aid + national measures</b>	18.9	8.1	9.1	16.1	7.0	6.1	4.6	9.3	0.49
<b>Share of state support in % on total support</b>	2.0	1.0	1.0	2.3	1.0	0.7	0.7	1.2	0.60

Source: MARD SR. [15].

### General services

General services for farmers (Table 9) are provided mainly by specialized institutions within the agricultural sector. The services of specialized state administration institutions accounted for the largest share of total services. Their activities focused primarily on

monitoring compliance with phytosanitary, veterinary and hygienic regulations, in order to maintain the quality and safety of food. Inspection services had the highest share on total general services expenditure every year (55.41 % in average).

Table 9. General services expenditure in the years 2010-2017 (in million €)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	Index 17/10
<b>Research and development</b>	10.4	7.7	7.6	7.1	6.1	6.5	3.6	3.2	0.31
<b>Agricultural education</b>	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.6	1.50
<b>Inspection services</b>	54.7	55.2	61.5	44.5	46.5	53.7	77.8	53.3	0.97
<b>Infrastructure</b>	1.8	1.1	1.4	1.2	1.4	1.0	2.3	1.5	0.83
<b>Marketing and promotion</b>	4.4	0.4	0.4	0.4	0.5	0.6	0.5	0.5	0.11
<b>Other services including support to civil society organisations, non-profit associations and state enterprises</b>	33.3	33.7	34.0	43.6	37.6	28.7	24.8	50.8	1.53
<b>General services in total</b>	105	98.4	105.3	97.3	92.5	90.8	109.3	105.9	1.01

Source: MARD SR. [15].



## OECD and Producer Support Estimate (PSE)

Countries around the world have significantly changed their agricultural trade and domestic support policies over the last two decades.

In some countries, support provided to farmers has become more decoupled from production, which means that many farmers no longer receive payments for the production of a particular commodity and have instead started to focus on environmental performance. However, in some developed countries, support remains high and linked to production, while some emerging economies have also been hit hard by policy interventions that undermine production decisions. In both cases, the support could have been better targeted at public services, which benefit producers, consumers and

society as a whole. The OECD monitors the extent to which policies adapt to the needs of growth, resilience and sustainability.

Producer Support Estimate is one of the best-known measures developed by the OECD and used worldwide (Table 10). PSE - represents the equivalent of production subsidies respectively estimate of producer support. PSE is the sum of the costs of supporting farmers due to trade barriers that keep domestic prices above world prices (paid by consumers) plus payments from budgetary sources and subsidies to support the purchase of inputs (paid by taxpayers). Through the PSE, it is possible to assess support for agriculture and compare its level with other countries. The highest level of PSE we can observe in case of Norway, Iceland and Switzerland.

Table 10. Overview of PSE development in selected OECD countries in 2000 – 2019

Country	2000	2005	2010	2015	2019	Index 2019/2000
Australia	3.74	3.64	2.95	1.81	1.9	0.51
Brazil	7.11	7.67	6.37	2.56	1.1	0.15
Canada	19.39	21.17	16.61	8.44	8.8	0.45
Colombia	21.97	20.12	20.74	15.58	10.8	0.49
Costa Rica	8.63	6.32	13.96	11.47	7.6	0.88
EÚ-28	33.19	31.23	20.33	19.14	19	0.57
Chile	10.93	4.69	2.62	3.17	2.7	0.25
China	3.67	7.75	12.27	15.67	12.1	3.30
Iceland	70.74	67.13	44.37	57.08	54.6	0.77
Israel	22.2	10.72	13.22	17.78	17.4	0.78
Japan	59.74	53.8	54.11	44.07	41.3	0.69
Kazakhstan	12.79	14.65	9.39	11.37	3.4	0.27
Korea	66.14	59.61	44.64	50.77	46.1	0.70
Mexico	24.2	13.65	12.76	10.96	8.5	0.35
New Zealand	0.32	1.37	0.64	0.64	0.7	2.19
Norway	66.59	65.78	59.67	59.55	57.6	0.86
OECD total	32.92	27.61	19.86	17.89	17.8	0.54
Philippines	21.3	14.18	21.52	25.68	27.1	1.27
Russia	1.53	14.70	22.4	12.21	9.2	6.01
South Africa	5.85	6.26	1.73	4.67	4.6	0.79
Switzerland	67.18	63.81	46.04	59.01	47.4	0.71
Turkey	32.38	28.99	27.48	26.15	13.5	0.42
Ukraine	0.41	10.94	6.43	7.53	1.6	3.90
USA	22.67	15.50	8.58	9.59	12.1	0.53

Source: OECD Agriculture Statistics, Agricultural support estimate (Edition 2019) [16].

On the other hand to the group of countries with lowest PSE belong Ukraine, New Zealand and Chile.

The Slovak Republic also annually provides a report for the “Monitoring and Evaluation of OECD Agricultural Policies”, needed for elaboration of the Producer Support Estimate.

PSE data for individual states of the European Union are not published, as their publication requires the consent of all EU countries.

The agricultural sector in each country faces many challenges related to meeting future requirements for food, fuel, environmental

services in a more sustainable way in the context of a changing climate.

## CONCLUSIONS

Support from EU funds as well as from the state budget in the years 2010-2017 had an irreplaceable importance for the agricultural sector in Slovakia. Overall, 6.44 billion EUR was paid to the agricultural sector of the Slovak republic. These expenditures were classified to following basic groups: market organization in agricultural commodities, direct payments, rural development, state aid with national measures and general services. The largest volume of support was in direct payments (47%) and rural development payments (38%).

Total expenditure on agriculture had a decreasing trend, but varying from year to year. They have been decreasing year-on-year since 2011, increasing in 2015 and 2017. The fluctuations were mainly caused by rural development support and the fact that the highest volume of priority support under the Rural Development Program 2007-2013 was paid in the first years of the programming period.

As a part of rural development in 2016, APA also performed tasks related to the cancellation of liens on projects for which the contract expired, administered responses to control and audit findings of control bodies and related tasks in the preparation of irregularities. The Section of Direct Supports within the RDP SR 2007 - 2013 registered cases of applications in which administrative proceedings were taking place for various reasons (pending appeals of applicants, renewal of proceedings, multi-year court proceedings). The most funds were spent each year to support disadvantaged areas.

Direct payments reached the highest volume in 2016; compared to 2007 they increased from 242.1 million EUR to 408.0 million EUR (by 40.7%); their year-on-year fluctuation was not as significant as in rural development. Single area payments accounted for the largest share of direct payments every year.

Effective agricultural policies are essential to meet the growing demand for safe and nutritious food in a sustainable way. While the growth in demand for food, feed, fuels, etc. presents significant opportunities for agriculture, government policies need to address challenges such as increasing productivity growth, improving environmental behaviour and adapting to climate change, and improving the resilience of farms to market shocks caused by weather and other unforeseen circumstances.

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