BUSINESS ENTITIES IN THE RURAL AREAS AS THE ACTORS OF COMPETITIVENESS AND SUSTAINABLE DEVELOPMENT OF REGIONS

Zuzana Bajusová¹, Lubomír Gurčík², Peter Bajus³, Mária Gulová⁴
Slovak University of Agriculture in Nitra¹,²,³,⁴
Department of Economics¹,²,⁴, Department of Machines and Production Biosystems³
Tr. A. Hlinku 2
Nitra, Slovak Republic
e-mail¹,²,³,⁴: bajusova.spu@gmail.com¹, lubomir.gurcik@uniag.sk², xbajus@is.uniag.sk³, mariagulova91@gmail.com⁴

Abstract

Nowadays, there is a growing interest in regional competitiveness, but it should be noted that such competitiveness is a very broad concept and involves many sectional areas and the factors that affect it. Agriculture is one of the oldest industries and can be considered as an important part of the national economy of the state. A suitable business environment is one of the target instruments to ensure the competitiveness of the regions, which increases the awareness of the region itself. The priority of farms is to create the right conditions for the sustainability and competitiveness of the regions, to protect the environment in the most efficient way and to constantly apply new knowledge from science, research and development, thereby increasing the potential for new business creation in the agro-sector.

The aim of the paper is to evaluate the influence of businesses in the agricultural sector that significantly influence the development and competitiveness of regions. An important aspect in terms of competitiveness of the region is to provide citizens with a higher standard of living. However Slovakia is characterized by significant regional disparities, to which belong disparities in regional competitiveness. The paper is focused on assessment of business structure within the agricultural sector operating in Slovakia and the assessment of the representation of agriculture at regional level calculated on the basis of the location index. Within the Slovak regions at levels NUTS I Slovak Republic and NUTS III Košice region are evaluated socio-economic indicators such as development of the employment in agriculture, the share of
gross domestic product, gross value added, and these can be described as indicators
to assess the overall competitiveness of the region. The research is focused on the
comparison of the development of comparative indicators of economic level of the
agricultural sector in the Košice region to developments in whole Slovakia.

According to the results of the research it is necessary to point out the fact that
Slovak agriculture is currently in a complicated economic situation, caused by the
economic crisis and the failing market due to a large number of externalities. The
highest representation in the agricultural sector is in the western Slovakia, and mov-
ing towards eastern Slovakia, results are reduced to the level of sub-representative
representation. For the development of the Košice region, it would be appropriate to
attract both domestic and foreign investors and try to keep as many qualified and
educated people as possible, as well as having a sufficient interest in increasing com-
petitiveness in this region. The results of the paper show that agriculture in the Košice
region is developing in a negative direction.

Keywords: region, competitiveness, entrepreneurial subject, agriculture, socio-econo-
mic indicators

JEL classification: R11, J1, J43

1 Introduction

Nowadays, emphasis is placed on increased attention in the area of regional de-
velopment, not only within the Slovak Republic but also in the world. Slovakia is
characterized by marked regional disparities between regions. A substantial part
of many regional differences are given by geographic, cultural, economic, admin-
istrative and other centers, which have a negative impact on the development of
individual regions in the territory of the Slovak Republic. The basis for identifying
the supported regions is in particular an analytical assessment of the situation in
individual regions of the Slovak Republic and the definition of problem regions
based on selected indicators, which can determine the degree of problem and
regional disparities affecting the development of individual regions. Based on so-
cio-economic indicators, areas with the strongest weaknesses and manifestations
of regional inequalities that need to be mitigated can be analyzed.

Agriculture is one of the oldest industries and can be considered as an im-
potent part of the national economy of the state. Agricultural enterprises in the
agro-sector, which can be understood as engines of regional development, also
have a significant share in the development of regions. Therefore, it is necessary
to create conditions that would facilitate the emergence of new businesses in the
agro-sector, maintain and further develop existing businesses. These businesses
create new job opportunities, contributing to increased employment and greatly influencing the stability of the whole region. A suitable business environment is one of the main instruments to ensure the competitiveness of the regions, which increases the awareness of the region itself. The main interest of the region should be the development of a suitable business base, thus ensuring better living conditions for the inhabitants of the regions. Enterprises in the agro-sector must adapt to ever-changing conditions, a competitive environment and a steady increase in economic and technological efficiency of production.

The current trend of farms has a steadily declining tendency. The structure of the legal forms has changed significantly, resulting in a decline in the number of workers in the sector. The priority of farms is to create suitable conditions for the sustainability and competitiveness of the regions, to protect the environment in the most cost-effective way and to constantly apply new knowledge from science, research and development, thereby increasing the potential for new business creation in the agro-sector.

1.1 Region

Understanding the concept of a region is very inconsistent, and it is used in different ways in professional works. It has a wide-ranging content from the point of view of the approaches to its definition that we have encountered in the works of domestic and foreign authors. Its exact definition is difficult. We can meet different interpretations of the region with different terms and different meanings. The Region has its content definition in many disciplines such as in economics, history, sociology, statistics, ethnography, geography and urbanism. Since it is possible to identify and define a large number of regions, its most appropriate definition depends on the purpose for which the region is to serve. The region can be seen as a certain link between the whole of society and the local population. It is a defined area where dynamics of the state and the local population meet, with the region providing the opportunity to concentrate local initiatives and evaluate them as a whole.

Under Act 539/2008 Zz. on regional development support, the region is a territorially defined area for the creation and implementation of regional and structural policy at level two or three according to the classification of statistical territorial units.
A special figure for defining planning regions is their classification called Nomenclature of Territorial Statistical Units - NUTS. The European Union has set up a common nomenclature of territorial units for statistical purposes, which allows the collection, compilation and dissemination of harmonized regional statistics in the EU. This five-tier hierarchical built system represents the division of land into territorial units established by the Statistical Office of the European Commission in cooperation with national institutions for the purposes of monitoring and processing analyzes of the economic and social situation in individual regions and for the needs of regional policy.

Table 1 NUTS classification in SR

<table>
<thead>
<tr>
<th>NUTS level</th>
<th>acronym</th>
<th>Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTS 1</td>
<td>Slovak republic</td>
<td></td>
</tr>
<tr>
<td>NUTS 2</td>
<td>4 area:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bratislava region</td>
<td></td>
</tr>
<tr>
<td></td>
<td>East Slovakia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Central Slovakia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>West Slovakia</td>
<td></td>
</tr>
<tr>
<td>NUTS 3</td>
<td>Regions: Bratislava region, Trnava, Trenčín and Nitra region, Žilina and Banská Bystrica region, Prešov and Košice region</td>
<td></td>
</tr>
<tr>
<td><strong>Local level</strong></td>
<td>LAU 1</td>
<td>Dicticts: 79</td>
</tr>
<tr>
<td></td>
<td>LAU 2</td>
<td>Municipalities, including urban areas:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2927</td>
</tr>
</tbody>
</table>

Source: Own processing.

1.1.1 Regionalization and regional development

Several disciplines are taken over by regionalization, geographers are attempting to define it, but the definitions are not quite uniform.

In their definitions, there is a consensus that regionalization is a process of subdivision of territorial units that have their specific character or characters and their separation from territories that do not have that character.

It is a traditional and indispensable method of regional geography. One of the key issues of regionalization is the question of how many regions should be
defined. The number of regions is based on the size of the landscape as well as on
the purpose we define them.\textsuperscript{6}

Development is generally a very meaningful and serious term, and its inter-
pretation may be very different. In the past, this term has been linked to the concept
of economic growth, so development has been linked with growth in production,
capital and jobs. At present, the definition of regional development has expanded
and includes economic, social, environmental, political and cultural aspects.

To develop, we attribute the main elements that we should include:
1. growth.
2. work
3. equality / justice.
4. participation.
5. independence / autonomy.

Characterization of regional development as a complex of procedures leading
to the creation of a prosperous region, in order to build its competitiveness, pri-
marily by exploiting local potential and spatial differences.\textsuperscript{7}

Regional development is a permanent process in which a wide range of trade
unions and industries are linked whose interrelationships are many times unim-
aginable or very difficult to specify. The multidisciplinary character of the whole
complex of regional sciences is also relevant to all areas of regional development.\textsuperscript{8}

1.1.2 Regional policy and regional disparities

In the system of economic and social policy, regional policy has a significant im-
pact. It uses methods and tools to help initiate and promote the use of natural,
capital and human resources in the region as well as the comparative advantages
of the regions. An important component of a functioning regional policy is:
\begin{itemize}
    \item Creating institutional structures whose purpose, principles and tools of region-
al policy help to bring to life,
    \item Determination of legislative relations between central and regional structures.
\end{itemize}

Currently, expanding the concept of competitiveness at regional level has a
major impact on the direction of regional development policy. It encourages, in
particular, a revival of interest in the form of a new regional policy. In the past,
regional policy has attempted to make regions competitive by attracting interna-
tional competing firms, but with limited success. Looking for a new approach to

\textsuperscript{6} MATOUŠKOVÁ. Regionální a municipální ekonomika. 2004.
\textsuperscript{7} LIPTÁKOVÁ. Verejná správa a regionálny rozvoj. 2008.
\textsuperscript{8} KOLEKTIV. Úvod do regionálních věd a verejné správy. 2004.
regional development is currently focused primarily on increasing the competitiveness of domestic companies.\textsuperscript{9}

On the basis of regional policy, economic processes in the territorial parts of the state are affected by the public sector. The aim is to strengthen the positive externalities to make the region more attractive as an economic site, thus contributing to an increase in the inflow of economic activities into the region, thereby increasing its capacity and performance.\textsuperscript{10}

The spatial difference of phenomena, together with the widening regional inequalities, are a reflection of potential regions’ alternatives in adapting to economic and social transformations and can be seen as a consequence of a different state of factors that determine the development of the region differently.\textsuperscript{11}

With regard to regional disparities, it is necessary to pay attention to:

- reasons for the emergence and increase of regional inequalities,
- the consequences of disparities for the population, the economic development of the region, the landscape and the environment,
- measurement of disparities,
- time and space aspects of disparities,
- processing of regional disparities through regional policy instruments.

The main causes of regional inequality can be considered as primary or natural potential, settlement structure, location attractiveness, transport infrastructure, demographic composition, availability of territory and economic expertise of the regions, but also the impact of historical development and spatial-administrative arrangement plays a very important role.\textsuperscript{12}

There are significant inequalities between the regions of Slovakia as a result of economic and social activities, which are quite different, and different natural geographic assumptions can be followed to create the same conditions for each activity in the regions. At the same time, the distribution of certain economic and social activities is observable with selective character, with the preference of certain sites, settlements or regions. On the basis of this definition, on the one side, regions with good potential and development dispositions are identified and on the other side a group of problematic and also underdeveloped regions.\textsuperscript{13}

\textsuperscript{9} Regionálna konkurencieschopnosť v kontexte globalizácie, novej ekonomickej geografie a inovačných procesov. 2011.
\textsuperscript{10} MAIER – TODTLING. Regionálna a urbanistická ekonomika 2. 1998.
\textsuperscript{12} TVRDOŇ. Regionálne disparity resp. regionálny rozvoj. 2007.
\textsuperscript{13} GAJDOŠ. Teoretický a metodologický rámec klasifikácie a typológie regiónov Slovenska v kontexte teritoriálnych disparít. 2005.
1.2 Competitiveness of the region

Defining competitiveness is a problem for many authors, because they understand it in a different way and therefore create different ambiguities in this concept. There is no uniform definition of competitiveness in the literature. Different definitions of competitiveness are based on several dimensions.

In the area of competitiveness, capabilities, sectors, regions, nations and national groups, sufficient levels of income from factors of production and their use at a sustainable level in today’s competitive environment can be created.14

Regional competitiveness is an important factor in the development of regions that compete with each other for the creation, acquisition, maintenance and support of economic operators. Businesses stabilize or create new job opportunities and have a major impact on the prosperity and living standards of the regions.

The competitiveness of the region is characterized by indicators that will ensure the competitiveness of the region in another region and bring results that bring regional competitiveness, created. It is the ability of a business, industry or country to compete in order to maintain long-term sustainable prosperity.

In the long run, the economic development of the market economy is closely linked to competitiveness as a key factor in the success of companies, states, regions and municipalities. Regions compete in different ways and, above all, attract the business environment to workforce and capital. Regional competitiveness can be considered to be synergy and complementarity that are found in commercial and other socio-economic activities in the region.15

2 Data and Methods

The subject of the paper is the study of entrepreneurial subjects in agriculture in the territory of the Slovak Republic on the basis of selected socio-economic indicators determining the competitiveness and sustainability of individual regions of Slovakia. According to the stated aim of the paper, the methodology used in the paper has mainly descriptive character, using chosen indicators and comparative indicators to provide overview about situation within Slovak republic and Košice region, during period 2004-2013. The data used in the work were obtained mainly from the Slovak statistical office and Research Institute of Agricultural and Food Economics.

14 KOREC. Regionálna konkurencieschopnosť v kontexte globalizácie, novej ekonomickej geografie a inovačných procesov. 2011.
15 WOKOUN. Teoretické a metodologické přístupy k výzkumu regionální konkurenceschopnosti. 2009.
To provide overview about representation of agriculture in regions of Slovak republic, was used localization index:

\[ IL = \frac{(E_{ij} \div E_{i})}{(S_{j} \div S)} \]

Where:
- \( E_{ij} \) - number of employees in sector in j-region
- \( E_{i} \) - number of employed in i-sector in the country
- \( S_{j} \) - population of j-region
- \( S \) - population in the region
  - If the \( IL < 1 \) sector is sub-proportional to the population,
  - If \( IL = 1 \) is the proportional representation of the given sector to the population,
  - If \( IL > 1 \) is over-representation of the sector in the region,

3  Results and Discussion

The Slovak Republic's agriculture changed its structure mainly by political changes after 1989. Changes in ownership and organizational conditions were negative events for agricultural primary production, especially in the first years, and were probably considered the most critical in terms not only of the existence but also of the functioning of the entire Slovak agriculture. These negative events were reflected not only in the overall decline in animal and crop production, but also in the number of employees and the average monthly wage.

Since 1990, we have been able to observe an enormous reduction in the share of employment in agriculture in the Slovak Republic, when it can be stated that in 2013 there was a rapid decrease of employment in RV and ŽV by almost 74.6%. Changes also occurred in the share of the average monthly salary of agricultural workers in Slovakia, and since 1990 the average monthly wage has dropped markedly by almost 29.4%.
The business environment of the agro-sector since 2004 has been largely determined by the activities connected with the preparation of Slovakia for accession to the European Union.

In connection with the accession to the European Union, the development of the business structure in the agrarian sector was considerably differentiated in terms of business conditions and entitlements. The system of the business sphere in agricultural primary production and agricultural services represents a wide range of business entities. The business environment in the agro-sector is influenced by size, size, legislation, economic instruments, financial sector policy, and state aid.

According to the results obtained since 2004, the number of owners of both legal forms has fallen by almost half. In agricultural cooperatives, the number of owners in 2004 was 118,068 and in 2013 their number dropped to 56,838, which means that 112 owners are converted into one agricultural cooperative, and there are 8 owners per 100 ha of agricultural land.

In the case of companies, the number of owners was significantly lower, compared to 13,429 in 2004 and 6,506 in 2013, at the same time in 2013 one owner of 7 owners and one owner per 100 ha of agricultural land.

Localization index - representation of agriculture within Slovak regions

Information on the region’s representation of the sector in terms of population numbers is provided by the localization index. The location index measures the proportion of the industry to the population. Within the monitored period from 2004-2012, an analysis of agriculture representation at regional level NUTS III was carried out. The values given in the following table (see table 2) are analyzed by agricultural representations within the individual regions of Slovakia. The highest values during the monitored period were achieved in the Nitra region.
This region is characterized by lowlands and suitable climatic conditions, it belongs to warmer regions in Slovakia. It is also indicated as the region with the most suitable and best agricultural and arable land, which ultimately results from the highest value of the localization index and is the most suitable area for agricultural production. In the Nitra region, there is an over-proportional representation of agriculture. When analyzing the localization index, the lowest, sub-proportional representation of agriculture in the observed period in the following regions was: Košický, Prešovský, Žilinský, Trenčiansky and Bratislavský kraj. Over-proportional representations of agriculture were in the Trnava, Nitra and Banská Bystrica regions. In Bratislava region representation of agriculture is the lowest in terms of the fact that it is the region with the smallest area compared to the other regions analyzed.

Table 2 Development of localization index at NUTS III level in the Slovak Republic

<table>
<thead>
<tr>
<th>Region/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA</td>
<td>0,63</td>
<td>0,82</td>
<td>0,53</td>
<td>0,48</td>
<td>0,67</td>
<td>0,70</td>
<td>0,63</td>
<td>0,64</td>
<td>0,62</td>
<td>x</td>
</tr>
<tr>
<td>TT</td>
<td>1,49</td>
<td>1,58</td>
<td>1,56</td>
<td>1,56</td>
<td>1,39</td>
<td>1,13</td>
<td>1,04</td>
<td>1,07</td>
<td>1,08</td>
<td>x</td>
</tr>
<tr>
<td>TR</td>
<td>0,90</td>
<td>0,80</td>
<td>0,91</td>
<td>0,94</td>
<td>0,91</td>
<td>1,00</td>
<td>1,03</td>
<td>0,97</td>
<td>0,93</td>
<td>x</td>
</tr>
<tr>
<td>NR</td>
<td>1,49</td>
<td>1,52</td>
<td>1,55</td>
<td>1,58</td>
<td>1,56</td>
<td>1,54</td>
<td>1,55</td>
<td>1,70</td>
<td>1,63</td>
<td>x</td>
</tr>
<tr>
<td>ZI</td>
<td>0,73</td>
<td>0,68</td>
<td>0,77</td>
<td>0,74</td>
<td>0,76</td>
<td>0,72</td>
<td>0,73</td>
<td>0,75</td>
<td>0,83</td>
<td>x</td>
</tr>
<tr>
<td>BB</td>
<td>1,14</td>
<td>1,17</td>
<td>1,14</td>
<td>1,20</td>
<td>1,16</td>
<td>1,18</td>
<td>1,22</td>
<td>1,13</td>
<td>1,24</td>
<td>x</td>
</tr>
<tr>
<td>PO</td>
<td>0,94</td>
<td>0,86</td>
<td>0,81</td>
<td>0,91</td>
<td>0,84</td>
<td>0,94</td>
<td>0,92</td>
<td>0,91</td>
<td>0,93</td>
<td>x</td>
</tr>
<tr>
<td>KE</td>
<td>0,75</td>
<td>0,69</td>
<td>0,81</td>
<td>0,68</td>
<td>0,78</td>
<td>0,82</td>
<td>0,89</td>
<td>0,84</td>
<td>0,77</td>
<td>x</td>
</tr>
</tbody>
</table>

Source: Statistical office SR, own processing.

Analysis of selected socio-economic indicators

Measuring and evaluating development indicators is currently one of the major and most important areas of human activity, particularly in the economy, but also in demography and the environment. Pointers are a number of features. Their main tasks include, in particular, the simplification, clarification and mediation of the information that is important for decision making. They are important in terms of early warning of economic, social and environmental threats.
The share of agriculture in total employment in the Slovak Republic has a long-lasting tendency. From the point of view of the share of total employment in agriculture in the NUTS I Slovak Republic, during the monitored period it can be said that from 2004 to 2007 the trend of employment represented a decreasing tendency, while in 2007 a significant drop in employment in agriculture. However, the downward trend was of a long-term nature throughout the period under review. In 2013, the share of agriculture in total employment was only 2.18%.

The share of agriculture is calculated on GDP has been on a downward trend until 2006. From 2007 to 2008, there was an increase in GDP, but a significant decline could be observed since 2008 and this trend persisted until 2010 when the value of this year was at the same time the lowest value of agriculture's share of GDP. In
2011, there has been an increase and this trend has continued in the years to come and continues to the present.

Picture 4 **Gross fixed capital formation**

Picture 5: **Gross fixed capital formation in agriculture in SR (in mil. €) in agriculture in Košice region (in mil. €)**

![Graph showing gross fixed capital formation in agriculture in SR and Košice region](image)

*Source:* Statistical office SR, own processing.

It is clear that the development of gross fixed capital formation at NUTS I level has been in a fluctuating trend in agriculture. The lowest increase can be observed in 2004 and the highest in 2008 since this year is the declining trend of gross fixed capital formation in agriculture. The decline could be due in particular to low investment in buildings and construction, machinery and equipment, and also to means of transport.

In Košice Region, gross fixed capital in agriculture during the period under review reached the highest amount in 2008 of 73.17 mil. which, compared to 2013, when gross fixed capital reached 37.56 mil. euro, was almost half lower. Comparison of the development of gross fixed capital formation in Slovakia with the Košice region is not very differentiated. In 2004, gross fixed capital in the Košice Region accounted for roughly 10% of the total gross fixed capital of the Slovak Republic, this value being also the lowest achieved value with the other compared years. The rapid increase in gross fixed capital could be monitored in 2008, but this increase was only 11% of the total gross fixed capital of the Slovak Republic.

*Comparison of the development of comparative indicators of the agrosector’s economic level in Košice region with developments in the Slovak Republic*

It can be said that the number of employees in agriculture per one hectare of agricultural land in the Košice Region is considerably lower compared to the Slovak Republic. The lowest number of employees per 1ha in the Košice Region was in 2007 and the highest in 2006. The number of employees in agriculture per
1ha of agricultural land represents an overall reduction not only within the Slovak Republic but also in the Košice region.

Picture 6 **Number of employees in agriculture per 1 hectare of agricultural land**

![Graph showing number of employees in agriculture per 1 hectare of agricultural land from 2004 to 2013.](image)

*Source:* Own processing.

Gross agricultural output per employee has a fluctuating trend within the Slovak Republic as well as at the regional level in Košice region. Years 2004-2005 are almost identical and reach roughly the same gross agricultural output per employee. The lowest value in the Košice region can be seen in 2010, but the following years are a markedly visible increase. In 2013 there was an increase in gross agricultural output per employee within the SR, but at the regional level there was a decrease in the same year.

Picture 7 **Gross agricultural output per employee**

![Graph showing gross agricultural output per employee from 2004 to 2013.](image)

*Source:* Own processing.

During the monitored period sales for agricultural products per employee in the Košice Region from 2004 to 2006 were approximately equal in revenue. A significant increase is visible in 2007, but its value has fallen again in the years to come.
The highest increase in sales of agricultural products was in 2012 but a year later its value declined. Within the Slovak Republic, a steady increase in sales of agricultural products per employee can be noticed from 2009 to 2013.

**Picture 8** Revenue from sales of agricultural products per employee

![Graph showing revenue from sales of agricultural products per employee](image)

**Source:** Own processing.

Gross value added in agriculture per employee in Košice region is only slightly different from the Slovak Republic. In 2007, Košice Region shows a higher value compared to the SR, but this trend did not last long, and next year the gross value added in agriculture per employee was almost identical at the regional level as well as within the Slovak Republic. Since 2010, it can be concluded that gross value added is increasing in both cases.

**Picture 9**: Gross added value in agriculture per employee

![Graph showing gross added value in agriculture per employee](image)

**Source:** Own processing.
4 Conclusion

Agriculture is one of the most important sectors in the economy and its very important function is to provide and secure the nutrition of the population. In spite of this important function, it must observe its competitiveness not only between individual regions within the country but also among countries. At present, competitiveness is a relevant factor, in particular, in determining the success of not only the sector but also enterprises that have to face often the adverse and difficult competitive conditions on the market.

On the basis of the results of the work, the development of the business structure of the agrarian sector in Slovakia was greatly differentiated. The development of primary agricultural enterprises within NUTS I Slovakia has remained unchanged since 2005, but there has been a decline in cooperatives. There was a slight increase in the number of public companies and joint-stock companies, as well as the increase in the number of companies, especially limited liability companies. In enterprises in services for agriculture, on the basis of the results achieved from 2005-2013, the state of state enterprises was stabilized. The other legal forms decreased, but the most significant increase was achieved in the number of registered natural persons.

The region’s performance of the region in terms of population was based on a localization index calculation. Localization index was analyzed from 2004-2012. The results obtained show the highest representation of the agricultural sector in the Nitra region. It is also designated as a region in the most suitable and best agricultural and arable land, which ultimately results also from the highest value of the localization index. Sub-proportional representation of agriculture was in the following regions: Prešov, Košice, Žilina, Trenčín and Bratislava regions. Over-proportional representation was achieved in Nitra, Trnava and Banská Bystrica region.

Through the assessed socio-economic indicators at the NUTS I level of the Slovak Republic, there were demonstrable differences in the share of employees, almost half of the less employed work in business companies as in agricultural cooperatives throughout the period under review. State-owned enterprises and contributory organizations are indifferent in terms of employment in Slovakia. In Slovak agriculture, the structure of the working population changed in terms of education as the number of trained workers, university educated people and secondary education workers increased. Due to the decrease in the share of employment, a reduction in the share of the average monthly wage in agriculture was also shown in Slovak Republic and since 2004 it has been almost year-on-year decreasing.
The results of the paper point that Slovak agriculture is currently in a complicated economic situation caused by the economic crisis and failing market due to a large number of externalities. The highest representation in the agricultural sector in the western Slovakia, and moving towards eastern Slovakia, results are reduced to the level of sub-representative representation. For the development of the Košice region, it would be appropriate to attract both domestic and foreign investors and to try to keep as many qualified and educated people as possible, as well as having a sufficient interest in increasing competitiveness in this region. It is clear from the results that agriculture in the Košice region is developing in a negative direction.

Thus, we have come to the conclusion that, when analyzing the selected indicators and the results achieved, it is not possible to determine clearly which factors can influence regional results and competitiveness. Assessing regional potential is a long-term and permanent need to increase its competitiveness. It is therefore necessary to address the widest range of factors that could be measured and evaluated according to the needs of the region.

The primary factors that could affect the economic development of the region as well as the regions as a whole are:

- a qualified and educated population structure,
- the quality and flexibility of agricultural holdings,
- reducing regional disparities between regions,
- innovations,
- location, cultural and geographical conditions,
- increasing the attractiveness of the agricultural sector.

Agriculture represents the most important economic activity and is an important key element that affects the quality of food, the countryside and also ensures competitiveness in the regions. The common vision should therefore be to ensure and strengthen the competitiveness of agricultural holdings, to strengthen employment and to take account of less-favored areas.

References