

## THE IMPACT OF NATURAL CONDITIONS ON THE DEVELOPMENT AND COMPETITIVENESS OF THE LUBUSKIE VOIVODESHIP

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**Purpose:** This publication presents the most important natural resources in the Lubuskie Voivodeship, which have very large importance for regional development in terms of tourism, supra-regional but also domestic.

**Design/methodology/approach:** The method of statistical data analysis and source materials was used in the work.

**Findings:** The richness of the voivodeship are forests and wilderness, with numerous landscape parks, reserves and monuments of nature as well as with animals living in the wild. An important aspect in the tourist landscape of the Lubuskie Voivodeship are castles, churches and manor houses and palaces related to the history of the region. Today, a large proportion of tourists seek to learn about folklore, tradition, folk creativity, as well as regional cuisine. The voivodeship offers a wide range of cultural, sporting, entertainment and artistic events. It should be added that as one of the few regions in Poland, the Lubuskie Voivodeship may offer enotourism as an attraction.

**Originality/value:** The analysis carried out in the article is addressed to people interested in regional policy in the aspect of the impact of natural conditions on the development and competitiveness of Polish regions.

**Keywords:** regional development, region, natural resources, competitiveness.

### 1. Introduction

The economic importance of the landform has a huge impact on the possibility of introducing to the environment generally understood forms of economic activity such as agriculture, forestry, settlement, and above all tourism. The form of the land brings enormous potential for development, for activities related to the proper selection of crops, soil protection, afforestation of land or designing construction projects (Macias, Bródka, 2014, p. 136).

The plant cover of Poland has outstanding values. Several factors imposed this. Poland lies on the border of two Central European geobotanical provinces, i.e. Lowland-Upland and Mountain. The large vertical diversity from the Baltic Sea to the Tatra Mountains causes a stronger diversity of our flora. In the territory of our country there are also numerous transitive species from the west and east, reaching our territories ending their ranges. These factors cause a great wealth of our plant cover. The second factor of good preservation of our plant cover is related to the fact that, compared to Europe, we still have the largest forest refuges and swamp-peat flora. Despite the huge transformation of our vegetation, caused by human interference, the remains of forests have survived. In various parts of the country there are refuges of the forest flora, including the Lubuska. So we have extremely valuable floristic complexes that deserve special care and protection (Kozłowski, 1983, p. 82).

A characteristic feature of the contemporary Polish climate is the large variability of weather conditions. The relatively fast migration of barric highs and barric lows over Europe contributes to this. Over the area of Poland, moist air masses coming from the Atlantic with drier masses of continental origin clash. Climatic conditions in the mountainous areas of southern Poland are significantly affected by a decrease in temperature with increasing altitude. Its consequence is a clear climate stratification in the Carpathians and Sudetes. A sign of Poland's rising continental climate towards the east are aggravating winters. Oceanism is indicated by the advantage of autumn rainfall over spring precipitation. The prevalence of autumn precipitation is in southwestern Poland. The western part of the country is also characterized by more frequent occurrence of mid-winter thaws, causing rivers to gather. These features have contributed to the climate of Poland, which is often called transitory (Starkel, 1991, p. 17).

In the climate classification, there is a border in Poland between moderate, warm and rainy, and boreal, snow-forest climate. The area of Poland is intersected by annual isoamplitudes of 20-23°C. They are within the boundary between the oceanic and continental climate. Seasonal, changing from year to year distribution of climatic factors and mainly conditioned flowing water and vegetation, affects the quality, course and intensity of sculptural processes in Poland. Climate-related factors determine the type of sculpture. For these reasons, attempts to separate modern morphoclimatic zones refer to individual climate classifications. Polish lands almost entirely belong to the forest zone dropping leaves for the winter. The dominant natural plant communities in our country were deciduous forests, and to a lesser extent mixed forests.

At present, coniferous forests prevail in the Polish forests, because most of them suitable for deciduous and mixed forests have been used for arable land. The most significant feature of contemporary Polish vegetation is its transience to neighbouring areas. Plant cover changes from west to east, as continentalism increases. In Polish lands, numerous plant communities with an oceanic climate are disappearing, and in their place there are or are growing in importance of coniferous forests, characteristic of the lowland areas of the Eurasian continent. In southwestern Poland, the relative share of brown soils increases among zonal soils,

and the mug-wort soils in the north and east. South-eastern ends of Poland is a dense range of steppe humus areas and the narrow strip of grey forest soils characteristic of forest-step adjacent to it from the north. Regional diversity of the animal world also refers to the spatial diversity of the natural environment. The majority of non-transitive species in our native fauna, whose share is close to 40%, reach the northern and north-western border in Poland, while the least eastern and south-eastern. Progressive deforestation of many areas of our country initiated a period of anthropogenic fauna reconstruction. The transitional nature of the contemporary Polish natural environment is therefore determined by climate-related features, i.e. water cycle, flora and fauna, soils and sculpting processes. The current natural environment of Poland is transformed by man. The geographical location of any territory is of fundamental importance for all regional considerations. This is a significant feature that gives rise to the separateness of territories. Contemporary composition of the Polish flora has been determined as a result of climate change and the spread of species during the post-glacial period. The last glaciation created the conditions for the spread of the steppe tundra in southern Poland, but eventually the disappearance of the Scandinavian continental glacier caused a re-entry of the forest (Kondracki, 1978, p. 149). Vegetation and animal world in a state similar to the original one survived only in national parks and reserves.

## **2. Natural values of the Lubuskie Voivodeship**

As the area of Poland is very rich in nature, nevertheless this paper will focus on the Lubuskie region, its values and conditions of this beautiful land. The Lubuskie Voivodeship occupies the central-western part of Poland with an area of 13 989 km<sup>2</sup> (4,5% of the country area). The structure of the Lubuskie Voivodeship surface according to the directions of use is as follows, i.e. forests and tree stands 51,0%, agricultural land 41,0%, communication areas 2,7%, surface water 1,7%, housing estate 1,4%, wasteland 1,3%, other areas 0,9%. The Lubuskie Voivodeship borders on the north with the West Pomeranian Voivodeship, on the east with the Wielkopolskie Voivodeship, and on the south with the Dolnośląskie Voivodeship. This beautiful region has 1 009,2 thousand inhabitants. The voivodeship is divided into 12 land districts (poviats). The districts include 83 communes, including 9 municipal, 33 urban-rural and 41 rural. There are 42 cities, 1376 villages and 1017 parishes (village administrative units) in the voivodeship. The Lubuskie Land belongs to the Lubuskie – Lower Silesia climate region. The climate in the north of the voivodeship, in the press of the Noteć and Warta River valleys, is of a transitional nature between the cool and quite humid of Pomeranian region and the warmer and drier part of the central and southern part of the Lubuskie – Lower Silesia region. The region is one of the warmest in the country. In Słubice there is Polish heat pole, where the highest maximum temperatures in Poland are recorded.

The entire area of the province is located in the Baltic catchment area, and in the central part of the Odra river basin.

South of the Toruń – Eberswald Pradolina on both sides of the Odra in Poland and Germany extends a macro-region called the Lubuskie Lake District. It differs in significant natural features from the Greater Poland Lakeland located further to the east. Lubuskie Lake District hills exceed 200 m above sea level in places, while deep gutters fill the lakes. The climate here is more humid than farther east, the afforestation of the area is considerable, and the occurrence of beech is characteristic for forest complexes (Kondracki, 1978, p. 293). In the Lubuskie Voivodeship there are beautiful lakes, which makes this region very rich in beautiful landscapes, has a huge impact on the competitiveness of this region.

The central register of nature protection forms kept by the General Director for Environmental Protection includes in the Lubuskie Voivodeship: 2 national parks – “Warta Mouth” and partly Drawieński National Park, 67 nature reserves, 8 landscape parks, 41 protected landscape areas, 409 ecological lands, 12 complexes of nature and landscape, 2 documentation sites for geological formations and 1 262 nature monuments (Przemysław, Demidowicz, Konopczyński, 2018).

These are undoubtedly beautiful landscapes and wonderful forests. There are a total of 519 lakes in the voivodeship, including 36 in the size range of 50-100 ha and 26 with an area of more than 100 ha. The total area of Lubuskie lakes is 13 009,8 ha, which is 0,93% of the voivodeship's area. It shows the richness and advantages of this region as well as in terms of competitiveness. The Sławskie Lake is the largest lake in this region with a water surface of 817,3 ha. It is often called by the youth “Lubuskie Sea”, by the elders “Silesian Sea”. The islands occupy 10,6 ha of the lake, there are, among others Bird Island, Cormorant Island, Wild Island. There are also several bays, including Miejska, Radzyńska, Lubiatowska, Krępińska. The Sławskie Lake together with Obrzyca forms the beginning of the 200-kilometer canoe trail to Santok near Gorzów Wilkp. Along the shores of the lake there are many holiday resorts. In the season it is up to 40 thousand guests there, mainly from Lower Silesia and the Lubuskie Land. It is worth adding that they began to be developed only in 1927, when Sława municipality received permission from the county to make the lake available for water sports. Today, it is the region's largest area for sailors to show off. There is a free public beach at the Sławskie Lake in Sława.

The area of the Lubuskie Voivodeship is covered in forests in 48,7% (681, 6 thousand ha), which is the largest forest cover rate in the country. This should be regarded as incredible, and certainly for another reason to choose this region for rest. Since 2000, the forest area has increased by 0,6% (8960 ha). In the habitat structure, coniferous habitats prevail, with pine as the dominant species, they occur on almost 90% of the forest area. In the Lubuskie, every second hectare is a forest, so the term “Lubuskie sea” is often used to refer to Lubuskie forests. Most often pine can be found there, which is why it is called the “kingdom of Pine”. The dendrological garden at the Nature and Forestry Education Center in Wysokie Jeziora is

worth visiting. In addition to Coulter pine, there are 30 other species of pines. It is also a collection of cones. The educational trail "On the ravines" is worth recommending, as well as the historical and natural path "From Sass to the forest", which leads from the High Lakes to the beautiful Palace in Brody located a few kilometres away. This is undoubtedly a great opportunity to create tourist routes, from hiking in the forests to visiting the monuments of the region.

In the surrounding forests it is possible to find Octopus Pine, a tree with a trunk, whose trunk grows up to eight branches, which is undoubtedly unheard of. Moreover, it is also possible to see "dancing pine trees", or "Forest Candelabra", fancifully bent pines that give the impression of dancing. However, Lubuskie forests are not only pine forests. There are two national parks in the voivodeship, i.e. Drawieński and "Warta Mouth" with a total area without buffer zone of 13606,4 ha. Eight landscape parks were created in the voivodeship, i.e. Łagowski, Pszczewski, Barlinecko-Gorzowski, "Ujście Wart", Gryżyński, Krzesiński, Przemęcki and "Łuk Mużakowa". The total area of landscape parks is currently almost 80 000 ha. There are also 55 nature reserves in the voivodeship with a total area of over 3,6 thousand ha, of which 32 objects are forest reserves, 7 peat bogs, 6 fauna, 4 water, 4 floristic and 2 steppe. In 2006 three new reserves were created, i.e. 2 forest reserves – Żurawno and Mierkowskie Suche Bory in the Żary district and one steppe – Gorzowskie Murawy in Gorzów Wielkopolski (Demidowicz, Konopczyński, 2006, p. 9).

In the Łagowsko-Sulęcín Landscape Park it is also possible to see beech forests, in combination with the azure water of the Łagowskie and Trześniowskie Lakes creates the magic of this place. For lovers of forests and paths not yet trampled it is a beautiful Landscape Park. By the shore of Trześniowskie Lake, a path resembling mountain climates leads to the "Buczyna Łagowska" Nature Reserve, where even 150-year-old beeches grow (<https://zbierajsie.pl/5-powodow-lubic-lubuskie>, 22/09/2019).

The Trześniowskie Lake is more wild because its shores are very steep and the lake itself is deeper. It is 4,7 km long and 60 meters wide. Its turquoise colour is due to the large depth and the presence of limestone. The Trześniowskie Lake is the 10th deepest lake in Poland. With a depth of 58,8 meters, it also encourages divers who come to enjoy underwater life here. So, this is another reason why it is recommended to come there. Apparently, visibility is incredible there. It is a region with many bike paths, fishing piers and water equipment rentals. The National Park "Warta Mouth" and its buffer zone is also noteworthy. This place is also impressive and recommendable, above all it differs in character from other forests. Currant alder, or alder forest growing in swampy habitats will impress everyone who finds it. The Lubuskie Voivodeship is therefore created to be in the bosom of nature. There are many walking, cycling paths, observation towers or sports paths. According to the inhabitants, the most beautiful lake is the Łagowskie Lake. The water is turquoise and the forests so beautiful that it is breath-taking. The Łagowskie Lake is a gutter lake with an area of

82 hectares. It is also worth visiting the Joanite Castle in the centre of Łagów. It is possible to move on canoes and pedal boats on the Łagowskie Lake.

The legendary knights lived in the 600-year-old castle in Łagów between the two lakes for over 450 years. It survived during the war, so today it is possible to admire its beautiful interiors. It is worth noting that the Joannites are in other words order from Malta. It comes from the medieval brotherhoods and knightly orders that arose on the wave of the first Crusades. The name comes from the Latin word "Joannes" or "John". Today, the order has about 10 000 members, 160 of them are Poles. Established in 1083, the Order of the Knights of Malta survived to this day. A fortified tower dominates the castle, which is visible from a distance of several kilometres. From the top of the tower of the castle in Łagów there is a beautiful view of the countryside. This location was of great strategic importance on the border of Greater Poland, Pomerania and Brandenburg (<https://www.styl.pl>, 22/09/2019). If the canoe trail is preferred, one will certainly find a diverse network for themselves along the canals of Postomia and Warta. However, rivers are not only wide and swift streams of water, but also their deltas and backwaters. It is possible to admire them from around the mouth of the Warta river. The Lubuskie Voivodeship is located in Poland, where the glacier worked intensively. Hence, numerous lakes and moraine hills as well as a dense network of rivers. One of the most interesting places is the Muskau Arch, which is the glacier's frontal moraine area. Through its activities, land rich in mineral elements accumulated in this place, which was later used for mining activities.

In the area of the frontal moraine of the Muskau Arch and the place where decades ago coal and clay mines operated, the only Colourful Anthropogenic Lake District in Poland was created. It is possible to see there over 100 colourful lakes on the Polish side. In total, there are over 400 on both sides of the border. There are intense green waters, azure coves, rusty red reservoirs, and rainbow lakes. Certainly, they are a great attraction of this region, rare and admirable. They owe their colours to the presence of mineral elements in the substrate. However, this fairy-tale landscape also includes the lunar landscape resulting from the activities of underground and open-cast mines. It should also be mentioned that the wine tradition in the vicinity of Zielona Góra dates back to the twelfth century, when settlers from Flanders or Wallonia came together with vine varieties. The vines took on surprisingly very well there.

The most famous element of the Zielona Góra celebration is the Wine Procession. In addition, a Wine Market is being built around the Town Hall, where it is possible to learn about wine traditions, viticulture and take advantage of many artistic attractions. Considering the virtues of this beautiful region, its unique places, every traveller will find a place for himself, one may rediscover these places. Undoubtedly, this area can compete with numerous countries around the world. It has beautiful monuments, charming forests and many tourist attractions. All these natural conditions create great opportunities thanks to which this will affect the further development of this region of our country.

### 3. Tourism in the Lubuskie Voivodeship

Indicators of tourist traffic intensity in the Lubuskie Voivodeship in relation to the number of actual inhabitants placed them in the top ten (places from 6-10 among 16 voivodeships) with a value lower than the national average, while other relative measures characterizing tourism of the Lubuskie Voivodeship were lower, placing them on place 11-13.

At the end of July 2018 in the Lubuskie Voivodeship, the surveyed population of tourist accommodation establishments (having 10 or more beds) consisted of 300 facilities. 217 of them offered all-year seats (72,3%, with the national average constituting 69,6%). In the analysed period, there is a relatively constant number of accommodation facilities participating in the survey, oscillating in the range from 290 to 300. The accommodation facilities of the voivodeship offered 18,5 thousand of bed places, which constituted 2,3% of the total number of bed places in Poland (nearly a 3% share measured by the number of bed objects). On average, there were 2 tourist accommodation establishments per 100 km<sup>2</sup> of the Lubuskie Voivodeship (in the country – 3,5). On average, there were 18 beds per 1000 Lubuskie residents (21 in Poland).

In the Lubuskie Voivodeship, more than half of the hotels (43, i.e. 65,2%) were medium-class facilities, marked with the 3- and 2-star category, 5 hotels (7,6%) had the 4-star category, there were no hotels with the highest 5 -star category. (Statistical Office in Zielona Góra, 30.05.2018).

**Table 1.**

*Tourist accommodation facilities*

Name	In total							
	total facilities		year-round facilities		total beds		all-year beds	
	2016	2018	2016	2018	2016	2018	2016	2018
	[fac.]	[fac.]	[fac.]	[fac.]	[bed]	[bed]	[bed]	[bed]
POLAND	10 509	11 076	7 214	7 709	749 191	798 723	521 938	561 525
LUBUSKIE	299	300	207	217	19 023	18 512	10 989	11 083

Source: Local Data Bank of the Statistical Office, <https://bdl.stat.gov.pl> (11.09.2019).

As of 31 July 2018, 18512 beds were waiting for travellers in tourist accommodation establishments. In the total number of places – 11083, i.e. 59,9%, there were beds available for tourists throughout the year. In comparison with 2016, the share of year-round places in the total number of beds increased by 2,1 percentage points. One tourist facility offered an average of 62 beds (63 a year earlier, and 64 in 2016).

**Table 2.***Tourist accommodation establishments divided into facilities*

Name	Facilities	Facilities, places and rooms	Year	Value	Unit of measure
LUBUSKIE	in total	total facilities	2016	299	Fac.
	in total	total facilities	2018	300	Fac.
	in total	total beds	2016	19023	Bed
	in total	total beds	2018	18512	Bed
	Hotels	total facilities	2016	65	Fac.
	Hotels	total facilities	2018	66	Fac.
	Hotels	total beds	2016	4614	Bed
	Hotels	total beds	2018	4824	Bed
	Hotels	total rooms	2016	2397	-
	Hotels	total rooms	2018	2482	-
	Motels	total facilities	2016	15	Fac.
	Motels	total facilities	2018	14	Fac.
	Motels	total beds	2016	687	Bed
	Motels	total beds	2018	642	Bed
	Motels	total rooms	2016	354	-
	Motels	total rooms	2018	328	-
	guesthouses	total facilities	2016	13	Fac.
	guesthouses	total facilities	2018	13	Fac.
	guesthouses	total beds	2016	678	Bed
	guesthouses	total beds	2018	672	Bed
	guesthouses	total rooms	2016	301	-
	guesthouses	total rooms	2018	306	-
	other hotel facilities	total facilities	2016	41	Fac.
	other hotel facilities	total facilities	2018	43	Fac.
	other hotel facilities	Total beds	2016	1560	Bed
	other hotel facilities	Total beds	2018	1516	Bed
	other hotel facilities	Total rooms	2016	793	-
	other hotel facilities	Total rooms	2018	697	-
	Boarding houses	Total facilities	2016	1	Fac.
	Boarding houses	Total facilities	2018	0	Fac.
	Boarding houses	total beds	2016	20	Bed
	Boarding houses	Total beds	2018	0	Bed
	youth hostels	Total facilities	2016	2	Fac.
	youth hostels	Total facilities	2018	2	Fac.
	youth hostels	Total beds	2016	65	Bed
	youth hostels	Total beds	2018	80	bed.
	school youth hostels	Total facilities	2016	8	Fac.
	school youth hostels	Total facilities	2018	7	Fac.
	school youth hostels	Total beds	2016	390	Bed
	school youth hostels	Total beds	2018	445	Bed
	holiday centres	Total facilities	2016	28	Fac.
	holiday centres	Total facilities	2018	27	Fac.
holiday centres	Total beds	2016	2894	Bed	
holiday centres	Total beds	2018	2710	Bed	
summer camp centres	Total facilities	2016	4	Fac.	
summer camp centres	Total facilities	2018	4	Fac.	
summer camp centres	Total beds	2016	559	Bed	
summer camp centres	Total beds	2018	561	Bed	
training and recreation centres	Total facilities	2016	23	Fac.	
training and recreation centres	Total facilities	2018	22	Fac.	
training and recreation centres	Total beds	2016	2568	bed	
training and recreation centres	Total beds	2018	2354	Bed	
tourist cottage complexes	Total facilities	2016	22	Fac.	



Cont. table 2.

tourist cottage complexes	Total facilities	2018	21	Fac.
tourist cottage complexes	Total beds	2016	1339	Bed
tourist cottage complexes	Total beds	2018	1237	Bed
Camping	Total facilities	2016	4	Fac.
Camping	Total facilities	2018	4	Fac.
Camping	Total beds	2016	605	Bed
Camping	Total beds	2018	605	Bed
camping sites	Total facilities	2016	14	Fac.
camping sites	Total facilities	2018	9	Fac.
camping sites	Total beds	2016	1665	Bed
camping sites	Total beds	2018	1180	Bed
Hostels	Total facilities	2016	0	Fac.
Hostels	Total facilities	2018	1	Fac.
Hostels	Total beds	2016	0	Bed
Hostels	Total beds	2018	20	Bed
guest rooms/private lodgings	Total facilities	2016	11	Fac.
guest rooms/private lodgings	Total facilities	2018	19	Fac.
guest rooms/private lodgings	Total beds	2016	191	Bed
guest rooms/private lodgings	Total beds	2018	420	Bed
agritourism lodging	Total facilities	2016	26	Fac.
agritourism lodging	Total facilities	2018	26	Fac.
agritourism lodging	Total beds	2016	439	Bed
agritourism lodging	Total beds	2018	447	Bed
other tourist accommodation establishments	Total facilities	2016	22	Fac.
other tourist accommodation establishments	Total facilities	2018	22	Fac.
other tourist accommodation establishments	Total beds	2016	749	Bed
other tourist accommodation establishments	Total beds	2018	799	bed

Source: Local Data Bank of the Statistical Office, <https://bdl.stat.gov.pl> (11.09.2019).

As at the end of July 2018, the largest (4824) beds were in hotels (increase by 4,6% compared to 2016 and quite significant compared to 2017 – by 10,1%). In other hotel facilities, the number of beds decreased, compared to 2016, the most in motels (by 6,6%). In the remaining six tourist accommodation establishments, the number of beds increased (the largest, more than double, in guest rooms), while in the other facilities there was a decrease, among others: on camping sites – by 29,1%, in training and recreation centres – by 8,3%, in tourist cottage complexes – by 7,6%, in holiday resorts – by 6,4%, or in agritourism lodgings – by 7,6%. This resulted in a decrease in the total number of beds in the voivodeship by 2,7% compared to the state recorded on July 31, 2016 (Tourism in the Lubuskie Voivodeship in 2016-2018, Statistical Office in Zielona Góra, 2019).

In terms of tourist infrastructure development, the Lubuskie Voivodeship is not uniform. The most, because over 60% of tourist accommodation establishments operate in the northern and central parts of the voivodeship (the exception is the Wschowski district). In July 2018 (with an average number of 21 facilities per one district), the largest number of tourist accommodation facilities were located in Międzyrzecki (39), Świebodziński (38), Słubicki (31), Zielona Góra (31), Wschowa (27) and Sulęcinski (26), while the least in the Żagań powiat (6)

and in the Nowosolski powiat (10 objects) (Tourism in the Lubuskie Voivodeship in 2016-2018, Statistical Office in Zielona Góra, 2019).

During the research, it was noticed that the attractiveness of accommodation facilities is largely influenced by catering facilities.

In 2018, 687,8 thousand of tourists stayed in tourist accommodation establishments. It was 4,0% more than last year and 7,2% more than in 2016, which was granted 1429,5 thousand of accommodation. There was an increase both in annual terms and in relation to 2016 by 5,0% and 3,0%. 74,2% (510,1 thousand) of the total number of tourists accommodated in tourist accommodation establishments were foreign tourists, and 25,8% (177,6 thousand) were foreign tourists.

The use of tourist accommodation facilities is expressed by the degree of use of beds and the degree of use of rooms in hotel facilities (i.e. the percentage share of the number of overnight stays allocated to the nominal number of beds and rented rooms – to the nominal number of rooms in hotel facilities). The degree of occupancy of beds, on average 29,8%, increased by 1,0 pp. compared to both the one recorded in 2016 and compared to 2017. In the period 2016-2018, the largest increase in the degree of use of beds occurred in camping sites by 6,5 percentage points, and the lowest in motels, where there was an increase of 0,5 pp. The decrease in the occupancy rate of beds took place, among others in: school youth hostels by 11,7 pp., holiday centres by 6,6 pp, campsites by 3,3 pp. and training and recreation centres by 3,0 pp. The use of rooms in hotel facilities during 2018 amounted to 37,7%, i.e. by 2,0 pp. more in relation to 2016 and by 0,5 percentage points less compared to 2017. The highest level of room use in hotels, motels, boarding houses and other hotel facilities was recorded in August – 46,1%, and the lowest in January – 28,8% (Tourism in the Lubuskie Voivodeship in 2016-2018, Statistical Office in Zielona Góra, 2019).

Table 3 shows that the Lubuskie Voivodeship in terms of the use of bed places and the degree of use of hotel rooms ranks last compared to all the provinces. An upward trend can be observed compared to 2018 to 2016.

**Table 3.**

*Occupancy rate of beds and occupancy rate of hotel rooms in individual voivodeships*

Name	occupancy rate of beds		occupancy rate of rooms	
	In total		In total	
	2016	2018	2016	2018
	[%]	[%]	[%]	[%]
POLAND	38,6	40,8	47,6	49,8
DOLNOŚLĄSKIE	37,0	39,9	45,7	47,7
KUJAWSKO-POMORSKIE	33,2	32,5	43,0	43,6
LUBELSKIE	29,1	30,4	36,8	38,9
LUBUSKIE	28,2	31,2	35,7	37,7
ŁÓDZKIE	31,7	35,0	41,5	45,5
MAŁOPOLSKIE	45,6	47,9	54,3	56,1
MAZOWIECKIE	47,4	47,8	59,5	60,4
OPOLSKIE	29,7	32,9	39,6	42,0

Cont. table 3.

PODKARPACKIE	30,0	31,6	36,6	39,3
PODLASKIE	31,3	31,8	38,7	40,4
POMORSKIE	41,8	44,7	50,7	53,6
ŚLĄSKIE	34,7	39,2	43,8	48,8
ŚWIĘTOKRZYSKIE	27,8	31,7	35,1	39,8
WARMIŃSKO-MAZURSKIE	35,3	34,4	39,9	38,9
WIELKOPOLSKIE	31,2	32,7	42,1	43,0
ZACHODNIOPOMORSKIE	49,6	51,6	57,8	58,7

Source: Local Data Bank of the Statistical Office, <https://bdl.stat.gov.pl> (11.09.2019).

Nowadays, it is very important to attract and encourage foreign tourists to visit and stay in a particular region. Table 4 shows that from year to year there are more and more foreign tourists in Lubuskie, where in 2018 there were 177,6 thousand of foreign tourists.

During this time, 687,8 thousand of tourists stayed in tourist accommodation establishments in the Lubuskie Voivodeship, which constituted 4,0% more than a year ago and 7,2% more than in 2016, which was granted 1429,5 thousand of accommodation. It was an increase both in annual terms and in relation to 2016 by 5,0% and 3,0%. (Tourism in the Lubuskie Voivodeship in 2016-2018, Statistical Office in Zielona Góra, 2019).

**Table 4.**

*Number of foreign tourists and accommodation provided to foreign tourists in individual voivodeships*

Name	foreign tourists (non-residents)			accommodation granted to foreign tourists (non-residents)		
	In total			In total		
	2016	2017	2018	2016	2017	2018
	[person]	[person]	[person]	[-]	[-]	[-]
POLAND	6 378 793	6 803 667	7 082 231	15 579 225	16 705 215	17 742 651
DOLNOŚLĄSKIE	593 482	654 991	696 726	1 347 103	1 442 076	1 483 890
KUJAWSKO-POMORSKIE	120 510	120 711	116 637	282 924	290 642	279 631
LUBELSKIE	120 767	129 533	126 390	188 477	211 183	215 750
LUBUSKIE	154 096	171 966	177 639	300 484	331 764	327 190
ŁÓDZKIE	175 063	189 561	194 876	344 725	364 930	531 483
MAŁOPOLSKIE	1 376 883	1 460 023	1 504 318	3 328 387	3 553 368	3 652 754
MAZOWIECKIE	1 476 815	1 547 305	1 588 719	2 777 517	3 016 383	3 143 832
OPOLSKIE	48 097	48 010	54 454	109 592	107 086	108 909
PODKARPACKIE	138 552	162 691	151 037	259 276	303 657	291 635
PODLASKIE	168 807	162 872	145 137	218 494	220 602	199 203
POMORSKIE	504 565	559 741	572 393	1 269 566	1 450 879	1 542 129
ŚLĄSKIE	366 956	374 751	422 025	800 131	829 962	967 481
ŚWIĘTOKRZYSKIE	32 748	34 716	36 984	74 453	81 883	105 595
WARMIŃSKO-MAZURSKIE	160 199	167 641	162 345	401 127	400 048	395 204
WIELKOPOLSKIE	303 291	307 628	310 980	613 057	639 231	663 667
ZACHODNIOPOMORSKIE	637 962	711 527	821 571	3 263 912	3 461 521	3 834 298

Source: Local Data Bank of the Statistical Office, <https://bdl.stat.gov.pl> (11.09.2019).

The largest number of foreign tourists visiting the Lubuskie Voivodeship came from Europe – 173,5 thousand, where 67,0% are citizens of the European Union, i.e. 3,5% more than a year ago. Europeans constituted 97.6% of the total foreign tourists. It was a decrease of 0.2 percentage points compared to 2016. The inhabitants of Europe visiting in 2018 the

Lubuskie Voivodeship came mainly from Germany – 30,9%. There was also a high percentage of tourists from Russia – 11,2%, Ukraine – 10,3%, Belarus – 9,9%, Lithuania – 9,5% and Latvia – 6,9%. Tourists from the Netherlands 3,9%, Great Britain – 2,5%, France – 2,2%, Denmark 1,8% and Belgium 1,4% also visited the Lubuskie Voivodeship. Moreover, in Lubuskie tourist accommodation facilities there were, among others, 2,1 thousand of tourists from North America, 1,5 thousand – from Asia, 0,3 thousand – from South and Central America, 0,2 thousand – from Africa and 0,1 thousand – from Australia and Oceania. (<https://zielonagora.stat.gov.pl/dla-mediow/informacje-prasowe/informacja-prasowanipublikacja-turystyka-w-województwa-lubuskim-w-latach-2016-2018,131.html>, 24/09/2019).

### **3.1. Determinants of the region's natural competitiveness**

Competitiveness can be defined as the region's ability to adapt to changing environmental conditions, which is to contribute to success. Achieving a competitive advantage over other regions based on the existing environmental potential, the ability to use it in the processes of socio-economic growth and development, and a low level of anthropopressure can be described as the region's environmental competitiveness. This phenomenon should be considered in two-way terms. On the one hand, competitive advantage may relate to environmental conditions occurring in a particular region, on the other hand, the key here is the ability to transform them into socio-economic effects that will contribute to the relatively faster development of the region in question.

The categorization of environmental determinants of the regions' competitiveness can be divided into:

1. Natural conditions: landscape diversity (e.g. occurrence of mountainous areas, rivers, lakes); average monthly air temperatures; monthly precipitation; wind speed; degree of sunshine and cloudiness; occurrence of resources of more important minerals (e.g. hard coal and lignite, gas, oil).
2. Geodetic and soil conditions: geodetic structure of the voivodeship (e.g. share of agricultural land, forest land in the total area of the voivodeship); soil structure according to bonitation classes; threat associated with wind, water and ravine erosion; the share of devastated and degraded land; fertilizer consumption level; soil reaction structure.
3. Condition and degree of pollution of water resources: surface water resources; groundwater exploitation resources; surface and underground water quality, including cleanliness of lakes and rivers; industrial and municipal sewage discharged into water and soil (including untreated sewage, amount of sewage sludge generated).

4. Quality and level of atmospheric air pollution: concentration level of basic air pollutants; UV-B radiation level; structure of pollution concentration zones; ozone content in the atmosphere; chemical composition of atmospheric precipitation; total air pollution, including the number of particularly onerous plants; impurities retained and neutralized in purifying devices.
5. The level and structure of generated waste.
6. Facilities and areas with special natural values as well as the degree of forest cover and afforestation of land.
7. Industrial and road noise level.
8. Infrastructure for environmental protection and water management: level of equipment in the sewage network; sewage treatment plants serving cities and villages; population using sewage treatment plants; equipped with devices to protect against air pollution; the ratio of legal landfills to the so-called illegal dumps (Kasztelan, 2010, p. 83).

The definition of a region's competitiveness often defines the ability to achieve relatively high incomes, i.e. ensuring a fair standard of living for the inhabitants of a particular region. The basic indicator of the purely economic nature of GDP per capita is often used to examine this phenomenon, and the factor that affects the region's competitiveness, which is the natural environment, is omitted.

Some definitions of competitiveness emphasize the strong relationship between competitiveness and prosperity and define a competitive region not only through the prism of factors related to production, but also in relation to the whole economic situation and its important element, which is a lasting and growing level of prosperity. Building a competitive region is not fast and easy. It is a long and complex process. Unlike the company's competitiveness, there are no fixed and unambiguous measures for regions that represent the best level of competitiveness (Sługocki, 2016, pp. 552-554).

Hanna Kruk, conducting her analysis, stated that the tourist attractiveness of the region is influenced not only by the occurrence of areas with high natural values, assessing waters or forests, but their proper development for the needs of tourism and promotion of the region (Kruk, 2010, p. 196).

The regions' natural competitiveness should be understood as a concept closely related to the natural environment as a factor of competitiveness. This is the relationship between the natural environment and the activities of economic operators using this factor. It should be remembered by managing the resources and values of the natural environment in the region that they are economic goods, not free. A large part will naturally run out, while others will be destroyed as a result of poorly planned activities and will disappear (Kruk, 2010, pp. 201, 235-236).

## 4. Conclusions

The tourist attractiveness of the Lubuskie Voivodeship is underestimated. The attractiveness of a particular region is definitely determined by natural values, preparation of the area for tourism and recreation, as well as the availability of particularly valuable cultural and national heritage. A very important element is the communication infrastructure, because the means of road and rail transport are most often used by tourists.

The tourist potential of the Lubuskie Voivodeship is certainly huge but not fully utilized. The Lubuskie Voivodeship is distinguished by its special natural values, above all the varied landscape, large forest complexes, numerous lakes and rich fauna and flora. The natural environment of the voivodeship is slightly transformed and not polluted.

The richness of the voivodeship are forests and wilderness, with numerous landscape parks, reserves and monuments of nature as well as with animals living in the wild. An important aspect in the tourist landscape of the Lubuskie Voivodeship are castles, churches and manor houses and palaces related to the history of the region. Today, a large proportion of tourists seek to learn about folklore, tradition, folk creativity, as well as regional cuisine. The voivodeship offers a wide range of cultural, sporting, entertainment and artistic events.

It should be added that as one of the few regions in Poland, the Lubuskie Voivodeship may offer enotourism as an attraction (Dariusz, 2019). The Lubuskie Land is called the land of flowing wine and honey, due to the exceptionally mild climate, necessary to found a vineyard and many regional products. The Lubuski Wine and Honey Trail is the first such attraction in Poland. The over 200-kilometer route includes 14 stops, which consist of vineyards, museums and farms, where you can taste regional delicacies, taste the wine products and even spend the night.

A showcase of this form of recreation is the only “living” wine museum in Poland – Lubuskie Wine Center in Zabór near Zielona Góra. The main goal of creating the Lubuskie Wine Centre is the development of the brand and tourist potential of the Lubuskie Voivodeship as well as building regional identity, integration of wine environments and re-cultivation of traditions related to viticulture and wine production in the Lubuskie Region.

The Lubuskie Land and its special natural values with numerous monuments make this area more beautiful from Polish regions, which has been attracting domestic and foreign tourists for years.

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