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PERFORMANCES OF REGIONAL TOURISM IN THE AREA OF NORTHERN SLOVAKIA

SUMMARY

Tourism is a dynamically developing segment, belonging to important components of the national and world economy. The Slovak Republic has a suitable starting potential for the development of tourism. The North of the Slovak Republic consists of two self-governing regions, acting as tourism regions, which are the subject of the study. Their offer in terms of tourism is diverse. At present, the development of the tourism phenomenon has been significantly slowed down by the Covid-19 pandemic. The study focuses on the Žilina self-governing region and the Prešov self-governing region, which form a unified whole in the North of Slovakia. The aim of this paper is to use analytical methods to identify and describe the performance of tourism in selected regions that form the North of Slovakia. The analysis of tourism development in the Žilina self-governing region and the Prešov self-governing region on the basis of selected statistical indicators, points to the development situation in the time horizon of 15 years. Despite the adjective most mountainous part of Slovakia, the results of the study confirm that these regions are attractive, and, in the past, they were experiencing an increase of visitors. This fact subsequently requires the expansion of services in tourism in the form of complex services and a higher degree of cooperation of entities in the region.

Keywords: tourism, regions, overnight stays, accommodation facilities, income of accommodation facilities

INTRODUCTION

Tourism contributes to the economic growth of the regions and thus also to the economic growth of the country as a whole. It brings not only economic

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benefits but also the cultural, social, ecological ones with an emphasis on sustainability. The potential of tourism in Slovakia is supported by the fact that Europe is the largest market considering the number of international arrivals each year. Slovakia is a country with a very good, although still not fully exploited potential of tourism.

The geographical division of the territory is seemed as a necessary and important for the preference for the development of types of tourism, thus contributing to the reduction of regional disparities. The partnership between tourism and the region depends on the quality of the offer of the natural environment, cultural potential (human footprint in the region) and on the fulfilment of the dynamic component of tourism - attractive organized events of various kinds and measurements. Subsequently, the offer transformed into a product of networks of entities in tourism can address a visitor who will make some effort and visit the selected region.

By increasing the visitors' rate, it is needed to develop the range of services provided in tourism. These facts are monitored through measurable indicators, summarized in statistical results and reports. Based on their values, it is possible to monitor and respond to changes, evaluate the development of the region and then, if necessary, correct it.

Due to the Covid-19 pandemic, not only economic, social life but also dynamically launched tourism has slowed down. The tourism industry, which has dealt very quickly with the occurrence of various diseases around the world as well as with the economic crisis, is experiencing extremely difficult times during this period. Many experts agree that this is the most affected sector.

Overview of the researched issues in the literature

In the scientific bibliography of the recent period, a relatively large group of authors deals with the issue of both tourism and analysis of regions. From the number of publications, due to the focus of the study, relevant studies of the authors are selected, which focus on the relationship and interaction of tourism and the region.

Gao, Xu a Zhang (2019) examine the relationship between CO2 emissions, energy consumption, economic growth and tourism development in the region of selected countries. Dunets *et al.* (2019) are dedicated to sustainable tourism within mountain regions. A comprehensive analysis of tourism in mountainous areas and determining the strategic priorities for different regions is addressed for instance by Dunets *et al.*, 2019a; Sharafutdinov *et al.*, 2018; Voronkova *et al.*, 2019 and others. The influence of the socio-demographic characteristics of visitors on the visited region and the communities in them is examined by Alrwajfah *et al.*, 2019; Rebollo 2018; Micić *et al.*, 2019. The importance and purpose of accommodation facilities in the region monitor for instance Gabryjończyk and Kułaga 2017; Štefko *et al.*, 2018; Márquez 2018.

J. K. Walton (2020) perceives tourism as an act and a process of spending time away from home in search of recreation, relaxation and pleasure, while

using the commercial provision of services. At the beginning of the 21st century, international tourism became one of the most important economic activities. The Statistical Office of the Slovak Republic (2013) characterizes tourism as the activity of people traveling outside their usual environment, not longer than one continuous year (outbound tourism), for the purpose of rest or business reasons, which, however, are not related to paid activities performed at the visited place.

The region is generally understood as a part of the earth's surface, which differs from the surroundings in a certain defined characteristic (Rajčáková 2009). From a geographical point of view, the region represents a limited area, which differs from the others by the set of natural conditions, the structure of the population, the structure of the economy, etc. From a sociological point of view, the region is a territorial unit within which the basic life functions of the population take place (work, housing, education, health, social security, etc.). The region represents a limited area with approximately the same natural-geographical features, economic base, is characterized by a high integrity of intra-regional links, the ability to reproduce development factors from its own resources and has its own typical culture (Bajanová 2010). Regions can be divided into natural and the administrative ones (Výrostová 2010).

Regional arrangement of Slovak territory from 1945

The communist coup in 1948 marked the introduction of a centralist system of governance. Subsequently, it was necessary to create and adopt an appropriate model of regional organization. The basis of the new system was the regional unit. The regional system was introduced by Act no. 280/1948 Coll. on the regional establishment, which created the national committees of the regional level (Mikuš 2018).

The form of regional establishment and the rules of the system were valid until the adoption of Constitutional Act no. 100/1960 Coll. While the official name of the state is changed to the Czechoslovak Socialist Republic (ČSSR). In the same year, there were changes in regional management. By the Act no. 36/1960 Coll. on the territorial division of the state, which is referred to at the time as the Reduction Act, the number of administrative units was reduced from the original 19 to 10. In the conditions of Slovakia, it was a reduction from 6 to 3 regions in order to create an easier-to-manage system. Since the entry into force of the law, Slovakia has been divided into West Slovakia (headquarters in Bratislava), Central Slovakia (headquarters in Banská Bystrica) and East Slovakia (headquarters in Košice).

With the adoption of the Act on the Czechoslovak Federation (October 1968), real self-government did not exist in Slovakia (Kováč 2007). Another change in the state establishment and regional administration was the assignment of the capital city of Bratislava to the three existing regions. In the regional report, a three-plus-one model was created. This, as a relatively stable component in the construction of public administration, survived until social and political changes in the late eighties (Mikuš 2018).

Figure 1: Regional establishment of Slovakia after 1960 (Source: Slovakiamap.jpg., 2015.)

After 1989, the society had to deal with several urgent tasks. The fall of the communist dictatorship led to the need to focus on the creation of a democratic system, the resolution of the state status of Slovakia and the rebuilding of directive economic planning to market (Čaplovič a kol. 2000). The 3 + 1 model was considered a remnant of the past and was therefore temporarily cancelled and replaced by a new mechanism. From the original three-stage model (region, district, municipality) a two-stage establishment was created. Districts as the higher part remained the same, but in the first stage, consisting of municipalities, 121 territorial districts were created. These were created based on the Regulation of the Government of the Slovak Republic no. 548/1990 Coll. (Mikuš 2018).

Territorial reform itself was complicated and demanding. Discussions at the political level brought several proposals, which included eight resp. twelve regions. The 3 + 1 model of higher territorial units was rejected (Machyniak 2018). The Act no. 302/2001 Coll. on self-government created Upper territorial units represented by self-governing regions. Act no. 416/2001 significantly extended their operation on the transfer of certain scopes from state administration bodies to municipalities and local authorities. Since January 2002, the self-government has consisted of eight local authorities (MV SR 2007).

Gradually, a uniform structure for society was created at the national or international level, known as the common nomenclature of territorial units for statistics - classification NUTS (Nomenclature des unités teritoriales statistique). The essence of the NUTS classification is based on the hierarchical classification of regions. It consists of 5 regions, with NUTS I, NUTS II and NUTS III levels merging with regional and NUTS IV (LAU 1) and NUTS V (LAU 2) associate with the local level. The classification does not take into account the classical divisions of regions, logical rules of regionalization, heterogeneous and incomparable regions, and is therefore unsuitable for two-way comparisons, according to critics from professional circles (Sloboda 2014). NUTS have a legal

basis based on Regulation of the European Parliament and of the Council No 1059/2003. The reason for its adjustment was the enlargement of the EU with new members. The building blocks for the NUTS classification are national authorities made up of EU cities and towns (Kołodziejski 2020).

Figure 2 Regional establishment of Slovakia after 2001 - self-governing regions
Source: Red College, 2015.

Northern Slovakia regions´ potential for the development of tourism

The presented part of the study presents the most significant primary potential of the monitored regions, which is created by man in the static component as well as in its dynamic component. At the same time, it presents the most significant natural potential of the regions.

At the same time, Regional Tourism Organizations and Regional Tourism Organizations in the Regions are also mentioned and described. These types of organizations were established on the basis of Act 91/2010 Coll. on the support of tourism. "A regional tourism organization is a legal entity that supports tourism and creates conditions for its development in the region and protects the interests of its members. According to the law, a local tourism organization is a legal entity that supports the development of tourism, while its goal is to provide groups and individuals with services to satisfy their interests and needs in travel, meetings and entertainment at a specific time and place" (Šenková 2018).

The general goal of the mentioned types of tourism organizations is (according to Act 91/2010 Coll.) to network entities operating in tourism, to encourage them to cooperate, to promote their products and to create packages of tourism products from the given region. One of the goals of regional and local tourism organizations is to extend the stay of visitors in the region. Subsequently, each of the organizations presents itself with a certain specificity, which is part of its region, so pf the territory in which it operates.

Perfect mapping of the offer of regions, determining the significance of potential points of interest for visitors (transnational, national, regional and local)

is possible by monitoring the data of the Statistical Office or creating own, often more detailed database, containing the necessary statistical indicators.

The potential of regions is a summary of conditions and preconditions for tourism in a given area - region. Potential is only an existing supply of factors, an option that may or may not be exploited. It does not yet guarantee the success and good results of a region with a high potential for tourism. The role of the human factor (entrepreneurship, skills, motivation, organization, marketing) and the overall approach of people who often know how to eliminate less favourable territorial assumptions and achieve results even better than in regions with higher potential are important here (Švedová 2013).

The Žilina self-governing region is located in the northwest of Slovakia. The Žilina self-governing region belongs into five regions - Horné Považie, Kysuce, Liptov, Orava and Turiec. Within the regions, a wide range of cultural monuments of international importance dominate (for example, open air museum Vlkolínec - UNESCO) (Szabo 2020), national significance (for example the town of Martin, which is connected with the identity of Slovaks), but also local significance (for example architecture in Podbiel, Čičmany municipality) (Slovakregion 2016). There are many castles such as Orava Castle or Strečno, a rich network of bike paths, or winter sports centers (such as Roháče). Thermal swimming pools in the villages of Bešeňová and Liptovský Ján, Lúčky and Rajecké Teplice (Szabo 2020) are popular. There are 4 national parks (High and Low Tatras, High and Low Fatra), 4 protected landscape areas, 39 natural monuments, 62 national nature reserves and 9 protected natural monuments in the Žilina self-governing region. The natural environment creates suitable conditions for mountain tourism or recreation by the water of the Orava dam, Liptovská Mara, the Žilina waterworks and the Hričovská reservoir (ŽSK 2018).

Numerous information offices provide information for visitors to the Žilina self-governing region about activities and attractions in tourism. The Žilina self-governing region has a total of 27 established information offices in its territory, of which the following can be mentioned:

- Tourist information center Čičmany,
- Tourist information center Žilina,
- Information center Vlkolínec,
- Information center Jased Jasenská dolina,
- Tourist information center of Martin,
- Tourist information center Snowland Valčianska dolina (ŽSK 2016).

There are also Regional tourism organizations (KOCR) and Local tourism organizations (OOCR) in the Žilina self-governing region:

- KOCR Žilinský turistický kraj
- OOCR Malá Fatra
- OOCR Rajecká dolina
- OOCR Región Liptov
- OOCR Klaster Orava
- OOCR Organizácia cestovného ruchu Kysuce

- OOCR Turiec – Kremnicko (ŽSK 2016a).

The regional culture includes the state chamber orchestra, theatres, national libraries and museums. The region is home of the University of Žilina, the Jessenius Faculty of Medicine of Comenius University in Martin, the Academy of the Armed Forces of General Milan Rastislav Štefánik in Liptovský Mikuláš and the Catholic University of Ružomberok (ŽSK 2018). The city of Žilina itself offers visitors various events such as the Carnival Festival (Carneval Slovakia), Medieval Day, Creative Crafts Workshops, Fest Anča, Central European Festival of Concert Art Allegretto (TIK Žilina 2020). Popular is the international folklore festival Jánošík's Days in Terchová, the festival of the amateur theatre Scénická žatva and a show of professional theatres Dotyky a spojenia (Touches and Connections) (Slovakregion 2016d).

The Prešov self-governing region is located in the northeast of Slovakia. It includes the regions of Horný Zemplín, Šariš, Spiš, Zamagurie, Tatry. These regions offer a rich choice and opportunities for tourism development based on their potential. The Prešov self-governing region as a region has world-famous monuments (for example, wooden churches of the Carpathian Arch, Spiš Castle, the towns of Bardejov, Levoča as UNESCO monuments or the A. Warhol Museum of Modern Art) (Slovakregion 2016a). Sights of national significance are for example the Red Monastery Museum or the Dukla, the city of Prešov - a city monument reservation) and with local significance are for example, the pilgrimage site of Litmanová (Slovakregion 2016b). The most attractive and very popular destination of Slovakia is the Tatras Mountain with an unforgettable scenery of the Gerlach, Kriváň and Rysy peaks. The high mountain location creates suitable conditions for winter sports and tourism in the resorts of Štrbské Pleso, Starý Smokovec and Tatranská Lomnica. The Tatra Ice Dome in Hrebienok is another great dominant of the Tatras region and thus also of the Prešov region (Slovakregion 2016c). The Prešov region includes and partially covers five national parks - Tatra National Park, Low Tatras National Park, Poloniny National Park, Slovak Paradise National Park and Pieniny National Park (PSK 2018).

These attractions (as well as other cultural and natural attractions and activities offered in the north of Slovakia) form a significant potential for the development of tourism in the northern regions of Slovakia. They represent not only an attraction for visitors but also a reason for investing to tourism and an attractive environment for business entities in tourism (for example, accommodation facilities, etc.).

The Prešov self-governing region disposes by several information, city and tourist centers (total: 34 registered), of which the following can be mentioned:

- Tourist information center and travel agency Bardejov
- Information center of Levoča
- Information center of Prešov
- Tatranská Information center Tatranská Lomnica
- Tatranská Information center Vysoké Tatry

- Tourist information center of Snina (PSK 2013).

Information activities are provided by Local tourism organizations (OOCR, total 7) and Regional tourism organizations (KOCR, total 1):

- KOCR Severovýchod Slovenska
- OOCR Región Vysoké Tatry
- OOCR Tatry-Spiš- Pieniny
- OOCR Severný Spiš – Pieniny
- OOCR Horný Zemplín – Horný Šariš
- OOCR Vysoké Tatry – Podhorie
- OOCR Región Šariš
- OOCR Šariš – Bardejov (PSK 2013a).

Events with international participation are also held on the territory of the Prešov self-governing region such as the chess tournament of Count Ján Zamoyský Stará Ľubovňa, the cultural festival Days of Master Pavel in Levoča, the club of lace lace in Prešov, the festival of costumed dolls in Poprad and many others (PSK 2015).

MATERIAL AND METHODS

The main goal of the study is to use analytical methods to compare the development and performance of tourism in selected regions that form the north of Slovakia. The Žilina and Prešov self-governing regions form the northern area of Slovakia, which, thanks to the regions, but especially the Tatra Mountains, has significant potential for the development of tourism.

Data from the sources of the Statistical Office of the Slovak Republic were analyzed using the method of secondary data analysis. By comparing selected statistical indicators, the study presents the state of statistical indicators in the tourism sector for the observed period of fifteen years (from 2004 to 2019).

The study evaluates selected relevant statistical indicators on the example of accommodation facilities, length of stay (beds), number of visitors and revenues from accommodation (including VAT).

Accommodation facilities are facilities that regularly provide temporary accommodation to visitors (Šenková 2009). Overnight stays (beds) in accommodation facilities represent all beds provided for the night's rest of the facility's guests, including occasional beds. Beds for the owner and staff of the accommodation facility are not included here (Statistical Office of SR 2018). Šenková (2009) says that each accommodation facility is also linked to the indicator of bed capacity of accommodation facilities, which is determined by multiplying the number of permanent beds and days of accommodation facilities in operation.

A visitor is a person who uses the services of a temporary accommodation facility, regardless of the country of residence. The reason for using the temporary accommodation facility for the visitor is a trip, vacation, business trip, training, course, visit, church ceremony, spa stay. On the contrary, this does not include persons who consider the accommodation facility to be a hostel

(domestic, foreign workers in Slovakia). The visitor may not exceed the period of temporary accommodation exceeding a calendar year (Statistical Office of SR 2018).

Revenue is defined as profit, benefit or total cash income, sales income (Kačala and Pisarčíková, 2003).

Before the research was conducted, a research problem was set, which focused on the mutual influence of selected statistical indicators, the importance of their monitoring and interconnection. The research problem was defined: It can be assumed that the selected statistical indicators influence each other, and it is important to monitor them for better coordination of regional development as two units.

Subsequently, a research question arose: Are the selected statistical indicators influencing each other, and is it important to monitor them for better coordination of the development of regions as two units?

The first part of the research problem examining the interaction (relationship) between selected statistical indicators was formulated into hypotheses. The second part of the research problem assumes positive answers to the formulated hypotheses in order to be able to determine the answer by deduction.

The comparison of the tourism development in the Žilina and Prešov self-governing regions was through established hypotheses:

Hypothesis no. 1: We assume that with the growing number of visitors, there was an increase in the number of accommodation facilities in the Žilina self-governing region in the period under review.

Hypothesis no. 2: We assume that with the growing number of visitors in the monitored period there was an increase in the number of accommodation facilities in the Prešov self-governing region.

Hypothesis no. 3: We assume that with the growing number of overnight stays, the number of accommodation establishments in the Žilina self-governing region increased in the observed period.

Hypothesis no. 4: We assume that with the growing number of overnight stays, the number of accommodation facilities in the Prešov self-governing region increased in the observed period.

Hypothesis no. 5: We assume that with increasing revenues from accommodation, there is a growing number of overnight stays in the Žilina self-governing region

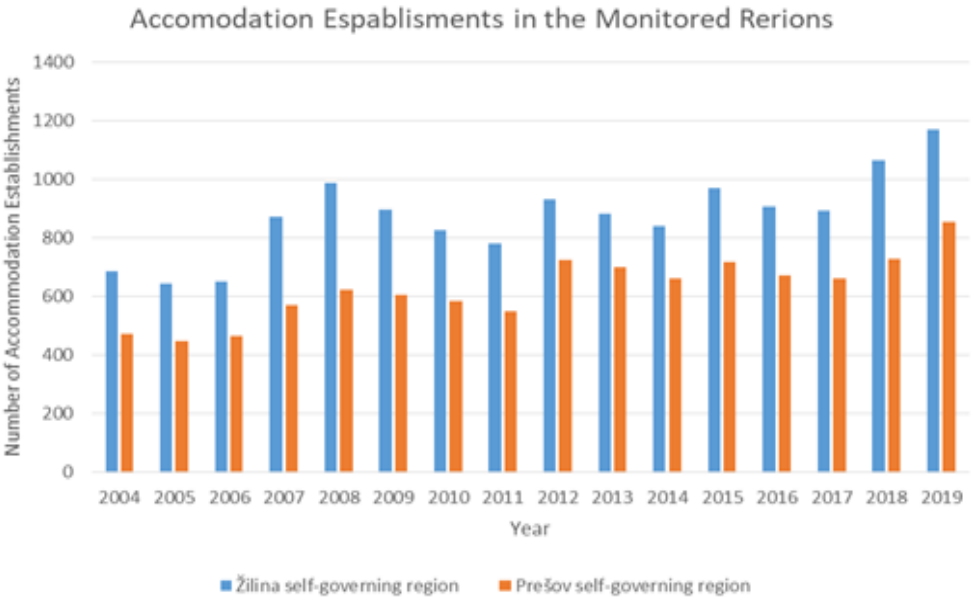
Hypothesis no. 6: We assume that with increasing revenues from accommodation, there is a growing number of overnight stays in the Prešov self-governing region.

In the study methods of regression analysis, correlation analysis - Pearson's correlation coefficient were used. The general form of the regression function has the following form: $y = \beta_0 + \beta_{1*}x+e_i$ i=1,2,...n, where β0 is the locating constant, y is a dependent variable, x is an independent variable and ei is understood as an error term denoting also as u_i. The significance level, the p-value, is 0.05.

RESULTS

The highest number of accommodation establishments in 2019 was the same in both regions, and the lowest number of accommodation establishments was in 2005 (see Graph 1). The highest year - on - year change in the Žilina self - governing region represents an increase in the number of accommodation establishments by 34% in 2007.

The lowest increase in the number of accommodation establishments in the Žilina self-governing region was in 2006 by 1%. The Prešov self-governing region recorded the highest year-on-year increase in the number of accommodation establishments in 2012 by 31% and the lowest year-on-year change in 2006 was by 3%. At the end of the observed period, the number of accommodation establishments multiplied several times compared to the first year of the observed period. Subsequently, it is possible to conclude that the monitored self-governing regions recorded an overall boom in tourism.



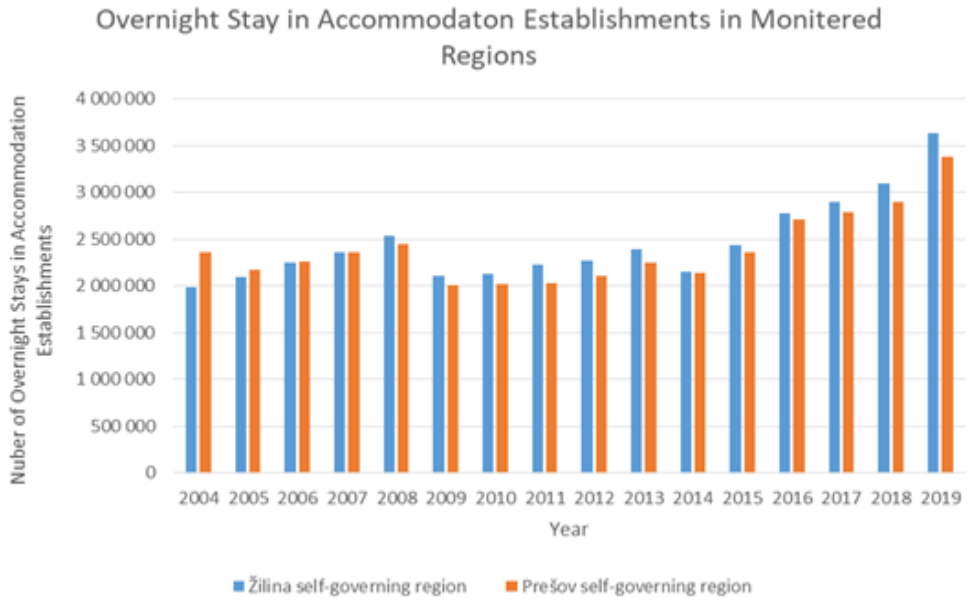
Graph 1. Development of the number of accommodation establishments in the selected regions in the monitored period, (Source: own processing)

As can be seen in Chart 2, in the Žilina self-governing region the highest number of overnight stays of visitors in accommodation establishments was in the last monitored year 2019, the lowest was in 2004. In the Prešov self-governing region the highest number of overnight stays of visitors in accommodation establishments in the same observed year 2019.

On the contrary, the lowest number of overnight stays can be observed in 2009. The highest increase in the year-on-year change in overnight stays in the Žilina self-governing region was 17% in 2019 compared to 2018. The lowest, 1%

increase in the year-on-year change was in 2010. In the Prešov self-governing region, the highest increase in the year-on-year change in overnight stays was in 2019 by 17% and the lowest in 2011 by 0.1%.

From Graph 3 it is possible to read that the largest number of visitors visited the Žilina self-governing region in 2019 and the least in 2004. The Prešov self-governing region also had the highest number of visitors in 2019, the lowest number of visitors was recorded in 2009.

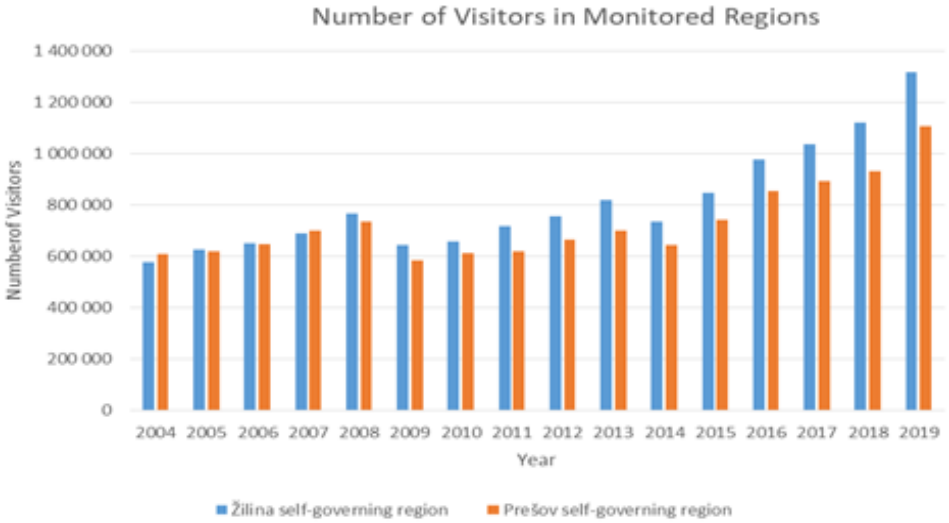


Graph 2. Development of the number of overnight stays in accommodation establishments in the selected regions in the monitored period (Source: own processing)

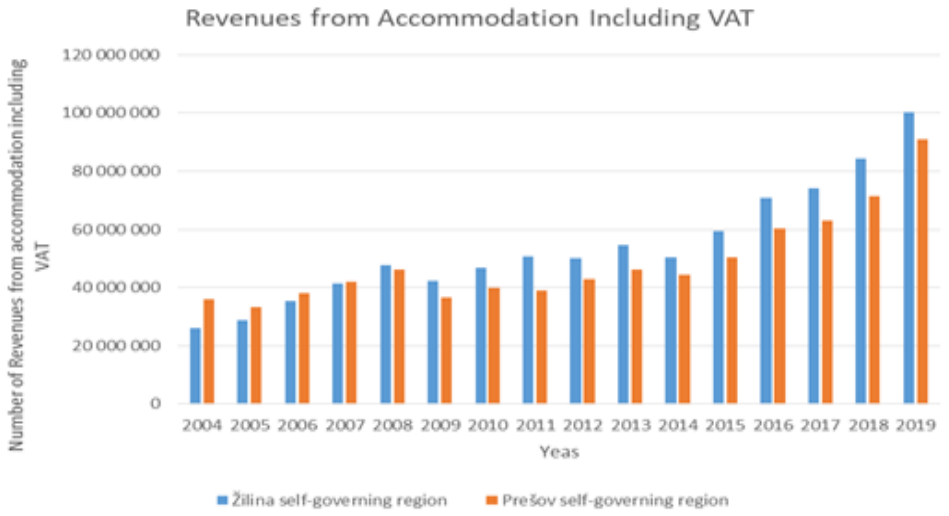
The highest increase in the year-on-year change in the number of visitors in the Žilina self-governing region was by 17% in 2019 and the lowest increase in the year-on-year change in the number of visitors in 2010. In the Prešov self-governing region the increase in the year-on-year change in the number of visitors in 2011 was by 1%. The above data mostly indicate an upward trend in the number of visitors in both regions.

Graph 4 shows that in the Žilina self-governing region the highest revenues from accommodation were achieved in 2019 and the lowest in 2004. Data for the years 2004 to 2008 were converted according to the exchange rate of the National Bank of Slovakia from the Slovak koruna to the euro. In the Prešov self-governing region, they were also the highest in the last monitored year 2019 and the lowest in 2005. There is clearly a high difference between the lowest revenues in the compared regions. The fluctuations in the growth and decline in sales in

both regions are worth noting. In the years 2015 to 2019, higher sales prevail compared to the previous year, which is a positive finding. The highest increase in year-on-year change in the Žilina self-governing region was by 23% in 2006, the lowest by 5% in 2017. In the Prešov self-governing region, the highest increase in year-on-year change in 2019 was 27% and the lowest in 2017 by 5%.



Graph 3. Number of visitors development in the selected regions in the monitored period (Source: own processing)



Graph 4. Revenues in accommodation establishments development in selected regions in the monitored period (Source: own processing)

The factual finding is that at the beginning of the observed period (2004) the Prešov self-governing region recorded higher revenues from accommodation

than the Žilina self-governing region. At the end of the observed period (2019), the development was the opposite. Nevertheless, it is possible to observe a growing development trend for both regions.

Subsequently, after evaluating the secondary data, the hypotheses were evaluated. The results for the monitored selected statistical indicators - the number of visitors, the number of accommodation establishments and the number of overnight stays - in the observed period of 2004 - 2019, within the Prešov and Žilina self-governing regions are as follows:

H1: There is a statistically significant relationship between the variables. The number of accommodation facilities depends on the number of visitors in the Žilina self-governing region. There is a statistically significant relationship between the variables. The strength of the Pearson correlation coefficient is above 0.5, which means a strong strength of the relationship between the variables.

H2: There is a statistically significant relationship between the variables. The number of accommodation facilities depends on the number of visitors in the Prešov self-governing region. Pearson's correlation coefficient is statistically significant. There is a statistically significant relationship between the variables. The strength of the Pearson correlation coefficient is above 0.5, which means a strong strength of the relationship between the variables.

H3: There is a statistically significant relationship between the variables. The number of accommodation facilities depends on the number of overnight stays in the Žilina self-governing region. Pearson's correlation coefficient is statistically significant. There is a statistically significant relationship between the variables. The strength of the Pearson correlation coefficient is above 0.5, which means a strong strength of the relationship between the variables.

H4: There is a statistically significant relationship between the variables. The number of accommodation facilities depends on the number of overnight stays in the Prešov self-governing region. Pearson's correlation coefficient is statistically significant and there is a statistically significant relationship between the variables. The strength of the Pearson correlation coefficient is above 0.5, which means a strong strength of the relationship between the variables.

H5: There is a statistically significant relationship between the variables. Revenues from accommodation depend on the number of overnight stays in the Žilina self-governing region. Pearson's correlation coefficient is statistically significant and there is a statistically significant relationship between the variables. The strength of the Pearson correlation coefficient is above 0.5, which means a strong strength of the relationship between the variables.

H6: There is a statistically significant relationship between the variables. Revenues from accommodation depend on the number of overnight stays in the Prešov self-governing region. Pearson's correlation coefficient is statistically significant and there is a statistically significant relationship between the variables. The strength of the Pearson correlation coefficient is above 0.5, which means a strong strength of the relationship between the variables.

Table 1. Results of tested hypotheses (Source: own processing)

Hypothesis	Test / method	Žilina self-governing region		Findings
H1	Regression analysis	Regression line	y = 427 + 0,000554x	increase in visitors by one unit may increase the number of accommodation establishments by 0.000554
		p-value	0,0000	H_0 Rejection - H_1 acceptation
	Correlation analysis	Pearson´s correlation coefficient	0,80433996	strong strength of the relationship between variables
		p-value	0,0002	H_0 Rejection
H2	Regression analysis	Regression line	y = 224+0,000554x	increase in visitors by one unit may increase the number of accommodation establishments by 0.000554
		p-value	0,003	H_0 Rejection - H_2 acceptation
	Correlation analysis	Pearson´s correlation coefficient	0,73174624	strong strength of the relationship between variables
		p-value	0,0013	H_0 Rejection
H3	Regression analysis	Regression line	y = 252 + 0,000253x	increase in visitors by one unit may increase the number of accommodation establishments by 0,000253
		p-value	0,0000	H_0 Rejection – H_3 acceptation
	Correlation analysis	Pearson´s correlation coefficient	0,79118318	strong strength of the relationship between variables
		p-value	0,0003	H_0 Rejection
H4	Regression analysis	Regression line	y = 208 + 0,000175x	increase in visitors by one unit may increase the number of accommodation establishments by 0,000175
		p-value	0,001	H_0 Rejection - H_4 acceptation
	Correlation analysis	Pearson´s correlation coefficient	0,59907265	strong strength of the relationship between variables
		p-value	0,0142	H_0 Rejection
H5	Regression analysis	Regression line	y =1,34e+006 + 0,0208x	increase in visitors by one unit may increase the number of accommodation establishments by 0,0208
		p-value	0, 0000	H_0 Rejection - H_5 acceptation
	Correlation analysis	Pearson´s correlation coefficient	0,93933283	strong strength of the relationship between variables
		p-value	0,0000	H_0 Rejection
H6	Regression analysis	Regression line	y = 1,32e+006 + 0,0219x	increase in visitors by one unit may increase the number of accommodation establishments by 0,0219
		p-value	0, 0000	H_0 Rejection - H_6 acceptation
	Correlation analysis	Pearson´s correlation coefficient	0,94072061	strong strength of the relationship between variables
		p-value	0,0000	H_0 Rejection

Subsequently, based on the evaluation of the established hypotheses, it can be stated that it makes sense to monitor selected statistical indicators for better coordination of regional development as two units. Regional tourism organizations and subsequently local tourism organizations in selected regions must monitor statistical indicators. As stated in the theoretical basis of the study, number of visitors depends on the richness and attractiveness of the offer

(dynamic or static, anthropogenic or natural). Other indicators, such as the number of overnight stays and the number of accommodation establishments in the regions, are linked to the number of visitors. As the above-mentioned, tourism organizations operating in selected regions strive to gain a regular visitor and especially to extend their stay.

The P_2O_5 content slightly increased in 2019 on the NP background and reached the maximum value in the experiment - 432 mg per kg^{-1} of soil, which is higher compared with the control by 70 mg, but within the experimental error. In the other treatments, the difference was even less significant. The same picture was observed in 2020.

The content of K_2O in treatments with traditional mineral fertilizers did not differ significantly from the control variant. The use of cinder, both in spring and autumn, led to a noticeable increase in K_2O in the soil. The raising of K_2O content compared with the control after autumn application was equal to LSD_{05} value (33 mg) in 2019 and reached 183 mg in 2020 (maximum in the experiment). In the treatment with spring application the difference was insignificant (22 mg) in 2019, but next year was reached 37 mg (LSD_{05} value 12 mg). The total K_2O content was higher in 2020 compared with 2019 for both these treatments. This trend can be explained by the slow release of potassium from poorly soluble compounds in the cinder composition.

DISCUSSION AND CONCLUSION

Hypotheses H1, H2, H3, H4, H5 and H6 monitored the behaviour and dependence of variables - visitors, number of accommodation establishments, number of overnight stays and revenues from accommodation (including VAT) in the monitored regions in the observed period (2004 - 2019). The comparison of the results is as follows. Based on the results of the regression analysis, it can be stated that in hypotheses H1, H2, H3, H4, H5 and H6, hypothesis H0 was rejected and subsequently hypothesis H1, H2, H3, H4, H5 and H6 were accepted. In each tested hypothesis, there is a linear relationship between the variables. This means that the established hypotheses are confirmed. There is a statistically significant relationship in the hypotheses. The strength of the Pearson correlation coefficient relationship is strong for the Žilina self-governing region and the Prešov self-governing region. When comparing the monitored regions, it is possible to confirm the increase of one indicator together with another. The results of the tested hypotheses also show that the Žilina self-governing region has a higher value of the Pearson correlation coefficient than the Prešov self-governing region in the case of comparing hypotheses H1 and H2 than in the case of comparing H3 and H4. In the case of comparing hypotheses H5 and H6, the Prešov self-governing region has a higher value than in the case of the Žilina self-governing region. However, as can be seen from Table 1, the strength of the relationship is high in both regions. The pandemic situation in Slovakia since March 2020 has significantly affected the development of tourism in the case of the region - the Žilina self-governing region. In 2019, based on data from the Statistical Office

(Statistical Office SR 2020), the Žilina self-governing region was the third most visited region by foreign visitors (16.8% - after Bratislava and Prešov), but the first with regard to the attendance of the domestic population. Regarding the number of overnight stays, it occupied the second place both in the case of overnight stays by foreign visitors (the first was the Bratislava region) and in the number of overnight stays within domestic tourism (the first was the Prešov self-governing region). The attractiveness and popularity of the region, especially in domestic tourism, is also underlined by the fact that together in the Prešov region they reached a year-on-year increase of 21.8% in 2019. In the case of a year-on-year increase in foreign visitors, the Žilina region took fourth place. The number of overnight stays was also included in the evaluation of the year-on-year increase in the monitored indicator.

Within the first half of 2020, the tourism was hardly tested by a pandemic and various measures (restrictions and bans) associated with it. In this year, the Žilina self-governing region ranked first in tourism statistics (24.7%) within the indicator of the share of domestic visitors. The first position was also within the indicator the share of overnight stays realized by domestic visitors (24.4%) and in the second place (26.6%) in the case of the share of foreign visitors (after the Bratislava region), but in the first place (31.8%) in the case of the indicator the share of the number of overnight stays foreign visitors. Despite the higher, (perhaps optimistic point of view) development of tourism in the Žilina self-governing region, the sad reality drop tourism performance in the first half of 2020 by -45.1% in the number of domestic and -42.7% in the number of foreign visitors compared to the same period in 2019. In other words, it is the second lowest drop within the regions of Slovakia). In the case of the number of overnight stays, this is a decrease of -40.3% of overnight stays realized by domestic participants and -36.8% of overnight stays realized by foreign participants (the second lowest decrease within the regions of Slovakia) (Statistical Office SR 2020a).

The state of tourism within the Prešov self-governing region in the first half of 2020 was as follows. Data were used from Statistical Office of Slovak Republic 2020 (Statistical Office SR 2020b). The indicators of number of visitors as well as the number of overnight stays indicate that the Prešov self-governing region is one of the first three popular regions in Slovakia. The share of domestic visitors was 22.6% in the first half of 2020, which puts the Prešov self-governing region in the second place. In the case of foreign visitors, it ranked third (after the Bratislava and Žilina regions) with a share of 15.9%.

The share of overnight stays of domestic visitors was 23.9%, which secured the Prešov self-governing region the second place (after the Žilina region). The share of overnight stays of foreign visitors was 18.1% (third place after the Žilina and Bratislava regions).

Unfortunately, the decrease in the total monitored indicators did not avoid either the Prešov self-governing region. In percentage terms for the first half of 2020, the decrease in the number of domestic visitors was 41.8% and foreign

visitors 48%. As for the number of overnight stays, as well as in the case of the number of visitors, a decrease was recorded. On the other hand, it is necessary to add that in both cases it was the least significant decrease within the regions of Slovakia. The share of overnight stays for domestic visitors was -39.5% and in the case of the share of overnight stays of foreign visitors, there was a decrease of -44.1%.

Within the research problem, not only hypotheses were solved and evaluated, but also whether it is intended to monitor selected statistical indicators. The answer was possitive. Due to the diversity in the offer but also the geographical similarity of the regions, while it can be stated that together they form a natural whole, it is necessary that the above statistical indicators will be monitored by the subjects of destination management. In the paper, they are listed as regional and local organizations which, unlike information centres, form strategic and promotional activities within the destination (the territory in which they were created by merging tourism entities) and thus contribute to the overall growth of the region. These entities should summarize data for smaller territorial units (for example, the city) as a statistical office (the smallest statistical unit is a district), just for detailed knowledge of the use of the region's potential in the form of service providers (in case of study number of accommodation facilities, beds, sales but also other indicators). Subsequently they should summarize visitors of the region, which indicate the willingness to accept the offer of the region and see its attractions.

In time, it is possible to assume asking about the effectiveness of a certain number of local tourism organizations within a region (we mean as a self-governing region) and therefore whether: is it necessary to combine such a number of local tourism organizations or rather into a few more destination management organizations covering the region?

Another stimulus is not only the networking of tourism entities within smaller regions, which are managed as a destination by a regional / local tourism organization, but also to establish cooperation between regional / local organizations between the monitored regions (Prešov and Žilina) due to their regional proximity and similarity.

In many European countries, tourism is an important part of the national economy. Thanks to the natural potential of the country and the potential created by man, tourism in Slovakia has a great opportunity to take a strategic position in the state.

The north of Slovakia, represented by the Žilina and Prešov self-governing regions, has extremely rich potential and suitable preconditions for this.

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