

## SMALL FARMERS, THEIR POSITION AND SUPPORT WITHIN THE CAP – CASE OF SLOVAKIA

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### Abstract

*The small farmers are an important element of sustainable agricultural production, multifunctional agriculture and rural development. It is the predominant mode of agricultural production in the world. Despite its predominance in the agricultural structure, small farming encounters several difficulties. Therefore, it is hard to imagine functioning of small farms without subsidies for production, especially direct area payments. The aim of the paper is to identify the development trend of small farmers in Slovakia and to point out their needs in the Slovak agricultural business environment. Based on the results we can expect a further increasing trend of number of small farmers in Slovakia. Therefore, we need to take into consideration their support and elimination of barriers in the Slovak environment, e.g. to improvement the access to the land, support of the business of the beginning farmers, improvement the possibilities to use the project support, improvement the access to the credits and improvement the access to the non-project measures. The adopted measures should be prepared carefully with the aim to eliminate the misuse the financial effect providing to support of agricultural business.*

**Key words:** small farmers, predominant mode, sustainability, forecast, CAP EU, project and non-project measures

### INTRODUCTION

The EU farming sector has undergone major structural changes over recent decades. The agricultural structural changes in land ownership, farm size and age composition of farmers have been understood to have a significant impact on the efficient use of agricultural resources [3]. Family farming is the predominant mode of agricultural production in the world. Family farms produce about 80 percent of the world's food in value terms, and collectively they are the largest source of employment worldwide [7]. Indeed, family farming is the most common business model in small-scale agriculture. Small farms are perceived to be diversified and to contribute more to environmental sustainability, preservation of traditional values, and economic resilience than large farms [6,19]. The importance of small farms is given that the unique and substantial contribution of small and family farms to the production of food and public goods, as well as ensuring balanced rural development, where large incorporated farms account for

only a small proportion of the global farm system [21].

Despite its predominance in the agricultural structure, small and family farming encounters several difficulties in remaining economically viable, such as expensive land cost, low farm efficiency and productivity, high input prices, lacking accessibility of credit or other financial resources, weak bargaining power within the supply chain, fluctuating market prices and being particularly vulnerable to climate change [8] and particularly the rapid ageing of the farmer population and the scarcity of young farmers entering the profession [22]. The small-scale agricultural countries encounter several structural problems. Some studies indicate that, compared to their older counterparts, young farmers have more potential to improve farm competitiveness and achieve better social viability for rural communities. Moreover, young farmers can also promote a wider range of rural socio-economic activities, such as food safety, rural tourism, conservation of traditions and cultural heritage, awareness of the negative effects of

farmland abandonment, and participation in local associations [7]. Therefore, the renewal of farming generations has become an urgent need for the adjustment of the EU agricultural sector regarding the small-holding farming world [4,10]. The EU Common Agricultural Policy aims also to reallocate resources to those producers with better capability of maximizing farm productivity and profitability. A particular structural challenge concerns the future development of small and family farms [5,21].

There is missing uniform terminology of small farmers among the states as well as in the international organisations. Family farms are equated to small farms by various authors [1,2]. According to the Food and Agricultural Organization's (FAO) definition, family farm is an agricultural holding which is managed and operated by a household and where farm labour is largely supplied by that household [7].

Smallholders are small-scale farmers, pastoralists, forest keepers, fishers who manage areas varying from less than one hectare to 10 hectares. Smallholders are characterized by family-focused motives such as favouring the stability of the farm household system, using mainly family labour for production and using part of the produce for family consumption [8]. According to the Small Farmers Scheme of the EU there is no strict definition of small farmer. The scheme is available to the farmers wishing to participate in the Small Farmers Scheme and receiving an annual payment fixed by the Member State of between €500 and €1,000, regardless of the farm's size [4]. The participants will face less stringent cross-compliance requirements, and be exempt from greening. In 2003, the European Commission adopted a recommendation 2003/361/EC concerning the definition of micro, small and medium-sized enterprises. It entered into force on January 1, 2005 and applies to all EU policies, programmes and measures for SMEs. Article 2 of the Annex of this recommendation defines a small enterprise as an enterprise which employs fewer than 50 persons and an annual turnover and/or annual

balance sheet total of which does not exceed EUR 10 million.

In Slovakia, there is a special type of agricultural businessmen which is defined by the Commercial Code and by the Act no. 105/1990 Coll. on private business of citizens. It is called individual farmer (in Slovak language – samostatne hospodáriaci roľník). It is a physical person carrying out the agricultural production as a businessman personally or by the help of other persons mostly family members. The physical person has to file an application to be noted down in the evidence of individual farmers at the particular municipal office where the agricultural business will be carried out. The individual farmers employ less than 50 employees; most of them employ 0 or 1 employee. The acreage of agricultural land per farmer ranges from 0.1 hectare to more than 500 ha. The land distribution is described in the Table 1.

Table 1. Land distribution cultivating by the individual farmers

Land distribution (in ha)	Number of individual farmers in %	
	2014	2015
	0, 1 – 50	24.82
51 – 100	27.55	28.51
101- 500	42.59	36.84
More than 500	5.05	3.86

Source: own-processing according to the Green report of Ministry for the agriculture and rural development, 2016

The most of individual farmers (84.5% of them) received an economic profit; in average 63.3 euro per hectare of agricultural land in 2015 [9]. However, this is an influence of the support from the CAP; otherwise, the most of individual farmers would be in a loss. For the purposes of our paper, we consider the individual farmers as the small farmers for the purposes of the Small Farmers Scheme. The aim of the paper is to identify the development trend of small farmers in Slovakia and to point out their needs in the Slovak agricultural business environment. The Slovak agriculture is characterized by a dual farm structure, with a high proportion (80 %) of small farms (usually doing business as

physical persons), and a small number of large farms (20 %) which usually use the legal forms of corporates or cooperatives (legal entities). Firstly, we identify development and current state of small farmers in Slovakia from 1993 – 2016 and we tried to provide a forecast for the next three years. Secondly, we identify the options of financial support providing by the European Union within the CAP. In the conclusions, there are including the proposals how to strengthen the current status of small farmers in Slovakia.

## MATERIALS AND METHODS

The number of small farmers in Slovakia was observed from 1993 to 2016. The data was received from the database of Statistical Office of Slovak Republic. We provided a forecast of number of small farmers for next three years by the Statistical Analytical System (SAS) that produces 582 models for that purposes. We chose the two best models according to the criteria MAPE (Mean Absolute Percent Error), R-square taking into account also the Akaike criterion and Schwarz-Bayssian criterion. MAPE is calculated as follows:

$$MAPE = \frac{1}{N} \sum_{t=1}^N \left| \frac{y_t - \hat{y}_t}{y_t} \right| \times 100$$

MAPE criterion measures the size of the error in percentage terms. The model is acceptable if the MAPE criterion is less than 10; if it is less than 5%, we can state the high quality of the model.

R-square is calculated as follows:

$$R^2 = 1 - \frac{\sum_{i=1}^n (y_i - \hat{y}_i)^2}{\sum_{i=1}^n (y_i - y_{average})^2}$$

R-square measures the proportion of variance explained by the model. R-square ranges from 0 to 1 and the R-square with the values close to one points out the most appropriate models. The values of Akaike criterion and Schwarz – Bayssian criterion are useful when comparing models. The model with the lowest value is the best model among all compared models.

Akaike criterion can be calculated as follows:

$$AIC = 2k - 2\ln(L)$$

where k is the number of estimated

parameters in the model and L is the maximized value of the likelihood function characterised as follows:  $L = P(x|\Theta, M)$ ; M is the model of data x and  $\Theta$  is the parameter values that maximize the likelihood function. Schwarz – Bayssian criterion is close to the AIC where the lowest value is preferred and is calculated as follows:

$$BIC = \ln(n)k - 2\ln(L)$$

where n is the number of observations and k is the number of estimated parameters in the model and L is above-mentioned.

## RESULTS AND DISCUSSIONS

### 1.Small farmers in Slovakia, their current state and development

Small farmers as the physical persons could do their business in agricultural production in Slovakia from 1st July 1991 when the Act on private business of citizens and its amendment entered into force. However, we observe their development from 1993 when the Slovak Republic received its independence. The development of small farmers in Slovakia is documented in the Figure 1.

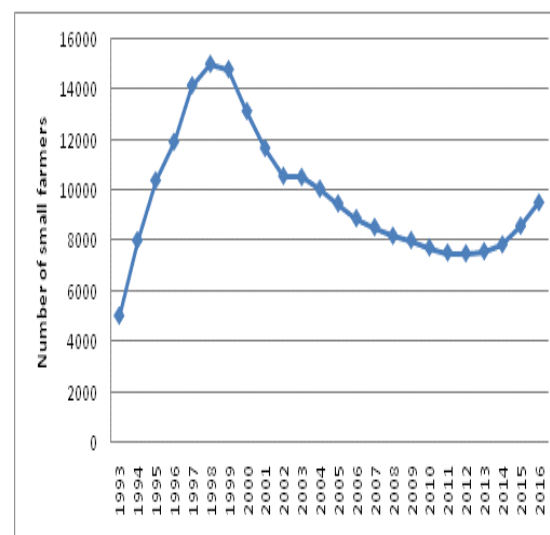


Fig. 1. Development of small farmers in Slovakia 1993 – 2016.

Source: own calculation by the sources of Statistical Office of SR, 2017

The development trend was caused by the economic changes oriented to creation of market economy, especially restitution of land, privatisation in agriculture and transformation of agricultural cooperatives.

The second increasing of small farmers (but much smaller than from 1993) was in 2003 - 2004 when the second restitution act no. 503/2003 Coll. on restitution of land ownership entered into force. The last increasing of small farmers was observed in 2013 – 2014 when the credit for agricultural businessmen called “My land” was created. It enabled to finance the purchase of agricultural land to farmers. The agreement between Ministry of Agriculture and Rural development of SR and Slovak Guarantee and Development Bank enabled to purchase the agricultural land to farmers by credits with preferable interest rate. From 2016, there is a new version of credit for agricultural businessmen oriented also to young farmers who do not have enough capital for credit guarantee. Another reason of increasing the number of small farmers in Slovakia is an implementation of new system of direct payments which is created by the multicomponent system of supports. It points out the sustainable improvement of rural environment and support of young farmers. Moreover, the economic profit of agricultural businessmen including the small farmers in Slovakia in the last years was a motivation factor for doing business in agriculture.

Based on this development trend, we tried to provide a forecast for next three years. The results of the forecast are documented in the Table 2 and 3.

Table 2. Forecast of number of small farmers in Slovakia 2017 - 2019

Year	1 <sup>st</sup> model		
	Predicted value	Upper 95% confidence	Lower 95% confidence
2017	10,523	11,171	9,874
2018	11,404	13,140	9,667
2019	12,258	15,507	9,009

Source: own calculation,2018

We used two combined models, each one is a combination of three others models. The first model (ARIMA(2,1,1)(0,1,1)s; ARIMA (2,1,1)(1,1,0)s a ARIMA (3,1,1)(0,1,0)s) is a combination of three best models by the MAPE indicator. The second model (Winters Method – Additive, Damped Trend

Exponential Smoothing and ARIMA (3,1,1) (1,1,0)s) is a combination of three best models by the R-square indicator.

Table 3. Forecast of number of small farmers in Slovakia 2017 - 2019

Year	2 <sup>nd</sup> model		
	Predicted value	Upper 95% confidence	Lower 95% confidence
2017	10,451	11,118	9,784
2018	11,332	12,891	9,773
2019	12,240	14,969	9,511

Source: own calculation,2018

These combined models were selected on the indicators presented in the table 4 and described in the chapter of material and methods.

Table 4. Indicators for evaluation of model quality

Models	MAPE	R-Square	Akaike Criterion	Schwarz – Bayssian Criterion
1 <sup>st</sup> model	3.67975	0.944	284.582	287.855
2 <sup>nd</sup> model	3.35673	0.958	305.573	309.107

Source: own calculation,2018

The model is acceptable if the MAPE criterion is less than 10. We chose the model with the smallest value of MAPE and both models have MAPE under 5%, which indicates a good model quality. The values of Akaike criterion and Schwarz – Bayssian criterion are useful when comparing more models. The model with the lowest value is the best model among all compared models. In Table 3, there are two best models according to these criteria. The R-square characteristic is more than 90 percent that confirms the good model quality.

According to the results of Table 2 and Table 3, there are only small differences in the models; however, we can state that the second model (Table 2) is the better for providing a prediction of development of the small farmers. However, the second model has the higher values of Akaike and Schwarz – Bayssian criterions; there are better values of MAPE and R-square that we consider as more

important indicators for evaluation of model quality. When evaluating the model quality, we can take into account also the lower and upper confidence of the predicted values. In the second model, there is the smallest interval of confidence (in 2018 and 2019). According to the above compared criteria we prefer the predicted values of the second model as the more reliable one.

Based on the results we can expect a further increasing trend of number of small farmers in Slovakia. In that the small farmers are an important element of agricultural business and rural development [19,21], we need to take into consideration their support and elimination of barriers in the Slovak environment. However the adopted measures should be prepared carefully with the aim to eliminate the misuse the financial effect providing to support of agricultural business. For that purpose we analysed the number of small farmers who were registered in a particular year and who were erased from the register, especially those who was registered and erased in the same year. The results are documented in the Table 4.

The number of registered and erased small farmers in the same year has again an increasing trend in the last years. At the beginning of the observed period, the high number of registered and erased small farmers in the same year could be explained by the absence of business skills and expertise to be successful in the agricultural business. Moreover, the integration on the internal market of the EU causes the agricultural business environment more difficult for starting of successful agricultural business. However, the increasing trend of the registered and erased small farmers in the same year during the last years is a little bit surprised. The main purpose is probably a business environment that was not stable and was influenced by the many foreign factors such as business risk because of volatility of the markets with the agricultural commodities, support system of CAP, national factors such as impact of national legislation, impact of financial and economic measures (national support, credits, insurance,

taxes, etc.) and internal factors such as managerial decision-making and saving measures of businessmen [9].

Table 5. Number of registered and erased of small farmers in Slovakia in 1993- 2016

year	Number of registered small farmers	Number of erased small farmers	Number of small farmers registered and erased form register in the same year	
			Absolute Frequency	Relative frequency from the total number of erased small farmers
1993	3,250	260	58	22.31
1994	2,557	178	22	12.36
1995	1,843	319	51	15.99
1996	2,585	339	102	30.09
1997	1,129	282	11	3.90
1998	785	994	95	9.56
1999	636	2,296	86	3.75
2000	594	2,060	82	3.98
2001	646	1,750	64	3.66
2002	969	1,012	100	9.88
2003	933	1,401	114	8.14
2004	896	999	103	10.31
2005	604	992	93	9.38
2006	430	916	39	4.26
2007	349	606	25	4.13
2008	282	683	14	2.05
2009	247	526	16	3.04
2010	233	547	18	3.29
2011	269	564	51	9.04
2012	260	449	56	12.47
2013	341	413	54	13.08
2014	487	339	57	16.81
2015	1,181	446	73	16.37
2016	1,394	463	88	19.01

Source: own calculation by the Statistical Office of Slovak Republic, 2017

The financial support of the small farmers in Slovakia is necessary if they should survive; on the other hand, the financial measures should be created so that nobody was able to misuse them.

## 2.Options of support for small farmers

A small farm, used for agricultural purposes is not only a source of incomes and food, but also gives a chance for living in own environment, where there are own goods; house, farm, machinery, tractor, land. It is also an effective protection against exclusion from the labour market, even when one loses the other, non-agricultural workplace, which

could have been even better for living and invest in machines or production assets. [15]. In order to distinguish of cultivation on agricultural land, small farms can also use less productive land, for example, to grow energy-growing plants. The authors [11,16] identified the economically efficient harvests of these plants for local use in regions of Slovakia. However, it is hard to imagine functioning of small farms without subsidies for production, especially direct payments regardless rich or power countries of the EU.

### **2.1.Options of financial support providing by the CAP**

The CAP in the period 2014-2020 focuses on market orientation by providing income support and establishing protective network mechanisms for producers in the light of environmental protection requirements and improving support for rural development across the EU. It is important to point out the primary role of the CAP, namely to provide a policy framework that will support agricultural producers to meet the objectives of the CAP, which are:

- improving the competitiveness of the agricultural sector,
- improving the sustainability of natural resources in the longer term,
- increasing efficiency and ensuring balanced territorial development.

The CAP 2014-2020 continues on the basis of a two-pillar system. Pillar I, financed by the European Agricultural Guarantee Fund covers direct payments (direct payments, payments for good agricultural practices, redistributive payment scheme for young farmers, small farmers scheme and a voluntary coupled support) and CMO. Changes in financial support in the current programming period compared to the previous one concern direct payments, which are the main source of support for young, small and family farmers. The allocation of direct payments intended for coupled support and young farmers is at the discretion of Member States. The Slovak Republic has for the first time applied support for young farmers in the 2014-2020 programming period. The payment for young farmers is paid on the basis of a scheme for

small farmers based on a simplified support scheme for primary agricultural producers with a maximum grant of up to EUR 1 250 and can be complemented with start-up aid under II. pillar. The reason for applying this payment is the age structure of farmers and the attempt to generational change in agriculture, as only 14% of farmers in the EU are under 40 years of age. The cross compliance and agricultural advisory system also remains in the 2014-2020 programming period. EU member States have the possibility to better target direct aids through optional schemes, including a redistributive payment, which allows support for decoupled payment on the first 28 ha of arable land (this is the average size of a Slovak farm or applicant), which represents up to 65% of the average payment per hectare in support of small and medium-sized farms, supplementary payments which may be up to 5% of the total amount for land allocated to less-favoured areas.

The CAP tools for support the performance and competitiveness of farms within the II. pillar includes measures related to the restructuring and modernization of farms, aid for young farmers implementing agricultural production as a business, farm advisory system, education and innovation. These tools are designed to help farmers adapt to new trends and technologies. Rural development policy 2014-2020 remains unchanged. The II pillar support is implemented in the Slovak Republic through the Rural Development Program for 2014-2020 and contains Slovakia's priorities in the use of public funds of EUR 2.1 billion for the period 2014-2020, of which 1 545 million EUR is from the EU budget and EUR 534 million from national funding.

The basic framework of the project supports RDP 2014-2020, and also includes following measures for target groups of beginning and existing small farmers:

Measure 1: knowledge transfer and innovation in agriculture, forestry and rural areas – mainly the possibility of using agricultural training services

Measure 2: Farm advisory services and farm management - allows the use of advisory

services for agricultural advisers, including special advisory services for farmers, who for the first time an agricultural holding, young farmers in the areas of legislation, production, processing and sale of products and specific advice for effective business management

Measure 4: Investment in physical assets - to obtain investment support. Special attention is paid to small farmers and young farmers who implement their business plan. Supported investments relate to increased competitiveness, environmental performance, energy self-sufficiency, increase of added value and finalization of farm production.

Measure 6: Farm and business development - Relate to support for the implementation of the business plan, support for the development of small business activities for farmers, to cover the costs associated with the implementation of the business plan

Submeasure 6.1: support for starting business for young farmers

Submeasure 6.3: support for starting business and development for small farmers

Submeasure 6.4: Supporting investment in the creation and development of non-agricultural activities

Measure 9: Setting up of producer groups and organisations

Measure 17: risk management

Measure 19: LEADER

The EAFRD regulation 2014-2020 also provides for support in the field of innovation. Young farmers are indeed the future of European agriculture – they are likely to have innovative ideas, to be technology-friendly and open to new means of communication. They are also generally better trained than older farm managers. As such, they are well placed to benefit from the opportunities offered by the 'European Innovation Partnership for Agricultural Productivity & Sustainability' (EIP-AGRI). Although not specifically designed for the younger generation of farmers, Member States can include this tool in their rural development programmes to support innovation projects led by operational groups (composed of farmers, advisors, scientists, NGOs, and businesses, working in cooperation). The aim is to develop new products, processes and

technologies in the agri-food and forestry sectors, at regional or national level, and generally foster competition and sustainable farming. The EIP-AGRI pools funding from two main sources: the EAFRD and, for multinational innovation projects, from Horizon 2020, the EU research and innovation programme.

Support dedicated to young farmers under Pillar II (rural development). Within the list of indicative measures proposed in the EAFRD regulation, 'Farm and business development' (Article 19) includes start-up aid for young farmers setting up an agricultural holding for the first time. It is a flat-rate payment, amounting to maximum € 70 000, paid in at least two instalments over a maximum of five years, and conditional upon the submission and successful implementation of a business plan. A new feature of the EAFRD regulation 2014-2020 is the possibility for Member States to include a sub-programme dedicated to young farmers within their rural development programmes (RDPs) and choose measures of particular relevance to this theme from a list provided in the regulation (sub-programmes can also cover other themes to which special and detailed attention must be devoted, such as small farms, mountain areas, women in rural areas, climate change mitigation/adaptation, biodiversity and short supply chains). As regards young farmers, in addition to the start-up aid mentioned above, some appropriate measures suggested are 'Investments in physical assets' (Article 17 of the EAFRD regulation), with a higher support rate (up to +20%),<sup>2</sup> 'Knowledge transfer and information actions' (Article 14) and 'Advisory services, farm management and farm relief services' (Article 15), which provides for 'specific advice for farmers setting up for the first time'.

## **2.2.Improvements of at the national level**

### **(a)Access to the agricultural land**

The small farmers, mainly the farmers who will start their agricultural business face the fundamental problem how to receive the land or additional hectares of land. The agricultural land is a natural resource that is unique, non-recoverable and non-reproduced and its acreage is given by the state boundaries. Most

of land is cultivated by the corporations or cooperatives which receive the land according to the lease or rent agreement. They cultivated less than 10% of land in their ownership but they cultivated many hundreds or thousands hectares of rented or leased land. Then, for the small farmers the access to the land is become an essential barrier to start their business in agriculture. The small farmers (if they are not landowners) have two possibilities how to receive the land – the land rent or land purchase. Both possibilities are accompanied by the barriers caused by the national legislation.

The land rent and lease is regulated by the Act no. 504/2003 Coll. on the agricultural land lease that stipulates many legislative barriers for new land leases, such as the long period of land lease contract (usually 10 – 15 years) that could terminate only by the expiration of a period; prior right of lessee to concluding the new land lease contract (it means that the present lessee has a prior right to conclude the new agreement); a duty of lessor to ask the withdrawal his/her land one year before the termination of contract, otherwise the land lease contract is renewed for at least 5 years [12,13,14].

Nowadays, the land purchase is more complicated due to the Act no. 140/2014 Coll. on the land acquisition. According to this Act the strict range of land purchaser is stipulated. However, the agricultural businessmen are preferred; there is no prefer the small farmers against the big corporations and cooperatives and the negotiation power of small farmers is missing because the land price is stipulated by the landowner according to his/her subjective opinions in the public register created by the Act for this purposes [13].

Moreover, there is a problem of enormous land fragmentation in Slovakia. The Slovak law maker adopted the Act 180/1995 Coll. that prevents the land fragmentation under the minimum size of land. However, the Slovak legislation concerning the land fragmentation is not very effective and does not prevent the land fragmentation. The Act no. 330/1991 on the land consolidation does not enable to manage the land consolidation by the public

offices very well [14,20].

The Slovak law maker should consider more carefully the legislative measures when adopting the law for improvement the access to the land and takes into consideration a special status of the small farmers who want to start their business in agriculture. In addition, the land consolidation is supported also by the Programme of Rural Development 2014-2020. Therefore the legislative measure should be simplified how to realise the land consolidation to be enable to use the financial support from the Programme of Rural Development.

#### **(b) Support for start-up a business**

The intention to increase especially the number of young and small farmers is being realized by various support tools implemented within the EU CAP. For young farmers is the support for starting a business significant, since there has been observed growing trend of those who start and finish the agricultural activity in the same year (as seen in table 4). Dominantly, support should be directed at small and young farmers in order to refinance the entry costs of the agricultural business needed to start a business in order to support the willingness of farmers to set up an agricultural business entity. Support should provide capital assistance to start-up a business. For young farmers in the programming period 2014-2020 is intended measure Start-up aid for young farmers.

The European Union farming sector faces a demographic challenge a shortage of young farmers – that undermines its long-term sustainability. Many socio-economic factors, such as reduced access to land and credit, and lack of rural infrastructure, drive young people away from a career in agriculture. The EU therefore provides various forms of support and incentives to facilitate young people's entry in the farming business, most notably in the framework of the reformed Common Agricultural Policy (CAP) 2014-2020, which introduced new or strengthened measures to encourage them to set up in farming. Under the first pillar of the CAP, young farmers receive a 25% supplement to the direct aid allocated to their farm, for a



period of five years, as part of the 'Young Farmer Scheme' which Member States are obliged to implement. Under the second pillar, they have access to support co-financed under the European Agricultural Fund for Rural Development (EAFRD): a start-up grants and various economic, environmental, development and innovation measures which Member States can choose to include in their national Rural Development Programmes.

To address the demographic challenge in the agricultural sector and encourage young people to embark on a farming career, legislators have, for the first time, introduced a specific package for them in Pillar I – the 'Young Farmer Scheme' (IFS) – complementing support made available under Pillar II. Regulation (EU) No 1307/2013 on direct payments stipulates that the aim of the IFS is 'to facilitate the initial establishment of young farmers and the structural adjustments of their holdings after the initial setting up', and defines young farmers as natural persons, setting up an agricultural holding for the first time or have set up a holding in the previous five years, and who are no more than 40 years of age. Under the YFS, young farmers receive an annual 25% top-up to their basic payment for a period of five years from the date of their installation. The IFS is compulsory for Member States, which means that they are obliged to allocate up to 2% of their national direct payment envelope to these supplementary payments. They can choose to strengthen the eligibility criteria by defining further requirements (such as adequate training or submission of a business plan).

#### **(c) Access to project measures in the context of Rural development programme**

Based on realized research [17,18], we consider that EU financial support realized through European Agricultural Found for Rural development had positive impact on competitiveness of agricultural holdings and increase of labor productivity (significant positive impact – evaluated in economically strong holdings). Financial support allowed receivers of support to strengthen the production capacity, improve the use of factors of production and introduction of new

techniques and products in short time period, which caused the maintaining and moderate increase of the competitiveness level in connection to their future activity, increase of the market share and more stable production and development in future. It is necessary to state, that not only the innovations and their introduction into production process, but also rational allocation of productive structures into the most favorable natural and production conditions and optimal combination and cohesion of main production factors use are contributing to strengthen the competitiveness of agricultural subject. Main agricultural subject are located in rural areas, which do have special structural features, as relatively low economic basis, limited business opportunities, low interface between sectors, relatively low level of knowledge transfer, because of listed features do such rural areas belong to less favorite areas to implement innovations. Therefore the support of implementation of innovation on agricultural level is the main task of government support via Programme for rural development in Slovak republic for the years 2014-2020. Such a support should lead to the creation of strong and viable agricultural sector and stable the position of small farmers in Slovak republic.

#### **(d) Access to the credits**

One of the most discussed problems of small and young farmers is missing of suitable credits for purchase of agricultural land. From 2005, the Slovak Guarantee and Development Bank has provide a credits (called "LAND") for purchase of agricultural land mostly the rented or leased land cultivated by the agricultural businessmen according to the rent or lease contract. In 2013, the credit product "My Land" was prepared by the Ministry of Agriculture and Rural Development of the SR and provided by the Slovak Guarantee and Development Bank. The new product included a few important changes, mainly the opportunity to purchase not only complete land plots but also a co-ownership share and the option to purchase the built-up land under real estate. The co-financing was changed from 20% to 15%. The interest rate was in average 4,5% in the credit "Land" according

to the policy of interest rate. The interest rate of the credit "My land" was coordinated by the Communication from the Commission on the revision of the method for setting the reference and discount rates (2008/C14/02); it was in average from 1.66% to 4.66%. In 2015, the credit "My land for young farmers" started to provide by the Slovak Guarantee and Development Bank. The co-financing is only 10%; however the credit limit is much smaller from 5,000 to 30,000 euro (in comparison with the above mentioned credits up to 250,000 (credit My land) or 330,000 euro (credit Land). The interest rate is the same as the interest rate for credit My land. Regarding the land price and land rent payment the interest rate of these credit products is high for the agricultural businessmen, mainly for the beginners in the agriculture [19].

#### **(e) Access to direct support and non-project measures in the context of Rural development programme**

Facilitate small and young farmers access to non-project measures of the Rural Development Program and support under decoupled and coupled direct payment scheme including. These include direct payments, greening, measures in the context of animal welfare, agri-environment-climate payments, and payments for ecological farming. Direct payment and greening are important source of finance for Slovak farmers, they should contribute to help mainly young and small farmers to slow the decrease of agricultural land and make the farming more attractive for young farmers. Payment for areas with natural constraints or other specific constraints and Payment within Natura 2000 for agricultural land are also important, because 50% of areas of Slovak republic belong to these areas. Payments are an irreplaceable component of efficient management to compensate the degree of land-use disadvantage that achieves lower performance parameters.

Coupled direct payment scheme and complementary national payments for young and small farmers are important to stabilize throughout the programming period and allow

farmers to set up their business plan without fear of changes in the level of support. Due to the structure of agricultural businesses, there is considerable support for young farmers and small farmers in plant production, which is intended to promote fruit and vegetable, beet, hops and vine growing. Significant support measures under the common organization of agricultural markets for target groups of farmers are support measures for the common organization of the market in wine, support for fruit and vegetables and support for the beekeeping sector.

## **CONCLUSIONS**

The importance of small farms is documented in the many publications mentioned in this study. The small farmers are an important element of sustainable agricultural production, multifunctional agriculture and rural development. They are able to be resist against the economic changes when cultivating the land in their own ownership (most of corporations and cooperatives cultivate the rented land). It follows the higher flexibility when using own production factors. Based on the results we can expect a further increasing trend of number of small farmers in Slovakia. However, it is hard to imagine functioning of small farms without subsidies for production, especially direct area payments regardless rich or power countries of the EU.

Therefore, we need to take into consideration their support and elimination of barriers in the Slovak environment, e.g. to improve the access to the land, support of the business of the beginning farmers, improvement the possibilities to use the project support, improvement the access to the credits and improvement the access to the non-project measures.

The adopted measures should be prepared carefully with the aim to eliminate the misuse the financial effect providing to support of agricultural business.

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