



New  
Direction

Pro Carpathia

# ENTREPRENEURSHIP IN PROTECTED AREAS IN THE CARPATHIANS



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This report was elaborated as part of the research conducted at the order of New Direction - The Foundation for European Reform by Association for the Development and Promotion of Podkarpacie "Pro Carpathia". The report was elaborated by a team of authors from Poland, the Czech Republic, Slovakia, Ukraine, Romania and Hungary, comprising: Agnieszka Pieniążek, PhD, project manager (Poland), Mateusz Stopa, PhD (Poland), Janka Adwan-Barabás (Hungary),

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# INTRODUCTION

The Carpathian Mountains cover an area of about 209,000 km<sup>2</sup>. Their largest part is located on the territory of Romania (55.5%), Slovakia (17.1%), Ukraine (10.3%), and Poland (9.3%), a smaller part on the territory of Hungary (4.3%), and the Czech Republic (3.2%), and the smallest area is situated on the territory of Austria (0.3%). Considering the percentage of the Carpathian Mountains area to the total area of a given Carpathian country, Slovakia ranks first, with as much as 73% of its territory covered by the Carpathians. Romania has a very large share of the territory of the Carpathians (45%), followed by Hungary (10%), the Czech Republic (8.5%), Poland (6%), Ukraine (3.5%), and Austria (0.6%) (Warszyńska, 1995).

The main objective of the study was to identify forms of economic activity in protected areas in the Carpathian Mountains, i.e. Poland, Slovakia, the Czech Republic, Romania, Hungary, and Ukraine, to verify the most important problems and needs, and to make recommendations for supporting entrepreneurship in accordance with the concept of sustainable development. The intention behind conducting the research in the above-mentioned scope resulted primarily from:

- limited knowledge of the forms of economic activity in protected areas in the different Carpathian countries and the differences in this respect,
- lack of precise information on the scale of economic activity in protected areas in the Carpathians,
- limited knowledge of institutions/organizations and support systems for entrepreneurs undertaking activities in protected areas in the Carpathians,
- perception of protected areas as an obstacle to running a business,
- limited knowledge of the needs of entrepreneurs operating in these areas and,
- limited knowledge of how to use the natural potential in economic activities in the Carpathians consistent with the concept of sustainable development.

In order to achieve this goal, a desk research analysis was carried out on the forms and scale of economic activity in protected areas in each of the Carpathian countries included in the study, i.e. Poland, Slovakia, the Czech Republic, Ukraine, Romania, and Hungary. In this regard, a review of scientific and popular science literature in the surveyed countries was

carried out. For the purpose of this study, it was assumed that the activity of those entrepreneurs who run their business in the Carpathians, in protected areas (regardless of the form of this protection) and where their registered offices are located (i.e., where the business was registered), will be analyzed. Focus Group Interview (FGI) and surveys were conducted simultaneously from April to July 2023. The focus group research was devoted to the broadly understood issues of entrepreneurship in the protected areas of the Carpathians. Entrepreneurs who operate within and/or related to protected areas, but also representatives of business environment institutions responsible for the development and support of entrepreneurship in these areas, representatives of the NGO sector (cooperating with entrepreneurs), and scientific institutions dealing with these issues were invited to participate in the discussion. The meetings were conducted online and a total of 58 experts from six Carpathian countries took part in them.

At the same time, quantitative research was also conducted among entrepreneurs and young people (students and schoolchildren) on entrepreneurship in the protected areas of the Carpathians. The research was conducted online. The questionnaires were available in the national languages in an electronic version in Google Forms. They were made available in the form of links and distributed by the partners of the Association for the Development and Promotion of Podkarpacie "Pro Carpathia", organizations of entrepreneurs, educational institutions, and social media in the Carpathian administrative units of the surveyed countries. The choice of these two categories of respondents was dictated by the desire to confront the opinions of representatives of communities who run businesses in the area, at least part of which is protected, with the opinions and beliefs of people who will potentially constitute human resources for this economic activity in the future. A total of 994 respondents took part in the survey (after discarding the responses of respondents unrelated to the Carpathian areas).

The content of marketing campaigns undertaken by entrepreneurs operating in protected areas in each Carpathian country was also analyzed. Five to seven active entrepreneurs in each country were selected for the marketing campaign analysis. The seat of the surveyed entrepreneurs could be located outside the protected areas in the Carpathians, but their key activities had to be carried out in the area. An important issue for the research team was to identify those companies that actively present themselves as businesses related to protected areas in the Carpathians. The businesses included in the analysis were operating in various industries, including cosmetics, catering,

food, crafts, and tourism. The largest number of analyzed entities operate in the food and tourism industries. The aim of the analysis was to capture communication solutions and references to protected areas in the Carpathians as an asset emphasized in communication with potential customers.

This is the first, at least to the authors' knowledge, such a cross-sectional research project devoted to entrepreneurship in the protected areas of the Carpathians. In a cross-sectional sense, the research was conducted in all Carpathian countries. Additionally, it is considered cross-sectional in that, on the one hand, it takes into account, the peculiarities of each of the countries included in the research (historical and current), and, on the other hand, it answers questions about common phenomena universal to the protected areas of the Carpathians. The obtained results are in line with the general diagnoses regarding the subject matter of the research, although precisely because of the cross-sectional nature - they make it possible to formulate conclusions and recommendations for the Carpathian policy. The depopulation of the protected areas of the Carpathians, the disintegration of local ties and the marginalization of aging local communities, immature local markets, and bureaucratic difficulties both formal and resulting from the local legal culture, make it a particular challenge to prepare the Carpathians for higher tourist traffic. And the Carpathians are still not as popular as their potential indicates. Indeed, an analysis of the natural and cultural values under protection in the various Carpathian countries clearly indicates that this second-largest European mountain range is still waiting to be discovered by European tourists.

This study is, therefore, an attempt to provide substantive and factual premises for specific formal and legal solutions, but also to design support mechanisms for the Carpathian local communities in such a way that they will be the primary beneficiaries of the future recognition and popularity of the Carpathians. After all, the protection of natural and cultural values should not take place at the expense of the fundamental social carriers of these values. The Carpathian local communities deserve a development strategy that takes into account the specificity of protected areas but allows them to draw socio-economic

benefits from the existence and even expansion of protected areas. Protecting the richness and diversity of the Carpathians must not mean closing access to them (in an acceptable form) for European tourists who are more and more environmentally aware. The Carpathian Mountains are a natural area for the development of sustainable tourism.

Developing a strategy for sustainable development of the Carpathians, taking into account their protected areas, and giving local communities operating in these areas concrete development opportunities while respecting natural and cultural resources means, therefore, in the long term, strengthening their protection also against uncontrolled exploitation. Entrepreneurship in this form, however, cannot mean vegetating on the brink of survival. On the contrary, it is supposed to be an attractive alternative for business activity, allowing development in the standards of the 21st century. Only such mechanisms make it possible to recreate and strengthen social ties, which in turn provide transmission belts for preserving and passing on local traditions and culture.

It may be an overstated expectation, but a vision of entrepreneurship in the protected areas of the Carpathians that is innovative on a European scale is possible. Innovative in the special way that it respects the natural and cultural values under protection - not trying to circumvent the nuisances of protection, but just using the nature of protected areas as a resource for innovation.

The report consists of ten parts. The first part deals with the natural and economic potential of the Carpathians and the Carpathian countries. The second presents the most important forms of nature protection in the surveyed countries and the limitations associated with them. In the next one, an analysis of economic activity in protected areas in the Carpathian countries is made on the basis of selected scientific and popular science literature. The next parts are the presentation of the methodology and results of: focus group research, a survey, and the content of marketing campaigns undertaken in protected areas in each of the Carpathian countries. The last part is a summary and recommendations.

2

# THE NATURAL AND ECONOMIC POTENTIAL OF THE CARPATHIANS

## DIVISION AND NATURAL VALUES OF THE CARPATHIANS

The Carpathian Mountains are a vast arc-shaped mountain chain about 1,300 kilometers long. It stretches between the Danube Gorge on the Austrian-Slovakian border to the so-called "Iron Gate" on the Romanian-Serbian border. They include three main cores: Western Carpathians, Eastern Carpathians, and Southern Carpathians (Warszyńska, 1995).

- **Western Carpathians**
  - Outer Western Carpathians
  - Central Western Carpathians
  - Internal Western Carpathians
- **Southeastern Carpathians**
  - Outer Eastern Carpathians
  - Internal Eastern Carpathians
  - Southern Carpathians
  - Transylvanian Plateau
  - West Apuseni Mountains

These are vast mountains, however, their heights exceed 2,500 meters above sea level only in two places (in the Tatras and the Southern Carpathians). According to the division of Professor J. Kondracki (1978), the Carpathians consist of two provinces and eight subprovinces:

Figure 1. Carpathian Arc



Source: TURKULA - Karolina Kiwior

The Outer Western Carpathians possess the characteristics of middle mountains. The highest elevation on their territory is the Babia Gora massif (1,725 meters above sea level) on the Polish-Slovakian border. In terms of geological structure, it

is the western part of the Carpathian Flysch arc. Naturally, there were oak-hornbeam forests of the foothills floor and fir-beech forests of the lower regal floor, as well as spruce forests characteristic of the upper regal floor. After the emergence

of men and the start of their economic activity in large areas, they gave way to arable fields, hay meadows, and pastures. Within this subprovince, the following macro-regions can be distinguished: Austrian-Moravian Carpathians, Central Moravian Carpathians, Bielawy, Western Beskids, Central Beskids, Western Beskidian Foothills, and Central Beskidian Piedmont.

The Central Western Carpathians consist of many isolated mountain groups separated by tectonic depressions. The

highest group is the Tatras with Gerlach (2655 m) in Slovakia. They are characterized by glacial terrain with, among other things, numerous cirque lakes. In addition, they are characterized by rock series with a predominance of carbonate rocks (limestone and dolomite). The subprovince is about 90% located on Slovak territory. It includes the following macro-regions: Lesser Carpathians, Middle Wag Valley, Lesser Tatras Chain, Nitrzansko-Turczańskie Depression, Orava-Podhale Depression, Tatra Mountains, Liptovsko-Spiskie Depression, High Tatra Chain, and Low Tatra Chain.

Figure 2.  
**High Tatras (Poland)**



Source: photo by K. Szpara

Figure 3.  
**Mala Fatra (Slovakia).**



Source: photo by M. Pociask

The Internal Western Carpathians are composed of older Paleozoic structures and rocks of volcanic origin. Characteristic and attractive are the Mesozoic limestone series occurring between them, such as the Straceńskie Mountains, the Slovak-Hungarian Karst, and the Beech Mountains. They include the following macro-regions: the Upper Hron, the Chain of Slovak Ore Mountains, the Depression of Ipel-Slana, the Slovak-Hungarian Karst, Cherehat, the Kosice Valley, the Tokaj Mountains, and the North-Hungarian Medium Mountains.

The Outer Eastern Carpathians are an extension of the Outer Western Carpathians. The highest mountain group is Czarnohora with Howerla (2061 meters above sea level). There are also well-preserved traces of glaciation. They include the following macro-regions: Eastern Beskids - Lesiste, Eastern Beskids - Poloniny, Moldavian-Muntenian Carpathians, and Eastern Subcarpathians.

Figure 4.  
**Czarnohora - Eastern Carpathians (Ukraine)**



Source: photo by M. Pociask

The Internal Eastern Carpathians reach their greatest heights in the crystalline-rock-built Rodna Mountains with Pietros (2305 meters above sea level). Also, characteristic and attractive is a belt of extinct volcanoes about 400 km long with culminations in the Călimani Mountains (2102 m) and Hargita

(1801 m). They can be divided into the following macro-regions: the Marmaroskie Carpathians, the Marmaroskie Basin, Rodna Mountains, Bystrzyckie Mountains, Wyhorlacko-Gutyńskie Chain, Kelimeńsko-Hargicki Chain, and Gheorghieńsko-Braszowski Depression.

Figure 5.  
**Rhodnjan Mountains (Romania)**



Source: photo by M. Pociask

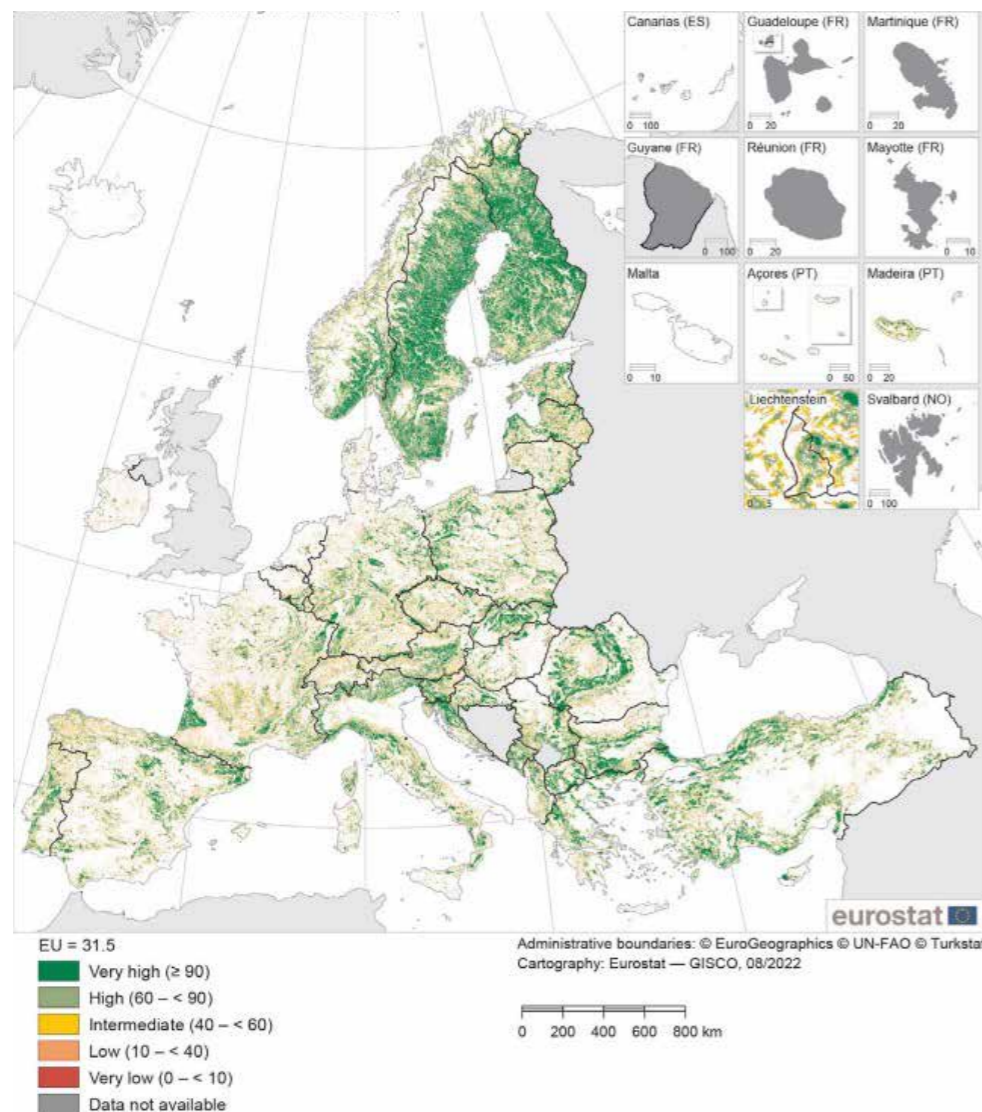
The Southern Carpathians are largely made up of metamorphic rocks. Among the most famous, attractive, and at the same time highest are the Fogaras Mountains with Moldoveanu (2543 meters above sea level) and Retezat (2509 meters above sea level). Strong traces of Pleistocene glaciation can be seen there. Within them, the following macro-regions can be distinguished: Fogaraska Valley, the Paring Group, the Godeanu-Retezat Group, the Banat Mountains, and the Poiana Rusca Massif and a part of the Southern Subcarpathians can still be mentioned here.

The Apuseni Mountains are characterized by flat summit areas with Curcubeta (1,848 meters above sea level) in the interior of the massif, and varied, partial karst terrain with deeply incised valleys on the periphery. Within them, the following macro-regions the following can be distinguished: the Biharu Massif, the Maruszy Mountains, the Kereszu Mountains, and the Ses-Meses Mountains. The Transylvanian Plateau occupies a central position within the Southeastern Carpathians. It is

surrounded by mountains, which gives it the character of a basin with a landscape of gentle hills. The rivers flowing through the highland emerge through picturesque gorges. Within the upland, the following units can be distinguished: Samosz Plateau, Transylvanian Plain, Central Marusza Valley, Tyrnava Plateau, Fogaraska Valley, Sibiu Basin, and Hateg Valley.

The nature of the Carpathian Mountains is extremely valuable and attractive. Kucharzyk (2009) reports, following other researchers, that it is home to Europe's largest area of primary forest of about 300,000 hectares (Webster et al., 2001), and the mountainous mixed forests of the Carpathians, Alps, Balkans, and Caucasus have been ranked among the 200 most important ecosystems in the world (Olson and Dinerstein, 2002). It is also a refuge for all the large mammalian predators found in Europe, an important area for the conservation of the Caucasian bison and chamois, and an area of high biocenotic diversity (Kucharzyk, 2009).

Figure 6. Forest connectivity (2018) (% of forests in a fixed local neighborhood area)



Source: European Commission, Eurostat, (2022). Eurostat regional yearbook: 2022 edition, Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/915176>

## FORMS OF NATURE CONSERVATION IN THE CARPATHIANS

There are many different forms of nature protection in the Carpathian region. Already in 2001, the area of national and landscape parks was estimated at more than 19 thousand km<sup>2</sup>. To this should be added, among others, several thousand nature reserves, which, although they generally cover a small area, are often extremely valuable. In general, in 2001 it was estimated that about 16% of the Carpathian area was covered by various forms of protection (Kucharzyk, 2009; Webster et al., 2001). Today, this percentage is even higher, and the forms of nature protection sometimes vary from country to country.

As of 2023, there were 42 national parks in the Carpathians. The largest number were established in Romania (12) and Ukraine (12) and Slovakia (9), slightly fewer in Poland (6) and Hungary (3), and none in the Czech part of the Carpathians. National parks cover an area of more than 11,100 km<sup>2</sup> or about 5.3% of

the area of the Carpathians. Slovakia's Tatranský (738 km<sup>2</sup>) and Nízke Tatry (728 km<sup>2</sup>) national parks have the largest area, while Poland's national parks are among the smallest: Pieniny National Park (23.46 km<sup>2</sup>) and Babia Góra National Park (33.92 km<sup>2</sup>). The average size of a national park in the Carpathians is just over 264.4 km<sup>2</sup>, with the average size of national parks in Hungary (410.5 km<sup>2</sup>) and Slovakia (353.2 km<sup>2</sup>) being by far larger, and the average size of national parks in Poland (137.7 km<sup>2</sup>) being the smallest.

The oldest national park in the Carpathian Mountains is Pieniny National Park, established in 1932 in Poland, Retezat National Park, established in 1935 in Romania, and Piatra Craiului National Park, also established in 1938 in Romania. The youngest is Slovenský kras National Park, established in 2022 in Slovakia.

Table 1. National Parks in the Carpathians

L.P.	NATIONAL PARK	YEAR OF CREATION	COUNTRY	AREA IN KM <sup>2</sup>
1	Babia Góra	1954	Poland	33.92
2	Tatra	1955	Poland	211.97
3	Pieniny	1932	Poland	23.46
4	Gorce	1981	Poland	70.3
5	Magura	1995	Poland	194.38
6	Bieszczady	1973	Poland	292.02
7	Tatranský	1948	Slovakia	738.00
8	Pieninský	1967	Slovakia	37.50
9	Nízke Tatry	1978	Slovakia	728.00
10	Malá Fatra	1988	Slovakia	226.30
11	Slovenský raj	1988	Slovakia	194.14
12	Poloniny	1997	Slovakia	216.98
13	Muránska planina	1997	Slovakia	185.16
14	Veľká Fatra	2002	Slovakia	403.71
15	Slovenský kras	2022	Slovakia	346.11
16	Aggteleki	1985	Hungary	201.83
17	Bükk	1977	Hungary	422.83
18	Danube-Ipoly	1997	Hungary	606.75
19	Retezat	1935	Romania	380.47
20	Piatra Craiului	1938	Romania	147.73
21	Cozia	1966	Romania	171.00
22	Călimani	1975	Romania	245.66
23	Domogled - Valea Cernei	1982	Romania	612.11
24	Semenic - Cheile Carașului	1982	Romania	366.64
25	Munții Rodnei	1990	Romania	463.99
26	Cheile Bicazului - Hășmaș	1990	Romania	65.75
27	Cheile Nerei - Beușnița	1990	Romania	367.58
28	Ceahlău	1995	Romania	83.96
29	Buila-Vânturarița	2005	Romania	41.86
30	Defileul Jiului	2005	Romania	111.27

31	Bokivshchyna	2019	Ukraine	122.40
32	Carpathian	1980	Ukraine	515.71
33	Cheremoskiy	2009	Ukraine	71.18
34	Hutsul region	2002	Ukraine	322.71
35	Royal Beskydy	2020	Ukraine	86.91
36	Skolivski Beskydy	1999	Ukraine	356.84
37	Synewyr	1989	Ukraine	430.82
38	Syniohora	2009	Ukraine	108.66
39	Uzan	1999	Ukraine	461.47
40	Verkhovskiy	2010	Ukraine	120.22
41	Vyshnytsky	1995	Ukraine	112.38
42	Enchanted Country	2009	Ukraine	104.51

Sources: <https://zpppp.pl/> <https://www.soprs.sk/web/> <https://termesztvedelem.hu> <https://romaniasalbatice.ro/> Maryshevych M., Shpakivska I., Didukh O., 2007. Wyzwania i szanse dla ochrony przyrody w karpaccich parkach narodowych na Ukrainie. Roczniki Bieszczadzkie 15 (2007), s. 105-118.

## THE AREA OF THE CARPATHIANS IN EACH CARPATHIAN COUNTRY

The Carpathian Mountains cover an area of about 209,000 km<sup>2</sup>. Their largest part is located on the territory of Romania (55.5%), Slovakia (17.1%), Ukraine (10.3%), and Poland (9.3%), much less on the territory of Hungary (4.3%) and the Czech Republic (3.2%), and the least in Austria (0.3%). Considering the percentage of the Carpathian Mountains area to the total

area of a given Carpathian country, Slovakia ranks first, with as much as 73% of its territory being Carpathian. A very large share of the Carpathians in the area of the territory is held by Romania (45%), followed by: Hungary (10%), the Czech Republic (8.5%), Poland (6%), Ukraine (3.5%) and Austria (0.6%) (Warszyńska, 1995).

Table 2. Area of the Carpathian Mountains in the Carpathian countries

COUNTRY	SURFACE AREA OF THE CARPATHIANS (IN THOUSAND KM <sup>2</sup> )	AREA OF THE CARPATHIAN MOUNTAINS (IN %)	CARPATHIAN SHARE IN THE COUNTRY'S AREA (IN %)
Romania	116.0	55.5	45.0
Slovakia	35.7	17.1	73.0
Ukraine	21.5	10.3	3.5
Poland	19.4	9.3	6.0
Hungary	9.0	4.3	10.0
Czech Republic	6.7	3.2	8.5
Austria	0.6	0.3	0.6
<b>TOTAL</b>	<b>209.0</b>	<b>100.0</b>	

Source: compiled from Warshynska, 1995

## ENTREPRENEURSHIP IN THE CARPATHIAN COUNTRIES

The Carpathian Mountains are characterized by a highly fragmented terrain, the presence of extensive basins and wide river valleys, and low-lying passes. These features were conducive to the development of settlement and agriculture, and, in the higher parts, pastoralism. In addition, they created favorable conditions for the formation of trade routes (Balon, Węclaw-Michniewska, 2018) which translated into the economic development of the region.

The Carpathian Mountains are inhabited by some 14 million people, with about 7 million in Romania. The primary economic

sectors of the Carpathians include agriculture, forestry, industry, and tourism - the fastest-growing economic sector in these areas today (Kurek, 2004). In general, it is estimated that depopulation processes will be clearly visible in the Carpathian regions in the coming years.

Land abandonment, conversion and fragmentation of habitats, deforestation, and other phenomena have led to serious imbalances in the Carpathian landscapes and their biodiversity. Socio-economic evolution is also important. There are now many alternatives for young mountain farmers who migrate

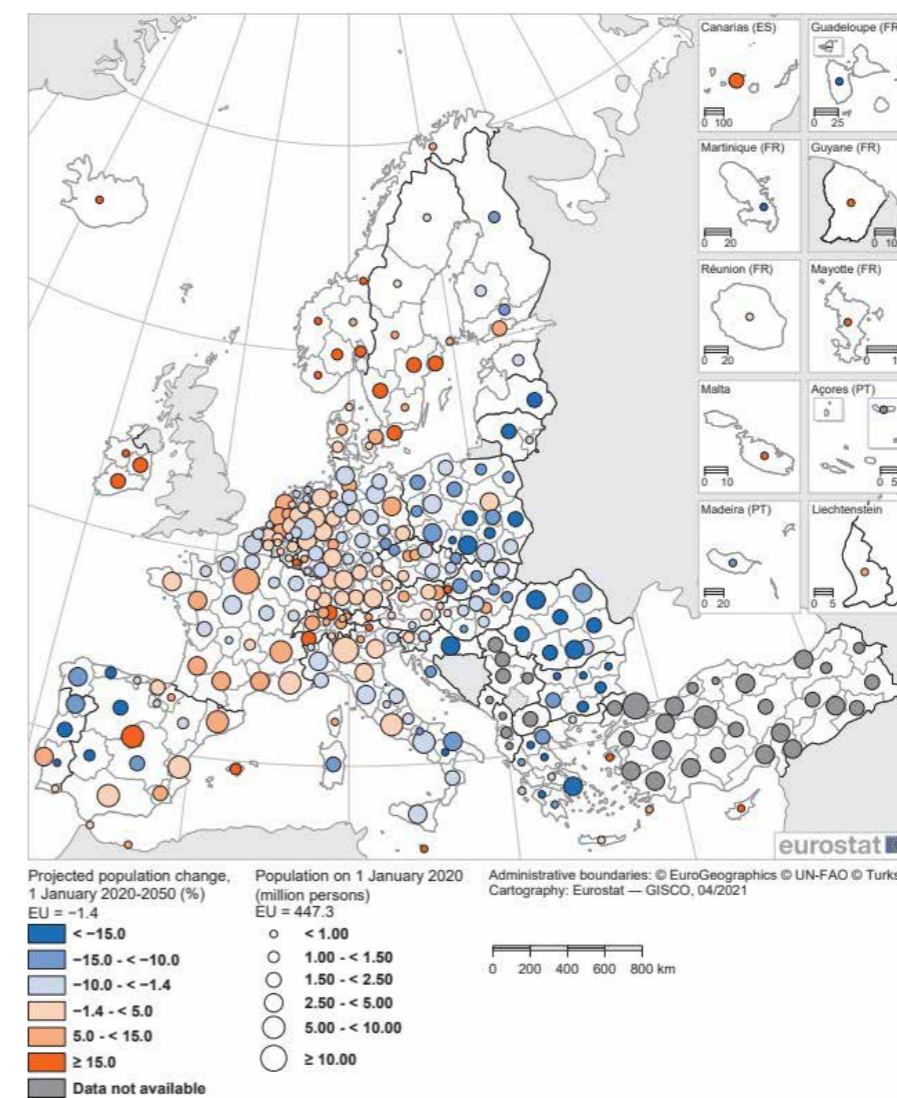
to cities or other Western European countries. As a result, the continuity and conservation of the quality of mountain pastures are threatened, as well as food production in these areas (Tofan & Nita, 2021).

Agriculture flourishes in the Transylvanian Upland, in the mountain valleys, and in the lower areas. The higher parts of the mountains are rather associated with forestry and shepherding. Among the natural resources, natural gas, occurring mainly in the Transylvanian Plateau, and crude oil are of importance. Noteworthy are also deposits of rock salt, e.g. in the Transylvanian Upland. In the past, iron ores, non-ferrous metal ores, and gold and silver ores were widely exploited, e.g. in the Bihor massif and in the Slovak Western Carpathians. Today, all these deposits are of little importance. Major industrial centers include: Bratislava with the engineering and petrochemical

industry and Košice with the steelworks. In Romania, important are Cluj-Napoca, known for the production of machinery as well as chemical and food products, Brasov with machine production and Sibiu (Kondracki, 2023).

Some places related to the economy of the Carpathians are among the most valuable monuments of technology. For example, in Poland, salt mining sites from the 13th century have been inscribed on the UNESCO World Heritage List under the name Royal Salt Mines in Wieliczka and Bochnia (Polish UNESCO Committee, 2023). The Ignacy Łukasiewicz Museum of Oil and Gas Industry in Bóbrka, located in the Polish Carpathians, refers to the tradition of oil exploitation and is located in the world's oldest, still operating oil mine (Ignacy Łukasiewicz Oil and Gas Industry Museum in Bóbrka, 2023).

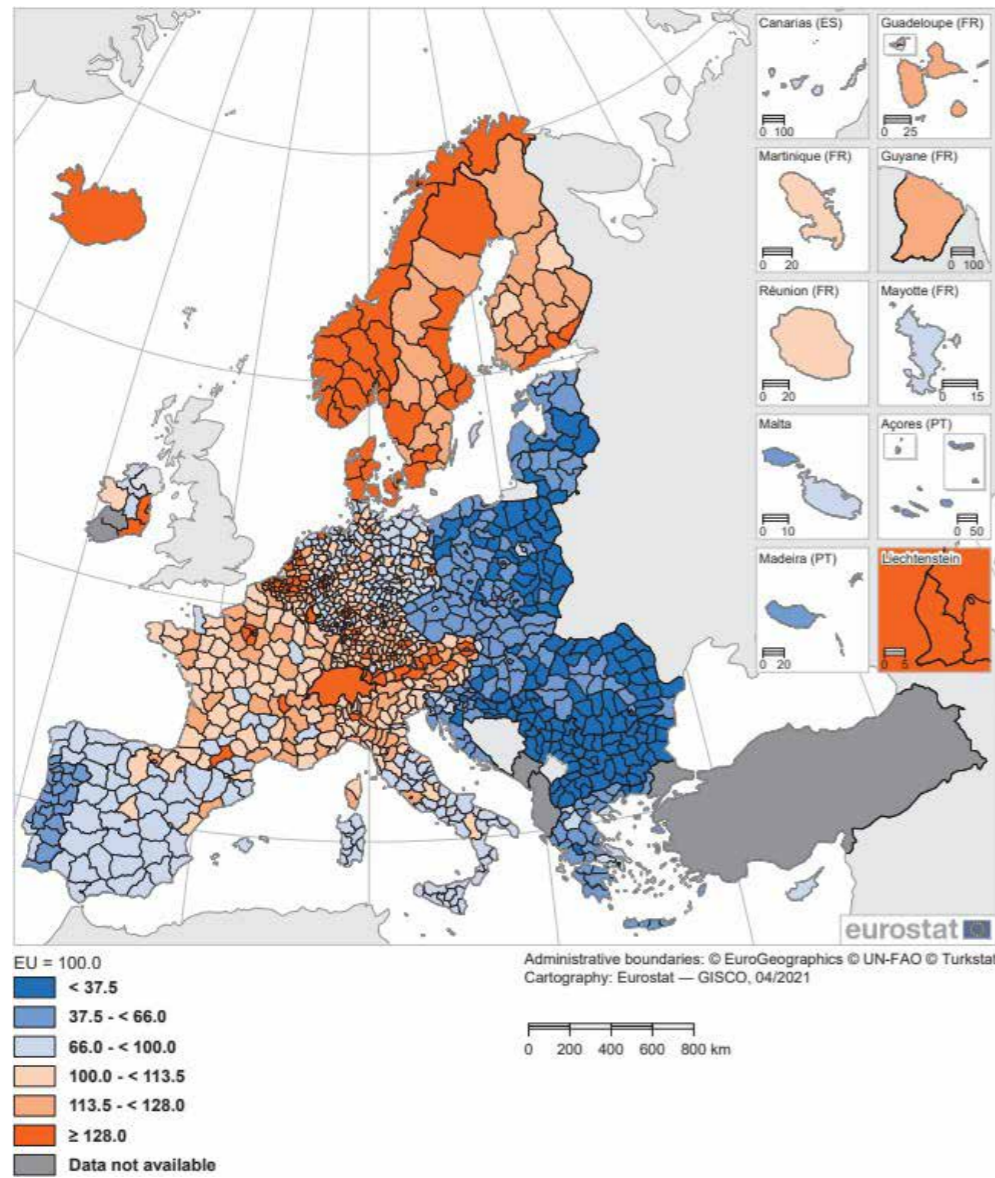
Figure 7. Population on January 1, 2020, and projected population change January 1, 2020-2050 (by NUTS 2 regions)



Source: European Commission, Eurostat, (2021). Eurostat regional yearbook: 2022 edition, Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/894358>

One of the factors influencing the level of economic development and entrepreneurship is labor productivity. In the Carpathian regions, as in Eastern European countries in general, it is significantly lower than in Western Europe.

Figure 8. Labor productivity, 2018

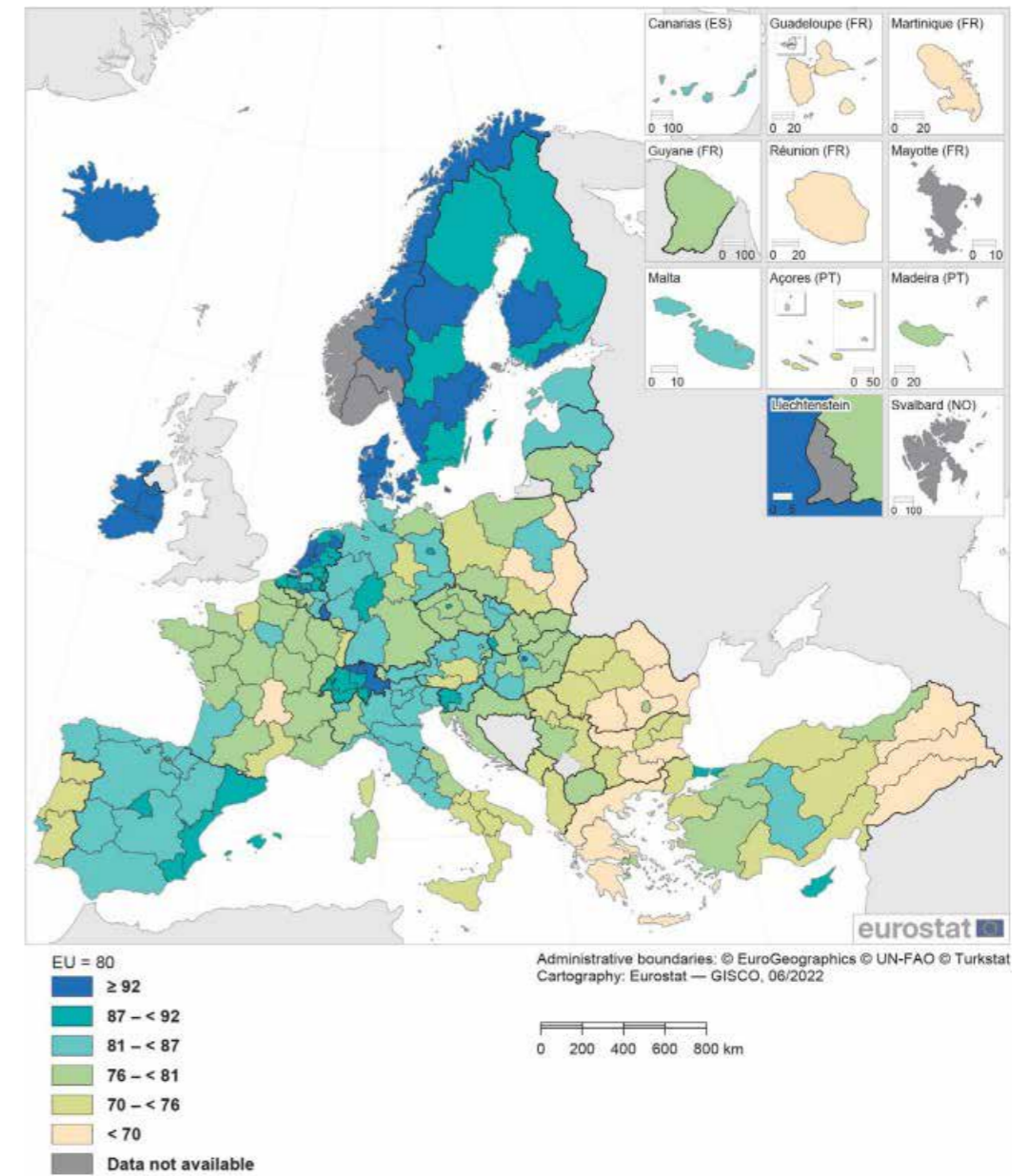


Source: European Commission, Eurostat, (2021). Eurostat regional yearbook: 2022 edition, Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/894358>

In the modern world, the level of development of digital society is extremely important for everyday life and economic activity. Information and communication technologies (ICT) affect people's daily lives (e.g. work, education, shopping, entertainment). One of the influencing factors is

access to fast and reliable Internet. People living in peripheral regions may, through lack of investment in infrastructure, be socially excluded or even result in a digital divide. The Carpathian regions have the lowest rates of Internet users in Europe.

Figure 9. Daily internet users during the three months preceding the survey (2021) (% , people aged 16-74, by NUTS 2 regions)

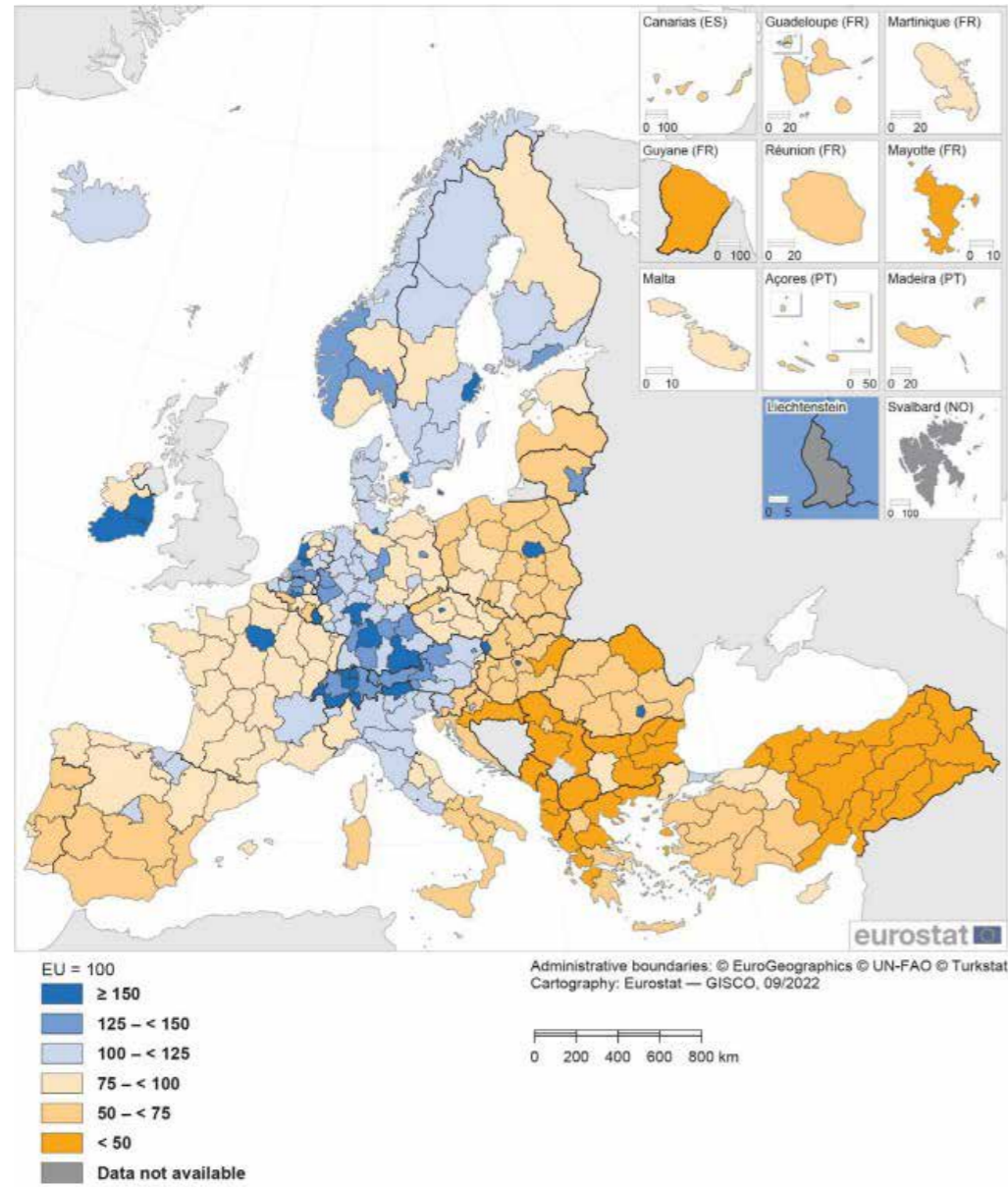


Source: European Commission, Eurostat, (2022). Eurostat regional yearbook: 2022 edition, Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/915176>

The GDP per capita ratio expressed in purchasing power standards shows considerable variation among European regions. It is a common conventional unit of currency used in the European Union to convert economic aggregates for spatial

comparisons. It makes it possible to eliminate differences in price levels between member states. In the Carpathian regions, it reaches values significantly lower than the average for the European Union.

Figure 10.  
**GDP per inhabitant in purchasing power standards (PPS) (2000)**  
 (index in relation to the EU average = 100, by NUTS 2 regions)

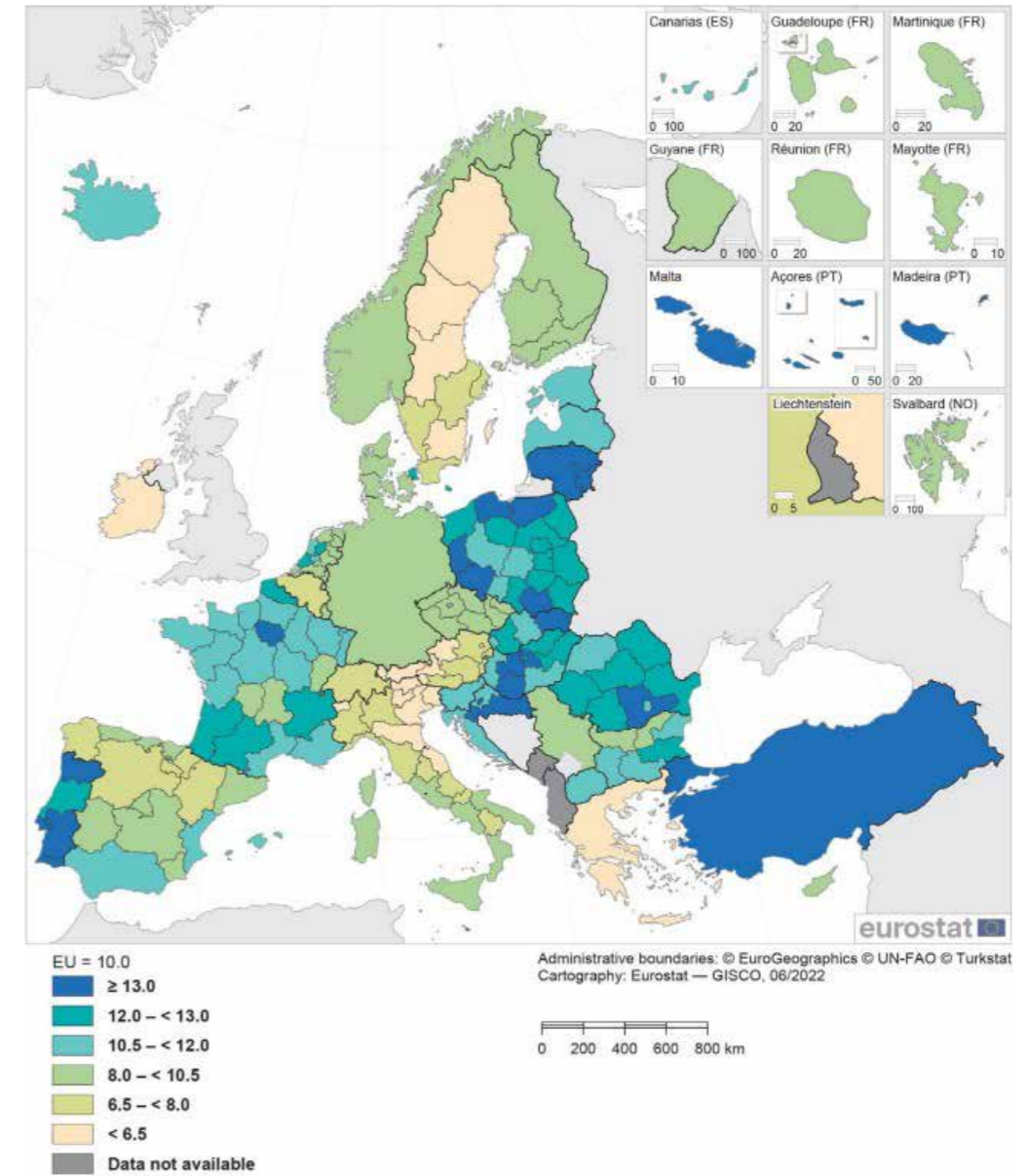


Source: European Commission, Eurostat, (2022). Eurostat regional yearbook: 2022 edition, Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/915176>

From the point of view of economic development, enterprises are crucial. New, fast-growing enterprises can be innovators and create jobs. The enterprise birth rate shows the number of new

enterprises created in a year relative to the total number of active enterprises in a given year. In 2019, it stood at 10.0 percent in the European Union and was slightly higher in the Carpathian regions.

Figure 11.  
**Enterprise birth rate (2019) (% of active enterprises in the business economy, by NUTS 2 regions)**



Source: European Commission, Eurostat, (2022). Eurostat regional yearbook: 2022 edition, Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/915176>

One of the most important economic activities in the Carpathian Mountains is tourism. Many forms of tourism are developing there, including mountain hiking, biking, skiing, and agro-tourism. Numerous spas are visited by visitors. Among the most important Carpathian spas in Poland are: Wysowa-Zdrój, Iwonicz-Zdrój, Rymanow-Zdrój, Krynica-Zdrój, Muszyna-Zlockie, Zegiestow-Zdrój, Piwniczna-Zdrój, Szczawnica, Rabka-Zdrój and Ustroń. In Slovakia, these are: Bardejov, Bojnice, Vyšné Rušbachy, Korytnica-Kúpele, Rajecké Teplice, Turčianske Teplice and Sliač. In Ukraine, these are: Sunny Zakarpattya, Siniak, Svalava, and Polana. In Romania, they are: Borsec, Borsa, Băile Tusnad, Vatra-Dornei, Covasna, Lacu Rosu, Slănic Moldova, Sovata, Singeorz-Băi, Busteni, Băile Govora, Băile Olănești, Călimănești, Ocna Sibiului, Pucioasa, Sinaia and Stina de Vale (Kurek, 2004).

The most important Carpathian ski stations include those located in Poland, Slovakia, and Romania: Szczyrk, Zakopane, Bukowina Tatrzańska, štrbskie Pleso, Tatranská Lomnica, Smokovec, Jasná, Poiana Brasov, Predeal and Sinaia (Kurek, 2004).

Agrotourism plays an important role for sustainable development in the Carpathians. It provides additional income for farmers, limits the exodus outflow of population from the countryside, allows tourists to enjoy many forms of recreation in rural areas, helps protect local products from cheap mass production from abroad, and most importantly preserves and creates new jobs (Kubal-Czerwińska et al., 2022).

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## 3

# NATURE CONSERVATION IN THE CARPATHIAN COUNTRIES

## NATURE CONSERVATION IN POLAND

### History of nature conservation in Poland

The origins of nature protection in the Polish Carpathians date back to the 19th century. In 1868, legal protection of the marmot and chamois was introduced under an act of the National Parliament. The Tatra Society (1873) had among its statutory goals the protection of animals in its area of operation. In 1932, the Pieniny National Park was established, forming, together with the Slovak Nature Reserve in the Pieniny Mountains, the first transboundary nature park in Europe and the second in the world. In 1954, the Pieniny National Park was opened after World War II. The same year, two more new national parks were established: the Tatra and Babia Góra National Parks.

### Goals

According to the current Law on Nature Protection, the goal of nature protection in Poland is:

- maintaining the stability of ecosystems and the sustainability of ecological processes,
- conservation of biodiversity, including ensuring the continued existence of all species of plants, animals, and fungi, along with their habitats,
- protection of landscape, tree plantings, and greenery in cities and villages,
- maintaining or restoring the protection of natural habitats, as well as other resources, formations, and components of nature,
- conservation of geological and paleontological heritage,
- shaping appropriate human attitudes toward nature through educational, informational, and promotional activities.

### Forms of nature protection

Under current Polish law, nature protection is governed by the provisions of the Law on Nature Protection of April 16, 2004.

The law identifies ten forms of nature protection:

- national parks,
- nature reserves,
- landscape parks,
- protected landscape areas,
- Natura 2000 areas,
- natural monuments,
- documentation sites,
- ecological areas,
- nature and landscape complexes,
- species protection of plants, animals, and fungi.

Each form fulfills a different role in the Polish system of nature protection and serves different purposes, and is therefore characterized by a different protective regime and scope of restrictions on land use. Forms of nature protection include a large and diverse set of measures to implement nature protection, formed as a result of the development of the scientific basis of nature protection and its long-standing practice.

Currently, more than half of the area of the Polish Carpathian Mountains is under area protection, which proves the outstanding natural and landscape values of the region.

The highest form of nature protection is a **national park**, which is an area distinguished by special natural, scientific, social, cultural, and educational values, with an area of not less than 1,000 hectares, where all nature and landscape values are protected. A national park is created to conserve biological diversity, resources, formations, and components of inanimate nature and landscape values, to restore the proper condition of resources and components of nature, and to restore deformed natural habitats, plant habitats, animal habitats or fungi habitats.

There are six national parks in the Polish Carpathians: Babia Góra, Gorce, Pieniny, Tatra, Magura, and Bieszczady. They cover many mountain ranges - from Beskid Żywiecki in the west,

through Gorce, Tatra Mountains, Low Beskid, to Bieszczady in the east. They are united by their mountainous location, different by almost everything else.

Table 3. National parks in the Polish Carpathians

L.P.	NATIONAL PARK	REGION	YEAR OF CREATION	SURFACE [HA]
1	Bieszczady National Park	Podkarpackie Region	1973	29 202
2	Magura National Park	Podkarpackie Region Małopolska Region	1995	19 438
3	Pieniny National Park	Małopolska Region	1932	2 346
4	Babia Góra National Park	Małopolska Region	1954	3 393
5	Gorce National Park	Małopolska Region	1981	7 029
6	Tatra National Park	Małopolska Region	1955	21 197

Source: own elaboration

Figure 12. National parks in the Polish Carpathians



Source: [https://zielnik-karpacki.pl/parki\\_narodowe](https://zielnik-karpacki.pl/parki_narodowe)

The territory of the national park and all the animate and inanimate elements of nature that occur there are protected. There are designated areas of strict, partial, and landscape protection. Human activity on the territory of the national park can only be aimed at protecting nature. Around the park, there is a buffer zone. This is an area that is not a form of nature protection. Its task is to protect the park's nature from the negative impact of external factors reaching from adjacent areas, i.e. large cities, factories, and roads. To protect the quality of the national park, economic activity in the buffer zone is limited to work that does not harm the surrounding nature. For example, hunting for game animals is prohibited there, and the possibility of constructing buildings is restricted. The territory of national parks is open to the public, but tourist traffic here can only take place in designated areas, trails, roads, and paths.

There are 135 **nature reserves** in the Polish part of the Carpathians, which include areas conserved in a natural or little-changed state, ecosystems, sanctuaries, and natural habitats, as well as plant habitats, animal habitats, and fungi habitats, as well as formations and components of inanimate nature, distinguished by special natural, scientific, cultural

or landscape values. There are different types and subtypes of nature reserves, which are designated due to the dominant object of protection and the main type of ecosystem. In the Polish Carpathians, there are the following types of reserves: forest, landscape, floristic, inanimate nature, faunal, aquatic, and peatland.

In addition, there are also 13 **landscape parks**, 10 **areas of protected landscape**, as well as 83 habitat areas and 14 bird areas of the **Natura 2000 network** - the youngest of the forms of nature protection introduced in Poland in 2004 as one of the obligations related to accession to the European Union. These areas are being created in all member states, forming the European Ecological Network Natura 2000, to protect about 200 of the most valuable and endangered natural habitats and more than a thousand rare and endangered species. The uniqueness of this form of nature protection lies in the fact that member countries create the network based on the same assumptions set out in the law and guidelines of the European Union, manage it using similar instruments, and jointly take care of adequate financial resources and its promotion.

Protected areas cover a total of 30% of the area of the Polish part of the Carpathians. By comparison, for the European Union as a whole, the percentage is less than 18% (2012).

Many forms of living and inanimate nature or their concentrations, sites of geological formations, accumulations of fossils or mineral formations, remnants of ecosystems important for the conservation of biodiversity, and fragments of the natural and cultural landscape deserving protection due to their landscape or aesthetic value are protected as **nature monuments, documentary sites or ecological areas**.

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## NATURE CONSERVATION IN SLOVAKIA

### History of nature conservation in Slovakia

The history of nature protection in Slovakia dates back to the 13th century, when the European bison and the area of the present Badínsky prales reserve near Banská Bystrica were protected. In 1876, the first protected area was designated - the Velika Garden (Slov. Kvetnica) in the Velická valley in the High Tatras. The first park in modern Slovakia was the Tatra National Park, established on December 18, 1948. The park started operating on January 1, 1949.

In Slovakia, the area of protected areas is 1.1 million hectares (23.1% of the national territory). The State Nature Protection of the Slovak Republic has 9 registered national parks: Tatranský, Pieninský, Nízke Tatry, Slovak Paradise, Malá Fatra, Muránska Planina, Poloniny, Velká Fatra, Slovak Karst. In addition, Slovakia has 14 protected landscape areas and more than 700 smaller areas.

### Forms of nature conservation

The basic legal document for nature and landscape protection in the Slovak Republic is the Act of the National Council of the Slovak Republic No. 543/2003 Coll. of June 25, 2002, on Nature and Landscape Protection, as amended.

The Act regulates the competencies of state administrative bodies and municipalities, as well as the rights and obligations of legal and natural persons in the field of nature and landscape protection, to ensure the long-term conservation of the natural balance and protection of the diversity of conditions and forms of life, natural values, and beauty, and

Another type of protection is **species protection**, which aims to ensure the survival and conservation of the proper state of protection of rare, endemic, vulnerable, and endangered species of plants, animals, and fungi occurring in the wild in Poland and the European Union, as well as those protected (under the provisions of international agreements to which Poland is a party) and their habitats and refuges. The purpose of this protection is also to conserve species and genetic diversity. Tasks involving the protection of sanctuaries and sites of plants or fungi under species protection or sanctuaries, breeding sites, and regular residence of animals under species protection can be implemented by creating protection zones.

creates conditions for the sustainable use of natural resources and the provision of ecosystem services, taking into account economic, social and cultural needs, as well as regional and local conditions.

One of the ways to achieve this goal is territorial protection of nature and landscape. By law, this means the protection of nature and landscape on the territory of the Slovak Republic or part of it. Five levels of protection have been established for territorial protection. The scope of restrictions increases as the level of protection increases. In areas where several protected areas with different degrees of protection are superimposed (for example, a national park and a nature reserve), the highest one always applies.

There are basic forms of nature protection in Slovakia:

- protected landscape areas (chránená krajinná oblasť),
- national parks (národný park),
- nature reserves (národná prírodná rezervácia, prírodná rezervácia),
- natural monuments (prírodná pamiatka),
- protected areas (chránený areál),
- a protected landscape element,
- municipal protected area.

National parks and protected landscape areas are referred to as large-scale protected areas. Protected areas, nature reserves, national nature reserves, nature monuments, national natural monuments, nature parks, and protected landscape elements are referred to as small-scale protected areas.

A **protected landscape area** is an area, usually more than 1,000 hectares, with dispersed ecosystems important for the conservation of biodiversity and ecological stability, with a distinctive landscape appearance, or with special forms of historical settlement. On its territory applies the second level of

protection, unless the law provides otherwise (for example, by declaring zoning). By 31.12.2021, 14 protected landscape areas have been declared in Slovakia.

A **national park** is a larger area, usually more than 10,000 hectares, covering mainly ecosystems essentially unaltered by human activity or with a unique and natural landscape structure, constituting the most important natural heritage, in which nature conservation takes precedence over other activities. It can be established by the government by decree. The third level of protection applies within its territory unless otherwise provided by law.

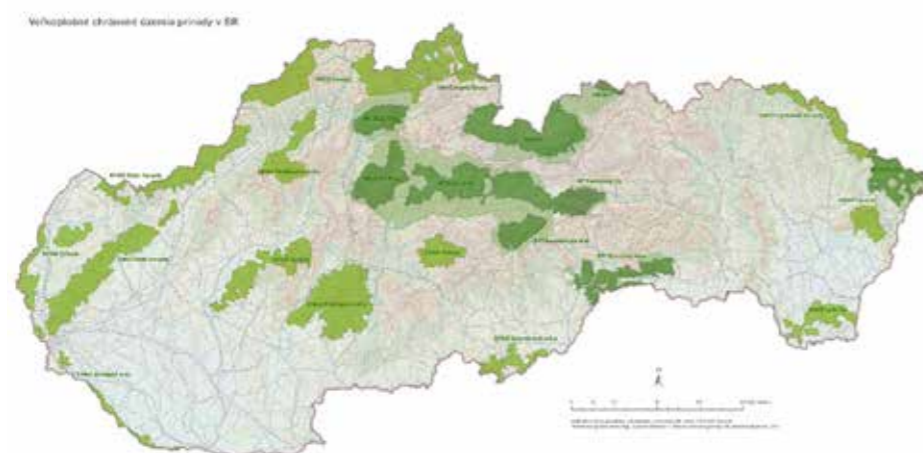
Table 4. National parks in the Slovak Carpathians

L.P.	NATIONAL PARK	REGION	YEAR OF CREATION	SURFACE [HA]
1	Tatra National Park Tatranský národný park	Prešov Region Žilina Region	1948	73 800
2	Pieniny National Park Pieninský národný park	Prešov Region	1967	3 749
3	National Park "Low Tatras" Národný park Nízke Tatry	Banská Bystrica Region Prešov Region Žilina Region	1978	72 800
4	National Park "Mala Fatra" Národný park Malá Fatra	Žilina Region	1988	22 630
5	National Park "Slovak Paradise" Národný park Slovenský raj	Košice Region Prešov Region	1988	19 414
6	National Park "Poloniny" Národný park Poloniny	Prešov Region	1997	29 805
7	Národný park Muránska planina Národný park Muránska planina	Banská Bystrica Region	1997	18 516
8	National Park "Veľká Fatra" Národný park Veľká Fatra	Banská Bystrica Region Žilina Region	2002	40 371
9	National Park "Slovak Karst" Národný park Slovenský kras	Košice Region	2022	34 611

Source: own elaboration

Note the proximity of these areas to the national border and the fact that several national parks have their counterparts on the other side of the border - Poland.

Figure 13. Large-scale forms of nature conservation in Slovakia



Source: <https://www.soprs.sk/web/?cl=114>

A **landscape park** is a larger area, usually more than 500 hectares, with ecosystems modified by human activity that form biocenters of supra-regional importance or that are important for ensuring the proper condition of habitats that are of community importance, habitats of national importance, habitats of species of community importance or habitats of species of national importance. A landscape park can be established by the government. The second or third level of protection applies in its territory unless otherwise provided by law. No protected area has yet been declared in this new category (as of 2020).

A **protected area** is an area, usually up to 500 hectares, that contains habitats of community importance or habitats of national importance, or that is a habitat of a species of community importance or a habitat of a species of national importance, where the proper condition of these habitats depend on human management. It can be established by the government by decree. Its territory has a second, third, fourth, or fifth level of protection. As of 31/12/2021, 193 protected areas (including 1 private area of the kind) were declared.

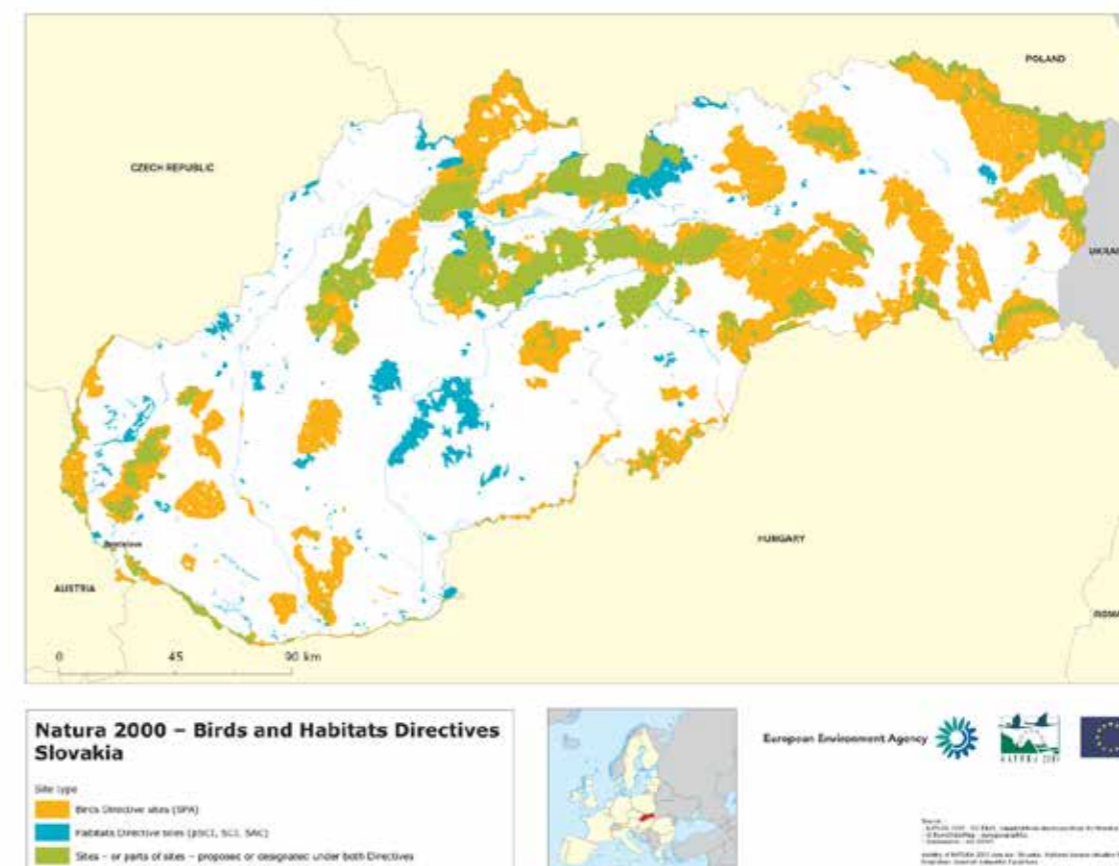
A **nature reserve** is an area, usually up to 1,000 hectares, that represents native or little-altered habitats of European

or national importance or habitats of community species or habitats of national importance. It can be created by the government decree. A fourth or fifth level of protection applies to its territory. A nature reserve, usually constituting a supra-regional biocenter as part of the state's most important natural heritage, may be recognized by the government as a National Nature Reserve. By December 31, 2021, 448 PRs (including 3 private and 200 nature reserves) were declared.

Many important landscape elements and small-scale ecosystems are protected in the form of: **natural monuments, protected landscape elements, and urban protected areas.**

In addition to the national system of protected areas, the territory of the Slovak Republic includes areas of the European system of protected areas **Natura 2000** - protected areas for birds and areas of European importance, which largely overlap with the national system of protected areas. The NATURA 2000 network consists of 473 areas of European importance representing 11.9% of the country's area and 41 bird-protected areas representing 26.16% of the country's area. This includes 26 bird areas and 435 habitat areas in the alpine subregion.

Figure 14. Natura 2000 sites in Slovakia



Source: [https://www.eea.europa.eu/data-and-maps/figures/natura-2000-birds-and-habitat-directives-8/slovakia-1/Natura2000\\_End2016\\_Slovakia.eps.75dpi.png/download](https://www.eea.europa.eu/data-and-maps/figures/natura-2000-birds-and-habitat-directives-8/slovakia-1/Natura2000_End2016_Slovakia.eps.75dpi.png/download)

In addition to the national system of protected areas, the territory of the Slovak Republic includes areas of **international importance** - Ramsar sites, biosphere reserves, areas with the Diploma of the Council of Europe (European Diploma for Protected Areas), and UNESCO natural heritage areas.

### Private protected areas

The owner of land that meets the conditions stipulated by the Law for a protected area, nature reserve, or nature monument whose possession has not yet been declared protected may, based on the submitted protection project, apply to the county district office at the county seat to declare it a private protected area, private nature reserve or private nature monument (hereinafter referred to as a “private protected area”). If the land meets the conditions for declaring territorial protection, the county district office at the county seat will declare it a private protected area by decree, which will also specify the degree of protection of the private protected area and the details of the territorial protection of the private protected area and its buffer zone, including their territorial and temporal validity. By 2020, 3 private nature reserves (Vlčica, Rysia, Roháčica) were declared, and in 2021 the first private protected area, Langáčske skaly, was declared.

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## NATURE CONSERVATION IN THE CZECH REPUBLIC

### Forms of nature protection

The 1992 Act on Nature and Landscape Protection (Zákon č. 114/1992 Sb., o ochraně přírody a krajiny) is the primary piece of nature protection legislation in the Czech Republic. Since its enactment, the document has undergone several amendments, the most important of which was carried out in 2004 in connection with the adaptation of the Czech Republic's legislation to EU requirements, specifically the transposition of Natura 2000 regulations. A distinction is made between general protection, to which all nature is subjected, and special protection, which includes protected areas and sites, protected species of plants and animals, and protected types of minerals.

### Caves and natural waterfalls

A special group of protected areas are caves and natural waterfalls. According to the law, a cave is accessible to humans and forms, as a result of natural processes, a hollow underground space in the earth's crust, the length or depth of which exceeds 2 meters, and the dimensions of the surface opening are smaller than its length or depth.

A natural waterfall as defined by the law is a natural rock formation through which a watercourse, under the influence of natural forces without human intervention, falls from a height of more than 3 meters or flows over a continuous or cascading rock cliff with a steepness of more than 75 meters, and the water in the riverbed persists throughout the year. All caves and natural waterfalls that meet the above definitions are natural monuments under the law. A unique cave or natural waterfall that is part of the state's most important natural heritage may be recognized by the government as a National Natural Monument. Natural caves and waterfalls and their protection zones are not subject to degrees of protection but to specific conditions of protection as defined by law.

As of 2021, more than 7,600 caves and more than 200 waterfalls were registered as natural monuments in Slovakia based on the above criteria. Of these, 44 caves and 5 natural waterfalls have been recognized as special national natural monuments and 10 caves have been recognized as special natural monuments.

Areas that are either very important or exceptional for natural, scientific, or aesthetic reasons can be protected under one of six categories of specially protected areas:

- national park (národní park),
- protected landscape area (chráněná krajinná oblast),
- national nature reserve (národní přírodní rezervace),
- nature reserve (přírodní rezervace),
- national nature monument (národní přírodní památka),
- nature monument (přírodní památka).

In total, the Czech Republic's protected areas cover a relatively small area of 1,310,000 hectares, which is 15% of the country's area.

**A national park** is a vast area of exceptional national or international importance, a large part of which is occupied by natural or minimally transformed by man ecosystems, and the plants, animals, and inanimate nature found here have extraordinary scientific and educational value.

There are currently 4 national parks. All of them are located within the Bohemian Massif, either in the mountains (Krkonoše, Šumava) or in fairly high-altitude areas (Bohemian Switzerland, Podyjí National Park).

The territory of the national parks is divided into 4 conservation zones depending on the objectives of protection and the condition of the ecosystems, namely:

- the natural zone is designated in integral areas where natural ecosystems predominate, to conserve them and allow natural processes to run undisturbed
- a zone close to nature is designated in areas with a predominance of ecosystems partially altered by man, to achieve a state corresponding to natural ecosystems,
- a zone of concentrated care for nature is designated in areas where ecosystems significantly altered by man are prevalent, to preserve or gradually improve the condition of ecosystems important for biodiversity, the existence of which is conditioned by continued human activity or the restoration of ecosystems close to nature,
- the cultural landscape is established in built-up areas and built-up areas of municipalities intended for their sustainable development and in areas where ecosystems altered by humans for sustainable human use prevail.

Compared to Poland's national parks, the average area of Czech parks is more than twice large, and they have half the percentage share of the country's area (they all occupy a total of 119,020 hectares or 1.5% of the country's area).

**A protected landscape area** is defined as an extensive area with a harmoniously shaped landscape, with a characteristically developed terrain, a significant share of natural forest ecosystems and grassy areas (meadows and pastures), with a rich occurrence of woody shrubs, possibly with conserved reminders of historical settlement. The area can be economically used according to graded protection in individual zones, so that its natural conditions are maintained and improved, and the optimal ecological functions of the area are created.

Tourism is permissible, as long as it does not destroy natural values.

There are 26 protected landscape areas in the Czech Republic, 4 of which are in the Carpathian Mountains: Pálava, White Carpathians, Beskids, Poodří.

The protected landscape area is divided into 4 zones (as a rule, less often into 3), which differ in their protective regime:

- Zone I (natural core) - natural or semi-natural forest communities, little altered by man, the most valuable, species-rich wetlands and steppe meadows and subalpine pastures. The goal is to maintain an appropriate degree of naturalness and species diversity. The measures taken are limited to the least intrusive forms of forest management, and in justified cases leaving selected parts of the forest to evolve spontaneously, as well as targeted use of meadows and pastures.
- Zone II (semi-natural, protective) - mainly forest areas with a clearly altered species composition, with a mosaic of forest communities close to natural and species-rich grassland scrub. The goal is to conserve and create spatial and species-diverse forest and grassland communities that serve as zone I protection. Non-intensive forms of forest management are mandatory here, with a preference for low-area (mostly natural) regeneration and increased biodiversity. Meadows and pastures should be permanently used extensively.
- Zone III (cultural-landscape) - mostly monocultural commercial forests, mosaics of meadows, fields, pastures, areas with scattered buildings, and possibly small settlements and a rich share of trees growing in the area individually or in groups. The goal is to conserve and restore the scenic character of the landscape. Forests, pastures, meadows, and fields are usually used. There should be transformations in agriculture, additions to the system of ecological balance, and maintenance and restoration of scattered buildings concerning the characteristics of the landscape.
- Zone IV (peripheral settlement) - compact development with a reserve of land and possibly adjacent intensively used arable land without elements of ecological balance. Suitable development can be placed here, taking into account the scale of the area, allowing the conservation and proper development of appropriate human activity and settlement, as well as an ecologically sustainable, although more intensive form of agriculture.

Figure 15.  
Large-scale areas in the Czech Republic



Source: <https://drusop.nature.cz>

The network of protected areas in the Czech Republic, in addition to the national parks and **the protected landscape area**, is completed by 4 categories of small surface areas:

- **National nature reserve** - a small area of exceptional natural beauty, where ecosystems of national or international importance or uniqueness are related to the natural terrain with typical geological structure.
- **Nature reserve** - a small area of concentrated natural values with ecosystems typical and important for a particular geographic region.
- **National natural monument** - a natural formation of smaller size, especially a geological or geomorphological form, a place of accumulation of minerals or valuable or endangered species in fragments of ecosystems, of national or international importance, scientific or aesthetic, including one that was created with the participation of human activity.

- **Natural monument** - as above, but of regional significance only.

Oversight of the implementation of the **Natura 2000 network** in the Czech Republic is carried out by the Ministry of the Environment, which in October 1999 appointed the Agency for Nature and Landscape Protection as coordinator of the network's implementation activities.

Currently, the Czech Republic has 4 national parks, 26 protected landscape areas, 126 national natural monuments, 120 national nature reserves, 1,603 natural monuments, and 818 nature reserves, some of which are part of 41 bird areas or 1112 areas of European importance. Many areas require care, some will benefit if they remain completely free of human intervention. Protected areas are important not only for biodiversity conservation but also for regional development. An overview of protected areas here:

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- <https://drusop.nature.cz/ost/chrobjekty/sumarizace/>

## NATURE CONSERVATION IN UKRAINE

### Forms of nature protection in Ukraine

Protected areas in Ukraine are created based on the Law “On Nature-Reserve Fund” (Zakon Ukrainy “Pro prirodno-zapovidnyj fond” - Закон України «Про природно-заповідний фонд»), adopted on June 16, 1992, as amended.

The fund of nature reserves consists of land and water areas, natural complexes, and objects that have special environmental, scientific, aesthetic, and recreational value and are intended to conserve the natural diversity of landscapes, the gene pool of the animal and plant world, maintain the overall ecological balance and ensure environmental monitoring.

The aforementioned law distinguishes the following forms of nature protection:

- natural areas and objects:
  - nature reserves (природні заповідники/природni zapovidnyky),
  - biosphere reserves (іосферні заповідники/biosferni zapovidnyky),
  - national nature parks,
  - regional landscape parks,
  - nature refuge (заказники/zakaznyky),
  - natural monuments,
  - protected areas
- artificially created objects:
- botanical gardens,
  - dendrological parks,
  - zoological parks,
  - natural monuments,
  - parks-memorials of horticulture and park art.

There are no clear equivalents for the Ukrainian protected areas referred to as “nature reserve” (природні заповідники/природny zapovidnyk) and “nature refuge” (заказники/zakaznyky). These areas have strict nature protection, while they differ in land ownership: in nature reserves, the land is transferred to the Ministry of Environmental Protection or the National Academy of Sciences of Ukraine, while in the case of nature refuges it remains with the previous owners (e.g., the State Forests).

The Ukrainian Carpathians contain 14% of Ukraine's protected areas. Compared to other administrative units of Ukraine, where the percentage of protected areas ranges from 0.3-0.4 to 7.6-12.5%, the average value of this indicator for the Ukrainian Carpathians is very high at 20%. In such administrative units (regions) as Yaremcha and Kosiv, protected areas occupy more than 50% of the area. A total of 703 protected areas are located in the mountainous parts of the Carpathian regions on an area of 381,182 hectares, 60 of which are under the authority of the state, or 10% of all sites in the entire state. The remaining nature-protection sites are under the jurisdiction of local authorities. The largest area occupied in the Ukrainian Carpathians is: the Carpathian Biosphere Reserve (Карпатський біосферний заповідни/Карпат-s'kyu biosfernyu zapovidnyk) with an area of 57,880 hectares in Zakarpattia Oblast and Carpathian National Nature Park with an area of 50,303 hectares in Ivano-Frankivsk Oblast (established in 1980).

**Biosphere reserves** are environmental, research institutions of national importance, established to conserve the natural condition of the most typical natural complexes of the biosphere, conduct monitoring of the background environment, and study the environment, its changes under the influence of anthropogenic factors. Biosphere reserves are included by the established procedure in the World Network of Biosphere Reserves within the framework of the UNESCO program “Man and the Biosphere” and acquire international status.

Protected areas of national importance primarily include nature reserves, biosphere reserves, national nature parks and separate refuges, nature souvenirs and botanical and zoological gardens, dendrological parks, and parks-monuments reminding of garden-park art. Protected objects of regional importance are landscape parks and refuges, nature memorials and botanical and zoological gardens, dendrological parks and parks-memorials of horticulture and park art.

**National natural parks** are environmental, recreational, cultural, educational, and research institutions of national importance, established for the protection, restoration, and effective use of natural complexes and objects that have special environmental, recreational, historical, cultural, scientific, educational, and aesthetic value.

National nature parks are entrusted with the following main tasks:

- preserving valuable natural, historical, and cultural complexes and sites;
- creating conditions for organized tourism, recreation, and other recreational activities in natural conditions by the protection regime of protected natural complexes and objects;

- conducting research on natural complexes and their changes under conditions of recreational use, developing scientific recommendations for environmental protection and efficient use of natural resources;
  - undertaking ecological educational activities.
- Taking into account the environmental, health, scientific, recreational, historical, and cultural values and other values of natural complexes and objects, their peculiarities in the territory of national parks, a differentiated system of their protection, reproduction, and use has been established by functional divisions:
- protected zone - intended for the protection and restoration of the most valuable natural complexes, the regime of which is established by the requirements for nature refuges (zakaznyky);
  - regulated recreation zone – short rest and recreation of the population is possible in this area, this area allows the installation and providing hiking trails and routes with appropriate equipment; deforestation of forests of primary importance is forbidden as well as commercial fishing, hunting and other activities that may adversely affect the condition of the natural complexes and areas of the protected area;
  - stationary recreation zone - intended for hotels, motels, campgrounds, and other facilities for park visitors; any economic activity unrelated to the purpose of this functional area or that may adversely affect the condition of the natural complexes and facilities of the protected area and the regulated recreation area are prohibited;
  - economic zone - the restriction of the main use is prohibited within its boundaries and economic activities are carried out to enable the realization of tasks assigned to the park.

Table 5.

### National parks in the Ukrainian part of the Eastern Carpathians

L.P.	NATIONAL PARK	REGION	YEAR OF CREATION	AREA [HA]
1	Національний природний парк «Синевир» (Natsional'nyy pryrodnyy park «Synevyr»)	Zakarpattia Oblast	1989	43 082
2	Ужанський національний природний парк (Uzhans'kyu natsional'nyy pryrodnyy park)	Zakarpattia Oblast	1999	46 147
3	Національний природний парк «Зачарований край» (Natsional'nyy pryrodnyy park «Zacharovanyy kraj»)	Zakarpattia Oblast	2009	10 451
4	Карпатський національний природний парк (Karpat-s'kyu natsional'nyy pryrodnyy park)	Ivano-Frankivsk region	1980	51 571
5	Національний природний парк «Гуцульщина» (Natsional'nyy pryrodnyy park «Hutsul'shchyna»)	Ivano-Frankivsk region	2002	32 271
6	Національний природний парк «Синьогора» (Natsional'nyy pryrodnyy park «Syn'ohora»)	Ivano-Frankivsk region	2009	10 866
7	Національний природний парк «Верховинський», (Natsional'nyy pryrodnyy park «Verkhovyns'kyu»)	Ivano-Frankivsk region	2010	12 022
8	Національний природний парк «Вижницький» (Natsional'nyy pryrodnyy park «Vyzhnyts'kyu»)	Chernivtsi Oblast	1995	11 238
9	Національний природний парк «Черемоський» (Natsional'nyy pryrodnyy park «Cheremos'kyu»)	Chernivtsi Oblast	2009	7 118
10	Національний природний парк «Сколівські Бескиди» (Natsional'nyy pryrodnyy park «Skolivs'ki Beskydy»)	Lviv region	1999	35 684
11	Національний природний парк «Бойківщина» (Natsional'nyy pryrodnyy park «Boykivshchyna»)	Lviv region	2019	12 240
12	Національний природний парк «Королівські Бескиди» (Natsional'nyy pryrodnyy park «Korolivs'ki Beskydy»)	Lviv region	2020	8 691

Source: compiled by Oksana Maryskvych

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## NATURE CONSERVATION IN ROMANIA

### History of nature conservation

The oldest document on nature protection in Romania dates back to 1467. The first area in the country, the Slătioara forest in what was then Bukovina, has been protected since 1904. Thanks to the efforts of naturalists, including renowned zoologist and speleologist Emil Racovița, the first law on nature protection was created in 1930. In 1935, the Retezat National Park was established, the second in the entire Carpathian arc after the Pieniny National Park. By 1938, 30 nature reserves were established. After World War II, laws were reformed several times, and the current one dates from 1995. In 2000, the first national parks were given their administration, as they had previously been under the administration of the Forest Fund.

### Forms of nature conservation

Romanian legislation distinguishes three categories of conservation areas: areas of international, national, and community importance.

Areas of national importance include (with an area of about 7% of the national territory):

- scientific nature reserves** - natural areas established to protect and conserve land and/or aquatic natural habitats, including representative elements of scientific importance from the point of view of floristics, fauna, geology, speleology, paleontology, pedology, or other natural aspects. The size of scientific reserves is determined by the area necessary to ensure the integrity of the protected area.
- nature reserves** - natural areas established to protect and conserve important natural habitats and species in terms of flora, fauna, forest, hydrology, geology, speleology, paleontology, and pedology. Their size is determined by the area necessary to ensure the integrity of the protected elements.
- natural monuments** - natural areas established to protect and conserve natural elements of special value and ecological, scientific, and landscape significance, represented by rare, endemic, or endangered species of plants or wild animals, centuries-old trees, floristic and faunal complexes, geological phenomena - caves, ravines, watercourses, waterfalls, and other geological formations, fossils, as well as other natural elements possessing natural value due to their uniqueness or rarity. If the natural monuments are not included in the boundaries of other areas under the protection regime, zones of mandatory protection will be established to ensure their integrity, regardless of the use and owner of the land.
- nature parks** - natural areas established to protect and conserve landscape complexes, where the interaction of human activity with nature over time has created a distinct area of significant landscape and/or cultural value, often with high biodiversity. They are the equivalent of Polish landscape parks and, like them, have the fifth category of “protected landscape” in the International Union for Conservation of Nature standard. There are a total of 16 of them and they are located in all regions of the country.
- national parks** - natural areas established to protect and conserve representative samples of the national biogeographical space, including natural elements of special value in terms of physical-geographical, floristic, faunal, hydrological, geological, paleontological, speleological, pedological or other nature, offering the opportunity to visit for scientific, educational, recreational and tourist purposes.

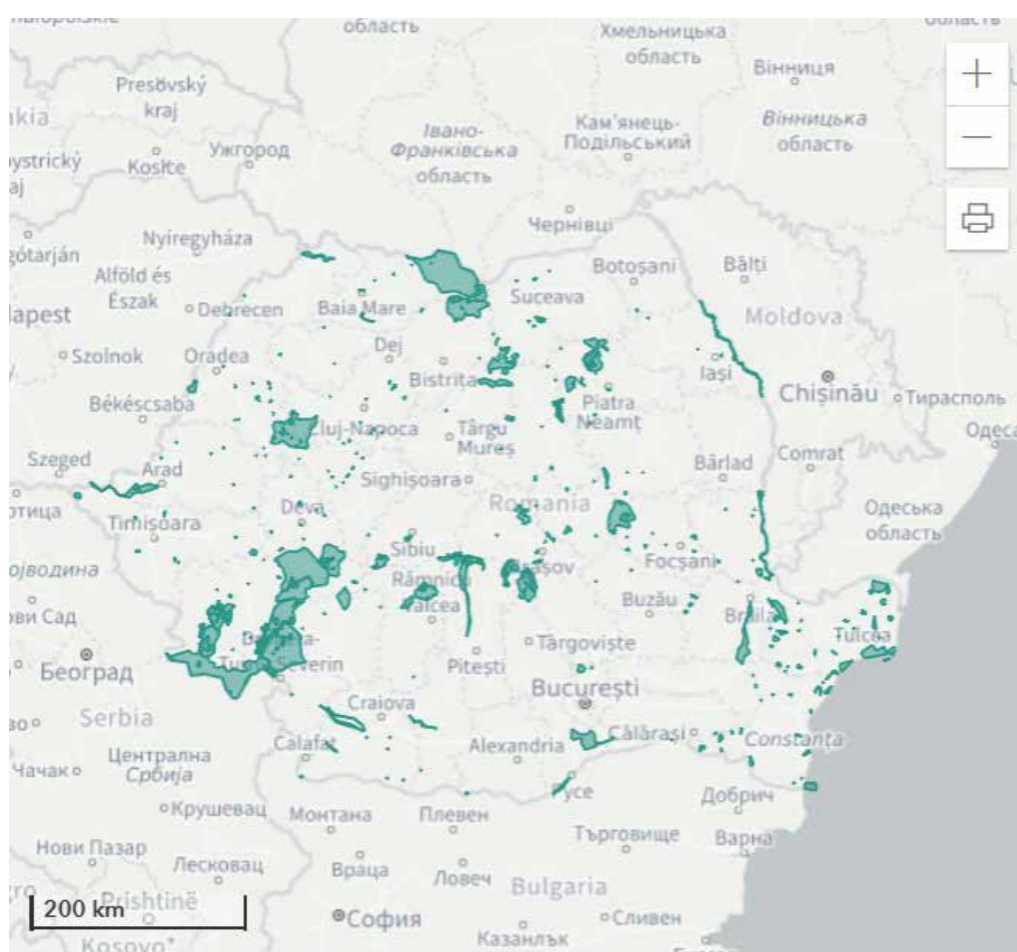
There are currently 13 national parks, of which only one is outside the Carpathians. The Danube Delta Biosphere Reserve has similar protective status and hence is often counted as a 14th park, and this is its status according to the International Union for Conservation of Nature classification.

Table 6.  
**Carpathian national parks in Romania**

L.P.	NATIONAL PARK	REGION	YEAR OF CREATION	AREA [HA]
1	Parcul Național Retezat	Hunedoara	1935	38 047
2	Parcul Național Piatra Craiului	Argeș, Brașov	1938	14 773
3	Parcul Național Cozia	Vâlcea	1966	17 100
4	Parcul Național Călimani	Mureș Suceava, Harghita, Bistrița-Năsăud	1975	24 566
5	Parcul Național Domogled - Valea Cernei	Caraș-Severin, Mehedinți, Gorj	1982	61 211
6	Parcul Național Semenic - Cheile Carașului	Caraș-Severin	1982	36 664
7	Parcul Național Munții Rodnei	Bistrița-Năsăud, Maramureș	1990	46 399
8	Parcul Național Cheile Bicazului - Hășmaș	Harghita, Neamț	1990	6 575
9	Parcul Național Cheile Nerei - Beușnița	Caraș-Severin	1990	36 758
10	Parcul Național Ceahlău	Neamț	1995	8 396
11	Parcul Național Buila-Vânturarița	Vâlcea	2005	4 186
12	Parcul Național Defileul Jiului	Gorj, Hunedoara	2005	11 127

Source: own elaboration.

Figure 16.  
**Protected areas designated under national law**



Source: <https://biodiversity.europa.eu/countries/romania>

The international category includes:

- **Biosphere reserves** - natural areas whose purpose is to protect and conserve areas of natural habitats and specific biodiversity. Biosphere reserves extend over large areas and include a complex of land and/or aquatic ecosystems, lakes and streams, wetlands with unique biocenotic floral and faunal communities, with harmonious landscapes natural or resulting from traditional land use, ecosystems modified by human influence and capable of being restored to their natural state, human communities whose existence is based on the valorization of natural resources on the principle of sustainable and harmonious development.
- **Wetlands** - natural areas whose purpose is to ensure the protection and conservation of natural sites with biological diversity specific to wetlands. These areas are managed with the aim of their protection and sustainable use of the biological resources they produce, by the provisions of the Convention on the Protection of Wetlands of International Importance, especially as waterfowl habitats.
- **World Natural Heritage Areas** - natural areas whose purpose is to protect and conserve areas of natural habitats, within which there are natural elements whose value has been recognized as of universal importance. The size of their area is determined by the requirements for ensuring the integrity and conservation of the elements subject to this protection regime. In these areas, there may be

human communities whose activities are directed towards development by the requirements for the protection and conservation of the natural area.

- **Geoparks** - areas that include elements of special geological interest, as well as elements of ecological, archaeological, historical, and cultural significance. Geological sites are located in several places of scientific, educational, or aesthetic interest, representing a specific moment in Earth's history or certain geological events or processes. A geopark has well-defined boundaries, a sufficiently large area, and a territorial development strategy for the benefit of local communities, whose existence is based on the exploitation of natural and cultural resources, on the principle of sustainable development. Geoparks are areas with human settlements developed in such a way that they are models of community development in harmony with the natural environment. Geoparks have their management structure, which in local and national partnerships ensures the conservation of natural and cultural heritage, and proposes new methods of protection, education, cooperation for socio-economic development, improvement of living conditions in the rural environment, and strengthening of local identity.

Areas of community importance are **Natura 2000 sites**, which cover 23% of the country. In many cases, the areas of the two types of protected areas overlap both with each other and with the area of natural and national parks. In total, there are 606 of them.

Figure 17.  
**Natura 2000 sites in Romania**



Source: <https://biodiversity.europa.eu/countries/romania>

Currently, 23.4% of Romania's land area is designated as protected areas. Protected areas in Romania cover a total of 55,890km<sup>2</sup> on land and 6,358km<sup>2</sup> at sea. Romania has a total of 1,550 protected areas, including areas designated under national law and recognized as Natura 2000 sites. These Natura 2000

sites - are designated under the Birds Directive, covering special protection areas, and the Habitats Directive, covering sites of Community importance. Many sites have been designated under both directives.

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## NATURE CONSERVATION IN HUNGARY

### Forms of nature conservation

Based on the provisions of Law LIII of 1996 on Nature Protection, special protection of natural areas and values is established by declaring them protected.

The purpose of the Law on Nature Conservation is:

- to promote the widespread protection, cognition, and sustainable use of natural values and areas, landscapes and their natural systems, and biodiversity, and to satisfy the public need for healthy, aesthetic nature;
- preservation of the tradition of nature conservation, further development of its results, priority protection, conservation, and development of natural values and areas.

According to the law, to provide them with special protection, subjects deserving protection must be recognized as protected:

- wild organisms, their biomes, and their fertility, and habitats;
- traditional domestic and plant species, and their varieties;
- natural, close-to-nature landscapes, landscape details;
- plantings, especially in parks, arboreta, historical or botanical gardens, and certain plants or groups of plants;
- collections of live animals;
- geological formations and bottom sections, minerals, mineral compounds, fossils;
- significant beds of protected minerals and fossils;

- surface, morphological formation, and cave areas;
- standing and flowing waters, especially lakes, streams, and marshes;
- typical and rare soil sections;
- cultural historical monuments related to nature.

A protected natural area, according to the scope, purpose, and national and international importance of protection, can be:

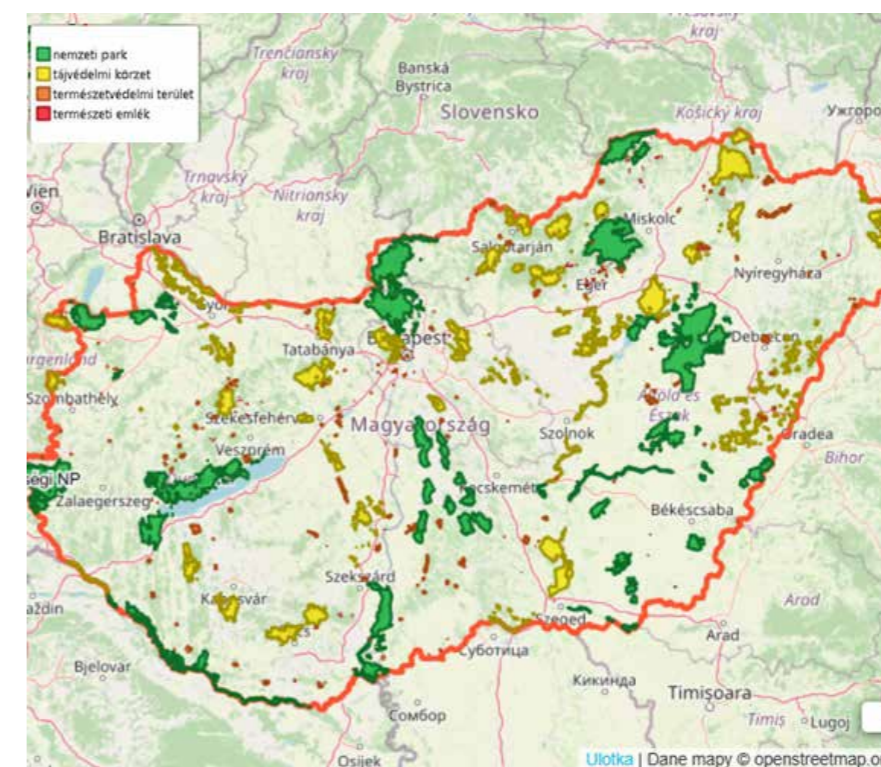
- National park (*Nemzeti park*),
- Landscape protection concession/landscape park (*Tájvédelmi körzet*),
- nature conservation area/nature reserve (*Természetvédelmi terület*),
- a natural monument (*Természeti emlékek*).

Since 1.01.1997, all peat bogs, salt lakes (as nature reserves), as well as kunhalom, earth castles, springs and sinkholes (as natural monuments) have been protected as protected natural areas of national importance without conducting a separate protection procedure.

### Natural areas of national importance

Natural areas of national importance protected by individual regulations are natural areas recognized as protected by a decree of the minister in charge of nature protection. These may include national parks, landscape conservation districts, nature reserves, and natural monuments.

Figure 18. Natural areas of national importance



Source: <https://termeszetvedelem.hu/orszagos-jelentosegu-egyedi-jogszaballyal-vedett-termeszeti-teruletek/>

There are 326 (area: 848,924 hectares) natural areas of national importance in Hungary:

- 10 national parks (area of 480,093 hectares),
- 39 landscape protection areas (area of 336,875 hectares),
- 174 nature reserves (area of 31,823 hectares),
- 103 natural monuments (area 133 hectares).

**National park** - a larger area of the country that has not been significantly altered in natural conditions, the primary purpose of which is to protect natural botanical and zoological values, as well as geological, ethological, landscape, and cultural-historical values of special interest, to maintain the efficient functioning of biodiversity and natural systems, and to promote education, research, and recreation. There are 10 national parks in Hungary, three of which are located in the Carpathian Mountains.

Table 7. Carpathian national parks in Hungary

L.P.	NATIONAL PARK	REGION	YEAR OF CREATION	AREA [HA]
1	<b>Aggtelek</b>	Borsod-Abaúj-Zemplén	1985	20 183
2	<b>Bükk</b>	Borsod-Abaúj-Zemplén	1977	42 283
3	<b>Danube-Ipoly</b>	Pest, Nógrád, Komárom-Esztergom	1997	60 675

Source: <https://termeszetvedelem.hu>

**Landscape conservation area** - a larger, generally contiguous area or detail of the country's landscape rich in distinctive natural and scenic features, in which the interaction between man and nature has developed a distinct character from an aesthetic, cultural, and natural point of view, and its main purpose is to conserve the landscape and natural values.

In turn, a **nature conservation area** is a small continuous area of the country rich in characteristic and special natural values, the main purpose of which is to protect one or more natural values or their interrelated system. **Natural monuments are** a unique natural value, a formation of special significance, and an area for its protection. A protected spring, karst funnel, mound, earthen castle is considered a natural monument.

If the protection of a protected natural area can only be ensured by special measures, the area or part of it must be declared **special protected**.

### Protected areas of local importance

Natural areas of local importance are natural areas recognized as protected by the local government - in Budapest, the metropolitan municipality. In terms of protection categories, they can also be nature reserves or natural monuments.

Protected areas in Hungary cover a total of 20,688 km<sup>2</sup> on land and include a diverse network consisting of Natura 2000 sites and nationally designated areas. Currently, 22.2% of the territory of Hungary is designated as protected.

### Natura 2000 areas

Natura 2000 areas in Hungary include species and habitats covered by the Nature Directives. The number of species and habitats protected in each area varies depending on the location of the area, the biodiversity in the region, the name used, and the features the area is intended to protect.

Table 8.  
Natura 2000 areas in Hungary

NATIONAL PARK	NATURA 2000 AREAS	
	NUMBER (PCS.)	AREA (THOUSAND HECTARES)
Special protection areas	56	1374.6
Special areas of protection	479	1444.4
Special areas for the conservation and protection of birds	10	not applicable
Total Natura 2000 sites	525	1994.9

Source: <https://termeszetvedelem.hu/natura-2000-altalanos-tudnivalok/>

In Hungary, more than half of the protected areas are designated exclusively as Natura 2000 sites. The rest consist mainly of

Natura 2000 sites that overlap with national designations, with a small territory of only nationally designated areas (3.6%).

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- <https://biodiversity.europa.eu/countries/hungary>
- <https://termeszetvedelem.hu>

## 4

# ECONOMIC ACTIVITY IN PROTECTED AREAS IN THE CARPATHIAN COUNTRIES (LITERATURE REVIEW)

The purpose of the study is to identify forms of economic activity in protected areas in the Carpathian Mountains (in Carpathian countries such as Poland, Slovakia, the Czech Republic, Romania, Hungary and Ukraine), to verify the most important problems and needs, and to make recommendations for supporting entrepreneurship in accordance with the concept of sustainable development. The study is based on selected scientific and popular literature, mainly from the above-mentioned Carpathian countries.

The natural and cultural potential of the Carpathians is one of the highest values that can be found in the landscape of Europe. The natural conditions, landscape, and lifestyle of the Carpathian region are to some extent similar to the Alpine region, although the natural potential of the Carpathians is greater and better preserved. The Carpathians are not as developed and prosperous as the Alpine region, mainly due to their history over the past 70 years. The Carpathians as a whole have suffered from many economic problems, more in some countries, less in others. Weaker transportation and technical infrastructure, as well as difficult natural conditions, make some regions very remote and difficult to access, which, while very beneficial for nature conservation, translates to unfavorable employment opportunities, resulting in unemployment and subsequent depopulation of the areas (Ministry of Regional Development of the Czech Republic, 2015).

For these reasons, among the Carpathian countries, i.e. Poland, Slovakia, the Czech Republic, Romania, Ukraine, and Hungary, the preservation of the Carpathian landscape with all its natural and cultural values as a result of the joint and balanced action of natural and human forces is postulated. In this spirit, the socio-economic development of the protected areas of the Carpathians should take place, allowing managing these areas while respecting certain principles of protection of natural and cultural heritage. Management in accordance with the concept of sustainable development consists of the appropriate integration of those forms of economic activity that not only do not interfere with the basic functions of the natural environment but allow the use of both resources and environmental services (Zielińska, 2013; Ministry of Regional Development of the Czech Republic, 2014; Maráková&Dzúriková, 2022; Mártonné&Császár, 2019; Matei, 2021; Konishcheva&Tkachova, 2020).

Nowadays, farming, economic activity are synonymous with entrepreneurship, and this concept is defined differently depending on the scientific trend. In the economic approach, entrepreneurship is seen, on the one hand, as a process of creating/establishing new ventures/enterprises, and on the other hand, as a certain ability of individuals (or increasingly also of organizations or territorial units) to identify opportunities and use them as opportunities for development (Zdon-Korzeniowska, 2020). On the other hand, in the psychological-social-cultural approaches, entrepreneurship is understood as a certain set of attitudes and behaviors of individuals and society that influence the formation of their future (Komraus, 2019).

Entrepreneurship is also seen as a way to solve the most pressing social and environmental problems. Vedula and co-authors (2022) note that two streams of research have emerged over the past two decades: social entrepreneurship and environmental entrepreneurship, which are collectively referred to as entrepreneurship for the public good. Both streams study the relationship between entrepreneurship and the creation of social value by solving social and environmental problems (Hall et al. 2010; Bacq&Janssen, 2011; Demirel et al. 2019; Shepherd&Patzelt, 2011). According to Piwowar-Sulej and co-authors (2021), “(..), there are many publications on environmental entrepreneurship (Thananusak, 2019; Gregori&Holzmann, 2020; Fichter&Tiemann, 2020; Terán-Yépez et al., 2020). Some focus on environmental effect (Mostashari-Rad et al., 2019), others on energy models, environmental impact, and economic effect in sustainable production (Nabavi-Pelesarai et al., 2019a, 2019b), but there is still no consensus in the literature on the conceptualization of environmental entrepreneurship” (Piwowar-Sulej et al., 2021).

Regardless of the nature of entrepreneurship, it depends on the entrepreneurial abilities of business owners and employees, i.e. the so-called internal environment, but also on external conditions, i.e. the environment in which the business operates (region, state, other companies). Thus, the environment means certain market conditions (actions of competitors, customers, suppliers, etc.), economic, socio-cultural (demographic, occupational, social structure, traditions, language, etc.), legal-administrative, political, but also natural (such as location, climate, terrain, soils, etc.). These conditions generate certain development opportunities and possibilities for enterprises operating there and are also a source of emerging barriers and development requirements.

Economic activity in protected areas in each of the Carpathian countries involves adherence to rules set by law. These regulations can mean many restrictions for businesses, residents as well as visitors. The general rule that is observable is that the stricter the protection of an area, the stricter the restrictions.

Poland, Slovakia, the Czech Republic, Romania, and Hungary are all post-socialist countries in Europe where, with the development of democracy and accession to the European Union, there have been political and legal changes resulting in, among other things, new regulations, relocation of resources, changes in land ownership, new conservation policies (e.g.: Natura 2000 network) but also new funding opportunities, management, system changes (Yakusheva, 2019).

Ukraine continues to experience a pro-democratic transition, but there are still problems related to the development of entrepreneurship, especially in mountainous areas, as pointed out by the National Institute for Strategic Studies in its analytical study titled: Ways to support small entrepreneurship in the context of bridging disparities in the socio-economic development of mountainous regions. Among the key problems listed are:

- Lack (inadequacy) of financial, investment, and material support, especially the high cost of bank loans, lack of financially efficient investors, inadequate financial condition and limited funds of small enterprises, the difficulty of obtaining them, and the high cost of technology;
- The deterioration of human capital, the lack of skills necessary to undertake and carry out economic activities, as a result of unsatisfactory living conditions caused by the inadequate state of service facilities and social infrastructure, the low prestige of work in the countryside, the limited income of the rural population, the degradation of cultural facilities and the unsatisfactory state of medical infrastructure in the countryside, the high level of unemployment, the deterioration of the ecological situation and the state of environmental protection;
- Unfavourable business environment in mountain regions (limited demand and underdevelopment of the internal market, resources, investment, neglected infrastructure, inadequate social and living conditions) and the lack of effective economic incentives for the creation and development of investment activities of small businesses, attracting public funds and foreign labor migrants for investment purposes (Voloshyn et al., 2018).

Similarly, in Romania, the Czech Republic, Poland, Slovakia, and Hungary, disadvantaged mountain areas are characterized by underdeveloped infrastructure, a low standard of living for the area's population, a high rate of aging population, a large number of unemployed, and reduced tourism capitalization of the area's natural and anthropological resources (Cristache et al., 2022; Ministry of Regional Development of the Czech Republic, 2015; Guzal-Dec et al., 2015; Messen et al., 2015).

Based on a review of the literature, it can be concluded that the restrictions on management in protected areas in the various Carpathian countries generally relate to traditional forms of use of environmental resources and protection of components and elements of the natural environment. Among other things, they affect those who farm aiming at nature conservation. Companies must be aware of the impact their activities may have on the environment and work to minimize their negative impact on the ecology. It is also forbidden to use modern techniques and measures in agriculture, such as plant protection products, artificial fertilizers, or genetically modified organisms. It is also forbidden to make too significant changes to components of the natural environment, for example, water relations or landscape transformation. Such restrictions can be burdensome for the local economy. Some of the prohibitions limit the possibility of intensifying agricultural or mining production and developing traditional forms of tourism or transportation. Restrictions also apply to the field of construction, infrastructure investments, and investments in services. This leads to the decline of other branches of production, which impedes the development of protected areas. Lack of employment opportunities in other fields of production of goods and services, unsatisfactory municipal, educational, medical, etc. infrastructure, low level of services, industry, trade, and construction leads to high levels of unemployment, which is the main reason for the migration of the population from these areas. Even if there are those willing to start their business, several obstacles appear and act as demotivators (Guzal-Dec et al., 2015; Vozár, 2013; Gyenes, 2020; Matei, 2021; Tokar&Hoblyk, 2017).

Young people are mostly migrating from the protected areas of the Carpathians because of limited opportunities to participate in and influence local development processes. This leads to a "drain" of fresh perceptions and implementation of new entrepreneurial skills and solutions. Intergenerational aspects are firmly embedded in the concept of sustainable development and are becoming increasingly important as the global population ages. However, the interaction between members of different generations in the sustainability process is increasingly disappearing. This results in the marginalization of the aging rural population and the loss of traditional knowledge regarding crafts, folklore, and traditional forms of land use (Mitrofanenko et al., 2014).

Running a business in protected areas also requires a license. This is the case in Hungary, among other countries, where the licensing process can be long and complicated, and the documentation and requirements set by the authorities necessitate a wide range of expertise (Nemzeti Agrárgazdasági Kamara, 2020). In addition, companies must cooperate with local authorities and conservation institutions and, if necessary, contribute to habitat restoration and preservation of natural values. Permit procedures and compliance with rules established in protected areas often entail higher costs, and hence entrepreneurs operating here are more likely to lose capital than businesses established in unprotected areas (Gyenes, 2020; György, 2022; Zacharczuk, 2014; Meessen et al., 2015; Getzner, 2010; Stanciu et al., 2009; Voloshyn et al., 2018).

It is worth mentioning that natural areas are the cause of significant constraints in the creation of local documents, such as land use plans, sustainable development strategies, or local environmental policies. Their presence reduces the competence of local municipalities and complicates decision-making processes (Guzal-Dec et al., 2015).

Nature protection laws in individual Carpathian countries have defined the rules for the use of naturally valuable areas and permissible forms of economic activity. For example, in Slovakia, nature protection is provided by Law No. 543/2002 on Nature and Landscape Protection (www.zakonypreludi.sk/zz/2002-543, 2002). According to this law, nature protection means limiting interventions that may endanger, disturb or destroy the conditions and forms of life, natural heritage, and nature of the landscape or adversely affect its ecological stability, as well as eliminating the effects of such interventions. Similar legislation is in effect in Poland, the Czech Republic, Romania, Ukraine, and Hungary.

Although protected areas often entail constraints that are noticeable to the local community, in the current context they can also become development opportunities. Forms of management in individual protected areas can vary depending on the characteristics of the area, the legal status of the area, local needs, and aspects of sustainable development. In most Carpathian countries, economic activity in protected areas means development through the greening of the economy. Pro-ecological activities may include:

- agricultural or forestry activities that preserve natural values (e.g.: production of healthy food, logging, undergrowth),
- providing tourism services (e.g.: eco-agrotourism, phytotherapy, apitourism),
- within qualified tourism: mountain hiking, mountaineering, hunting, fishing,
- spa tourism,
- research-development and educational activities (e.g.: camps, camping, green schools, open-air painting, photography, ecological workshops),
- economic activities based on local cultural features (souvenir-making, handicrafts).

In the case of agriculture in protected areas, regulations are much stricter than in unprotected areas, but in some protected areas, agriculture is particularly necessary for the maintenance and management of the area. In Hungary, for example, national parks often manage the areas, but most of the area is subjected to agriculture. Traditional grassland cultivation, mowing and grazing, maintenance of the area's biodiversity, and extensive, biodynamic agriculture are important elements of species maintenance, while also providing opportunities for business

development (György, 2022; <https://termeszetvedelem.hu/termeszetvedelmi-vagyonkezeles/>, 2023).

The spread of organic farming can be a solution to existing environmental and economic problems in the region, as it is a sustainable alternative to traditional farming methods.

Ecotourism destination is one of the development models that can bring local economic benefits once a protected area is incorporated into the local tourism offer (<https://www.eco-romania.ro/blog/tipuri-de-arii-naturale-protejata-si-diferentele-dintre-ele/>, 2023).

Especially in mountainous areas, tourism is still the most distinctive and has the greatest economic impact. Classic mass tourism, wellness hotels, and spas are very popular but are not recommended for reasons of sustainability and preservation of natural values in a protected area. Fortunately, active tourism and green tourism or ecotourism are becoming increasingly popular in the Carpathian countries (Mártonné & Császár, 2019; Zielinska, 2014; Zielinska, 2009; Matei, 2021).

Many business opportunities are associated with active tourism and ecotourism, as the services can be very diverse. Ecotourism is a branch of tourism that, if properly managed, can create harmony between conservation and development, and therefore between the present and the future (Mikházi, 2018).

One of the examples is the development/creation of accommodation close to nature (agrotourism, glamping, campgrounds, campsites). An interesting offer aimed at tourists is the opportunity to participate in the production and manufacture of some of the products typical of these areas – food or crafts (Benedek, 2013; Zielińska, 2014).

Offering farmer-to-table experiences and selling organic products can be part of sustainable agri-food industry activities. Supporting the production of local products and creating a network of local producers should be part of both local and regional development strategies. Supporting such businesses would have a positive impact on both the local economy and the environment, as sales are made locally, reducing transportation costs and harmful emissions (Gonda, 2021; Pityulych, 2011).

The activation of tourist and recreational activities in protected areas stimulates the development of local service facilities (hotels, cafes, restaurants, production and sale of souvenirs, development of handicrafts), improves social, transportation, and other types of local infrastructure, and affects the local economy by increasing demand for agricultural products, developing processing and food industries (Konishcheva&Tkachova, 2020).

Opportunities for the development of protected areas are therefore seen in the processing industry, using local agricultural raw materials. Therefore, already existing businesses should be activated in protected areas, such as catering establishments (for example, restaurants, confectioneries), bakeries, sawmills,

furniture manufacturing plants, fishing farms, and fishing tourism, sport fishing (for example, with the organization of competitions and contests). On the other hand, activities aimed at tourists (in addition to accommodation and catering services) may include such businesses as the rental and repair of sports and tourist equipment (bicycles, downhill and cross-country skis, winter hiking skis/rockets), fishing equipment, camping equipment, and others. (Zielinska, 2014).

In addition, there is a preference for activities that emphasize the specificity and tradition of the region, the delineation of thematic routes, nature trails, increasing the accessibility of protected areas for people with physical and sensory disabilities, cooperation in sustainable tourism products with other Carpathian destinations involving local communities (Kyselka, 2015). In Slovakia, among others, a methodology that focuses on studying the organizational structure and leaders in a destination based on a community and corporate model has been developed (Gajdošík et al., 2017).

A very good initiative for those farming in protected areas in Hungary is the so-called National Park Product Trademark. National Parks can reward places to stay and various services with it, as well as organize the awarded places into a network of businesses operating locally and mainly in protected areas, thus increasing their range and putting them on the mental map of tourists. In addition, such a solution strengthens cooperation between sectors (corporate, civil, and state), as this relationship is extremely important for protected areas as well as, it guarantees support for networking, even stronger central support for the creation of regional cooperatives and brands, increasing the visibility of small producers (Benedek, 2013).

Also important, from the point of view of the development of protected areas, are enterprises related to nature and environmental education that implement programs for both schools and tourists, enabling them to share knowledge of the region's natural values, among others, through the creation of visitor centers, forest nurseries or thematic camps (Varga et al., 2017).

In summary, naturally valuable areas require the search for and development of fields of economic activity carried out in accordance with the principles of sustainable development. Management based on the concept of sustainable development consists of the appropriate integration of those forms of economic activity that not only do not interfere with the basic functions of the natural environment but allow for the use of both resources and environmental services.

It is also important to remember the possible negative effects of tourism activities in protected areas, which have the potential

to adversely affect all elements of the ecosystem: soil, water, air, vegetation, etc., and lead to loss of aesthetic value, increased noise levels, generation of harmful emissions, littering, deforestation due to infrastructure construction, soil erosion, surface and groundwater contamination and air pollution, ecosystem disruption, and landscape change (GhulamRabbany et al, 2013; Manning et al., 2017; Tolvanen&Kangas, 2016; Mihalič, 2000; Muhanna , 2006; Eagles, 2002).

Therefore, naturally valuable areas create significant restrictions that can be burdensome to the local economy. In addition to prohibitions of a general nature, such special areas have prohibitions and restrictions that are related to the established form of area-based nature conservation. Restrictions may also be imposed on economic activity or even prohibit it if this causes pollution of the natural environment on a scale that threatens the purpose of the creation of the special area (Stelmasiak, 2019).

Based on the above-discussed forms of economic activity in protected areas, the following recommendations can be made for the given spheres of activity in protected areas:

- industry - avoiding the location of investments that interfere with environmental functions, environmentally safe technologies, and installation of protective equipment are preferred,
- agriculture - popularization of the pro-environmental agriculture model,
- forest management - the development of semi-productive and non-productive functions, rationalization of management, and avoiding the routing of heavy traffic through valuable forest complexes are preferred,
- municipal management - sources of supply of so-called clean energy, proper disposal of wastewater and waste, minimizing air pollution from transportation, minimizing the negative impact of transportation infrastructure and traffic on wildlife in the Carpathian region are preferred,
- tourism - active tourism and ecotourism providing a balance between conservation and development, research, development, and educational activities, and economic activities based on local cultural features (souvenirs, handicrafts)
- cooperation of entities, strong leadership, and financial empowerment (Guzal-Dec et al., 2015; Hlaváč&Anděl, 2019; Louda et al., 2023).

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5

# ENTREPRENEURSHIP IN THE CARPATHIAN PROTECTED AREAS. REPORT ON ANALYSIS OF FOCUS GROUP DISCUSSIONS

## METHODOLOGY

From April to July 2023, focus group discussions were conducted in Romania, Hungary, Ukraine, Poland, Slovakia, and the Czech Republic on the broadly understood issue of entrepreneurship in the Carpathian protected areas. The discussion scenario is attached at the end of the report.

Both entrepreneurs who operate within and/or are related to protected areas, but also representatives of business environment institutions responsible for the development and support of entrepreneurship in these areas, representatives of the NGO sector (cooperating with entrepreneurs), and scientific institutions dealing with this issue were invited to participate in the discussion.

**Table 9.**  
**Number of participants in focus group discussions by country**

Romania	Hungary	Ukraine	Poland	Slovakia	Czech Republic
8	10	11	14	8	7

Source: own elaboration.

It should be noted that the protected areas in the Carpathians include at least several administrative units in each of the countries mentioned. Hence, the most convenient format to guarantee the participation of as many representatives as possible was online meetings. Discussions lasted from 50 to 90 minutes. The meetings were conducted in national languages by the national partners of the Association for the Development and Promotion of Podkarpacie “Pro Carpathia”. A transcript was prepared from each meeting in the respective language, which was then translated into Polish and analyzed.

The discussion was divided into several main parts:

- overall assessment of local business conditions,
- discussing the strengths and weaknesses of economic activity in the protected areas of the Carpathians,
- discussing opportunities and threats to economic activity in the protected areas of the Carpathians,
- discussing existing and expected support for entrepreneurship in these areas,

Moderators were additionally instructed to allow as much freedom as possible for participants to speak in order to capture a practical dimension based on knowledge derived from daily

activities related to entrepreneurship in the protected areas of the Carpathians.

The empirical material obtained was then subjected to content and content analysis. The transcriptions were coded, which consisted of assigning keywords or slogans to relevant parts of the speech that characterized the passage as accurately as possible. Ad hoc coding was used - that is, there was no pre-developed list of codes (resulting from some accepted theoretical assumptions). The list developed when reading one transcription was used for coding the next transcription, with possible additions if there were threads that had not occurred before. From the beginning, the codes were described within the main threads of the completed discussions: problems, challenges, solutions, resources, and promotion. In situations where a passage did not fit into these threads, it was given a code without the above attribution (several times there were statements about “working for higher values”).

The final list of codes was revised by rereading the transcript with the assigned codes (verification of coding accuracy). Finally, the codes were standardized stylistically and separated into subcategories by threads.

The analysis presented here is qualitative, which in practice means that it is not possible to estimate the results on populations living in the Carpathian protected areas in the countries



industry - in general, this is what the analyzed areas of the Carpathians are characterized by. The historically lower level of economic development is, moreover, one of the main reasons why there is still something to protect (naturally and culturally) in such areas. In practice, however, these communities are by definition weaker and more vulnerable to negative social phenomena - mainly youth migration and aging and extinction. Restrictions on economic activity due to the nature of protected areas further strengthen and accelerate these processes.

This is happening in several dimensions. Experts pointed out that the potential of such communities is smaller and often loses out to external, stronger, and more aggressive capital. In practice, this means unequal and unfair competition. The local market is at the same time less affluent, and therefore shallower and less receptive to local production and local services. These, in turn, due to their distance from possible resources, and the need to operate in the limited conditions of protected areas, have potentially higher costs and greater uncertainty. This translates into prices, and the lack or limited local demand ultimately means the disappearance of such activities. What's more, local businesses are forced to compete with outside, much stronger companies, which in turn are able to offer lower prices, but also have disproportionately more capital. In the absence of institutional support and the current philosophy of formal and legal solutions, under which the conditions are the same for all entities, those local ones operating in the protected areas of the Carpathians are, in practice, doomed to lose. The disappearing endogenous enterprises are being replaced by economic activity from outside.

A special case of the situation described, cited by experts, is when new residents from large urban centers, with significant capital and trying to pursue entrepreneurship according to models from those urban centers, are brought into protected areas. Relatively quickly, they collide with the same challenges - a local market with insufficient resources to meet supply, unequal competition with external mass production, or distances from potential markets that significantly affect the final price.

In addition to the above challenges, economic activity in the protected areas of the Carpathians faces the problem of a lack of adequately skilled labor. Young people leave for larger urban centers in search of more secure and better-paid jobs, and those who remain locally often lack the necessary qualifications and competencies. As a result, local entrepreneurs compete among themselves not only for customers but also for employees, which only exacerbates the described phenomena of social atomization.

The basic historical infrastructural deficiencies and constraints that have enabled the survival of resources that are protected by law translate negatively into economic activity, lengthening

or even preventing supply or distribution chains, significantly increasing the cost of launching any activity (and especially industry). Entrepreneurs also face costly, complicated, and lengthy procedures for obtaining permits before launching any activity. Moreover, the costs incurred in this regard are their own risk, since the final outcome of such efforts is not at all certain. The likelihood that adequate capital will be accumulated within local communities in protected areas to bear such risks is low. In addition, the external formal and legal situation is unstable - regulations are constantly changing, which only adds to the sense of uncertainty.

At the very least, the situation has fostered controversial investments in which outside capital seeks opportunities to exploit protected resources within these areas. In the case of Poland, it is large hotel investments in the immediate vicinity of the protected areas of the Carpathian Mountains (e.g., in Wisla), but it is even more evident in Slovakia, where large ski resorts are being built, the location and development of which are supported by activation and pro-development policies for weaker areas. Local small tourism businesses are unable to compete with this type of investment and lose not only potential customers, but also current ones - discouraged by the change in the overall image and character of a given protected area and its surroundings. Importantly, these types of large investments ultimately dictate price and wage conditions in the local market, eliminating local competition and monopolizing relations with local artisans and manufacturers. In the long term, another negative consequence of such a situation also becomes apparent - mass tourism appears around protected areas, which leads to a disturbance of the delicate balance between protecting particularly valuable natural and cultural assets and making them accessible in the most sustainable way possible.

In this regard, the experts also mentioned another issue - market immaturity characterizes not only the local communities of the Carpathian protected areas but the national tourism markets of the Carpathian countries surveyed in general. Protected areas offer tourism opportunities that currently interest a rather narrow category of audience in these countries (the best-educated, affluent urban dwellers with special tourist interests). Small local tourism entrepreneurs in the protected areas of the Carpathians are unable to effectively reach the European tourists who are looking for such an offer. The aforementioned large investments in the area of accommodation facilities with such an offer do reach, but mass tourists, so the final result is more exploitation of protected areas than sustainable tourism.

Due to the above-described factors arising from the nature of protected areas, institutional support for local entrepreneurship that takes into account the sustainable development of the Carpathians is necessary. However, experts pointed out that there is a shortage of such solutions.

## CHALLENGES FOR ENTREPRENEURSHIP IN THE PROTECTED AREAS OF THE CARPATHIANS

Focused discussions pointed not only to problems directly arising from the nature of the Carpathian protected areas but also to challenges for entrepreneurship in these areas.

Figure 21. Challenges for entrepreneurship in the protected areas of the Carpathians



Source: own elaboration.

The key issue that dominated the experts' statements in this area was the immaturity of the market. What was taken into account were both the shallowness of local markets, which are unable to absorb local products or services to the extent that entrepreneurship in the protected areas of the Carpathians can function normally and the still quantitatively small size of national markets. Whether we were talking about local products (e.g., furniture, food, or handicrafts) or tourist services, the price and accessibility resulting from the problems described earlier are currently too high for the vast majority of potential customers in the Carpathian countries. Besides, they most often do not perceive additional value in these products or services. At the same time, it should be added that tourism is mainly domestic (foreign tourists account for a small part of the recorded traffic) in the analyzed countries.

The immaturity of the market also translates into the fact that sustainable tourism is also a challenge. In this regard, support is needed, which in turn requires activity on the part of local government authorities, but also broad cooperation between all stakeholders in protected areas. Without these two components, experts say, it is impossible for any innovation to strengthen sustainable tourism. Indeed, in its current shape and condition, entrepreneurship in the protected areas of the Carpathians is unable to overcome the problems analyzed in the previous section.

Another area of challenges defining entrepreneurship in the analyzed areas is the issue of stabilizing and systematizing formal and legal solutions and reducing the scope of bureaucracy. One gets the impression that these two elements, in the

opinion of experts, could act as protective mechanisms for local entrepreneurship - guarding against unequal competition with external capital. Stabilization of the law would reduce the risk associated with uncertainty about the consequences of investment decisions in the long term, and simplification of procedures for local entities would put them in a privileged position vis-à-vis expansive external capital. Of course, this is a challenge, as resolving this issue within the current philosophy of equality of entities is not an easy thing. Nevertheless, according to experts, protected areas are, by definition, special areas, which may, after all, require special legislative solutions that take into account the care of local communities and their residents.

The issue of greater opening to the European market and the associated risks of mass tourism remains a separate matter of caution. On the one hand, the Carpathians still remain an unknown and undiscovered area for European tourists. Their popularization is therefore crucial. However, the massification of tourism may threaten protected areas as such (destruction of natural and cultural resources), and, as experts pointed out in the problem threads, also local entrepreneurship in these areas (loss to large external investments and collapse of local businesses).

Summarizing the above, it was relatively obvious to the invited experts that entrepreneurship in the protected areas of the Carpathians should be realized within the framework of small businesses, mainly of family and local character. However, the fundamental challenge remains to secure such conditions for their operation and development that they guarantee an

adequate level of income (overcoming the negative social phenomena characteristic of these areas) while safeguarding the protected natural and cultural values. In other words, the challenge is to reduce the risk of the emergence of the phenomenon of treating protected areas like an open-air

museum, consisting in the depreciative functioning of a limited spectrum of entities to the delight and entertainment of visitors to these areas during the tourist season. The challenge, therefore, is the empowerment and emancipation of local entrepreneurs.

## SOLUTIONS FOR ENTREPRENEURSHIP IN THE PROTECTED AREAS OF THE CARPATHIANS

Experts also formulated solutions to identified problem situations during focused group discussions. The more often

a particular theme appeared, the more highlighted it is in the chart below.

Figure 22. Solutions for entrepreneurship in the protected areas of the Carpathians



Source: own elaboration.

The core of entrepreneurship in the protected areas of the Carpathians, according to experts, should be sustainable tourism. This very general formulation covers a whole spectrum of forms of tourism directed at experiencing and exploring protected natural and cultural values but with special emphasis on the least possible negative consequences for the values themselves. Thus, active tourism, nature tourism, medical tourism, spa tourism, etc. were pointed out, but in a limited and controlled quantitative dimension. The key and core value here should be the quality of the services and products offered.

This, in turn, led experts to emphasize the role of complex tourism products. In other words, single services or products are not able - with a limited quantitative scale - to provide adequate demand for local entrepreneurs on their own. It should be noted that such products are of interest to a special type of tourist, which the domestic markets of the Carpathian countries simply lack at present. Nevertheless, according to the participants in the discussion, the solution can be process-oriented, including also educating domestic tourists - especially with current tourism trends.

Complex tourism products require the cooperation of local entrepreneurs, and this cooperation is most effective through the association of local entities. This type of solution, however, requires overcoming the distrust that characterizes local communities of protected areas, which was pointed out by the invited interviewees. In this regard, cooperation between entrepreneurs and other entities operating in protected areas was also mentioned: local government authorities or NGOs. Particular emphasis was placed on cooperation between entrepreneurs and institutions responsible for implementing protection (park administration, forest administration, museum administration, etc.). It was pointed out that at present it largely depends on personal relationships and is characterized by considerable inequality and inconsistency (examples were given of both extensive and well-functioning cooperation and complete blockage and arbitrariness of decisions). This is practically the only way to overcome inequality in competition with external investment capital, guaranteeing exposure of a key element of entrepreneurship in protected areas - authenticity.

Local cooperation and authenticity should be reflected in appropriate certification systems. This did not mean solutions applied at the level of the European Union - e.g. regional products, but rather the building of independent certification systems typical of protected areas, which would protect products and services based on protected unique resources. The basis of such certification systems should be the appreciation of local natural values and related crafts. Another element, therefore, must be training and knowledge transfer between successive generations in local communities. Interviewees stressed that

without cooperation and association, the process of knowledge and experience transmission is ineffective.

Confirmed authenticity would find its consequences not only externally as complex tourism products advertised and promoted through protected assets, but also internally within protected areas under the tax breaks assumed by experts - so much easier to implement and control, as long as actors would associate effectively (from networks of local entrepreneurs to chambers of craftsmen).

## RESOURCES FOR ENTREPRENEURSHIP IN THE PROTECTED AREAS OF THE CARPATHIANS

Relatively less space in the discussion of entrepreneurship in the protected areas of the Carpathians was devoted to the resources available to local communities. Some of it has already been discussed in the form of problems - this is mainly about human resources and the depth of potential markets. However,

in this thread, mainly the positive aspects of the Carpathian protected areas were pointed out, emphasizing the advantages and benefits that come from having entrepreneurship in protected areas.

Figure 23. Resources for entrepreneurship in the protected areas of the Carpathians



Source: own elaboration.

For the experts involved in the discussions, the obvious and primary resource, despite the problems arising from the nature of protection, is precisely the protected areas. Nature and landscape are inextricably linked with them. At practically every step it was emphasized that entrepreneurship in these areas should in every possible way relate and refer to protected areas. Some of the interviewees also pointed to the traditions of local communities that are linked to the type of protected areas. The statements indicated that the legally sanctioned exceptionality and uniqueness of these areas is a special asset that local communities have.

development of local communities in socio-economic development, but as a resource precisely on which it is possible to build modern entrepreneurship, referring to the universal values of nature and ecology. This, according to experts, fits in with modern tourism trends, which increasingly seek unique experiences, original and authentic adventures, and sustainable activity, but also peace, rest, and tranquility away from civilization. Originality and authenticity are provided by local culture and traditions, deeply rooted in natural conditions. Adventure, activity, but at the same time tranquility and quiet are, in turn, realized in close and unique contact with the natural environment in the most intact state possible.

Thus, a kind of paradigm shift in the local perception of protected areas is necessary - not as a factor hindering the

These are impossible-to-imitate values, hence the growing interest in them also from the tourism industry and external investors. Therefore, experts pointed to the necessity of linking the aforementioned values as strongly as possible to local, sustainable entrepreneurship.

Some of the statements on local entrepreneurship pointed to the need for innovation. These themes can be attributed

to this dimension as well - original, innovative, and sustainable use of resources available to local communities in the protected areas of the Carpathians can be a guarantee of their stable functioning and development, without much risk to the resources themselves. Certainly, however, it is a basic and fundamental resource on the basis of which business can be conducted.

## PROMOTION OF ENTREPRENEURSHIP IN CARPATHIAN PROTECTED AREAS

Not surprisingly, according to the surveyed experts, these are resources that should form the core of entrepreneurial promotional activities in the Carpathian protected areas.

Figure 24. Promotion of entrepreneurship in the protected areas of the Carpathians



Source: own elaboration.

Interviewees pointed out that the natural and ecological qualities of products and services produced and offered in protected areas should be emphasized at every step. The purity of raw materials, the uniqueness of products, and the environmental friendliness of operations - these are fundamental assets that build the image of companies operating in protected areas, differentiating them from those that are competitive but produced under so-called "normal conditions." These are also arguments justifying the price, proving additional value for consumers. For potential buyers, these values are not at all so obvious and known in advance, and therefore communication should constantly build on them. What is obvious and almost unnoticeable to residents of protected areas as these are elements of their everyday life, to an external viewer is the essence of difference and originality.

It is, therefore, necessary in promoting products and services produced and offered in protected areas, to combine ecology with sustainable production, speaking about production

technologies and emphasizing their simplicity and compatibility with the environment in which they are used.

There were even examples given of promotional activities in which customers were informed that part of the money earned from a given product or service is used to support conservation and environmental activities - reinvested in protected areas. This is an action that is by all means justified. Consumers should be informed at every step of the way that the money earned serves both the entrepreneur, and thus indirectly the local community, but also the preservation of local traditions and crafts, and contributes to the conservation of the natural and cultural values of the protected areas of the Carpathians themselves.

Indirectly, it is also the foundation for constructing authentic stories, an important component of the experiences and values that consumers of products and services produced and offered in protected areas seek and expect.

# ENTREPRENEURSHIP IN CARPATHIAN PROTECTED AREAS. REPORT ON ANALYSIS OF ONLINE QUESTIONNAIRES AMONG ENTREPRENEURS AND YOUNG PEOPLE

## METHODOLOGY

Quantitative surveys were conducted in Romania, Hungary, Ukraine, Poland, Slovakia, and the Czech Republic among entrepreneurs and young people (students and schoolchildren) regarding entrepreneurship in Carpathian protected areas from April to July 2023. The choice of these particular two categories of respondents was based on a basic assumption, namely, to confront the opinions of representatives of communities that run a business in areas, at least part of which are protected areas, with the opinions and beliefs of those who potentially constitute the future human resources for this economic

activity. A frequent theme that emerged in parallel focus group discussions was the lack of workers, the disintegration of local communities, and the depopulation of the protected areas of the Carpathians, hence the attempt to capture and compare the perspectives of entrepreneurs and young people on entrepreneurship in protected areas.

The questionnaires can be found in the report's appendices; the main subject areas of both tools are summarized below in the form of problem questions.

Table 10. Thematic blocks of questionnaires for entrepreneurs and young people

ENTREPRENEURS	YOUTH
<ul style="list-style-type: none"> <li>How are business opportunities evaluated in the protected areas of the Carpathians?</li> <li>What are the barriers to economic activity in the protected areas of the Carpathians?</li> <li>What are the opportunities for economic activity in the protected areas of the Carpathians?</li> <li>Do opinions on barriers and opportunities for economic activity in the protected areas of the Carpathians differ from country to country?</li> <li>Do opinions on barriers and opportunities for economic activity in protected areas differ by category of respondents?</li> <li>Which industries are more «destined» to fail in the protected areas of the Carpathians?</li> <li>Which industries are more «destined» to succeed in the protected areas of the Carpathians?</li> <li>Do opinions on industries differ from country to country?</li> <li>Do opinions on industries differ by category of respondents?</li> <li>What are the necessary and urgent forms of support for entrepreneurship in the protected areas of the Carpathians?</li> <li>Do opinions on forms of support for entrepreneurship in the protected areas of the Carpathians differ from country to country?</li> </ul>	<ul style="list-style-type: none"> <li>Do young people associate their future careers with the protected areas of the Carpathians?</li> <li>Do opinions on future careers differ from country to country?</li> <li>What future career do young people prefer?</li> <li>Do the preferences regarding young people's future career differ from country to country?</li> </ul>

Source: own elaboration.

This meant three common questions in both questionnaires: "How do you assess the possibilities of running a business in the protected areas of the Carpathians?", "In your opinion, what are the barriers or opportunities for the development

of entrepreneurship in protected areas?", and, "Please assess - from your perspective - the level of success or failure of economic activity in protected areas in the following industries."

While developing the questionnaires for entrepreneurs and young people, efforts were made to make them respondent-friendly and as short to complete as possible. It was also assumed from the beginning that the survey would be conducted online. Therefore, they contain 8 questions each (the ninth was a question about the administrative unit), single- and multiple-choice, and tabulated using a simple, five-point scale. The questionnaires were translated into national languages and prepared electronically in Google Forms and then in the form of links were distributed among the partners of the Association

for the Development and Promotion of Podkarpacie “Pro Carpathia”, business organizations, educational institutions, and social media in the Carpathian administrative units of the countries surveyed. Due to the adopted form of the invitation distribution and the risk of obtaining artifactual responses from respondents that would be unrelated to the Carpathian areas, both questionnaires additionally introduced a question on the county (or analogous administrative unit) of residence (for youth) or registered office/business (for entrepreneurs). This question was used to select data for analysis.

Table 11. Measurements obtained in the survey by country and category of respondents

	Romania	Hungary	Ukraine	Poland	Slovakia	Czech Republic	TOTAL
ENTREPRENEURS	40	41	-	43	50	36	210
YOUTH	109	102	223	126	107	117	784
TOTAL	149	143	223	169	157	153	994

Source: own elaboration.

It should be noted that due to the war in Ukraine, it was decided not to implement a survey among Ukrainian businessmen - even though the Carpathian region occupies the western part of the country and there are no direct hostilities, the implementation of such a survey in a situation of increased mobilization and all the problems associated with it would be morally unjustified. Only a questionnaire was distributed to Ukrainian youth. The numbers shown above refer to the measurements selected for analysis, after discarding the responses of respondents unrelated to the Carpathian areas. The report's appendices include frequency tables for both categories of respondents, showing the distributions of responses to all questions in both questionnaires.

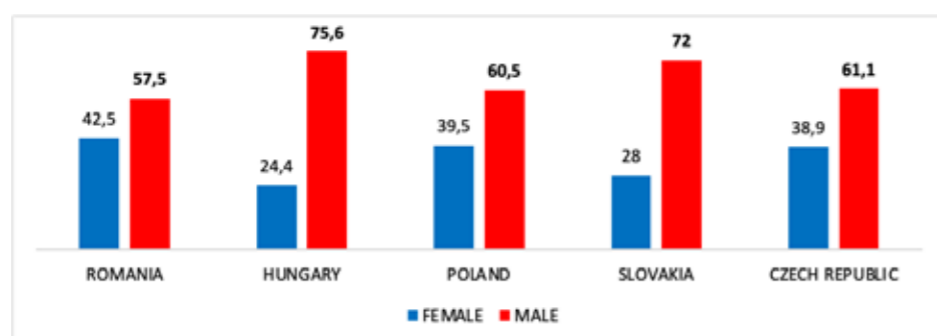
Verification of the possible statistical significance of potential differences by country or category of respondents was carried out by analysis of variance. Two questions were recoded into a cumulative index: “In your opinion, what are the barriers or opportunities for the development of entrepreneurship in protected areas?”, - “Index of barriers and opportunities” and “Please assess - from your perspective - the level of success or failure of economic activity in protected areas in the following industries” - “Index of failure and success”. This provided quantitative variables for the analysis of variance. For the question: “How do you assess the possibilities of running a business in the protected areas of the Carpathians?” the statistical significance of any difference was measured by T-test (for entrepreneurs) and chi-square (for youth).

## ENTREPRENEURSHIP IN THE PROTECTED AREAS OF THE CARPATHIANS IN THE OPINION OF ENTREPRENEURS

At the outset of the analyses, it is worth briefly characterizing the participants in the survey among entrepreneurs,

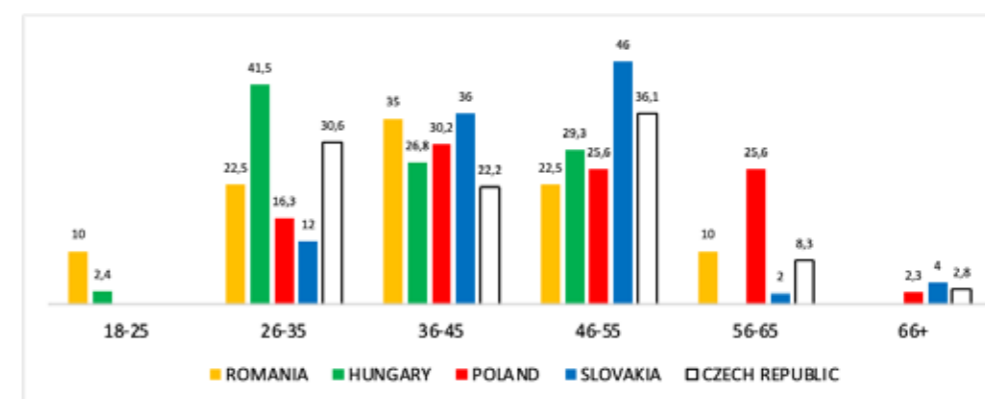
demonstrating the respective diversity and representativeness of the national samples.

Figure 25. Entrepreneurs' gender by country (%)



Source: own elaboration.

Figure 26. Entrepreneurs' age by country (%)



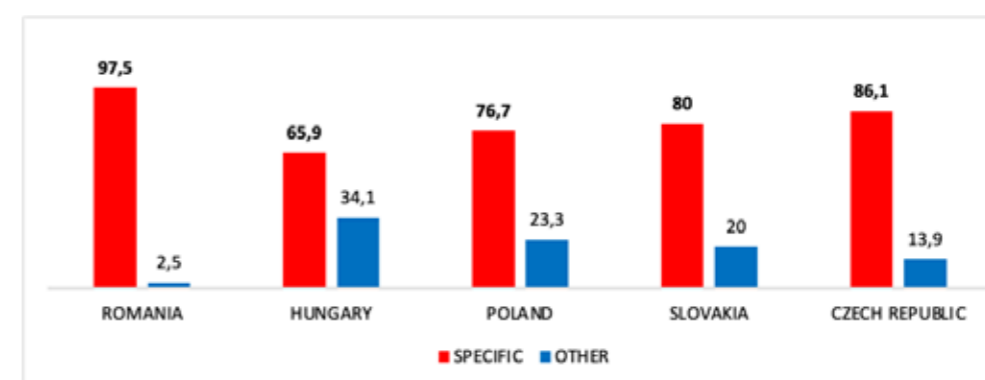
Source: own elaboration.

The surveyed were predominantly male, but there was no shortage of women's opinions either. In the case of Romania and Hungary, respondents were slightly younger than in Poland, Slovakia, and the Czech Republic - however, most respondents indicated the age group of 36-55 years. The vast majority of the surveyed entrepreneurs in all countries held a university degree (from bachelor's to doctorate).

for all industries, along with the additional supplementary responses, can be found in the appendix. The distribution of industries by “typical” protected areas and “other” is presented here. This division is based on responses received during focus group discussions with experts, who indicated that protected areas are dominated by tourism in the broadest sense; activities related to culture, entertainment, and recreation; crafts and handicrafts; agriculture and food processing; and forestry. It was these industries that were recoded as “typical.” Moreover, the supplementary responses also included indications of “gastronomy,” “natural cosmetics,” “beekeeping,” “wood processing,” and “health and welfare” - these were also recoded as “typical,” related to the nature and resources of protected areas. The rest of the indications were recoded as “other.”

When declaring areas of activity, respondents were allowed to select more than one answer from the list of 15 industries, and, if necessary, to add additional industries not included in the cafeteria. This solution was due to the fact that usually, entrepreneurs operate in several areas, often having a problem indicating one dominant one. The exact percentage distributions

Figure 27. Specific for protected areas vs other industries by country (%)



Source: own elaboration.

Thus, if an entrepreneur declared that he or she was running a business in at least one of the industries considered “typical,” he or she was classified in that category. The survey was decidedly dominated by entrepreneurs with daily experience in industries typical of protected areas.

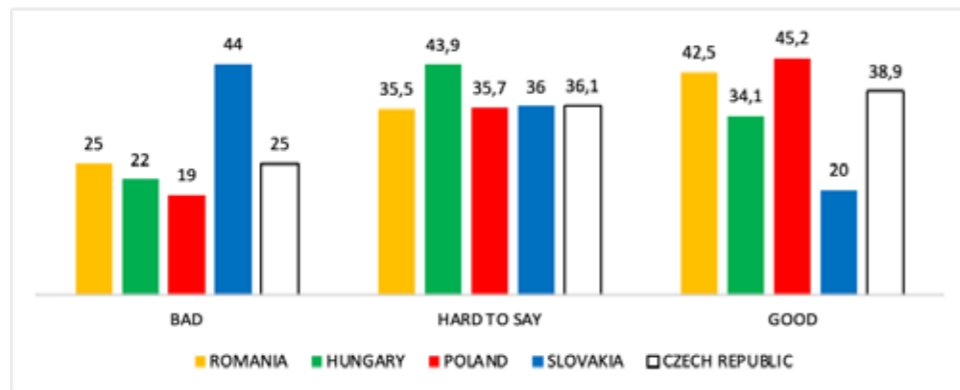
**assessment of business opportunities, evaluation of opportunities and barriers, success or failure of a particular industry or, finally, support factors depend on these independent variables in a linear way** (i.e., for example, the further west / the older / more often men / the more or less critical opinions or beliefs). The picture of entrepreneurship in the protected areas of the Carpathians in the opinion of entrepreneurs in these areas, presented in the following section, is relatively statistically consistent internally (even if there are

**Verification of possible statistically significant differences in opinions depending on gender, age, industry type, or, finally, the country did not show that the overall**

some statistical differences, they are insignificant and are due only to the design of the research sample - they do not depend on independent characteristics). However, there are sometimes differences at the level of a specific country, resulting from specifics beyond the problem of the survey, which is why the results are still presented by the country covered by the survey.

The charts below - for clarity of visualization - present the aggregated responses for the five-point scales, combining "definitely" and "rather" into a single category. The exact frequency distribution is included in the appendix containing tables of responses.

Figure 28. **Entrepreneurs' general opinion on possibilities of running a business in the protected areas of the Carpathians by country (%)**



Source: own elaboration.

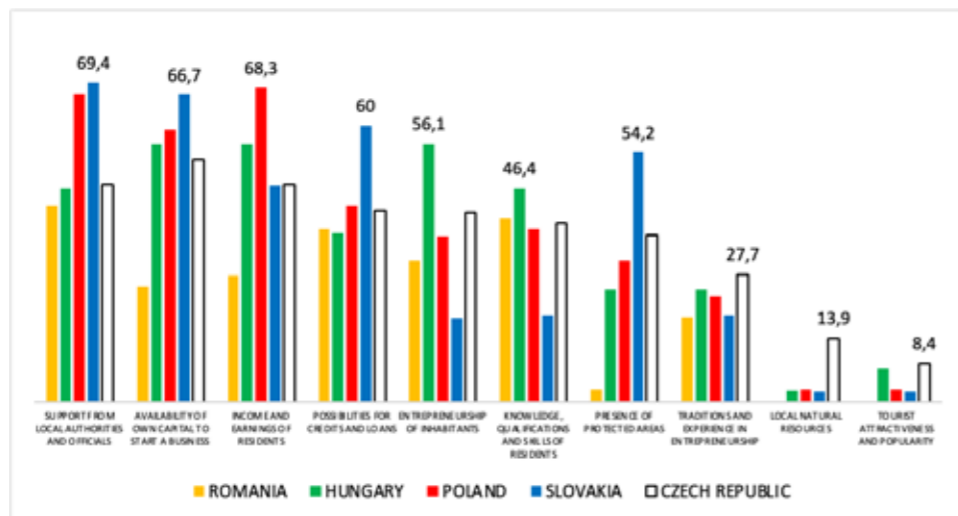
Clearly more critical were Slovak respondents (younger, much better educated), who, in contrast to entrepreneurs from other countries, generally assessed the opportunities for running a business in the protected areas of the Carpathians as worse. However, it should be remembered that the case of Slovakia is peculiar - the Carpathian Mountains are a decisive part of the entire country, and therefore protected areas to a greater extent determine the opportunities and directions of economic development at the national level (and not just at the local or regional level). This, moreover, is confirmed in the further assessment of barriers and opportunities for entrepreneurship in the protected areas of the Carpathians.

optimistic. Between 36% and 44% of respondents could not unequivocally pronounce either positive or negative. This is a significant percentage, and it is worth bearing in mind the scale of the uncertainty it illustrates.

In the next step, respondents were asked to evaluate selected factors in the context of potential barriers or opportunities for economic activity in the protected areas of the Carpathians. Here it should be added that these factors were formulated in a neutral way, so they could be interpreted individually positively or negatively by each respondent. For example, the income of the local population could have been assessed as low and as such treated as a potential plus - i.e. lower labor costs, or as a minus - the outflow of skilled labor.

Regardless of the above, it is difficult to conclude from these results that the surveyed entrepreneurs are unequivocally

Figure 29. **Entrepreneurs' assessment of barriers by country (%)**



Source: own elaboration.

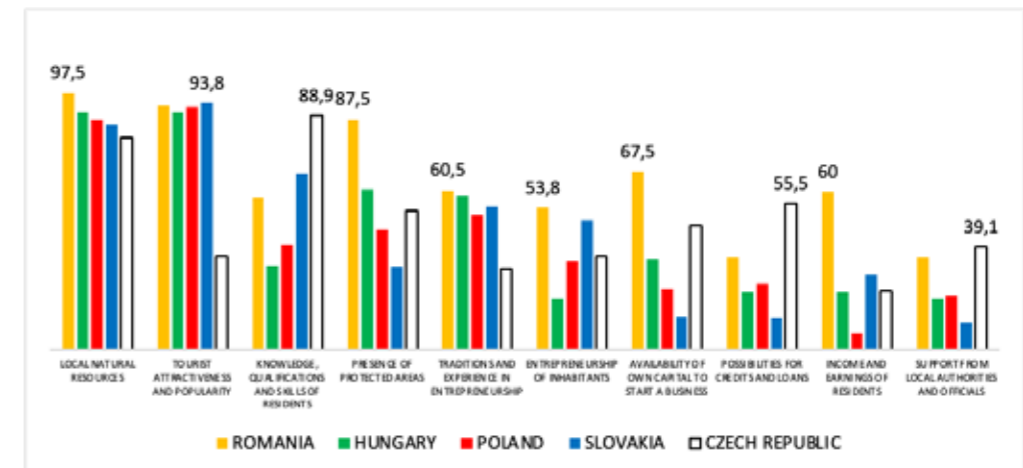
In general, the biggest barriers according to the surveyed were "support from local authorities and officials," "availability of own capital to start a business," as well as "income and earnings of residents" and "the possibility of obtaining credits and loans for starting and running a business, co-financing." Nevertheless, country specifics became apparent - for example, in the case of Slovakia, a significant percentage indicated "the presence of protected areas" as a barrier (as written about a little earlier). On the other hand, Romanian respondents, less likely than other entrepreneurs saw the indicated factors as barriers to entrepreneurship. It should be noted that "the presence of protected areas," "local natural resources" and "tourist attractiveness and popularity of these areas" were rarely indicated as obstacles to running a business. In other words, according to the surveyed entrepreneurs, the protected areas of the Carpathians are characterized primarily by institutional weakness, less support for entrepreneurship, fewer and weaker human resources, and a lack of capital resources. Clearly, Slovak entrepreneurs

are most affected by the negative consequences of the Carpathian protected areas.

Among the barriers spontaneously mentioned by respondents were:

- infrastructure deficiencies and a poor transportation network,
- the population's entitlement and welfare dependency,
- lack of qualified workforce and outflow of youth,
- significant centralization of administration (and thus the weakness of local governments),
- unstable and frequently changing laws,
- excessive bureaucracy.

Figure 30. **Entrepreneurs' assessment of chances by country (%)**



Source: own elaboration.

Respondents included "local natural resources," "tourist attractiveness and popularity of these areas" as opportunities for business development in the protected areas of the Carpathians. In other spheres, the assessment was no longer so consistent, and variations were revealed depending on the specific country and its peculiarities. In general, entrepreneurs from Romania were the most optimistic, while respondents from Slovakia were the most skeptical. Czechs saw opportunities in "the knowledge, qualifications, and skills of residents," as well as "the possibility of obtaining credits and loans for starting and running a business, co-financing." It is noteworthy that it was not so much "the presence of protected areas" that was considered an asset by the entrepreneurs associated with industries typical of protected areas. Predominately these were "local natural resources" and "tourist attractiveness and popularity of these areas." Perhaps the pragmatism of entrepreneurs prevented them from seeing a direct connection between the formal protection of natural and cultural

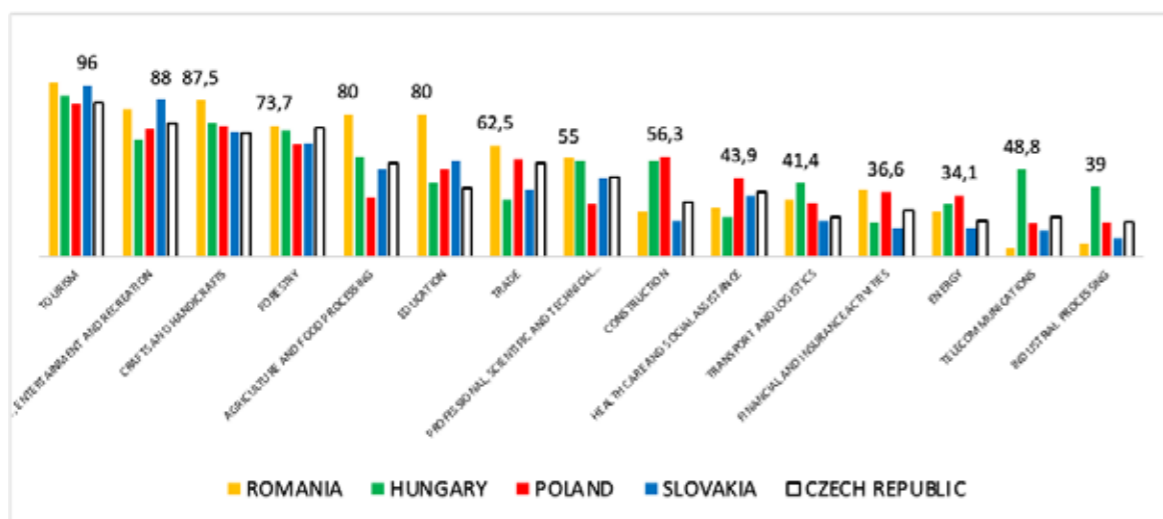
assets and their attractiveness, abundance, and accessibility. One might be tempted to interpret that what matters to the surveyed entrepreneurs are the resources of these areas and their attractiveness (including tourism) and that formal legal protection is an obstacle to their full use. Or in other words - the protected areas themselves are not seen as a resource or opportunity for running a business as much as the resources they protect.

Among the opportunities spontaneously mentioned in addition to the above listing were:

- local values and traditions,
- local creativity and ingenuity (resourcefulness),
- tourism development,
- infrastructure development, including tourism infrastructure,
- support and subsidies.

Entrepreneurs were also asked to assess which industries, business activity in the protected areas of the Carpathians has a chance to succeed, and in which it is destined to fail.

Figure 31. Industries rated by entrepreneurs as potentially successful by country (%)



Source: own elaboration.

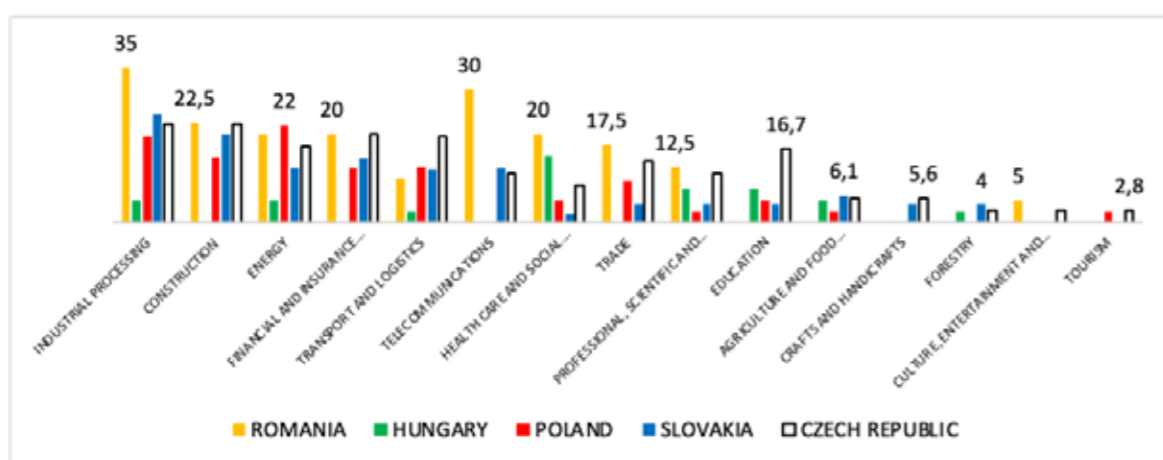
“Tourism,” “culture, entertainment, recreation,” “crafts and handicrafts” and “forestry” were cited among the industries increasing the chances of success. But agriculture and food production were not evaluated so clearly. For the surveyed entrepreneurs, also “health care and social assistance” carried out in protected areas does not mean success either.

In addition, they also mentioned:

- organic farming,
- agritourism,
- circular economy,
- gastronomy,
- arboriculture,
- water management.

The chart below shows (for comparison) the highest percentages for “will definitely fail” responses for selected industries in each country.

Figure 32. Industries “destined” by entrepreneurs to fail by country (%)



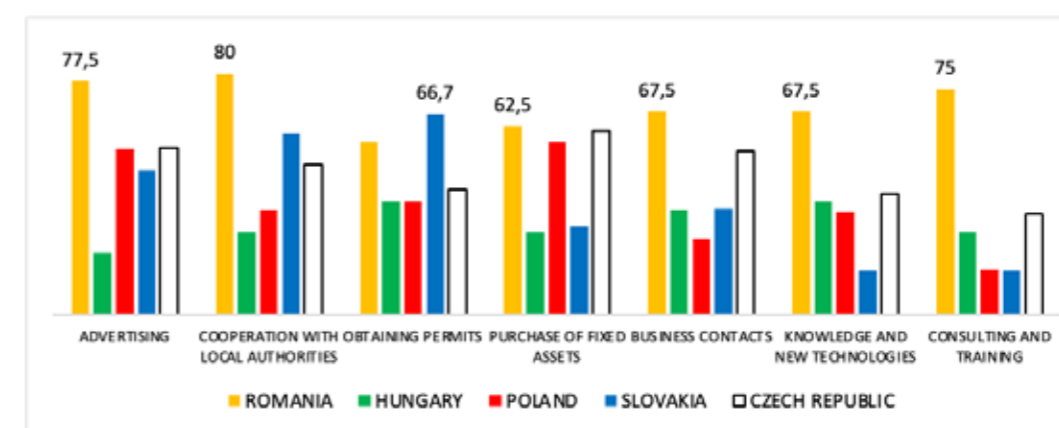
Source: own elaboration.

The surveyed entrepreneurs most frequently included “industrial processing,” “construction,” as well as “energy” and “financial and insurance activities.” These opinions are related to the characteristics of protected areas, where the scale of permits, distance from key markets, and shortcomings in transportation infrastructure practically exclude the profitability of industrial or construction activities. Small local markets also make it difficult to conduct significant business in the areas of energy or financial and insurance services. It should be noted that in Poland and the Czech Republic, there have been isolated voices indicating that even activities in industries directly related to protected areas (tourism and culture, entertainment and recreation) are destined to fail. However, these were isolated voices of bitterness.

At the end of the questionnaire, respondents were also asked to identify the most urgent measures for supporting business development in the Carpathian protected areas. The following were considered the most urgent and crucial for the success of the business support project:

- advertising of these areas,
- cooperation with local government authorities,
- legal support in obtaining environmental permits and decisions,
- financial support for the development of companies (purchase of fixed assets).

Figure 33. Most urgent support factors by country (%)



Source: own elaboration.

The chart presents only the percentages for “definitely the most important, the most urgent” responses. When the “rather important, urgent” category is additionally included, the differences between countries decrease, but the order of priorities does not change.

- introduction of tax reliefs,
- stabilization of the law,
- financial subsidies,
- education and digitization.

The respondents were additionally able to identify what they considered to be the key activities in supporting entrepreneurship in the Carpathian protected areas. These were:

The distribution of responses reveals one of the basic characteristics of the protected areas of the Carpathians. They are still poorly recognized not only in Europe but also in domestic tourism markets. For entrepreneurs from industries directly related to these areas, this means the need not to promote their businesses, but to build awareness among potential customers from the ground up.

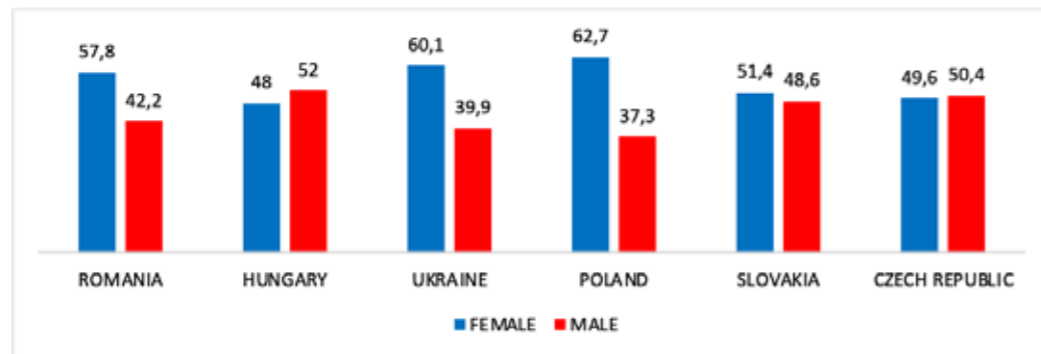
- associating and clustering entrepreneurs,
- development of infrastructure,

## ENTREPRENEURSHIP IN THE PROTECTED AREAS OF THE CARPATHIANS IN THE OPINION OF YOUNG PEOPLE

The survey of youth representatives was carried out by distributing a questionnaire to school and university students located in the Carpathian administrative units of the countries included in the project. Of course, some of the respondents were visitors and had little daily contact with the challenges and problems of local communities living in protected areas. On the other hand, it was impossible to reach those students who left

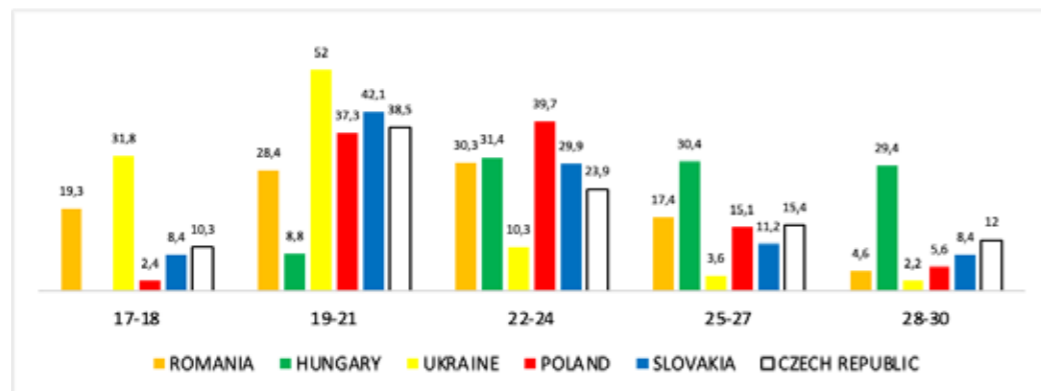
the areas for educational purposes. Thus, this is not a complete picture, but it is the only one possible - especially since it is relatively common for young people from smaller towns to choose to continue their education in institutions located as close as possible (due to the cost of commuting and accommodation). Below there is a brief socio-demographic characterization of the youth survey participants.

Figure 34. Youth representatives by gender in the surveyed countries (%)



Source: own study.

Figure 35. Youth representatives by age in the surveyed countries (%)

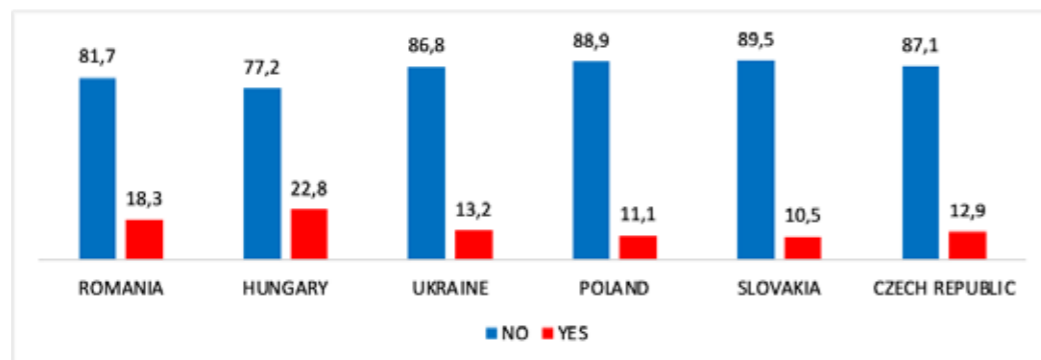


Source: own elaboration.

Thus, measurements were obtained in each of the assumed categories, although it is worth noting that slightly younger respondents were in Romania and Ukraine, while slightly older in Hungary and the Czech Republic.

First, respondents were asked to declare whether they personally knew anyone who was running a business in protected areas in the Carpathians (in their family circle or among friends). The vast majority of respondents had no such acquaintances.

Figure 36. Declarations of knowing someone who had run or is running a business in the Carpathians by country (%)



Source: own elaboration.

However, this variable did not have a statistically significant impact on the formulation of opinions on entrepreneurship in protected areas in the Carpathians. Both respondents in a

very similar way assessed opportunities, chances, and barriers, as well as industries in terms of the likelihood of success or failure.

Verification of possible statistically significant differences in opinions depending on gender, age, having friends running this type of business, and finally linking one's future with the protected areas of the Carpathians or the country did not show that the overall assessment of business opportunities, evaluation of opportunities and barriers, or the success or failure of a particular industry depends on these independent variables in a linear way (i.e., for example, the further west / the older / more often men / the opinions or beliefs are more or less critical). The picture of entrepreneurship in the protected areas of the Carpathian Mountains in the opinion of representatives of youth from these areas, presented in the following section, is relatively statistically consistent internally (even if there are some statistical differences, they are insignificant and result only from the structure of the research sample - they do not depend on independent characteristics). However, there are sometimes differences at the level of a specific country, resulting from

specifics beyond the issue of the survey, which is why the results are still presented by the country covered by the study.

While introducing the participants to the topic of the survey, they were first confronted with an attempt to determine their preferences as to their professional future - "If it were up to you alone, would you want to:?". The frequency table with the obtained result is included in the report's appendix. At this point, it is sufficient to point out that the vast majority (actually 2/3) of the respondents declared that if it were up to them, they would prefer to run their own business in the future. In addition, one of the key questions for the representatives of young people was about the possible linking of professional plans with protected areas in the Carpathians - "Do you associate your professional future (work, career) with work in protected areas in the Carpathians?". The table below proves that there is no statistically significant relationship between the vision of a career and the declared place of its realization.

Table 12. Future carrier plans and association with protected areas in the Carpathians

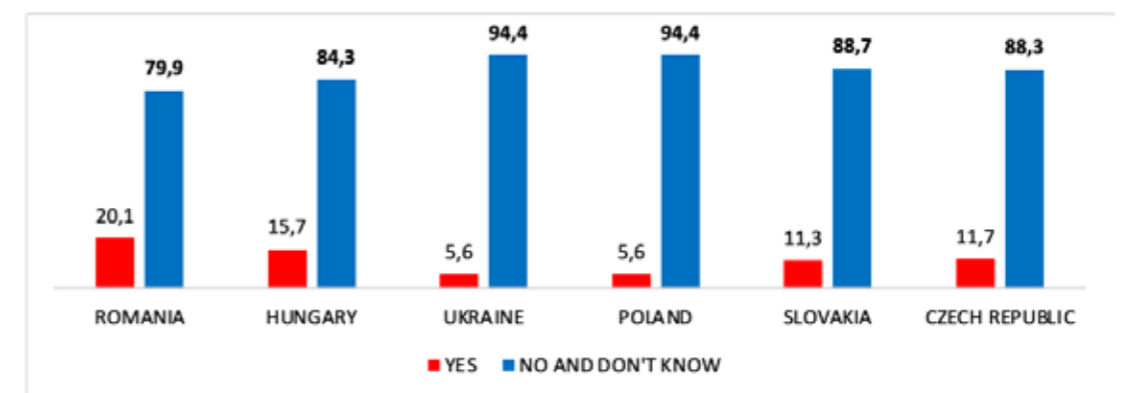
	DO YOU ASSOCIATE YOUR PROFESSIONAL FUTURE (WORK, CAREER) WITH WORK IN PROTECTED AREAS IN THE CARPATHIANS?					TOTAL
	DEFINITELY NOT	RATHER NOT	HARD TO SAY	RATHER YES	DEFINITELY YES	
If it were up to you alone, you would want to:						
run your business	64.1%	63.8%	60.4%	54.4%	72.7%	62.2%
work in a private workplace	18.2%	18.7%	21.4%	27.8%		19.9%
work in a state or local government enterprise	7.1%	12.3%	11.8%	17.7%	18.2%	11.6%
do not work for money at all	10.0%	4.9%	5.3%			5.6%
other	0.6%	0.3%	1.1%		9.1%	0.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: own elaboration.

However, it should be strongly emphasized that among the respondents, few explicitly declared that they associate their

future career with protected areas in the Carpathians.

Figure 37. Association of future career with protected areas in the Carpathians (%)

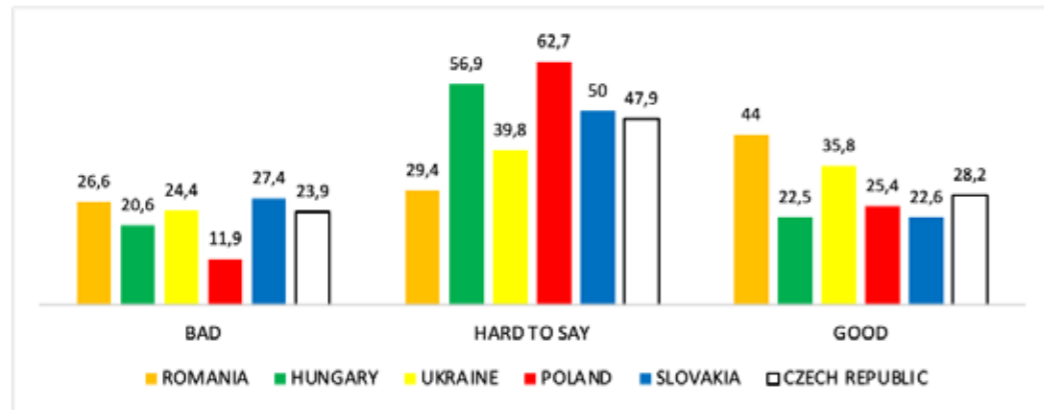


Source: own elaboration.

Of course, these are only declarations, but they illustrate quite well the social phenomena attributed to the protected areas of the Carpathians during the focus group discussions with experts. Especially since the survey was conducted among young learners. Those theoretically better qualified are not interested in working in these areas already at the stage of

obtaining an education, and education seems to be treated as a ticket to better jobs in larger urban centers. The protected areas of the Carpathian Mountains in Poland and Ukraine seem to be in a particularly difficult situation in this regard, with less than 6% of the surveyed youth interested in working in these areas.

Figure 38. Youth's general opinion on possibilities of running a business in the protected areas of the Carpathians by country (%)

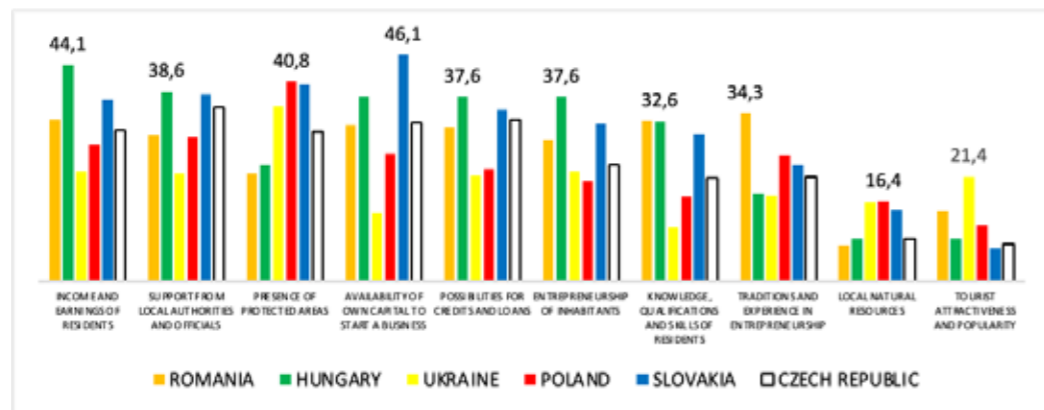


Source: own elaboration.

As for the general assessment of the possibility of running a business in the protected areas of the Carpathians, the surveyed youth did not formulate unequivocally negative opinions.

Aspects related to entrepreneurship in the Carpathian protected areas. As in the case of the survey among entrepreneurs, here the factors were formulated in a neutral way as well, so they could be interpreted individually, positively, or negatively by each respondent. For example, the income of the local population could have been assessed as low and as such treated as a potential plus - i.e. lower labor costs, or as a minus - the outflow of skilled labor.

Figure 39. Youth's assessment of barriers by country (%)



Source: own elaboration.

According to respondents, the key barriers (on average, the most frequently indicated) include "income and earnings of residents," "support from local authorities and officials," "the presence of protected areas," and "availability of own capital to start a business." These are definitely characteristics of peripheral

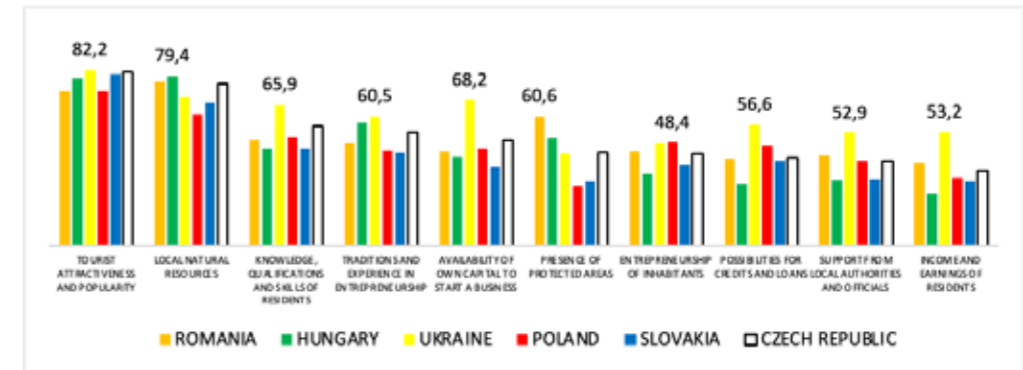
protected areas mentioned by experts during the focus group discussions. Differences between countries are revealed - in the case of Slovakia, young people point mainly to the problem of the availability of internal capital to start a business, while in Poland it is the presence of protected areas that is most important.

Barriers spontaneously mentioned by respondents also included:

- fear of destroying nature,
- lack of relevant development plans for these areas,

- the need to obtain necessary permits,
- corruption and unequal competition,
- lack of will on the part of residents,
- civilization backwardness,
- bureaucracy.

Figure 40. Youth's assessment of chances by country (%)



Source: own study.

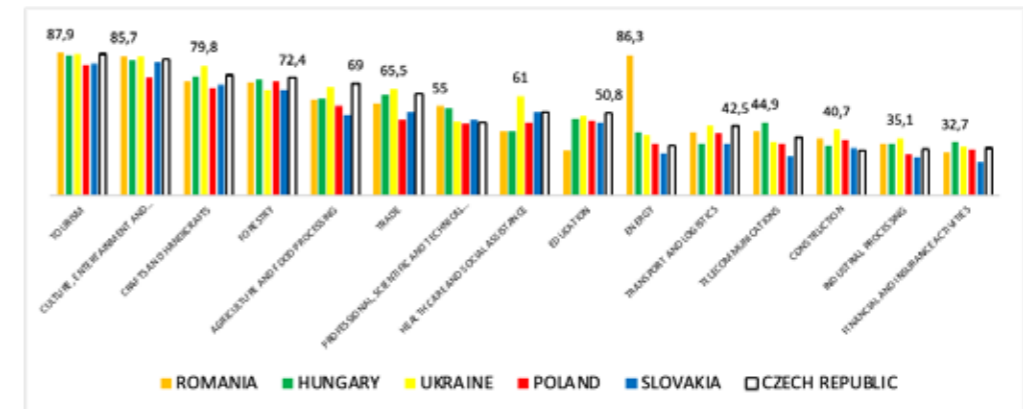
Among the opportunities for the development of entrepreneurship in the protected areas of the Carpathians perceived by the surveyed representatives of young people, the most frequently indicated were "tourist attractiveness and popularity of these areas," "local natural resources," "knowledge, qualifications and skills of residents," and "traditions and experience in running a business." Respondents from Ukraine were generally more optimistic in their assessments.

They spontaneously also pointed to:

- ecotourism,
- ecological education,
- international promotion,
- the growing popularity of the Carpathian Mountains,
- bringing the local population together,
- improvement of infrastructure,
- European Union grants.

Finally, respondents in the youth category were asked to assess the industries in terms of whether launching a business in their opinion could mean success or failure, given that this type of business will be carried out in the protected areas of the Carpathians.

Figure 41. Industries rated by youth as potentially successful by country (%)



Source: own elaboration.

The noticeable peak of indications among young people from Romania, for “energy,” is most likely related to the fact that the participants of the survey were students of courses of study related to this area. This is why the graphs are presented in the order of “averages” to avoid potential overinterpretation due to data curvature associated with the sample selection used. Spontaneously reported areas of activity also included:

- agritourism,
- organic farming,
- entertainment, sports, and guiding (including museums),
- gastronomy,
- renewable energy (Romania mentioned),
- the film industry, but also

- IT and innovation industries.

The following sectors were most often indicated as being exceptionally uncorrelated with the nature of protected areas, thus increasing the probability of failure of activities launched there (answers “will definitely fail”): “financial and insurance activities”, “industrial processing”, “construction” and - apart from Romania - “energy”. For details, see the frequency tables in the appendix. At this point, it remains only to conclude that for the young people surveyed, the nature of protected areas clearly defines the industries for successful entrepreneurship. Besides, quite clearly the issue of the “presence of protected areas” was indicated as a potential barrier, while at the same time “natural resources” as a potential opportunity for entrepreneurship.

## ENTREPRENEURS VS. YOUTH - DIFFERENCES IN ASSESSMENTS OF ENTREPRENEURSHIP IN THE PROTECTED AREAS OF THE CARPATHIANS

To statistically verify whether significant differences between the surveyed entrepreneurs and young people can be identified in the opinions formulated in the responses, the mean scores for the indices mentioned in the methodology were compared in the course of the analysis of variance: “Index of barriers and opportunities” and “Index of failure and success,” as well as the overall assessment of opportunities for entrepreneurship in the question: “How do you assess the possibilities of running

a business in the protected areas of the Carpathians?”. This verification did not reveal statistically significant differences between the two categories of respondents at the level of the overall survey sample. Yes, there are differences depending on the country in which the survey was conducted, but the size of the national samples (as well as the lack of measurement among Ukrainian entrepreneurs) makes it impossible to formulate meaningful conclusions at a lower level.

Table 13. **The possibilities of running a business in the protected areas of the Carpathians \* type of respondents crosstabulation**

	TYPE OF RESPONDENTS		TOTAL
	YOUTH	ENTREPRENEURS	
<b>definitely bad</b>	7.6%	2.9%	6.6%
<b>rather bad</b>	15.0%	24.9%	17.1%
<b>hard to say</b>	46.9%	36.8%	44.7%
<b>rather good</b>	26.8%	29.2%	27.3%
<b>definitely good</b>	3.8%	6.2%	4.3%
<b>TOTAL</b>	100.0%	100.0%	100.0%

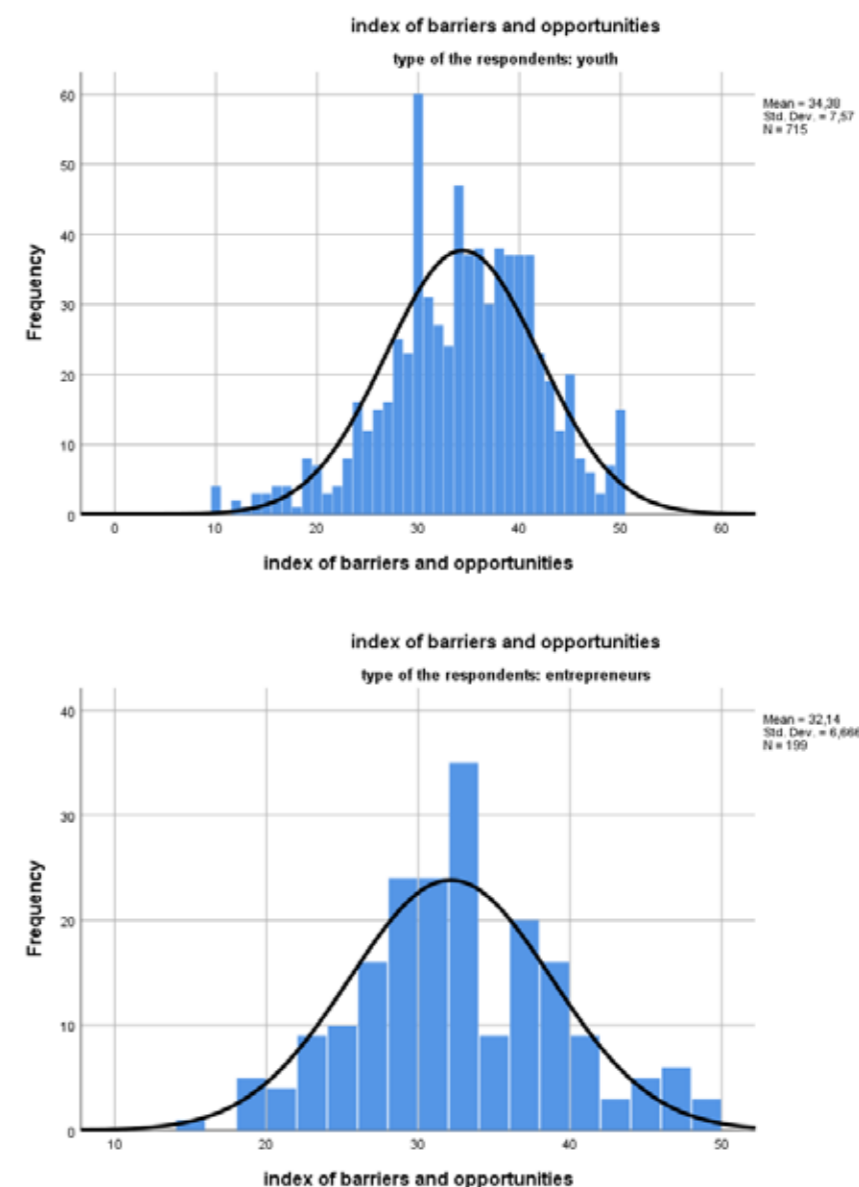
Source: own elaboration.

The small percentage differences between the two categories of respondents noticeable in the table are within the measurement error margin and are not statistically significant (in other words, they result from the structure of samples as such, rather than independent and objective differences between the categories).

The issue of potential differences in the assessment of barriers and opportunities and industries in terms of the

likelihood of opportunity or failure is very similar. The barriers and opportunities index was built on the assessment of 10 variables (on a scale of 1 to 5), which means that the results obtained range from 10 pts. (10 variables \* value of 1 on the scale) to 50 pts. (10 variables \* value of 5 on the scale). The theoretical midpoint of such a distribution is 30 pts. (which follows from the formula  $(10 + 50) / 2 = 30$ ). The histograms below show the actual distributions obtained in both research categories.

Figure 42. **Index of barriers and opportunities by the category of respondents**

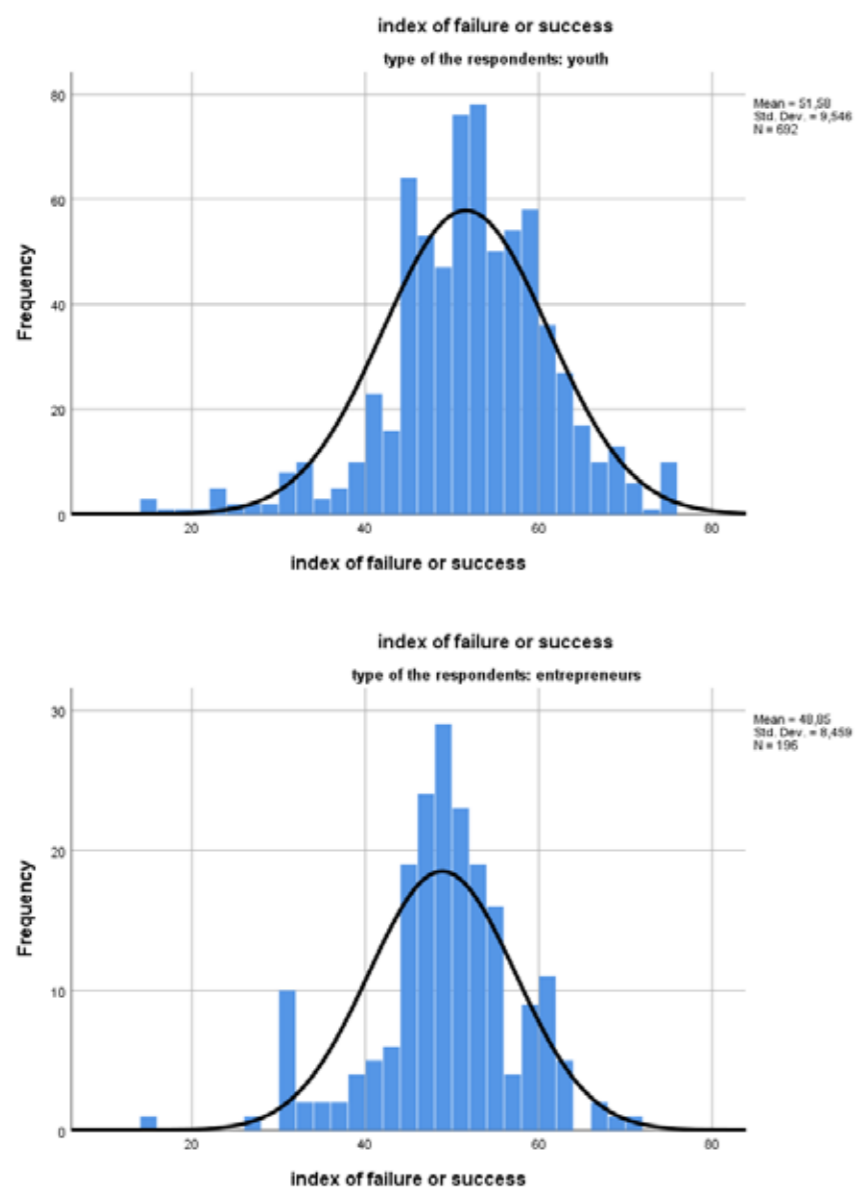


Source: own elaboration.

Both indices score slightly above the theoretical mean, with a very similar standard deviation. This means that both categories of respondents are minimally more optimistic about the opportunities and possibilities for entrepreneurship development in the protected areas of the Carpathians than the theoretical distribution would indicate.

The second index was obtained in a similar manner - this time for 15 industries, but also on a scale of 1 to 5, meaning that the index takes values ranging from 15 points. (15 industries \* value 1 on the scale) to 75 pts. (15 industries \* value of 5 on the scale). This time, the theoretical center of this distribution is the value of 45 (which follows from the formula  $(15 + 75) / 2 = 45$ ). The real values for both categories are shown in the charts below.

Figure 43. Index of failure and success by the category of respondents



Source: own elaboration.

Again, both indices score slightly above the theoretical mean (with very similar standard deviations) - 51.6 for youth and 48.9 for entrepreneurs. And this time it should be taken as a slightly higher

optimism than that implied by the theoretical distribution. But the difference relative to the theoretical mean and between both actual results is again within the margin of statistical error.

## ANALYSIS OF PROMOTIONAL ACTIVITIES

Five to seven active entrepreneurs in each country were selected to analyze marketing campaigns undertaken in protected areas in the Carpathians. The surveyed entrepreneurs may have been based outside the protected areas in the Carpathians, but their key activities had to be carried out in the area.

The key for the research team was the identification of those companies that actively present themselves as businesses related to protected areas in the Carpathians (e.g., tour operators, accommodation owners, artisans, craftsmen, and food producers).

The purpose of the analysis was to capture communication solutions and references to protected areas in the Carpathian Mountains as an asset highlighted in messages constructed for potential customers. B. Iwankiewicz-Rak defines the concept of an image campaign as “a company’s action-oriented activities combining promotion and public relations, focused on creating a positive image of the company, its product or brand. They serve to achieve the company’s image goals (i.e.: creating and

strengthening the brand image, increasing the indicators of spontaneous and assisted brand awareness recalling the brand and its values), as well as sales goals (persuading customers to use the company’s offer, increasing the rate of customer loyalty to the brand, the company). Their preparation and effective execution requires specialized knowledge and is therefore outsourced to public relations agencies (Olędzki, Tworzydło, 2009).

In this study, the very term “promotional campaign” is, of course, a far-reaching simplification, because in many cases it is difficult to talk about a well-thought-out communication strategy, with adequate financial resources and monitoring of effects. Nevertheless, under this term, all communication activities that are acutely undertaken by entities operating in protected areas in the Carpathians can be included. It is noticeable that they vary considerably, resulting not only from the activity in a specific industry, its scope (i.e. local, regional activities), but also financial capabilities, legal and cultural differences related to the fact that entities operating in six different countries were analyzed.

Table 14. Entrepreneurs selected for analysis of communication activities

COUNTRY	ENTERPRISE/BUSINESS	THE INDUSTRY OR INDUSTRIES IN WHICH THE BUSINESS IS RUN	AWARDS, CERTIFICATES
Czech Republic	Ecological Village Veronica in Hoštětín	Services: i.e., eco-friendly lodging, seminars, and education for those interested in rural lifestyles, festivals, or weddings	Traditions of the White Carpathians (Tradice Bílých Karpat)
	Moštárna Hostětín s.r.o.	food industry: apple cider production	Czech organic food Regional food of the Zlín region
	Ovocnak company Ovocňák	Food industry: juices, teas, jam, sweets, dried fruit	Regionální potravina (regional food) HACCP CERTIFICATION Mother's Choice 2022 Award for safe food packaging (250ml fruit jar) Zlín Pearl Award BIO quality certificate
	Včelí produkty	honey production	Certificates of the Research Institute of Beekeeping in Dolu
	Květomluva	cosmetics and food industry: herbal teas and cosmetics	Certified BIO quality
	Farma Rudimov s.r.o.	food industry	Traditions of the White Carpathians (Tradice Bílých Karpat) Regionální potravina (regional food) Czech organic food

<b>Hungary</b>	Avena 2000 Bt.	Tourism (accommodation and tourist services), animal husbandry: grazing, grassland management (mowing)	
	Erdei Kemping és Faházak Répáshuta	tourism (accommodation and tourist services), textile: lavender cultivation and lavender products	
	Turistapark Szentlélek	tourism (accommodation and travel services)	Trademark of the product of accommodation in the National Park.
	Királyi Csemegék	food industry (forest mushroom products, jams), tourist services (port tours)	National Park product trademark
	Fruktárium	food industry (brandies, jams) tourist services (accommodation)	National Park product trademark
	Györgytea Kft.	agriculture, education, tourism	Prestigious award for the Visa Boltok Boltja store Hungarian design award Special Award of the National Intellectual Property Office
<b>Poland</b>	Ökopark Szarvaskő	tourism (accommodation and tourist services) trade: selling products of local producers	
	ZPC Skórka Spółka Jawna Zajazd Pod Caryńska	tourism and gastronomy	GoToCarpathia Podkarpackie Flavors Culinary Trail Certificate of Integrity A family-friendly place with children Certificate of good practice
	En Hotel	hospitality	
	POLISH ASSOCIATION OF RAFTERS ON THE DUNAIEC RIVER IN SROMOWCE NIŻNE	tourist (rafting)	
	Piotr Kohut - shepherd, farmer, gazda High-mountain sheep grazing on the Barania Góra and Magurka mountain pastures Regional Product Center Shepherd's Center in Koniakow - a family farm that includes: Shepherd's Hut, Highland Store, and Educational Homestead	agriculture and agri-food processing	List of Traditional Products Protected Designation of Origin Now Poland
	Sopki Stopki - Natural Farming	agritourism	Certificate for the production of oscypek and redykołek
<b>Romania</b>	Tara Hategului Destination	ecotourism	Certified by the Ministry of Tourism
	WeWilder Green Economy Entrepreneurial Network	ecotourism, green agriculture	
	Made in Rosia Montana	clothing, traditional crafts	
	Doda Natural	cosmetics	
	Țara Colibelor - Valea Sadului Country of Huts	ecotourism	

<b>Slovakia</b>	SAVENCIA FROMAGE & DAIRY SK, A.S.	Dairy, producing mainly cheese and bryndza	
	GAS Familia s.r.o. (producer of Double Cross Vodka in Slovakia)	production of alcoholic beverages	Double Cross Vodka (DCV) Awards: Double Cross Vodka and "Gold - Outstanding" Medal at the 2021 International Wine & Spirit Competition Gold medal for taste and a gold medal for package design at the San Francisco World Spirits Competition (2008)
	AGROKARPATY, s.r.o. Plavnica	cultivation of medicinal plants, pharmaceuticals, medicine	Innovative product Petr Slavomir Kompiš Award Award for the most beautiful homestead Minister's award for best field production Certified organic production and labeling of organic products - BIO certification SK GOLD quality mark
	Kofola a. s.	Rajec spring mineral water, baby water, soft drinks, flavored drinks	Certifikát BIO lokalita Rajecká dolina
	Včelárka.sk	beekeeping	Honey quality certificate for Iveta Bašistova. Slovak honey label and trademark use
<b>Ukraine</b>	СІЛЬСЬКОГОСПОДАРСЬКИЙ ОБСЛУГОВУЮЧИЙ КООПЕРАТИВ ЧИСТА ФЛОРА	cultivation of berries, nuts, other fruit trees and shrubs, cultivation of spices, aromatic and medicinal plants, other kinds of processing and preservation of fruits and vegetables	Organic products of the Ukrainian Carpathians
	ТОВАРИСТВО З ОБМЕЖЕНОЮ ВІДПОВІДАЛЬНІСТЮ БАЗА ВІДПОЧИНКУ ЕДЕЛЬВЕЙС	accommodation, catering services	
	Музей архітектури і побуту "Старе село"	cultural, tourist activities	
	Гірськолижний курорт "Красія"	freshwater fish farming (aquaculture)	
	Гуцульська сироварня - ЕКО ферма	milk processing, butter, and cheese production	

Source: own compilation based on collected data.

Recognition and relevance were key criteria in the selection of entrepreneurs. The surveyed entities included smaller businesses, family businesses, but also medium-sized companies. Most of them present various awards and certificates on their

websites, confirming, on the one hand, the role of these entities in local and regional communities and the quality of the services and products they offer.

Figure 44. List of awards and recognitions from one of the food producers operating in protected areas in the Carpathian Mountains



Source: <https://www.ovocnak.cz/oceneni/>.

Also important for the formulated conclusions was the fact that there were companies from various industries, including cosmetics, catering, food, crafts, and tourism. This provides a

broader view of activities in protected areas in the Carpathians. The largest number of analyzed entities operating in the food and tourism industry.

Table 15. Areas of activity of the surveyed entities

INDUSTRIES BY COUNTRY	Czech Republic	Hungary	Poland	Romania	Slovakia	Ukraine	TOTAL
hospitality	1		2			2	5
cosmetics	1			1			2
food industry	4	2	1		4	2	13
pharmaceutics					1		1
gastronomy			1				1
tourism		4	1	3			8
museum						1	1
agriculture		1				1	2
craft				1			1
<b>TOTAL</b>	<b>6</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>34</b>

Source: own compilation based on collected data.

The analysis was conducted from the perspective of the average consumer, i.e. no attempt was made to directly contact representatives of the surveyed entities. The experts on the research team were only familiarized with that information which is publicly available. This is a key assumption, as the perspective adopted made it possible not to study the intentions and conscious goals of the selected entrepreneurs in their communication with customers, but to capture what ultimately

reaches the potential customer. It is worth remembering that the results presented are not a description of reality per se, but precisely the perspective in which entrepreneurs are perceived by potential customers. Thus, within the framework of the proposed approach, but also for convenience in conducting the analysis and better interpretation of the conclusions, these entities should be referred to as “leaders” (in protected areas in the Carpathians).

## CHARACTERISTICS OF PROMOTION CHANNELS

Among the surveyed entities, almost all companies have actively participated in various events such as fairs, open days, etc. Some even join in other actions, e.g. “Take it to You” garbage collection on the occasion of Earth Day, collecting signatures for a protest petition (related to environmental protection), various services and programs in protected areas, e.g. organizing tours, study visits (Avena 2000 Bt., Hungary),

etc., lavender collection actions (Erdei Kemping és Faházak Répáshuta, Hungary), participation in the International Fair of Agrotourism and Rural Tourism in Kielce (ZPC Skórka Spółka Jawna, Poland). Entrepreneurs from the Czech Republic, Hungary, and Romania are the most active in this regard, while those from Slovakia, Poland, and Ukraine are the least active.

Figure 45. Participation in trade fairs as one of the forms of promotion of a company from protected areas in the Carpathians



Source: [https://www.facebook.com/photo?fbid=619881201500610&set=pcb.619881921500538&locale=ms\\_MY](https://www.facebook.com/photo?fbid=619881201500610&set=pcb.619881921500538&locale=ms_MY)

Slightly fewer activities (in terms of traditional forms of conducting promotion) are undertaken through television advertising, outdoor advertising, i.e. (billboards, banners, posters, signs, etc.), newspaper advertising, or flyers.

Entrepreneurs also present what has been written about them on their websites, e.g. Ovocnak company Ovocník from the Czech Republic has a “They wrote about us” tab and points to Magzym Reporter, Hospodářské Noviny, Forbes Magazine, among others.

Figure 46. Press advertising in Forbes as one of the forms of promotion of a company from protected areas in the Carpathians



Source: <https://forbes.cz/presnidavky-a-mlekomaty-rodinna-firma-z-luhacovic-u-zlina-podporuje-mistni-farmare/>

The Polish Association of Pieniny Rafters on the Dunajec River in Sromowce Niżne also has a tab “News in the press about rafters”. In addition, an interesting form of communication is

the openness to other information - *You have an article about the rafters, let us know.*

Figure 47. **Press information provided on the website by a company operating in protected areas in the Carpathians**



Source: <https://flisacy.pl/menu/flisacy-w-prasie>

The least promotional activity, on the other hand, is in radio advertising. This is particularly noticeable among entrepreneurs

from Hungary, Poland, and Slovakia.

Table 16. **Types of promotion - channels of communication with the customer among the surveyed entities**

TRADITIONAL	ONLINE
<ul style="list-style-type: none"> <li>events (fairs, open days, etc.) - 26</li> <li>advertisements on the TV - 21</li> <li>outdoor (billboards, banners, posters, signs, etc.) - 18</li> <li>advertisements in the press - 18</li> <li>leaflets - 12</li> <li>advertisements on radio stations - 8</li> </ul>	<ul style="list-style-type: none"> <li>web page - 30</li> <li>social media - 30</li> <li>advertisements in social media (e.g. Facebook advertising, Instagram advertising, Google business card) - 29</li> <li>advertisements on web pages - 20</li> </ul>

Source: own compilation based on collected data.

Analyzing the presence of enterprises on the Internet, it should be noted that these entities use modern tools and follow trends in communication. All entities maintain their website, which,

in a way, was the basis for the analysis of promotional activities. It is even the preferred form of carrying out promotional activities (websites and own social media channels).

Table 17. **Division of promotion channels into traditional and online**

COUNTRY	TRADITIONAL	ONLINE
<b>Czech Republic</b>	<ul style="list-style-type: none"> <li>6 - events</li> <li>4 - advertisements on the TV</li> <li>3 - outdoor</li> <li>3 - advertisements in the press</li> <li>2 - leaflets</li> <li>0 - advertisements on radio stations</li> </ul>	<ul style="list-style-type: none"> <li>6 - own web page</li> <li>6 - own social media</li> <li>5 - advertisements on social media</li> <li>0 - advertisements on web pages</li> </ul>
<b>Hungary</b>	<ul style="list-style-type: none"> <li>5 - events</li> <li>3 - advertisements on the TV</li> <li>2 - outdoor</li> <li>2 - advertisements in the press</li> <li>2 - advertisements on radio stations</li> <li>0 - leaflets</li> </ul>	<ul style="list-style-type: none"> <li>7 - own web page</li> <li>6 - own social media</li> <li>6 - advertisements on web pages</li> <li>4 - advertisements on social media</li> </ul>
<b>Poland</b>	<ul style="list-style-type: none"> <li>5 - advertisements in the press</li> <li>4 - leaflets</li> <li>4 - outdoor</li> <li>4 - advertisements on the TV</li> <li>4 - events</li> <li>2 - advertisements on radio stations</li> </ul>	<ul style="list-style-type: none"> <li>5 - advertisements on web pages</li> <li>5 - advertisements on social media</li> <li>5 - own web page</li> <li>5 - own social media</li> </ul>
<b>Romania</b>	<ul style="list-style-type: none"> <li>5 - events</li> <li>3 - leaflets</li> <li>0 - Outdoor</li> <li>0 - advertisements on the TV</li> <li>0 - events</li> <li>0 - advertisements on radio stations</li> </ul>	<ul style="list-style-type: none"> <li>5 - advertisements on social media</li> <li>5 - own web page</li> <li>5 - own social media</li> <li>1 - advertisements on web pages</li> </ul>
<b>Slovakia</b>	<ul style="list-style-type: none"> <li>4 - outdoor</li> <li>4 - advertisements on the TV</li> <li>3 - advertisements in the press</li> <li>3 - events</li> <li>1 - leaflets</li> <li>1 - advertisements on radio stations</li> </ul>	<ul style="list-style-type: none"> <li>5 - own web page</li> <li>5 - own social media</li> <li>4 - advertisements on social media</li> <li>3 - advertisements on web pages</li> </ul>
<b>Ukraine</b>	<ul style="list-style-type: none"> <li>6 - advertisements on the TV</li> <li>5 - outdoor</li> <li>5 - advertisements in the press</li> <li>3 - advertisements on radio stations</li> <li>3 - events</li> <li>2 - leaflets</li> </ul>	<ul style="list-style-type: none"> <li>6 - advertisements on social media</li> <li>5 - advertisements on web pages</li> <li>3 - own social media</li> <li>2 - own web page</li> </ul>

Source: own compilation based on collected data.

Compared with traditional media, the Internet is, therefore, an attractive channel for reaching customers, much cheaper, and offering modern forms of communication. It also allows for being present in the virtual world and reaching audiences from different parts of the country and abroad. Among

traditional forms, on the other hand, events dominate, i.e. fairs, open days, and other events, slightly fewer entrepreneurs chose to advertise on television, outdoor advertising i.e. billboards, banners, posters, signs, etc., advertising in press or flyers.

Figure 48. Participation in trade fairs as one of the forms of promotion of a company from protected areas in the Carpathians



Source: <https://www.facebook.com/photo.php?fbid=558566989400905&set=pb.100057428260431.-2207520000.&type=3>

Today, on the other hand, the vast majority of entrepreneurs are choosing to be online. Some websites are run in accordance with current trends, while others were prepared several years ago and are no longer attractive in terms of image.

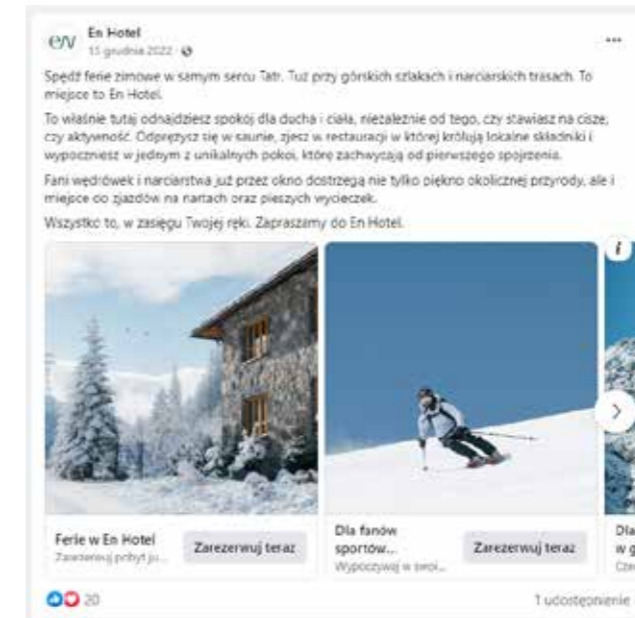
Signboards, billboards, i.e. outdoor campaigns are no longer so significant, although they are still in the top three. It is worth noting that advertising on Google is becoming more important, e.g. the company's business card on Google and Google Maps, which allows the customer to go directly to the place (provided, of course, that it is well marked on Google map), allows for determining the time of travel.

The surveyed entrepreneurs are almost equally likely to promote themselves on the websites of supporting institutions,

e.g. local websites, local government websites, websites of cooperating entities, or those certifying products or services. In the case of ZPC Skórka Spółka Jawna, which runs Zajazd Pod Caryńską (an inn) in Ustrzyki Górne, it is worth noting that the company appears on many websites, for example, as a member of the Carpathian Tourism Cluster <http://www.karpaty.turystyka.pl/index.php/pl/joomla-pages-iii/categories-list/62-karpacki-klaster-turystyczny>, or as a local entrepreneur on the Lutowiska Municipality website <https://www.lutowiska.pl/gdzie-zjesc-w-bieszczadach>.

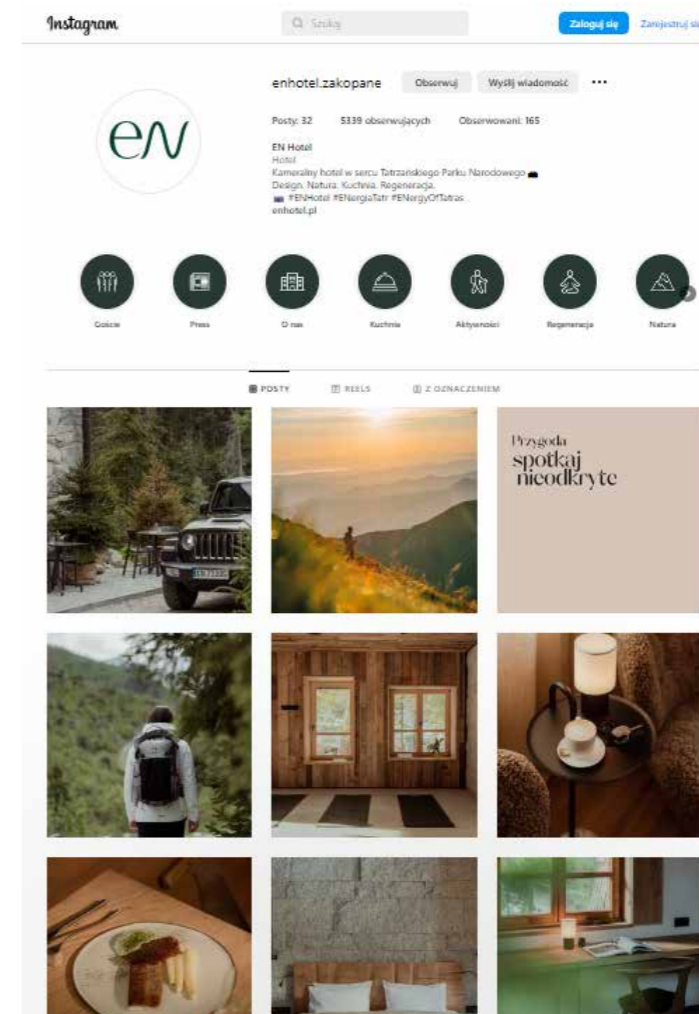
Almost all entrepreneurs choose to buy ads on general social media channels (including Facebook, Instagram, and Google). It is worth noting that the vast majority have profiles on Facebook, YouTube, and less frequently on Instagram.

Figure 49. The company's Facebook profile as an example of social media activities



Source: <https://www.facebook.com/EnHotel.Zakopane>

Figure 50. The company's profile on Instagram, as an example of social media activities



Source: <https://www.instagram.com/enhotel.zakopane/>

Slightly fewer surveyed entrepreneurs chose to purchase paid advertising on online portals. Although in some industries this seems to be necessary. A good example is the aforementioned ZPC Skórka Spółka Jawna (tourism, catering industry), which strengthens its Internet presence through paid Internet portals,

e.g. Bieszczadzki Serwis internetowy <https://www.bieszczady.net.pl/bieszczady-noclegi/>, e-turysta. pl <https://e-turysta.pl/zajazd-pod-carynska-ustrzyki-gorne-112204.html?kl=1>, Booking.com <https://www.booking.com/hotel/pl/zajazd-pod-carynska.pl.html>, etc.).

Figure 51. Promotional banner in a web portal, as an example of paid activities



Source: <https://www.bieszczady.net.pl/bieszczady-noclegi/>

Of course, these results are completely unrepresentative, if only considering the fact that only 5 to 7 leaders from each country were selected. Rather, this description is intended to demonstrate that the selected entities are indeed above average in promoting their business activities in protected areas in the Carpathians. In other words - it can be assumed that the way they describe their activities (company offerings) is the best in

comparison with smaller, less active entrepreneurs in protected areas. In a way, too, the results depict that well-conducted information and promotional activities make it possible to successfully conduct business in all circumstances of nature and difficulties of the terrain. It may also represent a form of opening up for other enterprising individuals or residents to run their dream business, right in the Carpathians.

## QUANTITATIVE DESCRIPTION OF THE CONTENT OF MESSAGES ABOUT ENTREPRENEURSHIP IN PROTECTED AREAS IN THE CARPATHIANS

Considering the focus of the activities carried out - the study of entrepreneurship in protected areas in the Carpathian countries and the analysis of the promotional activities carried out by business entities - two main features were included in the quantitative analysis: The Carpathians and protected areas. The “Carpathians” area included “localization in the Carpathians” (i.e., referring to the location of the enterprise in the Carpathians), “recalling the history of the Carpathians” (recalling the history of the entrepreneurship, services, and offerings available in the Carpathian area), “recalling traditions and customs of the Carpathian” (recalling traditions and customs of the Carpathians). Of course, in addition, a category of “other potential content threads that focus on the Carpathians” is provided, i.e. referring to threads, content that focus on the Carpathians, which would be different from those listed above.

The second key category, or “protected areas,” included “clean environment” (if an entrepreneur emphasizes a clean environment in its communication), followed by “unique landscape” (i.e., a reference to a unique landscape), “sustainable

business operating” (an invocation of running a sustainable business) and “ecology” (i.e., a reference to ecology in terms of its products, services, business operations). As in the case of “the Carpathians,” provision was made for the possibility that elements of a particular aspect not covered by the tool might appear. Accordingly, a category of “other potential content threads that focus on the protected areas (and are presented in promotional materials available online)” was prepared.

This division is purely analytical. The key thing in the survey was to verify what entrepreneurs operating in protected areas emphasize in communication with their audiences, that is, if and possibly which of the main characteristics related to the scope of the survey conducted is articulated most strongly. Once again, it is worth recalling that the survey is not representative, and the presented results refer only to the surveyed companies from protected areas in the Carpathians. Nevertheless, they are leaders (as shown earlier) among entrepreneurs from the protection areas, showing particular activity in the area of their activities, appreciation in the form of awards and prizes, and promotion of their products and services and enterprise.

Table 18. References to “the Carpathians” and “protected areas” appearing in the messages of the surveyed entrepreneurs

COUNTRY	TRADITIONAL	ONLINE
Czech Republic	<ul style="list-style-type: none"> <li>6 - localization in the Carpathians</li> <li>4 - recalling traditions and customs of the Carpathians</li> <li>0 - recalling the history of the Carpathians</li> <li>0 - other</li> </ul>	<ul style="list-style-type: none"> <li>4 - ecology</li> <li>3 - unique landscape</li> <li>2 - sustainable business operating</li> <li>2 - clean environment</li> <li>0 - other</li> </ul>
Hungary	<ul style="list-style-type: none"> <li>7 - localization in the Carpathians</li> <li>4 - recalling traditions and customs of the Carpathians</li> <li>2 - recalling the history of the Carpathians</li> <li>0 - other</li> </ul>	<ul style="list-style-type: none"> <li>5 - unique landscape</li> <li>7 - sustainable business operating</li> <li>4 - other</li> <li>3 - clean environment</li> <li>2 - ecology</li> </ul>
Poland	<ul style="list-style-type: none"> <li>5 - localization in the Carpathians</li> <li>5 - recalling the history of the Carpathians</li> <li>5 - recalling traditions and customs of the Carpathians</li> <li>2 - other</li> </ul>	<ul style="list-style-type: none"> <li>5 - unique landscape</li> <li>4 - clean environment</li> <li>4 - sustainable business operating</li> <li>4 - ecology</li> <li>2 - other</li> </ul>
Romania	<ul style="list-style-type: none"> <li>5 - localization in the Carpathians</li> <li>0 - recalling the history of the Carpathians</li> <li>0 - recalling traditions and customs of the Carpathians</li> <li>0 - other</li> </ul>	<ul style="list-style-type: none"> <li>1 - ecology</li> <li>0 - unique landscape</li> <li>0 - sustainable business operating</li> <li>0 - clean environment</li> <li>0 - other</li> </ul>
Slovakia	<ul style="list-style-type: none"> <li>5 - localization in the Carpathians</li> <li>2 - recalling traditions and customs of the Carpathians</li> <li>1 - recalling the history of the Carpathians</li> <li>0 - other</li> </ul>	<ul style="list-style-type: none"> <li>5 - clean environment</li> <li>4 - unique landscape</li> <li>4 - sustainable business operating</li> <li>4 - ecology</li> <li>3 - other</li> </ul>
Ukraine	<ul style="list-style-type: none"> <li>6 - localization in the Carpathians</li> <li>6 - recalling traditions and customs of the Carpathians</li> <li>5 - other</li> <li>3 - recalling the history of the Carpathians</li> </ul>	<ul style="list-style-type: none"> <li>4 - clean environment</li> <li>4 - unique landscape</li> <li>4 - other</li> <li>3 - sustainable business operating</li> <li>3 - ecology</li> </ul>

Source: own compilation based on collected data.

It can be seen from the above summary that actually both aspects of “the Carpathians” and “protected areas” are used to a great extent by the more than 30 entities surveyed from protected areas in the Carpathians. There is definitely more emphasis on “protected areas” in the ongoing communication of companies from the six countries surveyed, and less emphasis on “the Carpathians.”

The surveyed entrepreneurs from almost all countries reached for themes related to the Carpathians and Carpathianism in the broadest sense. Moreover, most companies reached for the traditions and customs of the Carpathians as exemplified by companies from the Czech Republic, Hungary, Slovakia, and Ukraine, while entrepreneurs from Romania and Poland were more likely to expose the history of the Carpathians. Statistical differences are impossible to determine due to the qualitative nature of the data collected.

If a ranking of the popularity of the various threads was to be elaborated according to how many times the surveyed entrepreneurs refer to them, it would look as follows:

- “localization in the Carpathians” (the Carpathians: 34 out of 34),
- “recalling traditions and customs of the Carpathians” (the Carpathians: 21 out of 34),
- “unique landscape” (protected areas: 21 out of 34),
- “sustainable business operating” (protected areas: 20 out of 34),
- “clean environment” and “ecology” (protected areas: 18 out of 34),

- “recalling the history of the Carpathians” (the Carpathians: 11 out of 34).

Thus, threads related to clean environment, and ecology were identified less frequently. The history of the Carpathians was the least frequently exposed. However, considering the analysis as a whole, reference to protected areas was much more prominent than to the Carpathians (including Carpathianism). Emphasis on both the traditions and customs of the Carpathians, the unique landscape or sustainable activities could be observed in almost equal proportion. Each of the surveyed entrepreneurs tried to find their way of telling the story of their enterprise, and the products and services they offer (their business) while using strong elements related to running a business in the Carpathian protected areas. Each of the entrepreneurs achieved undoubted commercial success, confirmed by

numerous awards and recognition, which, moreover, translated into qualification by experts for this study.

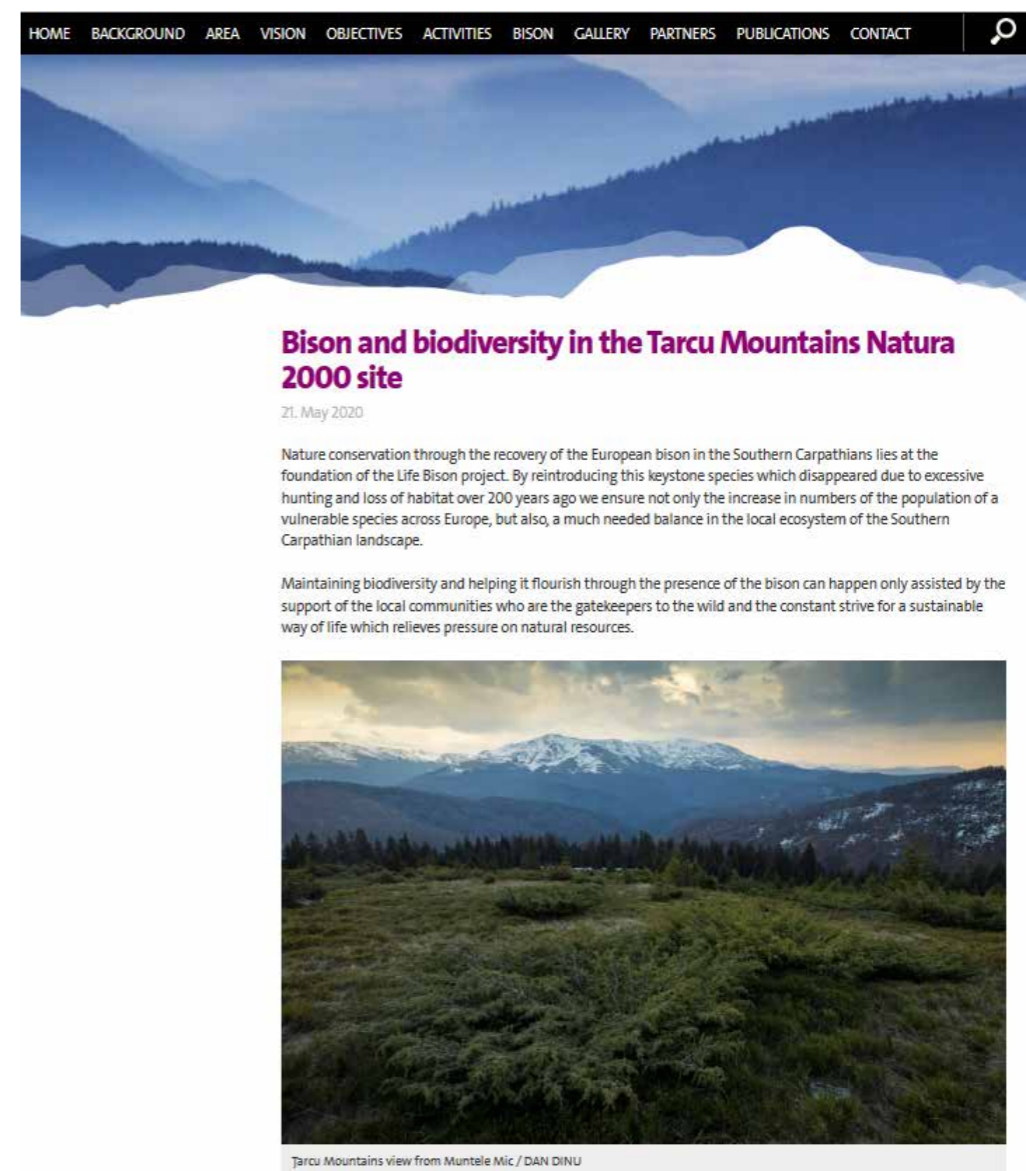
It should be noted that the category “other potential content threads that focus on the protected areas” and “other potential content threads that focus on the Carpathians” also had a lot of indications (the Carpathians: 7 out of 34; protected areas: 13 out of 34). Within these categories, the researchers highlighted, among others, the following descriptions: *in the heart of the Bieszczady National Park; The upper room is dominated by a large stove, and the walls are decorated with drawings made by artists who wonderfully reproduced the decorative art of the period when the Boykin people lived here.* Information on the rules for collecting undergrowth and information on the prohibitions in force in protected areas are also posted on websites and social media. Attention-grabbing photos of nature are also posted on Facebook.

## QUALITATIVE ANALYSIS OF MESSAGE CONTENT

To begin with, it should be noted that most of the quotes cited were found on the websites of the entrepreneurs selected for the study. Largely, these descriptions are found on the front (homepage) or under the “About Us” tab. Information for qualitative analysis was also taken from the entrepreneurs’ social media profiles. Sometimes, in the case of websites, these descriptions are more expanded, including dynamic elements or several sub-tabs, sometimes simply a story about the company posted on several pages. Attractive graphics and photographs also attract attention. Unfortunately, sometimes outdated content and photos and outdated solutions were also available on the websites.

Analyzing the content of the communication, in one case, there was a reference to both the Carpathian Mountains and protected areas, creating a coherent story about the company, the services, and the products offered. An interesting example is the website of one entity, which shows a combination of two categories: “the Carpathians” and “protected areas” as part of an ongoing project. “The Carpathians” is shown as *Nature conservation through the recovery of the European bison in the Southern Carpathians lies at the foundation of the Life Bison project. By reintroducing this keystone species which disappeared due to excessive hunting and loss of habitat over 200 years ago we ensure not only the increase in numbers of the population of a vulnerable species across Europe but also, a much-needed balance in the local ecosystem of the Southern Carpathian landscape<sup>1</sup>. The same was true for “Bison and biodiversity in the Tarcu Mountains Natura 2000 site”<sup>2</sup>.*

Figure 52. Example of combining the content of “the Carpathians” and “protected areas” on a website



Source: <https://life-bison.com/uncategorized/bison-and-biodiversity-in-the-tarcu-mountains-natura-2000-site/>, 1.06.2023.

The order of references presented below is based on the ranking developed earlier (see QUANTITATIVE DESCRIPTION OF COMMUNICATION ABOUT ENTERPRISE IN CHRISTIAN AREAS IN THE CARPATHIAN MOUNTAINS).

### References to locations in the Carpathians

The numerical comparison shows that the surveyed entrepreneurs were most likely to refer to locations in the Carpathian Mountains. However, these references are extremely vague:

*“The Hostétin cider house was opened in 2000 by the White Carpathian Tradition Civic Association to help restore traditional fruit growing and create jobs in the border region. It is located in the White Carpathian Mountains Protected Landscape Area”<sup>3</sup>.*

This description also refers to supporting the development of the local economy and entrepreneurship, similarly to that one: *“You will help the landscape and people in the White Carpathians”<sup>4</sup> or “You are buying a product whose origin you know. You are contributing to the preservation of the character of the landscape, the revival of traditions, and the development of the local economy.”<sup>5</sup>.*

1 Conservarea naturii prin resălbăticirea zimbrului în Carpații Meridionali stă la baza proiectului Life Bison. Prin reintroducerea acestei specii cheie care a dispărut din cauza vânătorii excesive și a pierderii habitatului în urmă cu 200 de ani, asigurăm nu numai creșterea numărului populației unei specii vulnerabile din Europa, ci și un echilibru necesar în ecosistemele peisajului carpatin. Source: <https://life-bison.com/uncategorized/bison-and-biodiversity-in-the-tarcu-mountains-natura-2000-site/>, 1.06.2023.

2 Zimbrii și biodiversitatea sitului Natura 2000 Munții Țarcu. Source: <https://life-bison.com/uncategorized/bison-and-biodiversity-in-the-tarcu-mountains-natura-2000-site/>, 1.06.2023.

3 Moštárnu v Hostétině uvedlo v roce 2000 do provozu občanské sdružení Tradice Bílých Karpat, aby přispělo k obnově tradičního ovocnářství i vytváření pracovních míst v příhraničním regionu. Nachází se v chráněné krajinné oblasti Bílé Karpaty. Source: <https://mostarna.bio/o-nas>, 1.06.2023.

4 Pomůžete krajíně a lidem v Bílých Karpatách. Source: <https://mostarna.bio/>, 1.06.2023.

5 Nakupujete výrobek, jehož původ znáte. Přispíváte k udržení rázu krajiny, k oživení tradic a k rozvoji místní ekonomiky. Source: <https://mostarna.bio/>, 1.06.2023.

An interesting example is the reference to the location of UNESCO-listed sites: the Retezat Tourist Association, founded in 2007, is a management entity whose main objective is to develop and promote the ecotourism center Țara Hațegului - Retezat. It is the only ecotourism center that has within its territory of operation two sites of international importance that are part of

the UNESCO world heritage: the Retezat Biosphere Reserve, part of the Retezat National Park, and the Tara Hațegului Dinosaur Geopark<sup>6</sup>. Undoubtedly, UNESCO and the national park also become a “magnet”. Moreover, the place has earned the Țara Hațegului-Retezat distinction and since 2016 has been an ecotourism resort certified by the Ministry of Tourism<sup>7</sup>.

Figure 53.

Reference to a location in the Carpathian Mountains on one of the entrepreneur’s website

Moštárnu v Hostětíně uvedlo v roce 2000 do provozu občanské sdružení Tradice Bílých Karpat, aby přispělo k obnově tradičního ovocnářství i vytváření pracovních míst v příhraničním regionu. Nachází se v chráněné krajinné oblasti Bílé Karpaty.



Source <https://mostarna.bio/o-nas>

Another entrepreneur describes its Carpathian business, describing it as “the flavors of the Carpathian region.” *Our cuisine-combining the flavors of the Carpathian region and traditional food-was created to feast after mountain struggles*<sup>8</sup>.

In turn, a Ukrainian businessman, one of the surveyed entities, reports on his website: *Every year the Carpathian Mountains attract tourists who want to take a break from the frenetic pace of city life and simply change their surroundings, leaving all their problems at home*<sup>9</sup>. Such a sentence is a kind of encouragement to come to the Carpathians.

Some of the content refers to mountain ranges such as the Tatra Mountains or the Tatra National Park (Carpathian Mountains), i.e. *In the middle of the Tatra National Park, we have created a refuge for you. We have put all our mountain hearts into providing you with a space where you can simply be, draw energy from the mountains and fully recover*<sup>10</sup>. Another company invites visitors with these words on its Facebook profile: *Feel the energy of the Tatras at EN Hotel*<sup>11</sup>.

6 Asociația de Turism Retezat, înființată în anul 2007, este unitatea de management ce are drept scop principal dezvoltarea și promovarea destinației ecoturistice Țara Hațegului – Retezat. Aceasta este singura destinație ecoturistică ce are pe teritoriul său două situri de importanță internațională, parte a patrimoniului mondial UNESCO: Rezervația Biosferei Retezat, parte a Parcului Național Retezat, și Geoparcul Dinozaurilor Țara Hațegului. Source: <https://turismretezat.ro/asociatia-de-turism-retezat/>, 1.06.2023.

7 Țara Hațegului- Retezat este o destinație ecoturistică certificată de către Ministerul Turismului din anul 2016. Source: <https://turismretezat.ro/asociatia-de-turism-retezat/>, 1.06.2023.

8 Kuchnia nasza łącząca smaki regionu karpackiego i tradycyjnego jadła - stworzona została by sycić po górskich zmaganiach. Source: [https://www.facebook.com/zajazdpodcarynska/?locale=pl\\_PL](https://www.facebook.com/zajazdpodcarynska/?locale=pl_PL), 1.06.2023.

9 Карпати щороку приваблюють туристів, які бажають відпочити від шаленого темпу міського життя і просто змінити обстановку, залишивши всі свої проблеми вдома. Source: <https://karpatu.com/>, 1.06.2023.

10 W środku Tatrzańskiego Parku Narodowego stworzyliśmy dla Ciebie schronienie. Włożyliśmy całe nasze górskie serca w to, by zapewnić Ci przestrzeń, w której możesz po prostu być, czerpać energię z gór i w pełni się zregenerować... Source: <https://enhotel.pl/>, 1.06.2023.

11 Poczuj energię Tatr w EN Hotel. Source: <https://www.facebook.com/EnHotel.Zakopane/>, 1.06.2023.

Figure 54.

Photographs posted on an entrepreneur’s website highlighting the location of the business in the Carpathian Mountains



Source: <https://enhotel.pl/galeria/>,

It must be admitted that often these are well-thought-out content, slogans, and well-chosen graphics (mountainous terrain, people, seasons, life) that encourage recipients to use services, buy products or simply come to the Carpathians. It also helps to “identify” the type of business that is run in the Carpathians.

References to traditions and customs of the Carpathians

Next, the surveyed entrepreneurs pointed to the traditions and customs of the Carpathian Mountains. Most frequently, companies from the Czech Republic, Hungary, Slovakia, and Ukraine. Entrepreneurs from Romania and Poland were more likely to highlight the history of the Carpathians. As Piotr Kohut, a

shepherd, representative of the family farm Shepherd’s Center in Koniaków, points out: *Grazing on the Baranya Hall has a symbolic meaning for us - it is a testimony to the highlanders’ freedom and will to renew their covenant with nature*<sup>12</sup>.

The surveyed entrepreneurs also emphasize the use of traditional production methods, e.g. butter, creams, dried fruits, and herbal massage oils. “St. František’s more than 100-year-old Wallachian fruit and herb drying facility, the White Carpathian meadows, and our lean, stony herb fields scattered on the high hill of our herb farm. The new, modern Wallachian plant and the ever-present intoxicating herbal aroma. This is our beloved piece of “Wallachian” land, where everything is created - our herbs, our products, but also in Fryzelkovs from Květomluv”<sup>13</sup>.

12 Wypas na Hali Baraniej ma dla nas symboliczne znaczenie – jest świadectwem góralskiej swobody i woli na odnowienie przymierza z przyrodą. Source: <http://seroscypek.pl/atrakcje/hala-barania-gora-i-magurka>, 1.06.2023.

13 Pries 100 let stará valašská sušina na ovoce a byliny sv. Františka, bělokarpatské louky a naše chudé, kamenité, na vysokém kopci rozeseť políčka bylin naši bylenné farmy. Nová,

Figure 55.

**Photographs from the website of a family business referring to the traditions and customs of the Carpathians**



Source: <https://www.kvetomluva.cz/clanky/onas/>, 1.06.2023.

There was also authentication (photos on the website) in the form of a family, an old cottage, and perennial trees growing on the business premises. One company from Hungary emphasizes in its communication channels that the animal species raised are from traditional Hungarian and Carpathian areas (e.g., the Hutsul horse), and the operations are based on traditional agriculture.

In turn, another company refers in its Christmas offer to the traditions and customs of the Boykos: *Traditional Christmas Eve menu arranged regionally with elements of the Boykos (outside package cost 100 PLN/adult, 70 PLN/child under 10 years old)*<sup>14</sup>. Another example confirming respect for

tradition can be noticed in these words: *We treat our guests as our ancestors treated theirs years ago - with care and respect*<sup>15</sup>. Tradition is also associated with materials (wool, linen): *“The care for the smallest details resulted in natural textiles which are present in the interior - linen curtains, linen pillows, and woolen plaids - to make you feel like home”*<sup>16</sup>. The Polish Association of Pieniny Rafters on the Dunajec River, on the other hand, emphasizes the customs and traditions associated with the business in the Carpathian Mountains: *“For nearly 200 years, rafting down the Dunajec River Gorge has been the biggest attraction of the Pieniny*<sup>17</sup>. *In the background, there are the same mountains as today. Podskalnica Góra and Nowa Góra*<sup>18</sup>.

Figure 56.

**A photograph depicting a rafting trip in 1949 - as an example of a reference to the traditions and customs of entrepreneurship in the Carpathians**



Source: <https://www.facebook.com/photo/?fbid=218742447340213&set=a.163586539522471>

Finally, it is worth returning to the basics of tradition, sheep grazing in the Carpathians: *“High-mountain sheep grazing on the Barania Góra (about 1,050 meters above sea level) and Magurka mountain pasture has been revived thanks to shepherd Piotr Kohut in 2008 after several decades of absence of sheep on this pasture - it was periodically still grazed after World War II until the early 1980s.”*<sup>19</sup>. It is the base of Carpathian stories, demonstrating the power of Carpathian traditions and customs, as well as providing balance, affecting a unique landscape and sustainable business. *A new shepherd's hut erected in 2009 to serve shepherds in the summer now stands on the site of a koliba (seasonal shelter for shepherds) that burned down decades ago. After several years of hard work clearing and cleaning up the area - Hala Barania - one of the oldest in the Silesian Beskid, associated with Wallachian settlement and culture - has been restored to sheep and people*<sup>20</sup>.

### References to the unique landscape

The following were included in the category “protected areas”: ecology (which was mentioned in the Czech Republic

and Romania), clean environment (which was mentioned in Ukraine and Slovakia), and a unique landscape (which was mentioned in Poland and Hungary). The latter appeared in either the first indication or the second in all countries. For example, companies were eager to use descriptions related to the unique or unrepeatable landscape (of the Carpathian Mountains). One such example is the description from the website: *Our family business is located in the picturesque village of Nedašov, in the protected landscape area of the White Carpathians. It is an area known for its unspoiled nature and lack of industry*<sup>21</sup>.

The owners of the facilities encourage guests: *Almost every room has a balcony overlooking the wilderness of the Bieszczady Mountains and the picturesque surroundings*<sup>22</sup>, then: *We are waiting with warm soup and mulled wine for all couples and groups of friends admiring the beauty of Podhale together*<sup>23</sup>, or more advertently: *Are you looking for comfortable conditions, beautiful views and a healing mountain climate at an affordable price*<sup>24</sup>. Another family business surveyed highlights, among other things, the beauty of the winter Bieszczady Mountains

moderní valašská provozovna a všude přítomná omamná bylinná vůně. To je ten náš milovaný kousek „vlachovské“ krajiny, kde vše vzniká – naše bylinky, naše výrobky, ale i my Fryzolkovi z Květomluvy. Source: <https://www.kvetomluva.cz/clanky/onas/>, 1.06.2023.

14 Tradycyjne wigilijne menu ułożone regionalnie z elementami bojkowszczyzny (poza pakietem koszt 100 zł/osoba dorosła, 70 zł/dziecko do lat 10). Source: <https://www.facebook.com/zajazdpodcarynska/photos/a.642638865767372/5989047874459751/>, 1.06.2023.

15 Traktujemy naszych gości tak, jak nasi przodkowie traktowali swoich lata temu – z troską i szacunkiem. Source: <https://enhotel.pl/o-nas/>, 1.06.2023.

16 Troska o najmniejsze detale we wnętrzu sprawiła, że w pokojach zagościły również naturalne tekstylia – lniane zasłony, lniane poduszki i wełniane pledy, dzięki którym można poczuć się tak miło jak u siebie. Source: <https://label-magazine.com/wnetrza/artykuly/hotel-w-tatrach-inny-niz-wszystkie>, 1.06.2023.

17 <https://www.facebook.com/SplywDunajcemFlisacy>, 1.06.2023.

18 <https://www.facebook.com/photo/?fbid=218742447340213&set=a.163586539522471>, 1.06.2023.

19 Wysokogórski wypas owiec na Hali Barania Góra (ok. 1050 m n.p.m.) i Hali Magurka został wznowiony przez bacę Piotra Kohut w 2008 r. po kilkudziesięciu latach nieobecności owiec na tej hali – okresowo była ona jeszcze wypasana po II wojnie światowej do początku lat 80-tych XX w. Source: <http://seroscypek.pl/atrakcje/hala-barania-gora-i-magurka>, 1.06.2023.

20 Na miejscu spalonej kilkadziesiąt lat temu koliby stoi dziś nowa bawółka postawiona w 2009 r. służąca pasterzom latem. Po kilku ciężkich latach pracy przy wykrzaczaniu i porządkowaniu terenu – Hala Barania – jedna z najstarszych na terenie Beskidu Śląskiego, związana z osadnictwem i kulturą wołoską – została przywrócona owcom i ludziom. Source: <http://seroscypek.pl/atrakcje/hala-barania-gora-i-magurka>, 1.06.2023.

21 Náš rodinný provoz se nachází v malebné obci Nedašov, v chráněné krajinné oblasti Bílé Karpaty. Jedná se o oblast, která je známá svou panensky čistou přírodou a absencí jakéhokoliv průmyslu. Source: <https://www.vceli-produkty.cz/bile-karpaty/>, 1.06.2023.

22 Niemalże każdy pokój posiada balkon z widokiem na dzikie tereny Bieszczad i malowniczą okolicę. Source: <https://carynska.pl/pokoje/rozklad-pokoi/>, 1.06.2023.

23 Czekamy z ciepłą zupą i grzanym winem na wszystkie pary i grupy przyjaciół wspólnie podziwiającej piękno Podhala. Source: <https://enhotel.pl/o-nas/>, 1.06.2023.

24 Шукаете комфортні умови, гарні краєвиди та цілючий гірський клімат за доступною ціною? Source: <https://karpatu.com/>, 1.06.2023.

and the facility's location in a charming spot in the heart of the Bieszczady Mountains: *What distinguishes our offer are: regional cuisine, experience, qualified team with a sense of humor, equipment, surroundings and beauty of the winter Bieszczady Mountains, facility run by a family business in a charming place in the heart of the Bieszczady Mountains*<sup>25</sup>. The entities also report peace and quiet combined with a picturesque landscape: *"The Krasiya ski resort is located in a quiet, picturesque gorge, in the village of Vyška, in the Vylkoberevo district, in Zakarpattia"*<sup>26</sup>

Often the unique landscape also appears in the communication in connection with mountains, rivers, and water, e.g. *"Eco-Forel is located near the source of a mountain river in the picturesque area of the Carpathian Mountains"*<sup>27</sup>.

Sopki Stopki - Natural farm encourages: *"See a flock of sheep. Rays of sunshine. The beauty of the Beskids."*<sup>28</sup>. They also emphasize that they are actively co-creating the landscape: *"We actively create the landscape around us, running a natural farm and also building an old highland settlement"*<sup>29</sup>.

Figure 57.

### Photographs from one of the entrepreneur's website, a reference to a unique landscape



Source: <https://enhotel.pl/galeria/>, 1.06.2023.

Obviously, this category represents the most extensive scope of communication, as it allows entrepreneurs to post different photos, from different seasons, and frames, that is, the

landscape in different views. People nowadays love photos, they love to see them, and social media are full of them. This communication form possesses thus the biggest potential.

## References to running a sustainable business

References to running sustainable businesses appear on some of the surveyed entrepreneurs' websites mainly under the "About Us" tab: *"The White Carpathians are a model example of harmonious coexistence between man and nature. The international quality of the area was also recognized by UNESCO, which in 1996 included it in the list of biosphere reserves"*<sup>30</sup>. Another example: *"The mission of the Veronica Hostětín Center is to demonstrate through practical examples, implemented model projects and the results of their monitoring that a relationship with nature, local resources, and traditions together with prudent management can protect the environment and the global climate, economically stabilize villages and solve the problem of unemployment even in relatively remote areas."*<sup>31</sup>.

Another surveyed entrepreneur also reports: *"Sensitivity and listening to nature, honesty and top quality, 100% small handmade production, traditions and new ideas, responsibility towards people and nature, and enjoyment of our products. This is important to us, and this is what we strive for at Květomluva. That's why, whenever possible, we grow everything by hand or harvest it ourselves in nature. Not only are the herbs of certified BIO quality, but they are mostly ours, from the south of Wallachia, from the northernmost part of the White Carpathian Protected Landscape Area"*<sup>32</sup>.

Another example: *"However, we don't always manage to meet the ever-increasing demand, so we also cooperate with other growers and farmers. Our business partners and subcontractors have been verified for a long time, including with BIO certification. We focus exclusively on breeds of animals from the higher areas of the White Carpathians and Beskydy Mountains and choose extensive meat breeds (primarily Aberdeen Angus, Galloway, and Highland), as well as Angus and Masný Simmental hybrids. We all share a common breeding philosophy, in which animals grow in their natural and healthy environment, without unnecessary*

*stress and feeding with non-native, modified feeds."*<sup>33</sup>.

Some of the surveyed entrepreneurs even make an elevated reference to "sustainable business operating" in their messages: *"As our guest, you become part of the mountain ecosystem"*<sup>34</sup>, and *"We love the Tatra Mountains, we want our place to be an integral part of it. We live and work in harmony with nature"*<sup>35</sup>.

This information is posted once, in one place on the website or social media. They do not appear in other information and promotional materials.

## References to clean environment and ecology

In a video promoting the company AGROKARPATY, s.r.o. Plavnica, it was emphasized that the crops including medicinal plants and the products created there are grown in a clean and ecological environment: *"Cultivation of special and medicinal medicinal plants in an ecologically unencumbered environment under the High Tatras. From the field straight to the table. Greetings from Pieniny and Zamaguria"*<sup>36</sup>. Another example from Poland encourages to visit with its clean air: *"Zajazd Pod Caryńską is a great place for guests to relax from their daily chores, gain strength and breathe fresh air"*<sup>37</sup>.

One of the Romanian entities that was surveyed has written standards that are posted on its website. "Standards" define the ways of working, and the principles underlying the ecotourism activities coordinated by the social enterprise WeWilder, in and around the municipality of Armeniș. The company emphasizes the role of ecology and certification in its operations: *"In the various facilities that are part of WeWilder's ecotourism infrastructure, any consumables, such as paper or detergents, are predominantly recycled and ecologically certified."*<sup>38</sup>.

A dairy producer from Slovakia, on the other hand, stresses the cleanliness of the land: *"The pastures where our sheep and cows*

30 Bilé Karpaty jsou příkladnou ukázkou harmonického soužití člověka s přírodou. Mezinárodní kvality tohoto území ocenilo také UNESCO, které je v roce 1996 zařadilo na seznam biosférických rezervací. Source: <https://www.vceli-produkty.cz/bile-karpaty/>, 1.06.2023.

31 Posláním Centra Veronica Hostětín je ukazovat na praktických příkladech, realizovaných modelových projektech a výsledcích jejich monitorování, že vztah k přírodě, místním zdrojům a tradicím spolu s ohleduplným hospodařením může chránit životní prostředí a globální klima, ekonomicky stabilizovat venkov a řešit nezaměstnanost i v poměrně odlehklých oblastech. Source: <https://hostetin.veronica.cz/o-nas/>, 1.06.2023.

32 Citlivost a naslouchání přírodě, poctivost a maximální kvalita, 100% malá ruční výroba, tradice i nové nápady, odpovědnost vůči lidem i přírodě a radost v našich výrobcích. To je to, co je pro nás důležité a o co se v Květomluvě snažíme. Proto, pokud je to jen trochu možné, vše ručně pěstujeme, nebo sbíráme v přírodě sami. Bylinky jsou nejen v certifikované BIO kvalitě, ale jsou především hlavně naše, z jihu Valašska z nejsevernější části CHKO Bílé Karpaty. Source: <https://www.kvetomluva.cz/clanky/onasi/>, 1.06.2023.

33 Ne vždy se nám ale podaří vykryt stále rostoucí poptávku a proto spolupracujeme i s jinými chovateli a farmáři. Naši obchodní partneři a subdodavatelé jsou dlouhodobě prověřeni, také s certifikací BIO. Zaměřujeme se výhradně na chovy z výše položených oblastí Bílých Karpat a Beskyd, preferujeme extenzivní hovězí plemena (především Aberdeen Angus, Galloway, Highland), dále pak křížence plemene Angus a Masný Simmental. My všichni máme společnou filozofii hospodaření, kdy zvířata rostou ve svém přirozeném a zdravém prostředí, bez zbytečného stresu a dokrmování nepůvodními, modifikovanými krmivy. Source: <https://www.masozluky.cz/>, 1.06.2023.

34 Jako nášz gošč, stajesz się częścią górskiego ekosystemu. Source: <https://enhotel.pl/o-nasi/>, 1.06.2023.

35 Kochamy Tatry, chcemy, aby nasze miejsce gošcinne było ich integralną częścią. Żyjemy i pracujemy w harmonii z naturą. Source: <https://enhotel.pl/o-nasi/>, 1.06.2023.

36 Pestovanie špeciálnych a koreninových liečivých rastlín v ekologicky nezaťaženom prosredí pod Vysokými tatrami. Z poľa priamo na stól. Zdravie from Pieniny a Zamaguria. Source: [https://www.youtube.com/watch?v=1X15JVKn9gg&ab\\_channel=R%C3%ADmskokato%C3%ADckaCirkev%2Cfarnos%C5%A5Vesel%C3%A9](https://www.youtube.com/watch?v=1X15JVKn9gg&ab_channel=R%C3%ADmskokato%C3%ADckaCirkev%2Cfarnos%C5%A5Vesel%C3%A9), 1.06.2023.

37 Zajazd Pod Caryńską jest dla Gošci wspaniałym miejscem aby odpocząć od codziennych obowiązków, nabrać sił i poddychać świeżym powietrzem. Source: <https://carynska.pl/atrakcje-lub-okolica-3/>, 1.06.2023.

<https://www.wewilder.com/standards>, 1.06.2023.

38 <https://www.wewilder.com/standards>, 1.06.2023.

25 Co wyróżnia naszą ofertę: kuchnia regionalna, doświadczenie, wykwalifikowany zespół z humorem, sprzęt, okolica i piękno zimowych Bieszczadów, obiekt prowadzony przez rodzinną firmę w urokliwym miejscu w sercu Bieszczadów. Source: <https://carynska.pl/pakiety-pobytowe/>, 1.06.2023.

26 Гірськолижний курорт Красія розташований в тихій мальовничій ущелині, в селі Вишка Великоберезнянського району на Закарпатті. Source: <https://krasiya.info/ua/>, 1.06.2023.

27 Еко-Форель розміщується біля витоків гірської річки у мальовничій карпатській місцевості. Source: <https://backpackers.top/verhovyna>, 1.06.2023.

28 Zobacz stado owiec. Promienie słońca. Piękno Beskidów. Source: <https://sopkistopki.pl/>, 1.06.2023.

29 Aktywnie tworzymy krajobraz wokół nas, prowadząc gospodarstwo naturalne a także budując dawną góralską osadę. Source: <https://sopkistopki.pl/o-nas/#about-text>, 1.06.2023.

graze freely are not treated or fertilized with any chemical sprays and fertilizers<sup>39</sup>.

One of the Czech entrepreneurs that was interviewed, emphasizes the role of place - the village: (...) operates in the unique environment of the village of Hostětín. The village is known for its environmental projects, which have been implemented thanks to the municipality's cooperation with the Veronica Center and

the Association of White Carpathian Traditions<sup>40</sup>.

A Czech apple cider company, on the other hand, reports on its website that: "More than ¾ of the production is certified BIO - a product of organic farming. The BIO brand guarantees the consumer both compliance with a verified production procedure and the quality of apples supplied for the cider by organic farmers, preferably from the White Carpathians<sup>41</sup>.

Figure 58.

#### Example of a video promoting the company and crops in an ecologically unencumbered environment



Source: [https://www.youtube.com/watch?v=1X15JVKn9gg&ab\\_channel=R%C3%ADmskokatol%C3%ADckaCirkev%2Cfarnos%C5%A5Vesel%C3%A9,1.06.2023](https://www.youtube.com/watch?v=1X15JVKn9gg&ab_channel=R%C3%ADmskokatol%C3%ADckaCirkev%2Cfarnos%C5%A5Vesel%C3%A9,1.06.2023).

To sum up, the terms: ecology, BIO, and clean environment are very broadly understood by the senders of the message, i.e. the surveyed entrepreneurs. They are described in general terms. In fact, one gets the impression that they apply to all operating business.

### References to the history of the Carpathians

Most of the surveyed subjects refer to the traditions and customs of the Carpathians. There are the fewest references to the history of the Carpathians. Hence there will be a few examples: "Our Inn is a unique place, combining tradition and stylish design with an exceptional atmosphere referring to the culture of the Boykos who lived here years ago. Above all, it is a charming

place, located in the Bieszczady Mountains, in the picturesque village of Ustrzyki Górne."<sup>42</sup>.

Another example: "Tom comes from one of the oldest highland families, and he sucked hospitality from his mother's milk, descended from the Krzeptowski-Biały family. This is the same family from which Sabala Krzeptowski - Zakopane's most celebrated storyteller - hails. Tomek's dad often laughs that his wife has blue blood in her veins; he himself comes from the Karpiel family - also an extremely respected family in Podhale. Tomek feels immense pride in his ancestry and thus has imposed on himself a mission to spread the love for the Tatra Mountains and restore the region's splendor."<sup>43</sup>.

Similarly: "This way of organizing grazing has always functioned in the Carpathians - and it is the same today - shepherds

collect sheep from a hill farmer every year, and during the summer grazing they take care not only of obtaining milk for cheeses but also play a huge role in preserving the cultural heritage of local communities by cultivating traditions and shepherding customs."<sup>44</sup>.

The most interesting story is presented by one of the Romanian entrepreneurs that was interviewed: "Almost 100,000 Romanians boast the name Gugulani. They are united by a history built around Gugu Peak, customs unchanged for centuries, and the fame of producing the best apples. And pride"<sup>45</sup>.

A similar story was also used by one of the Ukrainian entrepreneurs interviewed: "That's why in the 11th century King Danylo Halytsky built the 'Polonynsky Monastery' here. The monastery was famous for the fact that the monks knew the secrets of the local elixir and cured the people from the surrounding villages and towns. The traditions were passed on to future generations."<sup>46</sup>.

One also may get the impression that the descriptions are intertwined with tradition, a story about the company, or an attempt to uncover the secret of a particular enterprise. At the same time, this criterion indicates the difficulty of finding a clear message of reference to history in the materials.

### References

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- Olędzki J., Tworzydło D. (red.) (2009). Leksykon Public Relations. Rzeszów: Wydawnictwo Newsline i Bonus Liber, s. 78-79.

39 Pastviny, na ktorých sa naše ovečky a kravy voľne pasú, nie sú ošetrované ani hnojené žiadnymi chemickými postrekmi a hnojivami. Source: <https://www.nasliptov.sk/ako-sa-robi-syr/>, 1.06.2023.

40 (...) působí v unikátním prostředí obce Hostětín. Obec je známá svými ekologickými projekty, které byly realizovány díky spolupráci obce s Centrem Veronica a spolkem Tradice Bílých Karpat. Source: <https://hostetin.veronica.cz/o-nas>, 1.06.2023.

41 Více než ¾ produkce nesou osvědčení BIO - produkt ekologického zemědělství. Značka BIO garantuje spotřebiteli jak dodržení ověřeného výrobního postupu, tak kvalitu jablek, které do mostárny dodávají ekologičtí zemědělci přednostně z Bílých Karpat. Source: <https://mostarna.bio/o-nas>, 1.06.2023.

42 Nasz Zjazd to wyjątkowe miejsce, łączące w sobie tradycję i stylowe wzornictwo z klimatyczną atmosferą nawiązującą do kultury mieszkających tu przed laty Boyków. Jest to przede wszystkim urokliwe miejsce, położone w Bieszczadach, w malowniczej miejscowości Ustrzyki Górne. Source: <https://carynska.pl/o-nas-2/>, 1.06.2023.

43 Tomek pochodzi z jednego z najstarszych górskich rodów, a gościnność wyssał z mlekiem matki, wywodzącej się z rodziny Krzeptowskich-Białych. To ten sam ród, z którego pochodzi Sabala Krzeptowski - najznamienitszy zakopiański gawędziarz. Tata Tomka śmieje się często, że jego żona ma w żyłach błękitną krew, sam pochodzi z rodziny Karpieli - również niezwykle poważanej na Podhalu. Tomek czuje ogromną dumę ze swojego pochodzenia i przez to narzucił sobie misję rozprzestrzeniania miłości do Tatr i przywracania świetności regionu. Source: <https://enhotel.pl/o-nas/>, 1.06.2023.

44 Taki sposób organizacji wypasu funkcjonował w Karpatach zawsze - i tak też jest dzisiaj - bacywie co roku zbierają owoce od gazdów, a w czasie letniego wypasu dbają nie tylko o to by pozyskać mleko na sery, ale odgrywają również ogromną rolę w zachowaniu dziedzictwa kulturowego lokalnych społeczności poprzez pielęgnowanie tradycji oraz zwyczajów pasterskich. Source: <http://serocypek.pl/aktualnosci/tradycyjny-kulturowy-wypas-owiec>, 1.06.2023.

45 <https://www.hotnews.ro/stiri-arhiva-1219946-gugulania-tara-zeului-zamolxe.html>, 1.06.2023.

46 Саме тому, в XI столітті тут був збудований королем Данилом Галицьким "Полонинський монастир". Монастир славився тим, що монахи знали секрети тутешнього зілля, лікували людей з навколишніх сіл та міст. Традиції передавалися для майбутніх поколінь. Source: <https://tuca.com.ua/virobniky/ivano-frankivska-oblast/chysta-flora/>, 1.06.2023.

## SUMMARY AND RECOMMENDATIONS

First of all, it should be emphasized that there are many different forms of nature protection in the Carpathian region. Already in 2001, the area of national and landscape parks was estimated at more than 19 thousand km<sup>2</sup>. To this should be added, among others, several thousand nature reserves, which, although they generally cover a small area, are extremely valuable. In general, in 2001 it was estimated that about 16% of the Carpathian area was covered by various forms of protection (Kucharzyk, 2009; Webster et al., 2001). Currently, this percentage is even higher, and the forms of nature protection sometimes differ in individual countries. Today, this percentage is even higher, and the forms of nature protection sometimes vary from country to country. As of 2023, there were 42 national parks in the Carpathians. Most were established in Romania (12) and Ukraine (12) and Slovakia (9), slightly fewer in Poland (6) and Hungary (3), and in the Czech part of the Carpathians they do not occur at all.

The Carpathian Mountains have a population of about 14 million people, including about 7 million living in Romania. However, it is estimated that depopulation processes will be clearly visible in the Carpathian regions in the coming years. Labor productivity in the Carpathian regions is significantly lower than in Western Europe. The GDP per capita expressed in purchasing power standards in the Carpathian regions reaches values much lower than the average for the European Union.

The following recommendations for economic activity in protected areas in the Carpathians are formulated in the literature:

- industry - avoiding the location of investments colliding with the functions of the environment, environmentally safe technologies, and installation of protective equipment are preferred,
- agriculture - popularization of the pro-environmental farming model,
- forest management - the development of semi-productive and non-productive functions, rationalization of management, and avoiding heavy traffic through valuable forest complexes are preferred,
- municipal management - sources of supply of so-called clean energy, proper disposal of sewage and waste, minimizing air pollution from transport, minimizing the negative impact of transport infrastructure and traffic on wildlife in the Carpathian region are preferred,

- tourism - active tourism and ecotourism providing a balance between conservation and development, research, development, and educational activities, and economic activities based on local cultural features (souvenirs, handicrafts)
- cooperation of entities, strong leadership, and financial empowerment (Guzal-Dec et al., 2015; Hlaváč&Anděl, 2019; Louda et al., 2023).

One of the most important economic sectors in the Carpathian Mountains is tourism. Many forms of tourism are developing there, including mountain hiking, biking, skiing, nature, and cultural tourism.

The image of entrepreneurship in the protected areas of the Carpathians emerging from focused group discussions with experts in Romania, Hungary, Ukraine, Poland, Slovakia, and the Czech Republic is far from ideal. The starting point is a pragmatic diagnosis of the key problems that local entrepreneurs face on a daily basis. These are issues that significantly exceed the capabilities of both entrepreneurs and local communities, as well as local governments.

According to experts, the protection of the natural and cultural values alone, without the simultaneous care and attention for the people living in these areas, can lead to the “scansenisation of these communities”, contributing to the deepening of the already serious socio-economic phenomena that underlie the slower and worse development these areas. Of course, a positive consequence of this state of affairs is that the environment has been conserved in a state worth protecting. The problem, however, is that it is now necessary to develop solutions to make these protected assets available to a wider audience, but in a sustainable and safe manner.

In other words, modern and sustainable entrepreneurship in protected areas requires systemic protection of entrepreneurship as well. After all, the resources are so valuable that they are attracting increasing attention from the tourism industry, and aggressive investment of outside capital can contribute to disrupting the delicate balance of local ecosystems, ultimately contributing to the exploitation and devastation of the resources themselves.

Thus, on the one hand, it is necessary to support local entrepreneurship in the protected areas of the Carpathians in terms of association, cooperation, building complex tourism products, the transmission of knowledge and traditions, as

well as creating platforms for the exchange of experiences and creating and developing innovative solutions. On the other hand, these activities are insufficient according to experts in light of current experience. It is also necessary to exclude entrepreneurship in protected areas from the so-called “normal” rules of competitiveness due to the higher costs of running a business. This involves a kind of protectionism in terms of preferential mechanisms for financing activities, and tax reliefs, but also facilitations in the field of bureaucratic procedures.

According to the participants in the discussion, only in such a situation is it possible to have an enterprise that functions in harmony with the protected values, contributing to their popularization, but also to their even more complete protection and conservation, which can be described as sustainable development.

The Carpathians are still unfamiliar to the wider public, especially since domestic tourism dominates in the Carpathian countries. However, the situation in this regard is dynamic, and the societies of these countries are developing fast enough that soon the tourist traffic models functioning in Western Europe will become the norm here as well. Thus, this is a convenient time to develop systemic solutions for entrepreneurship in the protected areas of the Carpathians.

On the other hand, the analysis of the survey results shows that both entrepreneurs and youth from the protected areas of the Carpathians have a fairly similar and pragmatic assessment of entrepreneurial opportunities in these areas.

“Support from local authorities and officials,” “availability of own capital to start a business,” as well as “income and earnings of residents” and “the possibility of obtaining credits and loans for starting and running a business, co-financing” were mentioned as barriers (the youth also highlighted the negative role of “the presence of protected areas”). Opportunities, in turn, included “local natural resources,” “tourist attractiveness, and popularity of these areas.” The roles of networking and integrating the business community, financial support, and the special status of these areas in the form of tax reliefs were emphasized.

Among the industries guaranteeing success, “tourism”, “culture, entertainment, recreation”, “crafts and handicrafts” and “forestry” were quite unanimously indicated. At the other extreme were “industrial processing,” “construction,” and “energy” and “financial and insurance activities.”

Not surprisingly, but of concern is that the surveyed youth declared their willingness to build their careers outside the protected areas of the Carpathians. This thread recurs not only in this part of the research but also in the statements of experts during focused group discussions. Negative social processes in the form of the departure of young people precisely, the disintegration of local communities as a result of the aging of the residents, and the deterioration of the level of qualifications and professional competencies available to workers in protected

areas are phenomena with profound negative consequences for entrepreneurship.

The surveyed entrepreneurs identified key solutions to current challenges, but also additionally formulated their proposals for necessary actions to improve the overall situation of entrepreneurship in the Carpathians:

- advertising of these areas,
- cooperation with local government authorities,
- legal support in obtaining environmental permits and decisions,
- financial support for the development of companies (purchase of fixed assets).
- associating and clustering entrepreneurs,
- development of infrastructure,
- introduction of tax reliefs,
- stabilization of the law,
- financial subsidies,
- education and digitization.

Referring to the conclusions of the analysis of the content of marketing campaigns, it should be emphasized that among the surveyed entities, almost all enterprises actively participated in various events such as fairs, open days, etc. This allows for greater recognition of entrepreneurs’ brands and the entrepreneurship itself in protected areas in the Carpathians. Through contact during fairs and other events, the public has the opportunity to “touch people and their region”, and get acquainted with the activities, culture, customs, and language. This increases the chance that potential customers will benefit from their products and services. Slightly less activity (in terms of traditional forms of conducting promotion) was carried out through television advertising, outdoor advertising, i.e. (billboards, banners, posters, signs, etc.), newspaper advertising, or flyers. Nowadays, many forms of traditional promotion have been replaced by online activities, but for stable brand image building it is also important to mark the places of entrepreneurship by means of a signboard, a banner (which will also fit in with the landscape of the protected area in terms of color and architecture, without disturbing its space). This not only strengthens the image but also influences the recognition of a given enterprise in the field, thus increasing sales or service opportunities. It is worth noting that advertising on Google is becoming more important, e.g. the company’s business card on Google and Google Maps, which allows the customer to go directly to the place (provided, of course, that it is well marked on Google map), and determine the time of travel. The analyzed entities use modern online tools and follow the

trends in this area. Compared to traditional media, the Internet has proven to be an attractive channel for reaching customers, much cheaper and more effective. Some websites are run in a manner consistent with current trends, while others were prepared several years ago and are no longer attractive in terms of image, which is also worth paying attention to as part of image-building activities. Given the change in forms of running a business after the COVID-19 pandemic, including sales and distribution, it is also worth taking care of language options (e.g., supplementing materials in English), depending also on the industry and target customer. It is worth noting that the vast majority of the surveyed entrepreneurs had profiles on Facebook, YouTube, and less frequently an Instagram profile. However, what matters in running social media is being active, among other things, by regularly posting content, up-to-date photos and information, and taking care of comments (in the case of the surveyed enterprises, the intensity of the published content sometimes varied). Nowadays, social media and reaching specific target groups (others through Facebook, Instagram or YouTube profiles) are of great importance. Slightly fewer of the surveyed entrepreneurs, however, chose to purchase paid advertising on Internet portals. It should be emphasized, however, that the entrepreneurs selected for the research were those who showed above-average activity in promoting their businesses in protected areas in the Carpathians.

The surveyed entrepreneurs from almost all countries reached for threads related to the Carpathians and Carpathianism in the broadest sense and were most likely to refer to their location

in the Carpathians. Moreover, most companies reached for the traditions and customs of the Carpathians as exemplified by companies from the Czech Republic, Hungary, Slovakia, and Ukraine, while entrepreneurs from Romania and Poland were more likely to expose the history of the Carpathians. It must be admitted that there is often thoughtful content, slogans, and well-chosen graphics (mountainous terrain, people, seasons, life) that encourage recipients to use the services, buy products, or simply come to the Carpathians. It also helps to “place” the business in the Carpathians. Interestingly, themes related to clean environment, and ecology were identified less frequently. The history of the Carpathians was exposed the least often. It is also interesting to note that when analyzing the content of the messages, in only one case was there a reference to both the Carpathians and protected areas, and that created a coherent story about the enterprise, the services, and the products offered. Entrepreneurs tried to be authentic, and original, as each of them tried to find their own way of talking about their enterprise, offered products and services (conducted business). It is also interesting to note that in the case of the analysis of the content of the messages, only one entity decided to make a reference to both the Carpathian Mountains and protected areas, creating a coherent story about the enterprise, the services, and the products offered. The present analysis made it possible to capture communication solutions and references to protected areas in the Carpathians as an asset highlighted in communication with potential customers. Running a business in protected areas of the Carpathian Mountains can undoubtedly be a major asset and distinguishing feature for a business.

## RECOMMENDATIONS

- Create systemic solutions in the field of supporting entrepreneurship in protected areas in the Carpathians (preferential mechanisms for financing activities, tax reliefs, administrative facilitation),
- Support for building complex and more competitive tourism products,
- Support for building complex cross-border tourism products (emphasizing the specificity of the Carpathians above national divisions),
- Create platforms for exchanging experiences, creating, and developing innovative solutions
- Promote local and regional products in external markets,
- Systemize assistance and support for entrepreneurs,
- Promote and popularize existing support systems and the importance of certification,
- Promote and popularize good practices in the field of solutions to support business activities in protected areas,
- Networking of entrepreneurs - which would allow breaking the distribution barrier,
- Create local and supra-local agreements of entrepreneurs, producers, local governments, and representatives of NGOs,
- Raise the level of awareness and knowledge of the institutional environment regarding the resources in the area, and the importance and role of local and regional brands,
- Raise the level of awareness and knowledge of small and medium-sized enterprises on: cooperation procedures, possible sources and mechanisms of support,
- Improve the flow of information between the institutional environment and entrepreneurs,
- Strengthen the staff from the institutional entities,
- Support already operating entrepreneurs in building a promotional and marketing message (from building awareness of the uniqueness of the region, through education in the field of effective marketing tools, to implementing specific solutions in practice).
- Build the image of the entrepreneur’s brand through active social media management.
- Popularize and promote companies and entrepreneurship in local cooperation.
- Educate young people in the field of economics and entrepreneurship - for future business entities.

## SCENARIO OF A FOCUSED GROUP DISCUSSION

Dear Sirs,

First of all, thank you for agreeing to take part in this discussion. We would like to know your opinion on the opportunities and constraints in running a business resulting in protected areas in the Carpathians.

Our meeting is being conducted as part of a project commissioned by the Brussels-based New Direction Foundation. We are talking to experts from the Czech Republic, Slovakia, Poland, Ukraine, Hungary, and Romania. So this is a unique opportunity to compare experiences from several Carpathian countries.

My name is ... and on behalf of the Association for the Promotion and Development of Podkarpacie "Pro Carpathia" I will moderate our meeting today.

To begin with, I would like to give a very general definition of protected areas - they are areas under legal protection or special management aimed at their protection. They are created in an area with an interesting landscape or of great natural value. In other words, by protected areas, we mean areas where any legal restrictions have been put in place to protect the nature of special value.

### Overall assessment of local business conditions

1. In your opinion, is it easy or difficult to run a business in the protected areas of the Carpathians? What are the reasons for this? What are the reasons for your assessment? [Allow everyone to speak, if participants want to discuss the opinions formulated by others - allow them to do so. This is the opening thread and can take up to 30 minutes of the meeting. It is detailed in the subsequent part]
2. Do the reasons you indicate have more to do with the fact that the Carpathians are here, or more to do with the fact that these are protected areas after all? Or does it not matter at all?
3. If you were to characterize (generalize) the entrepreneurs in these areas - what is the activity? Is there something that dominates? Any specific pattern? What are the dominant industries here?
4. Is this peculiarity related more to the fact that the Carpathians are here, or rather to the fact that these are protected areas after all? Or is it irrelevant to the peculiarities of local economic activity here?
5. In your opinion, do entrepreneurs in these areas readily highlight that they operate in protected areas in their promotional materials?
6. If so - in what way? Why? If no - why?

7. To summarize this part - what activity is best suited to be carried out in the protected areas of the Carpathians? Why?
8. Can you name an entrepreneur or company that, in your opinion, has had exceptional success running a business in the protected areas of the Carpathians?

### Strengths and weaknesses of economic activity in the protected areas of the Carpathians [internal factors].

9. If you were to indicate the strengths of local entrepreneurs here - what are they? Why? What do they result from? What does it mean in practice?
10. Can these strengths, which you have identified, be considered something unique, special in the region or the country? Why?
11. What, in turn, are the weaknesses of enterprises here, in the protected areas of the Carpathians? Why? What is the reason for this? What does this mean in practice?
12. Again, I will ask - in your opinion, are these weaknesses something unique to the region or the country? Why?

### Opportunities and threats to economic activity in the protected areas of the Carpathians [external factors].

13. What, in your opinion, represents a unique opportunity for business development here locally, in protected areas? What might it be?
14. Can the fact that these are protected areas be considered an opportunity? Why?
15. What, in your opinion, are the key barriers to business development here locally, in protected areas? What might these be?
16. Can the fact that these are protected areas be considered a barrier? Why?

### Support for entrepreneurship in the protected areas of the Carpathians

17. Can you indicate examples of particularly successful - in your opinion - entrepreneurial development activities here locally, in protected areas? Why do you rate them as particularly successful?
18. And how do you rate the support and assistance for entrepreneurs here in these areas in general? Why? What institutions are responsible for this? What is on the plus side? What is the downside?

19. What can be identified as priorities - extremely urgent solutions that need to be implemented immediately to support entrepreneurship in the protected areas of the Carpathians? What are they? Why?

20. Who should be responsible for such urgent support? What institutions? Why?

### Summary part

21. We had the opportunity to discuss intensively entrepreneurship in the protected areas of the Carpathian Mountains - can you try to summarize it somehow? In your opinion, are the positives or negatives predominant?

What are they exactly?

22. Does the fact that local entrepreneurs operate in protected areas exert any impact on their day-to-day situation?
23. What is the direction for the development of entrepreneurship in these areas? What is the future of the protected areas of the Carpathians?
24. What support should be offered to entrepreneurs here in the protected areas of the Carpathians in the first place?

Thank you very much for the extremely interesting discussion. These are invaluable opinions.

## SURVEY FORM - ENTREPRENEURSHIP IN PROTECTED AREAS OF THE CARPATHIANS ACCORDING TO ENTREPRENEURS

Dear Sirs,

The Association for the Development and Promotion of Podkarpacie "Pro Carpathia", on behalf of the New Direction Foundation, is currently conducting a survey on entrepreneurship in the protected areas of the Carpathian countries. The survey is being distributed to respondents from the Czech Republic, Slovakia, Poland, Hungary, and Romania.

The survey concerns the opportunities and constraints of running a business since it is implemented in protected areas in the Carpathian Mountains. Your opinions will be presented only in the form of tabular summaries. At no point will we ask for your personal information.

We are keen on sincere and uninhibited responses that reflect your authentic opinions and beliefs on the subject. This will enable the development of recommendations for the policy of supporting and strengthening entrepreneurship in these areas, which may have a direct impact on activities undertaken as part of projects funded by the European Union.

The results are collected and stored by the "Pro Carpathia" Association in the form of a matrix and will be properly archived in the form of an anonymized database after the final report is prepared. We also do not collect your IP or other identifying information during the survey.

It should not take you more than 10 minutes to answer.

Agnieszka Pieniążek, PhD  
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Association for the Development  
and Promotion of Podkarpacie "Pro Carpathia"  
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1. Gender
2. Age
3. Education:
  - primary education
  - vocational education
  - technical education
  - secondary education
  - higher education - bachelor
  - higher education - engineer
  - higher education - master's degree
  - industries
4. In which of the following industries do you operate? [multiple choice]:
  - tourism
  - culture, entertainment, recreation
  - industrial processing
  - crafts and handicrafts
  - transport and logistics
  - trade
  - agriculture and food processing
  - telecommunications
  - forestry
  - construction
  - financial and insurance activities
  - professional, scientific, and technical activities
  - health care and social assistance
  - education
  - energy
  - other

Definition: Protected areas are protected by law or are specifically developed to protect them. They are created in an area with an interesting landscape or high natural values.

5. How do you assess the possibilities of running a business in the protected areas of the Carpathians?

- definitely bad
- rather bad
- hard to say
- rather good
- definitely good

6. In your opinion, what are the barriers or opportunities for the development of entrepreneurship in protected areas [on the scale: “definitely barrier”, “rather barrier”, “hard to say”, “rather opportunity”, “definitely opportunity”]:

- income and earnings of residents
- entrepreneurship of the inhabitants
- tourist attractiveness and popularity of these areas
- knowledge, qualifications, and skills of residents
- availability of own capital to start a business
- support from local authorities and officials
- traditions and experience in running a business
- the possibility of obtaining credits and loans for starting and running a business, co-financing
- the presence of protected areas
- local natural resources
- other

7. Please assess - from your perspective - the level of success or failure of economic activity in protected areas in the following industries [on the scale “will definitely fail”, “will rather fail”, “hard to say”, “will rather succeed”, “will definitely succeed”]:

- tourism
- culture, entertainment, recreation
- industrial processing
- crafts and handicrafts

- transport and logistics
- trade
- agriculture and food processing
- telecommunications
- forestry
- construction
- financial and insurance activities
- professional, scientific, and technical activities
- health care and social assistance
- education
- energy
- other

8. What support factors, in your opinion, are necessary and which are less important for the development of entrepreneurship in protected areas in the Carpathians? [on the scale: “definitely the least important, the least urgent”, “rather unimportant, not urgent”, “hard to say”, “rather important, urgent”, “definitely the most important, the most urgent”]

- financial support for the development of companies (purchase of fixed assets)
- support in acquiring new knowledge and technology
- providing knowledge and contacts for business development
- consulting and training in the development of the company / products and services
- Legal support in obtaining environmental permits and decisions
- advertising of these areas
- cooperation with local government authorities
- other

Your opinions are extremely important to us. Thank you for your time and commitment.

We are keen on sincere and uninhibited responses that reflect your authentic opinions and beliefs on the subject. This will enable the development of recommendations for the policy of supporting and strengthening entrepreneurship in these areas, which may have a direct impact on activities undertaken as part of projects funded by the European Union.

The results are collected and stored by the “Pro Carpathia” Association in the form of a matrix and will be properly archived in the form of an anonymized database after the final report is prepared. We also do not collect your IP or other identifying information during the survey.

It should not take you more than 10 minutes to answer.

Agnieszka Pieniążek, PhD  
 President of the Board  
 Association for the Development  
 and Promotion of Podkarpacie “Pro Carpathia”  
 Rynek 16/1, 35-064 Rzeszów  
 Tel. +48 17 852 85 26  
 Mail: agnieszka@procarpathia.pl

1. Gender

2. Age

3. Do you personally know anyone (in your family or the closest circle) who has run or is running a business in the Carpathian Mountains, in protected areas?

- no
- yes

4. Do you associate your professional future (work, career) with protected areas in the Carpathians?

- definitely not
- rather not
- hard to say
- rather yes
- definitely yes

5. If it were up to you alone, you would want to:

- run your own business
- work in a private workplace
- work in a state or local government enterprise
- do not work for money at all

Definition: Protected areas are protected by law or are specifically developed to protect them. They are created in an area with an interesting landscape or high natural values.

6. How do you assess the possibilities of running a business in the protected areas of the Carpathians?

- definitely bad
- rather bad
- hard to say
- rather good
- definitely good

7. In your opinion, what are the barriers or opportunities for the development of entrepreneurship in protected areas [on the scale: “definitely barrier”, “rather barrier”, “hard to say”, “rather opportunity”, “definitely opportunity”]:

- income and earnings of residents
- entrepreneurship of the inhabitants
- tourist attractiveness and popularity of these areas
- knowledge, qualifications, and skills of residents
- availability of own capital to start a business
- support from local authorities and officials
- traditions and experience in running a business
- the possibility of obtaining credits and loans for starting and running a business, co-financing
- the presence of protected areas
- local natural resources
- other

8. Please assess - from your perspective - the level of success or failure of economic activity in protected areas in the following industries [on the scale “will definitely fail”, “will rather fail”, “hard to say”, “will rather succeed”, “will definitely succeed”]:

- tourism
- culture, entertainment, recreation
- industrial processing
- crafts and handicrafts
- transport and logistics
- trade
- agriculture and food processing
- telecommunications
- forestry
- construction
- financial and insurance activities
- professional, scientific and technical activities
- health care and social assistance
- education
- energy
- other

Your opinions are extremely important to us. Thank you for your time and commitment.

## SURVEY FORM - ENTREPRENEURSHIP IN PROTECTED AREAS OF THE CARPATHIANS ACCORDING TO SCHOOLCHILDREN AND STUDENTS

Dear Sirs,

The Association for the Development and Promotion of Podkarpacie “Pro Carpathia”, on behalf of the New Direction Foundation, is currently conducting a survey on entrepreneurship in the protected areas of the Carpathian countries. The survey is being distributed to respondents from the Czech Republic, Slovakia, Poland, Hungary, and Romania.

The survey concerns the opportunities and constraints of running a business since it is implemented in protected areas in the Carpathian Mountains. Your opinions will be presented only in the form of tabular summaries. At no point will we ask for your personal information.

## FREQUENCY TABLES FOR ENTREPRENEURS RESPONSES

**Table 1. Country of the respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Romania	40	19,0	19,0	19,0
	Hungary	41	19,5	19,5	38,6
	Poland	43	20,5	20,5	59,0
	Slovakia	50	23,8	23,8	82,9
	Czech Republic	36	17,1	17,1	100,0
	Total	210	100,0	100,0	

**Table 2. Gender of the respondents**

country		Frequency	Percent	Valid Percent	Cumulative Percent	
Romania	Valid	female	17	42,5	42,5	42,5
		male	23	57,5	57,5	100,0
		Total	40	100,0	100,0	
Hungary	Valid	female	10	24,4	24,4	24,4
		male	31	75,6	75,6	100,0
		Total	41	100,0	100,0	
Poland	Valid	female	17	39,5	39,5	39,5
		male	26	60,5	60,5	100,0
		Total	43	100,0	100,0	
Slovakia	Valid	female	14	28,0	28,0	28,0
		male	36	72,0	72,0	100,0
		Total	50	100,0	100,0	
Czech Republic	Valid	female	14	38,9	38,9	38,9
		male	22	61,1	61,1	100,0
		Total	36	100,0	100,0	

**Table 3. Age of the respondents**

country		Frequency	Percent	Valid Percent	Cumulative Percent	
Romania	Valid	18-25	4	10,0	10,0	10,0
		26-35	9	22,5	22,5	32,5
		36-45	14	35,0	35,0	67,5
		46-55	9	22,5	22,5	90,0
		56-65	4	10,0	10,0	100,0
		Total	40	100,0	100,0	
Hungary	Valid	18-25	1	2,4	2,4	2,4
		26-35	17	41,5	41,5	43,9
		36-45	11	26,8	26,8	70,7
		46-55	12	29,3	29,3	100,0
		Total	41	100,0	100,0	
		Poland	Valid	26-35	7	16,3
36-45	13			30,2	30,2	46,5
46-55	11			25,6	25,6	72,1
56-65	11			25,6	25,6	97,7
66 and more	1			2,3	2,3	100,0
Total	43			100,0	100,0	
Slovakia	Valid	26-35	6	12,0	12,0	12,0
		36-45	18	36,0	36,0	48,0
		46-55	23	46,0	46,0	94,0
		56-65	1	2,0	2,0	96,0
		66 and more	2	4,0	4,0	100,0
		Total	50	100,0	100,0	
Czech Republic	Valid	26-35	11	30,6	30,6	30,6
		36-45	8	22,2	22,2	52,8
		46-55	13	36,1	36,1	88,9
		56-65	3	8,3	8,3	97,2
		66 and more	1	2,8	2,8	100,0
		Total	36	100,0	100,0	

**Table 4. Education of the respondents**

country		Frequency	Percent	Valid Percent	Cumulative Percent		
Romania	Valid	vocational education	2	5,0	5,0	5,0	
		technical education	6	15,0	15,0	20,0	
		secondary education	8	20,0	20,0	40,0	
		higher education – bachelor	12	30,0	30,0	70,0	
		higher education – engineer	5	12,5	12,5	82,5	
		higher education – master's degree	7	17,5	17,5	100,0	
		Total	40	100,0	100,0		
		Hungary	Valid	vocational education	1	2,4	2,4
technical education	2			4,9	4,9	7,3	
secondary education	2			4,9	4,9	12,2	
higher education – bachelor	12			29,3	29,3	41,5	
higher education – engineer	2			4,9	4,9	46,3	
higher education – master's degree	16			39,0	39,0	85,4	
higher education – doctorate	6			14,6	14,6	100,0	
Total	41			100,0	100,0		
Poland	Valid	vocational education	2	4,7	4,8	4,8	
		technical education	7	16,3	16,7	21,4	
		secondary education	3	7,0	7,1	28,6	
		higher education – bachelor	3	7,0	7,1	35,7	
		higher education – engineer	2	4,7	4,8	40,5	
		higher education – master's degree	24	55,8	57,1	97,6	
		higher education – doctorate	1	2,3	2,4	100,0	
		Total	42	97,7	100,0		
		Missing	System	1	2,3		
		Total	43	100,0			
	Slovakia	Valid	secondary education	7	14,0	14,3	14,3
higher education – bachelor			2	4,0	4,1	18,4	
higher education – engineer			18	36,0	36,7	55,1	
higher education – master's degree			6	12,0	12,2	67,3	
higher education – doctorate			16	32,0	32,7	100,0	
Total			49	98,0	100,0		
Missing			System	1	2,0		
Total	50	100,0					
Czech Republic	Valid	technical education	5	13,9	13,9	13,9	
		secondary education	4	11,1	11,1	25,0	
		higher education – bachelor	7	19,4	19,4	44,4	
		higher education – engineer	6	16,7	16,7	61,1	
		higher education – master's degree	12	33,3	33,3	94,4	
		higher education – doctorate	2	5,6	5,6	100,0	
		Total	36	100,0	100,0		

**Table 5. Industries the respondents operate in**

country	industries	Responses		Percent of Cases			
		N	Percent				
Romania	industries	tourism	18	29,0%	45,0%		
		culture, entertainment, recreation	9	14,5%	22,5%		
		crafts and handicrafts	8	12,9%	20,0%		
		transport and logistics	2	3,2%	5,0%		
		agriculture and food processing	6	9,7%	15,0%		
		forestry	7	11,3%	17,5%		
		construction	1	1,6%	2,5%		
		professional, scientific and technical activities	5	8,1%	12,5%		
		education	5	8,1%	12,5%		
		other	1	1,6%	2,5%		
		<b>Total</b>	<b>62</b>	<b>100,0%</b>	<b>155,0%</b>		
		Hungary	industries	tourism	18	27,7%	43,9%
				culture, entertainment, recreation	9	13,8%	22,0%
				crafts and handicrafts	2	3,1%	4,9%
transport and logistics	2			3,1%	4,9%		
trade	5			7,7%	12,2%		
agriculture and food processing	3			4,6%	7,3%		
construction	2			3,1%	4,9%		
financial and insurance activities	2			3,1%	4,9%		
professional, scientific and technical activities	11			16,9%	26,8%		
education	8			12,3%	19,5%		
energy	1			1,5%	2,4%		
other	2			3,1%	4,9%		
<b>Total</b>	<b>65</b>			<b>100,0%</b>	<b>158,5%</b>		
Poland	industries			tourism	20	32,3%	47,6%
		culture, entertainment, recreation	8	12,9%	19,0%		
		industrial processing	1	1,6%	2,4%		
		crafts and handicrafts	4	6,5%	9,5%		
		trade	6	9,7%	14,3%		
		agriculture and food processing	6	9,7%	14,3%		
		construction	4	6,5%	9,5%		
		financial and insurance activities	1	1,6%	2,4%		
		professional, scientific and technical activities	4	6,5%	9,5%		
		education	2	3,2%	4,8%		
		other	6	9,7%	14,3%		
		<b>Total</b>	<b>62</b>	<b>100,0%</b>	<b>147,6%</b>		
		Slovakia	industries	tourism	12	16,4%	24,0%
				culture, entertainment, recreation	5	6,8%	10,0%
industrial processing	1			1,4%	2,0%		
crafts and handicrafts	1			1,4%	2,0%		
trade	3			4,1%	6,0%		
agriculture and food processing	6			8,2%	12,0%		
forestry	17			23,3%	34,0%		
construction	5			6,8%	10,0%		
financial and insurance activities	1			1,4%	2,0%		
professional, scientific and technical activities	4			5,5%	8,0%		
education	9			12,3%	18,0%		
energy	2			2,7%	4,0%		
other	7			9,6%	14,0%		
<b>Total</b>	<b>73</b>			<b>100,0%</b>	<b>146,0%</b>		
Czech Republic	industries	tourism	14	31,1%	38,9%		
		culture, entertainment, recreation	7	15,6%	19,4%		
		crafts and handicrafts	2	4,4%	5,6%		
		trade	4	8,9%	11,1%		
		agriculture and food processing	6	13,3%	16,7%		
		forestry	3	6,7%	8,3%		
		construction	1	2,2%	2,8%		
		financial and insurance activities	2	4,4%	5,6%		
		professional, scientific and technical activities	2	4,4%	5,6%		
		energy	1	2,2%	2,8%		
		other	3	6,7%	8,3%		
		<b>Total</b>	<b>45</b>	<b>100,0%</b>	<b>125,0%</b>		

**Table 6. Other industries the respondents operate in**

country	Valid	Frequency	Percent	Valid Percent	Cumulative Percent			
Romania	Valid	natural cosmetics	39	97,5	97,5			
		Total	1	2,5	2,5	100,0		
		Total	40	100,0	100,0			
Hungary	Valid	Total	39	95,1	95,1	95,1		
		administrative services	1	2,4	2,4	97,6		
		translation and interpretation	1	2,4	2,4	100,0		
		Total	41	100,0	100,0			
Poland	Valid	Total	37	86,0	86,0	86,0		
		beauty industry	1	2,3	2,3	88,4		
		gastronomy	1	2,3	2,3	90,7		
		health care and social assistance	2	4,7	4,7	95,3		
		publishing	1	2,3	2,3	97,7		
		services	1	2,3	2,3	100,0		
		Total	43	100,0	100,0			
		Total	43	86,0	86,0	86,0		
Slovakia	Valid	arboriculture	1	2,0	2,0	88,0		
		beekeeping	1	2,0	2,0	90,0		
		IT	1	2,0	2,0	92,0		
		real estates	1	2,0	2,0	94,0		
		regional development	1	2,0	2,0	96,0		
		translation and interpretation	1	2,0	2,0	98,0		
		woodprocessing industry	1	2,0	2,0	100,0		
		Total	50	100,0	100,0			
		Total	33	91,7	91,7	91,7		
		Czech Republic	Valid	accountancy	1	2,8	2,8	94,4
				consultancy	1	2,8	2,8	97,2
services	1			2,8	2,8	100,0		
Total	36			100,0	100,0			

**Table 7. The assessment of the possibilities of running a business in the protected areas of the Carpathians**

country	Valid	Frequency	Percent	Valid Percent	Cumulative Percent	
Romania	Valid	rather bad	10	25,0	25,0	25,0
		hard to say	13	32,5	32,5	57,5
		rather good	13	32,5	32,5	90,0
		definitely good	4	10,0	10,0	100,0
		Total	40	100,0	100,0	
Hungary	Valid	rather bad	9	22,0	22,0	22,0
		hard to say	18	43,9	43,9	65,9
		rather good	12	29,3	29,3	95,1
		definitely good	2	4,9	4,9	100,0
Poland	Valid	Total	41	100,0	100,0	
		definitely bad	3	7,0	7,1	7,1
		rather bad	5	11,6	11,9	19,0
		hard to say	15	34,9	35,7	54,8
		rather good	14	32,6	33,3	88,1
		definitely good	5	11,6	11,9	100,0
		Total	42	97,7	100,0	
		Missing	1	2,3		
		Total	43	100,0		
	Slovakia	Valid	definitely bad	1	2,0	2,0
rather bad			21	42,0	42,0	44,0
hard to say			18	36,0	36,0	80,0
rather good			8	16,0	16,0	96,0
definitely good			2	4,0	4,0	100,0
Czech Republic	Valid	Total	50	100,0	100,0	
		definitely bad	2	5,6	5,6	5,6
		rather bad	7	19,4	19,4	25,0
		hard to say	13	36,1	36,1	61,1
		rather good	14	38,9	38,9	100,0
Total	36	100,0	100,0			

**Table 8. The assessment of opportunities and barriers for business in the protected areas of the Carpathians**

country		definitely barrier Row N %	rather barrier Row N %	hard to say Row N %	rather opportunity Row N %	definitely opportunity Row N %
Romania	income and earnings of residents	10,0%	17,5%	12,5%	30,0%	30,0%
	entrepreneurship of the inhabitants	23,1%	7,7%	15,4%	25,6%	28,2%
	tourist attractiveness and popularity of these areas	0,0%	0,0%	7,5%	32,5%	60,0%
	knowledge, qualifications and skills of residents	22,5%	17,5%	2,5%	27,5%	30,0%
	availability of own capital to start a business	10,0%	15,0%	7,5%	45,0%	22,5%
	support from local authorities and officials	27,5%	15,0%	22,5%	22,5%	12,5%
	traditions and experience in running a business	5,3%	13,2%	21,1%	42,1%	18,4%
	the possibility of obtaining credits and loans for starting and running a business, co-financing	22,5%	15,0%	27,5%	22,5%	12,5%
	the presence of protected areas	0,0%	2,5%	10,0%	42,5%	45,0%
	local natural resources	0,0%	0,0%	2,5%	37,5%	60,0%
Hungary	income and earnings of residents	17,1%	39,0%	22,0%	19,5%	2,4%
	entrepreneurship of the inhabitants	7,3%	48,8%	24,4%	14,6%	4,9%
	tourist attractiveness and popularity of these areas	2,4%	4,9%	2,4%	46,3%	43,9%
	knowledge, qualifications and skills of residents	4,9%	41,5%	22,0%	24,4%	7,3%
	availability of own capital to start a business	24,4%	31,7%	9,8%	26,8%	7,3%
	support from local authorities and officials	14,6%	31,7%	34,1%	19,5%	0,0%
	traditions and experience in running a business	4,9%	19,5%	17,1%	39,0%	19,5%
	the possibility of obtaining credits and loans for starting and running a business, co-financing	9,8%	26,8%	41,5%	17,1%	4,9%
	the presence of protected areas	2,4%	22,0%	14,6%	51,2%	9,8%
	local natural resources	2,4%	0,0%	7,3%	53,7%	36,6%
Poland	income and earnings of residents	24,4%	43,9%	24,4%	4,9%	2,4%
	entrepreneurship of the inhabitants	7,7%	28,2%	30,8%	23,1%	10,3%
	tourist attractiveness and popularity of these areas	2,6%	0,0%	5,1%	20,5%	71,8%
	knowledge, qualifications and skills of residents	12,5%	25,0%	22,5%	30,0%	10,0%
	availability of own capital to start a business	20,5%	38,5%	17,9%	23,1%	0,0%
	support from local authorities and officials	28,2%	38,5%	12,8%	12,8%	7,7%
	traditions and experience in running a business	5,1%	17,9%	25,6%	33,3%	17,9%
	the possibility of obtaining credits and loans for starting and running a business, co-financing	12,5%	30,0%	32,5%	20,0%	5,0%
	the presence of protected areas	7,7%	23,1%	23,1%	30,8%	15,4%
	local natural resources	2,6%	0,0%	10,3%	30,8%	56,4%
Slovakia	income and earnings of residents	8,2%	38,8%	24,5%	26,5%	2,0%
	entrepreneurship of the inhabitants	6,1%	12,2%	32,7%	44,9%	4,1%
	tourist attractiveness and popularity of these areas	0,0%	2,1%	4,2%	37,5%	56,3%
	knowledge, qualifications and skills of residents	4,2%	14,6%	14,6%	64,6%	2,1%
	availability of own capital to start a business	16,7%	50,0%	20,8%	8,3%	4,2%
	support from local authorities and officials	28,6%	40,8%	20,4%	6,1%	4,1%
	traditions and experience in running a business	2,1%	16,7%	27,1%	39,6%	14,6%

	the possibility of obtaining credits and loans for starting and running a business, co-financing	20,0%	40,0%	28,0%	10,0%	2,0%
	the presence of protected areas	14,6%	39,6%	14,6%	18,8%	12,5%
	local natural resources	2,1%	0,0%	12,5%	41,7%	43,8%
Czech Republic	income and earnings of residents	8,3%	38,9%	30,6%	13,9%	8,3%
	entrepreneurship of the inhabitants	23,5%	17,6%	23,5%	26,5%	8,8%
	tourist attractiveness and popularity of these areas	5,6%	2,8%	2,8%	30,6%	58,3%
	knowledge, qualifications and skills of residents	5,6%	33,3%	13,9%	33,3%	13,9%
	availability of own capital to start a business	16,7%	36,1%	8,3%	30,6%	8,3%
	support from local authorities and officials	5,6%	41,7%	22,2%	25,0%	5,6%
	traditions and experience in running a business	8,3%	19,4%	16,7%	47,2%	8,3%
	the possibility of obtaining credits and loans for starting and running a business, co-financing	19,4%	22,2%	30,6%	22,2%	5,6%
	the presence of protected areas	5,6%	30,6%	11,1%	27,8%	25,0%
	local natural resources	0,0%	13,9%	5,6%	47,2%	33,3%

**Table 9. Other opportunities or barriers for business in the protected areas of the Carpathians**

country		Frequency	Percent	Valid Percent	Cumulative Percent	
Romania	Valid	31	77,5	77,5	77,5	
	Barriers - lack of development of CFR train and road infrastructure	1	2,5	2,5	80,0	
	Lack of coherent strategies at local level	1	2,5	2,5	82,5	
	Natural resources and clean air would be an opportunity. The competition is less.	1	2,5	2,5	85,0	
	The barrier is the most confusing state. It doesn't help that we are broke, everything costs more because of the distance and difficult access..	1	2,5	2,5	87,5	
	The distances are long and there are no trains nearby. You have to come to the area by car	1	2,5	2,5	90,0	
	The inertia of the locals who prefer to be on social assistance rather than work	1	2,5	2,5	92,5	
	We are a nation that likes to be led, we do not know how to lead or have the initiative. Here I see a problem that poses obstacles.	1	2,5	2,5	95,0	
	We are far away and it is an effort to attract people to us. But we also have a beautiful area and I wouldn't give that for anything.	1	2,5	2,5	97,5	
	We need involved politicians, not self-interested political tricksters.	1	2,5	2,5	100,0	
	Total	40	100,0	100,0		
	Hungary	Valid	29	70,7	70,7	70,7
		As a result of strong economic concentration, it is difficult for SMEs to operate.	1	2,4	2,4	73,2
Basing on local values and local human resources (possibility)		1	2,4	2,4	75,6	
Erasmus programs		1	2,4	2,4	78,0	
EU support is an opportunity, bureaucracy growth and unpredictability are obstacles in many cases		1	2,4	2,4	80,5	
Excessive political-administrative centralization		1	2,4	2,4	82,9	

			1	2,4	2,4	85,4
		Greater development of tourism, research and introduction of new services. Spreading knowledge to both children and adults. Unfortunately, reaching wider social strata and creating affordable opportunities for them is an obstacle.				
		Lack of (skilled) labor, lack of adequate road network in transportation.	1	2,4	2,4	87,8
		lack of market competition, market-distorting economic decisions, support of large companies against SMEs	1	2,4	2,4	90,2
		Lack of national experience. Mashol how they do it.	1	2,4	2,4	92,7
		Possibility: service units related to tourism, such as hotels, restaurants, bars. Obstacle: lack of capital, lack of infrastructure, or the resulting long implementation time, strict rules for protected areas	1	2,4	2,4	95,1
		There is no longer enough manpower	1	2,4	2,4	97,6
		transport	1	2,4	2,4	100,0
		Total	41	100,0	100,0	
Poland	Valid		27	62,8	62,8	62,8
		As in other areas, the problems of running and operating costs in general ...	1	2,3	2,3	65,1
		Changing law, unstable government policy, high taxes	1	2,3	2,3	67,4
		Complicated and costly procedures related to the construction of new facilities, also in the case of agricultural use	1	2,3	2,3	69,8
		deficiencies in the network of multifunctional tourist roads and complete omission of them in financing despite being indicated as a priority by Interreg Brussels, unauthorized traffic of quads, motorcycles and off-road vehicles, concentration of investment expenditures in infrastructure only in the Bieszczady Mountains, investment exclusion in terms of infrastructure of the Beskid Niski, failure to take social consultations into account by regional government authorities - including the lack of a bicycle policy and plans to arrange bicycle paths along voivodeship roads instead of multifunctional roads in cooperation with the State Forests State Forests and municipalities, strategic errors in the road network (lack of investments in DK 28, shifting freight traffic to DW Gorlice - Dukla, state competition, e.g. ski resorts, erroneous decisions of the Regional Directorate for Environmental Protection, the propagated "biodiversity strategy" closing the perspective of forests belonging to the State Forests State Forests	1	2,3	2,3	72,1
		Fire 80 percent of officials and simplify regulations, reduce bureaucracy	1	2,3	2,3	74,4
		insufficient number of investments attractive for tourists - swimming pools, water parks, implementation of artificial beaches in selected places, ski lifts	1	2,3	2,3	76,7

		LACK OF EMPLOYEES, LOW POSSIBILITIES OF OBTAINING SUBSIDIES FOR THE DEVELOPMENT OF TOURISM, LIMITED ACCESS TO MEDIA (GAS, INTERNET), LIMITATIONS IN THE DEVELOPMENT OF SPORTS INFRASTRUCTURE (LIFTS) - SHORT SEASON	1	2,3	2,3	79,1
		lack of promotion of the region, addressed to the right group of recipients	1	2,3	2,3	81,4
		lack of tourism support programs, especially after COVID and the war.	1	2,3	2,3	83,7
		No public transport	1	2,3	2,3	86,0
		not only in these areas, but in the country: bureaucracy, regulations, permits, Social Security fees, taxes, etc	1	2,3	2,3	88,4
		resourcefulness and creativity of highlanders, diligence, determination to implement the intended plans	1	2,3	2,3	90,7
		Retention of young people, development of RES	1	2,3	2,3	93,0
		Road infrastructure and regulation of tourist infrastructure. No restrictions on erecting new buildings with architecture not from these areas.	1	2,3	2,3	95,3
		simplification of tax regulations, officials are still living in the People's Republic of Poland, the number of fines imposed is important.	1	2,3	2,3	97,7
		threat to the environment by thinning forests	1	2,3	2,3	100,0
		Total	43	100,0	100,0	
Slovakia	Valid		38	76,0	76,0	76,0
		advertising	1	2,0	2,0	78,0
		barriers - non-transparency in the allocation of subsidies	1	2,0	2,0	80,0
		bureaucracy and a lot of restrictions from the law	1	2,0	2,0	82,0
		Bureaucracy in offices	1	2,0	2,0	84,0
		Lack of skilled labor, reluctance to do heavy work in the forest	1	2,0	2,0	86,0
		legislation	1	2,0	2,0	88,0
		sabotage of activities by ŠOP and NGOs, non-compliance with contractual relations, etc.	1	2,0	2,0	90,0
		strict protection trends - territories and animals (mainly overpopulated bears)	1	2,0	2,0	92,0
		Subsidies	1	2,0	2,0	94,0
		The barrier is restrictions on running a business in the protected area for reasons of nature protection and applicable legislation	1	2,0	2,0	96,0
		transport infrastructure	1	2,0	2,0	98,0
		zoning of the territory, non-profit organizations submit objections to the performance of activities in the given territories	1	2,0	2,0	100,0
		Total	50	100,0	100,0	
Czech Republic	Valid		35	97,2	97,2	97,2
		difficult business in the PLA, lack of interest of the population in this region	1	2,8	2,8	100,0
		Total	36	100,0	100,0	

**Table 10. The assessment of industries in the protected areas of the Carpathians**

country		will definitely fail Row N %	will rather fail Row N %	hard to say Row N %	will rather succeed Row N %	will definitely succeed Row N %	
Romania	tourism	0,0%	0,0%	2,5%	30,0%	67,5%	
	culture, entertainment, recreation	5,0%	2,5%	10,0%	45,0%	37,5%	
	industrial processing	35,0%	22,5%	35,0%	7,5%	0,0%	
	crafts and handicrafts	0,0%	2,5%	10,0%	25,0%	62,5%	
	transport and logistics	10,0%	32,5%	25,0%	22,5%	10,0%	
	trade	17,5%	7,5%	12,5%	47,5%	15,0%	
	agriculture and food processing	0,0%	12,5%	7,5%	60,0%	20,0%	
	telecommunications	30,0%	27,5%	37,5%	5,0%	0,0%	
	forestry	0,0%	10,5%	15,8%	60,5%	13,2%	
	construction	22,5%	20,0%	32,5%	25,0%	0,0%	
	financial and insurance activities	20,0%	10,0%	32,5%	30,0%	7,5%	
	professional, scientific and technical activities	12,5%	10,0%	22,5%	35,0%	20,0%	
	health care and social assistance	20,0%	12,5%	40,0%	15,0%	12,5%	
	education	0,0%	15,0%	5,0%	37,5%	42,5%	
	energy	20,0%	32,5%	22,5%	17,5%	7,5%	
	Hungary	tourism	0,0%	2,4%	7,3%	56,1%	34,1%
		culture, entertainment, recreation	0,0%	19,5%	14,6%	48,8%	17,1%
		industrial processing	4,9%	19,5%	36,6%	31,7%	7,3%
		crafts and handicrafts	0,0%	10,0%	15,0%	70,0%	5,0%
		transport and logistics	2,4%	17,1%	39,0%	34,1%	7,3%
trade		0,0%	22,5%	45,0%	22,5%	10,0%	
agriculture and food processing		4,9%	14,6%	24,4%	46,3%	9,8%	
telecommunications		0,0%	14,6%	36,6%	41,5%	7,3%	
forestry		2,4%	9,8%	17,1%	53,7%	17,1%	
construction		0,0%	22,0%	29,3%	43,9%	4,9%	
financial and insurance activities		0,0%	29,3%	51,2%	17,1%	2,4%	
professional, scientific and technical activities		7,3%	9,8%	29,3%	43,9%	9,8%	
health care and social assistance		15,0%	30,0%	32,5%	20,0%	2,5%	
education		7,3%	26,8%	24,4%	34,1%	7,3%	
energy	4,9%	39,0%	26,8%	22,0%	7,3%		
Poland	tourism	2,4%	4,8%	7,1%	35,7%	50,0%	
	culture, entertainment, recreation	0,0%	14,3%	14,3%	42,9%	28,6%	
	industrial processing	19,5%	36,6%	24,4%	14,6%	4,9%	
	crafts and handicrafts	0,0%	14,3%	11,9%	45,2%	28,6%	
	transport and logistics	12,5%	15,0%	42,5%	22,5%	7,5%	
	trade	9,5%	9,5%	26,2%	40,5%	14,3%	
	agriculture and food processing	2,4%	33,3%	31,0%	19,0%	14,3%	
	telecommunications	0,0%	31,0%	50,0%	11,9%	7,1%	
	forestry	0,0%	7,3%	29,3%	26,8%	36,6%	
	construction	14,6%	17,1%	22,0%	34,1%	12,2%	
	financial and insurance activities	12,2%	19,5%	31,7%	26,8%	9,8%	
	professional, scientific and technical activities	2,4%	39,0%	29,3%	19,5%	9,8%	
	health care and social assistance	4,9%	19,5%	31,7%	36,6%	7,3%	
	education	4,9%	14,6%	31,7%	31,7%	17,1%	
energy	22,0%	17,1%	26,8%	26,8%	7,3%		
Slovakia	tourism	0,0%	2,0%	6,0%	60,0%	36,0%	
	culture, entertainment, recreation	0,0%	6,0%	6,0%	68,0%	20,0%	
	industrial processing	24,5%	46,9%	18,4%	6,1%	4,1%	
	crafts and handicrafts	4,0%	8,0%	18,0%	54,0%	16,0%	
	transport and logistics	12,0%	28,0%	40,0%	16,0%	4,0%	
	trade	4,0%	10,0%	48,0%	24,0%	14,0%	
	agriculture and food processing	6,1%	24,5%	20,4%	34,7%	14,3%	
	telecommunications	12,2%	18,4%	55,1%	10,2%	4,1%	
	forestry	4,0%	18,0%	14,0%	46,0%	18,0%	
	construction	20,0%	42,0%	18,0%	16,0%	4,0%	
financial and insurance activities	14,3%	28,6%	40,8%	16,3%	0,0%		

Czech Republic	professional, scientific and technical activities	4,0%	8,0%	44,0%	36,0%	8,0%
	health care and social assistance	2,0%	24,0%	40,0%	30,0%	4,0%
	education	4,0%	8,0%	44,0%	34,0%	10,0%
	energy	12,2%	24,5%	46,9%	14,3%	2,0%
	tourism	2,8%	0,0%	11,1%	38,9%	47,2%
	culture, entertainment, recreation	2,8%	13,9%	8,3%	52,8%	22,2%
	industrial processing	22,2%	22,2%	36,1%	16,7%	2,8%
	crafts and handicrafts	5,6%	11,1%	13,9%	47,2%	22,2%
	transport and logistics	19,4%	27,8%	30,6%	19,4%	2,8%
	trade	13,9%	8,3%	25,0%	38,9%	13,9%
	agriculture and food processing	5,6%	19,4%	22,2%	47,2%	5,6%
	telecommunications	11,1%	13,9%	52,8%	22,2%	0,0%
	forestry	2,8%	0,0%	25,0%	55,6%	16,7%
	construction	22,2%	13,9%	33,3%	25,0%	5,6%
financial and insurance activities	20,0%	20,0%	34,3%	25,7%	0,0%	
professional, scientific and technical activities	11,1%	16,7%	27,8%	30,6%	13,9%	
health care and social assistance	8,3%	25,0%	30,6%	36,1%	0,0%	
education	16,7%	5,6%	38,9%	19,4%	19,4%	
energy	17,1%	17,1%	45,7%	20,0%	0,0%	

**Table 11. The assessment of other industries in the protected areas of the Carpathians**

country	Valid		Frequency	Percent	Valid Percent	Cumulative Percent		
Romania	Valid		35	87,5	87,5	87,5		
		agro-turism// event venues	1	2,5	2,5	90,0		
		I think tourism and transport have the best chance of success.	1	2,5	2,5	92,5		
		tourism	1	2,5	2,5	95,0		
		Tourism, education, handicrafts, natural food production, ecological agriculture	1	2,5	2,5	97,5		
		transport, construction, tourism, green agriculture, food production	1	2,5	2,5	100,0		
		Total	40	100,0	100,0			
Hungary	Valid		33	80,5	80,5	80,5		
		-	1	2,4	2,4	82,9		
		Any supplier activities for multinational companies.	1	2,4	2,4	85,4		
		Creative economy	1	2,4	2,4	87,8		
		Livestock breeding, organic farming	1	2,4	2,4	90,2		
		Local history museums, as well as programs and commerce based on them	1	2,4	2,4	92,7		
		marketing activity, circular economy	1	2,4	2,4	95,1		
		Tourism, hospitality, entertainment industry, agriculture.	1	2,4	2,4	97,6		
		tourism, logistics	1	2,4	2,4	100,0		
				Total	41	100,0	100,0	
		Poland	Valid		32	74,4	74,4	74,4
agritourism	1			2,3	2,3	76,7		
ecology, services	1			2,3	2,3	79,1		
education and upbringing industry, traditional farming	1			2,3	2,3	81,4		
Gastronomy	1			2,3	2,3	83,7		
IT	1			2,3	2,3	86,0		
mainly handicrafts, shepherding	1			2,3	2,3	88,4		
mountain guidance	1			2,3	2,3	90,7		
Museum exhibition	1			2,3	2,3	93,0		
sanatoriums, health resorts	1			2,3	2,3	95,3		
services - remote work	1			2,3	2,3	97,7		
tourism	1			2,3	2,3	100,0		
				Total	43	100,0	100,0	
Slovakia	Valid				41	82,0	82,0	82,0
				Agricultural activities	1	2,0	2,0	84,0
				Any that is in the interest of the concerned authorities.	1	2,0	2,0	86,0
		arboriculture, waste management - waste processing, land reclamation - water management	1	2,0	2,0	88,0		
		arts (if a branch)	1	2,0	2,0	90,0		
		gastronomy	1	2,0	2,0	92,0		
		local products and production of souvenirs	1	2,0	2,0	94,0		
		Research	1	2,0	2,0	96,0		
		Sports activity	1	2,0	2,0	98,0		
		Sustainable tourism	1	2,0	2,0	100,0		
				Total	50	100,0	100,0	
Czech Republic	Valid		36	100,0	100,0	100,0		

**Table 12. The assessment of support factors in the protected areas of the Carpathians**

country			definitely the least important, the least urgent Row N %	rather unimportant, not urgent Row N %	hard to say Row N %	rather important, urgent Row N %	definitely the most important, the most urgent Row N %		
Romania		financial support for the development of companies (purchase of fixed assets)	0,0%	0,0%	0,0%	37,5%	62,5%		
		support in acquiring new knowledge and technology	0,0%	0,0%	0,0%	32,5%	67,5%		
		providing knowledge and contacts for business development	0,0%	0,0%	0,0%	32,5%	67,5%		
		consulting and training in the development of the company / products and services	0,0%	2,5%	0,0%	22,5%	75,0%		
		legal support in obtaining environmental permits and decisions	0,0%	0,0%	0,0%	42,5%	57,5%		
		advertising of these areas	0,0%	0,0%	0,0%	22,5%	77,5%		
		cooperation with local government authorities	0,0%	0,0%	0,0%	20,0%	80,0%		
		Hungary		financial support for the development of companies (purchase of fixed assets)	0,0%	10,0%	15,0%	47,5%	27,5%
				support in acquiring new knowledge and technology	0,0%	7,5%	12,5%	42,5%	37,5%
				providing knowledge and contacts for business development	0,0%	5,0%	5,0%	55,0%	35,0%
				consulting and training in the development of the company / products and services	0,0%	7,5%	12,5%	52,5%	27,5%
legal support in obtaining environmental permits and decisions	0,0%			10,0%	10,0%	42,5%	37,5%		
Poland		advertising of these areas	0,0%	5,1%	12,8%	61,5%	20,5%		
		cooperation with local government authorities	2,5%	0,0%	12,5%	57,5%	27,5%		
		Poland		financial support for the development of companies (purchase of fixed assets)	5,0%	0,0%	5,0%	32,5%	57,5%
				support in acquiring new knowledge and technology	5,3%	7,9%	5,3%	47,4%	34,2%
				providing knowledge and contacts for business development	2,5%	10,0%	5,0%	57,5%	25,0%
Slovakia		consulting and training in the development of the company / products and services	12,5%	10,0%	22,5%	40,0%	15,0%		
		legal support in obtaining environmental permits and decisions	10,0%	2,5%	12,5%	37,5%	37,5%		
		advertising of these areas	2,5%	2,5%	5,0%	35,0%	55,0%		
		cooperation with local government authorities	2,5%	2,5%	7,5%	52,5%	35,0%		
		Slovakia		financial support for the development of companies (purchase of fixed assets)	2,1%	6,3%	10,4%	52,1%	29,2%
				support in acquiring new knowledge and technology	0,0%	10,4%	27,1%	47,9%	14,6%
				providing knowledge and contacts for business development	0,0%	12,5%	8,3%	43,8%	35,4%
Czech Republic		consulting and training in the development of the company / products and services	0,0%	14,6%	16,7%	54,2%	14,6%		
		legal support in obtaining environmental permits and decisions	0,0%	4,2%	0,0%	29,2%	66,7%		
		advertising of these areas	0,0%	6,3%	4,2%	41,7%	47,9%		
		cooperation with local government authorities	0,0%	0,0%	2,1%	37,5%	60,4%		
		Czech Republic		financial support for the development of companies (purchase of fixed assets)	0,0%	2,8%	2,8%	33,3%	61,1%
				support in acquiring new knowledge and technology	5,7%	5,7%	11,4%	37,1%	40,0%

providing knowledge and contacts for business development	2,9%	8,6%	8,6%	25,7%	54,3%
consulting and training in the development of the company / products and services	5,6%	13,9%	11,1%	36,1%	33,3%
legal support in obtaining environmental permits and decisions	0,0%	2,8%	5,6%	50,0%	41,7%
advertising of these areas	0,0%	2,8%	11,1%	30,6%	55,6%
cooperation with local government authorities	0,0%	0,0%	16,7%	33,3%	50,0%

**Table 13. The assessment of other support factors in the protected areas of the Carpathians**

country		Frequency	Percent	Valid Percent	Cumulative Percent	
Romania	Valid	34	85,0	85,0	85,0	
	Creating clusters between local operators for a synergistic promotion and capacity increase	1	2,5	2,5	87,5	
	Development of the infrastructure for visiting protected areas.	1	2,5	2,5	90,0	
	It would help educate children from an early age and increase youth retention through green businesses	1	2,5	2,5	92,5	
	Legislation and tax facilities	1	2,5	2,5	95,0	
	Promotion of areas	1	2,5	2,5	97,5	
	Support for sales channels would be needed	1	2,5	2,5	100,0	
	Total	40	100,0	100,0		
	Hungary	Valid	32	78,0	78,0	78,0
		Courses showing the operation of landscape and ecological systems	1	2,4	2,4	80,5
Excellent connections to central government.		1	2,4	2,4	82,9	
Information center (even electronic)		1	2,4	2,4	85,4	
Infrastructure development		1	2,4	2,4	87,8	
publications		1	2,4	2,4	90,2	
Reduction and abolition of taxes and other burdens in both Poland and Hungary. Burdens arising from ZUS for sole proprietors in Poland and the abolition of the KATA tax form in Hungary clearly hinder entrepreneurs		1	2,4	2,4	92,7	
The power of presenting the experiences of other areas, local events like brainstorming		1	2,4	2,4	95,1	
To involve well-known persons in marketing activities so that wider strata can get to know the Carpathian areas. Many large companies also try to sponsor nature and protect values and businesses. Building partner relationships, which could even be based on reciprocity, thus providing everyone with favorable opportunities/support.		1	2,4	2,4	97,6	
Trainings		1	2,4	2,4	100,0	
Total	41	100,0	100,0			
Poland	Valid	28	65,1	65,1	65,1	
	Changing the law to make it stable.	1	2,3	2,3	67,4	
	ecological energy, logistics, human resources management, social media	1	2,3	2,3	69,8	
	it all depends on the promotion of the region and the mentality of people and where they want to rest and how they fill their wallets	1	2,3	2,3	72,1	
	location bonuses	1	2,3	2,3	74,4	
	Lowering the tribute to the state, i.e. taxes	1	2,3	2,3	76,7	
	Networking	1	2,3	2,3	79,1	
	operation of non-governmental organizations	1	2,3	2,3	81,4	
	organization of industry meetings	1	2,3	2,3	83,7	

	Promotion of slow travel tourism	1	2,3	2,3	86,0
	Promotional activities carried out individually for SMEs	1	2,3	2,3	88,4
	so-called networking in subsidy support programmes, supporting networking in general, reducing VAT on recreational and educational products, e.g. bicycle rental for school groups	1	2,3	2,3	90,7
	Subsidies for opening a business, training	1	2,3	2,3	93,0
	Targeted programs for the development of tourism with own contribution based on non-financial resources	1	2,3	2,3	95,3
	Tax credits	1	2,3	2,3	97,7
	Training, cooperation with entrepreneurs from Poland	1	2,3	2,3	100,0
	Total	43	100,0	100,0	
Slovakia	Valid	41	82,0	82,0	82,0
	Construction in the High Tatras must be limited.	1	2,0	2,0	84,0
	creating clusters, associations	1	2,0	2,0	86,0
	Develop at the same time	1	2,0	2,0	88,0
	digitization, research and communication of its results for the public, understanding of interest groups (mainly from the "protection" side of nature)	1	2,0	2,0	90,0
	Look for ways and especially exceptions to build infrastructure in protected areas,	1	2,0	2,0	92,0
	Subsidies	1	2,0	2,0	94,0
	Support for the use of local products and services	1	2,0	2,0	96,0
	the real interest of state authorities and NGOs in the development of the affected territories	1	2,0	2,0	98,0
	v	1	2,0	2,0	100,0
Total	50	100,0	100,0		
Czech Republic	Valid	35	97,2	97,2	97,2
	more subsidies	1	2,8	2,8	100,0
	Total	36	100,0	100,0	

## FREQUENCY TABLES FOR YOUTH RESPONSES

**Table 1. Country of the respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Romania	109	13,9	13,9	13,9
	Hungary	102	13,0	13,0	26,9
	Ukraine	223	28,4	28,4	55,4
	Poland	126	16,1	16,1	71,4
	Slovakia	107	13,6	13,6	85,1
	Czech Republic	117	14,9	14,9	100,0
	Total	784	100,0	100,0	

**Table 2. Gender of the respondents**

country		Frequency	Percent	Valid Percent	Cumulative Percent	
Romania	Valid	female	63	57,8	57,8	57,8
		male	46	42,2	42,2	100,0
		Total	109	100,0	100,0	
Hungary	Valid	female	49	48,0	48,0	48,0
		male	53	52,0	52,0	100,0
		Total	102	100,0	100,0	
Ukraine	Valid	female	134	60,1	60,1	60,1
		male	89	39,9	39,9	100,0
		Total	223	100,0	100,0	
Poland	Valid	female	79	62,7	62,7	62,7
		male	47	37,3	37,3	100,0
		Total	126	100,0	100,0	
Slovakia	Valid	female	55	51,4	51,4	51,4
		male	52	48,6	48,6	100,0
		Total	107	100,0	100,0	
Czech Republic	Valid	female	58	49,6	49,6	49,6
		male	59	50,4	50,4	100,0
		Total	117	100,0	100,0	

**Table 3. Age of the respondents**

country		Frequency	Percent	Valid Percent	Cumulative Percent			
Romania	Valid	17-18	21	19,3	19,3	19,3		
		19-21	31	28,4	28,4	47,7		
		22-24	33	30,3	30,3	78,0		
		25-27	19	17,4	17,4	95,4		
		28-30	5	4,6	4,6	100,0		
		Total	109	100,0	100,0			
		Hungary	Valid	19-21	9	8,8	8,8	8,8
22-24	32			31,4	31,4	40,2		
25-27	31			30,4	30,4	70,6		
28-30	30			29,4	29,4	100,0		
Total	102			100,0	100,0			
Ukraine	Valid			17-18	71	31,8	31,8	31,8
				19-21	116	52,0	52,0	83,9
		22-24	23	10,3	10,3	94,2		
		25-27	8	3,6	3,6	97,8		
		28-30	5	2,2	2,2	100,0		
		Total	223	100,0	100,0			
		Poland	Valid	17-18	3	2,4	2,4	2,4
19-21	47			37,3	37,3	39,7		
22-24	50			39,7	39,7	79,4		
25-27	19			15,1	15,1	94,4		
28-30	7			5,6	5,6	100,0		
Total	126			100,0	100,0			
Slovakia	Valid			17-18	9	8,4	8,4	8,4
		19-21	45	42,1	42,1	50,5		
		22-24	32	29,9	29,9	80,4		
		25-27	12	11,2	11,2	91,6		
		28-30	9	8,4	8,4	100,0		
		Total	107	100,0	100,0			
		Czech Republic	Valid	17-18	12	10,3	10,3	10,3
19-21	45			38,5	38,5	48,7		
22-24	28			23,9	23,9	72,6		
25-27	18			15,4	15,4	88,0		
28-30	14			12,0	12,0	100,0		
Total	117			100,0	100,0			

**Table 4. Do you personally know anyone (in your family or in the closest circle) who has run or is running a business in the Carpathian Mountains, in protected areas?**

country		Frequency	Percent	Valid Percent	Cumulative Percent
Romania	Valid	no	89	81,7	81,7
		yes	20	18,3	100,0
		Total	109	100,0	100,0
Hungary	Valid	no	78	76,5	77,2
		yes	23	22,5	100,0
		Total	101	99,0	100,0
	Missing	System	1	1,0	
Ukraine	Valid	no	191	85,7	86,8
		yes	29	13,0	100,0
		Total	220	98,7	100,0
	Missing	System	3	1,3	
Poland	Valid	no	112	88,9	88,9
		yes	14	11,1	100,0
		Total	126	100,0	100,0
	Missing	System	2	1,9	
Slovakia	Valid	no	94	87,9	89,5
		yes	11	10,3	100,0
		Total	105	98,1	100,0
	Missing	System	2	1,9	
Czech Republic	Valid	no	101	86,3	87,1
		yes	15	12,8	100,0
		Total	116	99,1	100,0
	Missing	System	1	,9	
Total	117	100,0			

**Table 5. Do you associate your professional future (work, career) with work in protected areas in the Carpathians?**

country		Frequency	Percent	Valid Percent	Cumulative Percent	
Romania	Valid	definitely not	19	17,4	17,4	17,4
		rather not	30	27,5	27,5	45,0
		hard to say	38	34,9	34,9	79,8
		rather yes	20	18,3	18,3	98,2
		definitely yes	2	1,8	1,8	100,0
		Total	109	100,0	100,0	
		Hungary	Valid	definitely not	9	8,8
rather not	48			47,1	47,1	55,9
hard to say	29			28,4	28,4	84,3
rather yes	14			13,7	13,7	98,0
definitely yes	2			2,0	2,0	100,0
Total	102			100,0	100,0	
Ukraine	Valid			definitely not	51	22,9
		rather not	108	48,4	48,6	71,6
		hard to say	44	19,7	19,8	91,4
		rather yes	17	7,6	7,7	99,1
		definitely yes	2	,9	,9	100,0
		Total	222	99,6	100,0	
		Missing	System	1	,4	
	Total	223	100,0			
Poland	Valid	definitely not	29	23,0	23,0	23,0
		rather not	60	47,6	47,6	70,6
		hard to say	30	23,8	23,8	94,4
		rather yes	6	4,8	4,8	99,2
		definitely yes	1	,8	,8	100,0
		Total	126	100,0	100,0	
		Slovakia	Valid	definitely not	32	29,9
rather not	41			38,3	38,7	68,9
hard to say	21			19,6	19,8	88,7
rather yes	10			9,3	9,4	98,1
definitely yes	2			1,9	1,9	100,0
Total	106			99,1	100,0	
Missing	System			1	,9	
Total	107		100,0			
Czech Republic	Valid	definitely not	31	26,5	26,5	26,5
		rather not	43	36,8	36,8	63,2
		hard to say	29	24,8	24,8	88,0
		rather yes	12	10,3	10,3	98,3
		definitely yes	2	1,7	1,7	100,0
		Total	117	100,0	100,0	

**Table 6. If it were up to you alone, you would want to:**

country			Frequency	Percent	Valid Percent	Cumulative Percent
Romania	Valid	run your own business	64	58,7	60,4	60,4
		work in a private workplace	24	22,0	22,6	83,0
		work in a state or local government enterprise	15	13,8	14,2	97,2
		do not work for money at all	3	2,8	2,8	100,0
		Total	106	97,2	100,0	
		Missing System	3	2,8		
	Total	109	100,0			
Hungary	Valid	run your own business	55	53,9	55,0	55,0
		work in a private workplace	16	15,7	16,0	71,0
		work in a state or local government enterprise	20	19,6	20,0	91,0
		do not work for money at all	8	7,8	8,0	99,0
		other	1	1,0	1,0	100,0
		Total	100	98,0	100,0	
	Missing System	2	2,0			
	Total	102	100,0			
Ukraine	Valid	run your own business	145	65,0	65,9	65,9
		work in a private workplace	44	19,7	20,0	85,9
		work in a state or local government enterprise	6	2,7	2,7	88,6
		do not work for money at all	22	9,9	10,0	98,6
		other	3	1,3	1,4	100,0
		Total	220	98,7	100,0	
	Missing System	3	1,3			
	Total	223	100,0			
Poland	Valid	run your own business	82	65,1	65,6	65,6
		work in a private workplace	22	17,5	17,6	83,2
		work in a state or local government enterprise	21	16,7	16,8	100,0
		do not work for money at all	1	,8		
		Total	125	99,2	100,0	
		Missing System	1	,8		
	Total	126	100,0			
Slovakia	Valid	run your own business	62	57,9	58,5	58,5
		work in a private workplace	24	22,4	22,6	81,1
		work in a state or local government enterprise	14	13,1	13,2	94,3
		do not work for money at all	5	4,7	4,7	99,1
		other	1	,9	,9	100,0
		Total	106	99,1	100,0	
	Missing System	1	,9			
	Total	107	100,0			
Czech Republic	Valid	run your own business	73	62,4	62,9	62,9
		work in a private workplace	24	20,5	20,7	83,6
		work in a state or local government enterprise	14	12,0	12,1	95,7
		do not work for money at all	5	4,3	4,3	100,0
		Total	116	99,1	100,0	
		Missing System	1	,9		
	Total	117	100,0			

**Table 7. If it were up to you alone, you would want to (other):**

country			Frequency	Percent	Valid Percent	Cumulative Percent
Romania	Valid		109	100,0	100,0	100,0
Hungary	Valid		101	99,0	99,0	99,0
		to be a nature photography and conservation billionaire	1	1,0	1,0	100,0
	Total		102	100,0	100,0	
Ukraine	Valid		221	99,1	99,1	99,1
		The activity is aimed at preserving the natural integrity of that area	1	,4	,4	99,6
		Work in a public/charity organization	1	,4	,4	100,0
	Total		223	100,0	100,0	
Poland	Valid		126	100,0	100,0	100,0
Slovakia	Valid		106	99,1	99,1	99,1
		working in a state-owned enterprise while running your own small business	1	,9	,9	100,0
	Total		107	100,0	100,0	
Czech Republic	Valid		117	100,0	100,0	100,0

**Table 8. The assessment of the he possibilities of running a business in the protected areas of the Carpathians**

country			Frequency	Percent	Valid Percent	Cumulative Percent
Romania	Valid	definitely bad	11	10,1	10,1	10,1
		rather bad	18	16,5	16,5	26,6
		hard to say	32	29,4	29,4	56,0
		rather good	37	33,9	33,9	89,9
		definitely good	11	10,1	10,1	100,0
		Total	109	100,0	100,0	
Hungary	Valid	definitely bad	7	6,9	6,9	6,9
		rather bad	14	13,7	13,7	20,6
		hard to say	58	56,9	56,9	77,5
		rather good	22	21,6	21,6	99,0
		definitely good	1	1,0	1,0	100,0
		Total	102	100,0	100,0	
Ukraine	Valid	definitely bad	23	10,3	10,4	10,4
		rather bad	31	13,9	14,0	24,4
		hard to say	88	39,5	39,8	64,3
		rather good	70	31,4	31,7	95,9
		definitely good	9	4,0	4,1	100,0
		Total	221	99,1	100,0	
	Missing System	2	,9			
	Total	223	100,0			
Poland	Valid	definitely bad	1	,8	,8	,8
		rather bad	14	11,1	11,1	11,9
		hard to say	79	62,7	62,7	74,6
		rather good	31	24,6	24,6	99,2
		definitely good	1	,8	,8	100,0
		Total	126	100,0	100,0	
Slovakia	Valid	definitely bad	11	10,3	10,4	10,4
		rather bad	18	16,8	17,0	27,4
		hard to say	53	49,5	50,0	77,4
		rather good	22	20,6	20,8	98,1
		definitely good	2	1,9	1,9	100,0
		Total	106	99,1	100,0	
	Missing System	1	,9			
	Total	107	100,0			
Czech Republic	Valid	definitely bad	6	5,1	5,1	5,1
		rather bad	22	18,8	18,8	23,9
		hard to say	56	47,9	47,9	71,8
		rather good	27	23,1	23,1	94,9
		definitely good	6	5,1	5,1	100,0
		Total	117	100,0	100,0	

**Table 9. The assessment of opportunities and barriers for business in the protected areas of the Carpathians**

country		definitely barrier Row N %	rather barrier Row N %	hard to say Row N %	rather opportunity Row N %	definitely opportunity Row N %	
Romania	income and earnings of residents	10,4%	22,6%	28,3%	25,5%	13,2%	
	entrepreneurship of the inhabitants	7,5%	21,5%	27,1%	29,0%	15,0%	
	tourist attractiveness and popularity of these areas	4,8%	9,5%	13,3%	25,7%	46,7%	
	knowledge, qualifications and skills of residents	14,0%	18,7%	17,8%	26,2%	23,4%	
	availability of own capital to start a business	13,1%	18,7%	24,3%	20,6%	23,4%	
	support from local authorities and officials	12,1%	17,8%	28,0%	23,4%	18,7%	
	traditions and experience in running a business	13,9%	20,4%	17,6%	26,9%	21,3%	
	the possibility of obtaining credits and loans for starting and running a business, co-financing	9,3%	22,2%	27,8%	21,3%	19,4%	
	the presence of protected areas	7,7%	14,4%	17,3%	25,0%	35,6%	
	local natural resources	5,6%	1,9%	15,9%	29,9%	46,7%	
	Hungary	income and earnings of residents	10,8%	33,3%	31,4%	21,6%	2,9%
		entrepreneurship of the inhabitants	7,9%	29,7%	28,7%	25,7%	7,9%
		tourist attractiveness and popularity of these areas	0,0%	8,9%	12,9%	42,6%	35,6%
		knowledge, qualifications and skills of residents	5,9%	26,7%	21,8%	39,6%	5,9%
availability of own capital to start a business		12,9%	24,8%	20,8%	23,8%	17,8%	
support from local authorities and officials		12,9%	25,7%	30,7%	21,8%	8,9%	
traditions and experience in running a business		5,0%	12,9%	24,8%	46,5%	10,9%	
the possibility of obtaining credits and loans for starting and running a business, co-financing		8,9%	28,7%	33,7%	25,7%	3,0%	
the presence of protected areas		7,9%	15,8%	25,7%	35,6%	14,9%	
local natural resources		2,9%	5,9%	11,8%	44,1%	35,3%	
Ukraine		income and earnings of residents	6,3%	16,1%	24,4%	36,6%	16,6%
		entrepreneurship of the inhabitants	6,3%	15,1%	30,7%	29,8%	18,0%
		tourist attractiveness and popularity of these areas	5,8%	5,3%	6,8%	18,4%	63,8%
		knowledge, qualifications and skills of residents	4,8%	9,1%	20,2%	30,3%	35,6%
	availability of own capital to start a business	8,1%	11,4%	12,3%	23,2%	45,0%	
	support from local authorities and officials	8,3%	13,6%	25,2%	25,2%	27,7%	
	traditions and experience in running a business	5,9%	11,7%	22,0%	35,6%	24,9%	
	the possibility of obtaining credits and loans for starting and running a business, co-financing	9,3%	12,2%	22,0%	29,3%	27,3%	
	the presence of protected areas	16,6%	19,0%	21,5%	17,6%	25,4%	
	local natural resources	7,8%	8,3%	14,1%	34,6%	35,1%	
	Poland	income and earnings of residents	11,5%	16,4%	40,2%	27,0%	4,9%
		entrepreneurship of the inhabitants	8,2%	12,3%	31,1%	33,6%	14,8%
		tourist attractiveness and popularity of these areas	4,1%	7,3%	16,3%	36,6%	35,8%
		knowledge, qualifications and skills of residents	2,5%	14,9%	31,4%	35,5%	15,7%
availability of own capital to start a business		10,9%	15,1%	28,6%	24,4%	21,0%	
support from local authorities and officials		9,8%	19,5%	30,9%	24,4%	15,4%	
traditions and experience in running a business		5,0%	20,7%	29,8%	28,9%	15,7%	

	the possibility of obtaining credits and loans for starting and running a business, co-financing	6,6%	16,4%	30,3%	31,1%	15,6%
	the presence of protected areas	13,6%	27,2%	31,2%	16,0%	12,0%
Slovakia	local natural resources	6,6%	9,8%	22,1%	34,4%	27,0%
	income and earnings of residents	17,5%	19,4%	33,0%	21,4%	8,7%
	entrepreneurship of the inhabitants	5,8%	26,2%	30,1%	22,3%	15,5%
	tourist attractiveness and popularity of these areas	2,9%	3,9%	12,7%	34,3%	46,1%
	knowledge, qualifications and skills of residents	8,7%	21,4%	24,3%	26,2%	19,4%
	availability of own capital to start a business	16,3%	29,8%	17,3%	17,3%	19,2%
	support from local authorities and officials	13,7%	24,5%	30,4%	17,6%	13,7%
	traditions and experience in running a business	3,0%	20,8%	32,7%	25,7%	17,8%
	the possibility of obtaining credits and loans for starting and running a business, co-financing	15,5%	19,4%	25,2%	24,3%	15,5%
	the presence of protected areas	18,6%	21,6%	29,4%	16,7%	13,7%
Czech Republic	local natural resources	5,9%	8,8%	18,6%	37,3%	29,4%
	income and earnings of residents	11,4%	19,3%	34,2%	21,9%	13,2%
	entrepreneurship of the inhabitants	4,4%	19,3%	33,3%	29,8%	13,2%
	tourist attractiveness and popularity of these areas	3,4%	4,3%	11,2%	25,9%	55,2%
	knowledge, qualifications and skills of residents	6,1%	14,9%	22,8%	33,3%	22,8%
	availability of own capital to start a business	9,6%	22,6%	18,3%	23,5%	26,1%
	support from local authorities and officials	15,0%	20,4%	24,8%	23,0%	16,8%
	traditions and experience in running a business	8,0%	13,3%	25,7%	40,7%	12,4%
	the possibility of obtaining credits and loans for starting and running a business, co-financing	10,4%	22,6%	26,1%	27,0%	13,9%
	the presence of protected areas	9,6%	20,9%	26,1%	21,7%	21,7%
	local natural resources	2,6%	6,1%	15,7%	33,0%	42,6%

**Table 10. Other opportunities or barriers for business in the protected areas of the Carpathians**

country	Valid		Frequency	Percent	Valid Percent	Cumulative Percent
Romania	Valid		92	84,4	84,4	84,4
		A big barrier in the development of entrepreneurship in protected areas would be to convince the inhabitants, and not only, to agree to the subsequent changes of the area.	1	,9	,9	85,3
		Barriers: too strict laws	1	,9	,9	86,2
		Bear	1	,9	,9	87,2
		Conceptualizing an idea good enough to be put into practice for the eventual business to function within normal parameters	1	,9	,9	88,1
		Development of the localities around the areas protected by tourism	1	,9	,9	89,0
		Ecotourism, products and services offered either by locals or by entrepreneurs/traders, either residents or those outside the community, conservation and restoration of habitats,	1	,9	,9	89,9
		European funds	1	,9	,9	90,8
		Fauna and natural hazards	1	,9	,9	91,7
		Forest protection	1	,9	,9	92,7
		International promotion would be an opportunity	1	,9	,9	93,6
		Loans from the bank	1	,9	,9	94,5
		Many times I have thought about this business, I have always said that I want to develop a small agro-tourism guesthouse to be able to offer people multiple landscapes and routes.	1	,9	,9	95,4
		The authorities are a barrier	1	,9	,9	96,3
		The craft industry	1	,9	,9	97,2
		The popularity of the Carpathians on an international level, partnerships with educational institutions that allow a continuous flow of people, impediment in the preparation of the documents and files necessary to establish a company (I know from experience)	1	,9	,9	98,2
		To find a middle way by keeping the areas protected, protected, but also to be used to their maximum capacity from a tourist point of view, the Carpathians being an incredible resource from this point of view	1	,9	,9	99,1
		Underdevelopment of infrastructure	1	,9	,9	100,0
		Total	109	100,0	100,0	
Hungary	Valid		85	83,3	83,3	83,3
		All areas of more than a hundred years of backward society	1	1,0	1,0	84,3
		Bureaucracy, politics, familiarity	1	1,0	1,0	85,3
		Cooperation could be a possibility, but its lack is often an obstacle.	1	1,0	1,0	86,3
		Corruption, unjustified competitive advantages, incompetence, predatory management approach, lack of resources, lack of entrepreneurial approach	1	1,0	1,0	87,3
		Environmental Protection	1	1,0	1,0	88,2
		I am looking for a request, will there be a place for the business in the given area	1	1,0	1,0	89,2
		I consider the topic mostly covered based on what was listed above.	1	1,0	1,0	90,2
		I think it would be necessary to spend more on the unifying power of the population and to build a higher level of trust between people.	1	1,0	1,0	91,2
		In my opinion, the questionnaire exhausted the possibilities.	1	1,0	1,0	92,2
		Infrastructure	1	1,0	1,0	93,1

		lack of capital, lack of entrepreneurship, little access to education	1	1,0	1,0	94,1
		Legal jurisdictions. Current economic conditions	1	1,0	1,0	95,1
		must also be reviewed on a country-specific basis, there may be serious differences	1	1,0	1,0	96,1
		National Park, official permits	1	1,0	1,0	97,1
		Opportunity: Diversity of landscape values, e.g. that there are many types of landscapes in these areas. Obstacle: I think mainly from a financial and bureaucratic point of view (mostly knowing Hungary)	1	1,0	1,0	98,0
		politics	1	1,0	1,0	99,0
		The presence of wild animals (mainly bears) is a hindrance factor in terms of safety and wildlife damage	1	1,0	1,0	100,0
		Total	102	100,0	100,0	
Ukraine	Valid		189	84,8	84,8	84,8
		barrier - damage to nature, opportunity - more expensive prices/services due to the uniqueness of the location	1	,4	,4	85,2
		Barriers can be the lack of improved infrastructure (roads, communications); also a barrier - internal conflicts between the development of tourism and the preservation of biodiversity	1	,4	,4	85,7
		Big problems with garbage disposal	1	,4	,4	86,1
		Business activity in nature conservation areas should not harm the environment	1	,4	,4	86,5
		corruption	2	,9	,9	87,4
		Creation of sanctuaries with animals listed in the Red Book and their careful support, development of tourism, improvement of road surface, improvement of infrastructure, in particular road	1	,4	,4	87,9
		Deforestation for construction, damage to nature	1	,4	,4	88,3
		deforestation, corruption	1	,4	,4	88,8
		Deforestation, which causes floods, destroys local species of animals and plants	1	,4	,4	89,2
		Environmental pollution as a negative factor	1	,4	,4	89,7
		environmental protection legislation, not all types of business can be conducted in the conditions of PZF	1	,4	,4	90,1
		Government	1	,4	,4	90,6
		High level of corruption	1	,4	,4	91,0
		Higher education, ecology, mind, owners of their land	1	,4	,4	91,5
		human factor	1	,4	,4	91,9
		I believe that the nature conservation areas of the Carpathians should be left alone and not subject to any enterprise. Since, if it appears there, we may lose one of the pearls of Ukraine.	1	,4	,4	92,4
		Inexperience of the manager/employees	1	,4	,4	92,8
		It will be difficult to save the environment	1	,4	,4	93,3
		lack of a state target program to support the region	1	,4	,4	93,7
		lack of state support	1	,4	,4	94,2
		legislation of Ukraine?	1	,4	,4	94,6
		non-compliance with laws related to nature protection, urban planning, and the use of recreational areas	1	,4	,4	95,1

			1	,4	,4	95,5
			1	,4	,4	96,0
			1	,4	,4	96,4
			1	,4	,4	96,9
			1	,4	,4	97,3
			1	,4	,4	97,8
			1	,4	,4	98,2
			1	,4	,4	98,7
			1	,4	,4	99,1
			1	,4	,4	99,6
			1	,4	,4	100,0
			223	100,0	100,0	
Poland	Valid		112	88,9	88,9	88,9
			1	,8	,8	89,7
			1	,8	,8	90,5
			1	,8	,8	91,3
			1	,8	,8	92,1
			1	,8	,8	92,9
			1	,8	,8	93,7
			1	,8	,8	94,4
			1	,8	,8	95,2
			1	,8	,8	96,0
			1	,8	,8	96,8
			1	,8	,8	97,6
			1	,8	,8	98,4
			1	,8	,8	99,2
			1	,8	,8	100,0
			126	100,0	100,0	
Slovakia	Valid		101	94,4	94,4	94,4
			1	,9	,9	95,3
			1	,9	,9	96,3

			1	,9	,9	97,2
			1	,9	,9	98,1
			1	,9	,9	99,1
			1	,9	,9	100,0
Czech Republic	Valid		107	100,0	100,0	
			116	99,1	99,1	99,1
			1	,9	,9	100,0
			117	100,0	100,0	

**Table 11. The assessment of industries in the protected areas of the Carpathians**

country		will definitely fail Row N %	will rather fail Row N %	hard to say Row N %	will rather succeed Row N %	will definitely succeed Row N %	
Romania	tourism	2,8%	3,7%	5,6%	31,8%	56,1%	
	culture, entertainment, recreation	0,0%	6,7%	7,6%	41,9%	43,8%	
	industrial processing	13,1%	24,3%	30,8%	20,6%	11,2%	
	crafts and handicrafts	4,7%	6,6%	18,9%	40,6%	29,2%	
	transport and logistics	6,6%	21,7%	33,0%	29,2%	9,4%	
	trade	8,5%	10,4%	24,5%	39,6%	17,0%	
	agriculture and food processing	6,5%	16,7%	17,6%	40,7%	18,5%	
	telecommunications	8,5%	16,0%	35,8%	31,1%	8,5%	
	forestry	4,7%	5,6%	20,6%	37,4%	31,8%	
	construction	10,2%	25,9%	28,7%	22,2%	13,0%	
	financial and insurance activities	14,7%	16,5%	42,2%	22,9%	3,7%	
	professional, scientific and technical activities	7,3%	16,5%	21,1%	38,5%	16,5%	
	health care and social assistance	10,3%	21,5%	29,0%	24,3%	15,0%	
	education	5,6%	11,2%	33,6%	29,0%	20,6%	
	energy	9,3%	19,4%	43,5%	19,4%	8,3%	
	Hungary	tourism	2,0%	2,9%	8,8%	34,3%	52,0%
		culture, entertainment, recreation	3,0%	3,0%	10,9%	38,6%	44,6%
		industrial processing	10,0%	22,0%	36,0%	26,0%	6,0%
		crafts and handicrafts	4,0%	6,9%	15,8%	42,6%	30,7%
transport and logistics		7,2%	25,8%	35,1%	24,7%	7,2%	
trade		5,0%	9,9%	23,8%	45,5%	15,8%	
agriculture and food processing		5,9%	9,9%	24,8%	40,6%	18,8%	
telecommunications		5,1%	21,4%	28,6%	31,6%	13,3%	
forestry		9,9%	5,0%	13,9%	41,6%	29,7%	
construction		10,9%	23,8%	34,7%	21,8%	8,9%	
financial and insurance activities		10,9%	18,8%	37,6%	22,8%	9,9%	
professional, scientific and technical activities		2,0%	15,8%	28,7%	38,6%	14,9%	
health care and social assistance		9,9%	23,8%	26,7%	21,8%	17,8%	
education		6,1%	13,1%	33,3%	32,3%	15,2%	
energy		11,9%	20,8%	31,7%	24,8%	10,9%	
Ukraine		tourism	1,9%	4,3%	6,7%	23,4%	63,6%
		culture, entertainment, recreation	1,9%	6,2%	6,2%	32,4%	53,3%
		industrial processing	15,9%	14,4%	34,6%	21,2%	13,9%
		crafts and handicrafts	1,4%	4,3%	14,4%	34,6%	45,2%
	transport and logistics	6,8%	22,0%	28,8%	29,3%	13,2%	
	trade	1,9%	9,7%	22,8%	38,8%	26,7%	
	agriculture and food processing	4,8%	11,0%	17,7%	45,0%	21,5%	
	telecommunications	6,7%	22,6%	37,5%	24,5%	8,7%	
	forestry	6,2%	12,4%	16,3%	29,2%	35,9%	
	construction	13,9%	20,6%	24,9%	26,8%	13,9%	
	financial and insurance activities	10,2%	24,3%	35,9%	25,2%	4,4%	
	professional, scientific and technical activities	5,8%	15,5%	33,3%	26,1%	19,3%	
	health care and social assistance	2,9%	11,5%	24,5%	34,1%	26,9%	
	education	5,7%	14,4%	31,6%	32,1%	16,3%	
	energy	11,0%	19,1%	33,0%	24,9%	12,0%	
	Poland	tourism	3,2%	5,6%	10,5%	31,5%	49,2%
		culture, entertainment, recreation	3,3%	6,5%	17,9%	40,7%	31,7%
		industrial processing	19,2%	20,0%	35,8%	17,5%	7,5%
		crafts and handicrafts	7,4%	8,3%	18,2%	44,6%	21,5%
transport and logistics		15,6%	16,4%	29,5%	27,0%	11,5%	
trade		9,6%	13,6%	30,4%	35,2%	11,2%	
agriculture and food processing		9,8%	9,8%	25,2%	36,6%	18,7%	
telecommunications		8,1%	15,3%	45,2%	24,2%	7,3%	
forestry		4,2%	5,8%	20,0%	30,0%	40,0%	
construction		17,1%	18,7%	30,1%	23,6%	10,6%	
financial and insurance activities		11,4%	23,6%	36,6%	21,1%	7,3%	

Slovakia	professional, scientific and technical activities	9,0%	11,5%	35,2%	34,4%	9,8%
	health care and social assistance	8,1%	15,4%	31,7%	30,1%	14,6%
	education	8,1%	9,7%	36,3%	33,1%	12,9%
	energy	13,1%	17,2%	37,7%	27,0%	4,9%
	tourism	2,0%	2,0%	14,9%	32,7%	48,5%
	culture, entertainment, recreation	0,0%	5,8%	12,6%	42,7%	38,8%
	industrial processing	14,6%	26,2%	35,9%	18,4%	4,9%
	crafts and handicrafts	4,9%	6,8%	20,4%	37,9%	30,1%
	transport and logistics	9,0%	26,0%	33,0%	24,0%	8,0%
	trade	1,0%	20,4%	27,2%	31,1%	20,4%
	agriculture and food processing	4,9%	20,6%	25,5%	26,5%	22,5%
	telecommunications	7,8%	31,4%	37,3%	16,7%	6,9%
	forestry	3,9%	12,6%	18,4%	34,0%	31,1%
	construction	9,7%	35,0%	26,2%	20,4%	8,7%
	financial and insurance activities	14,7%	32,4%	32,4%	16,7%	3,9%
	professional, scientific and technical activities	3,9%	16,5%	33,0%	35,0%	11,7%
	health care and social assistance	7,9%	13,9%	26,7%	35,6%	15,8%
	education	2,0%	16,8%	36,6%	29,7%	14,9%
	energy	5,9%	30,4%	38,2%	20,6%	4,9%
Czech Republic	tourism	2,6%	4,3%	6,1%	27,0%	60,0%
	culture, entertainment, recreation	0,9%	7,8%	7,8%	37,4%	46,1%
	industrial processing	13,8%	25,0%	32,8%	19,8%	8,6%
	crafts and handicrafts	3,5%	7,0%	15,7%	35,7%	38,3%
	transport and logistics	8,0%	21,2%	28,3%	36,3%	6,2%
	trade	4,4%	11,4%	21,9%	44,7%	17,5%
	agriculture and food processing	6,9%	10,3%	13,8%	52,6%	16,4%
	telecommunications	9,5%	23,3%	31,9%	25,0%	10,3%
	forestry	3,4%	11,2%	12,9%	30,2%	42,2%
	construction	11,2%	29,3%	26,7%	24,1%	8,6%
	financial and insurance activities	11,4%	22,8%	36,8%	25,4%	3,5%
	professional, scientific and technical activities	6,0%	19,8%	29,3%	29,3%	15,5%
	health care and social assistance	10,3%	15,5%	23,3%	31,9%	19,0%
	education	6,0%	14,7%	28,4%	33,6%	17,2%
	energy	14,7%	24,1%	31,0%	20,7%	9,5%

**Table 12. The assessment of other industries in the protected areas of the Carpathians**

country		Frequency	Percent	Valid Percent	Cumulative Percent
Romania	Valid	90	82,6	82,6	82,6
	Amusement parks	1	,9	,9	83,5
	beekeeping	1	,9	,9	84,4
	Bio	1	,9	,9	85,3
	business plan and recognition of the competition and the uniqueness of the idea	1	,9	,9	86,2
	Electrotechnics	1	,9	,9	87,2
	Maybe gastronomy	1	,9	,9	88,1
	Mountain activities	1	,9	,9	89,0
	museums	1	,9	,9	89,9
	Protection	1	,9	,9	90,8
	Recreation	1	,9	,9	91,7
	Recreational tourism, creation of interactive walkways	1	,9	,9	92,7
	resort, thematic camps, thematic excursions. and it is better to do nothing! :)	1	,9	,9	93,6
	Short story about tourism, logistics/warehouse capacities	1	,9	,9	94,5
	Sport, carried out in its many ways	1	,9	,9	95,4
	tourism	1	,9	,9	96,3
	Tourism for the protection of nature.	1	,9	,9	97,2
	Traditional transport by cart, donkey for tourists	1	,9	,9	98,2
	Traveling, ski racing	1	,9	,9	99,1
	Wine and beer processing	1	,9	,9	100,0
Total	109	100,0	100,0		
Hungary	Valid	83	81,4	81,4	81,4
	Agriculture	1	1,0	1,0	82,4
	agritourism	1	1,0	1,0	83,3
	Agritourism, hotel industry	1	1,0	1,0	84,3
	Agrotourism, glamping.	1	1,0	1,0	85,3
	Development of agriculture	1	1,0	1,0	86,3
	Folk crafts	1	1,0	1,0	87,3
	food industry	1	1,0	1,0	88,2
	For me, activity in protected areas is their destruction. Construction - deforestation, hotel business - restriction of access of ordinary people to the territory, etc. Or attractions for tourists - destruction of nature (for example, ATVs).	1	1,0	1,0	89,2
	Gastronomy	1	1,0	1,0	90,2
	immobility	1	1,0	1,0	91,2
	It is necessary to tighten up the mentioned industries as much as possible. Constantly improving, it is certainly necessary to attract as many people and tourists as possible and to expand tourism.	1	1,0	1,0	92,2
	None. Reserves must remain reserves. It is worth leaving at least some piece of nature alone.	1	1,0	1,0	93,1
	Recreation of the territory of the Carpathians and development of tourism.	1	1,0	1,0	94,1
	Software development, programming (operation of company management systems)	1	1,0	1,0	95,1
	Solar and wind energy	1	1,0	1,0	96,1
	Sport - climbing, running, bicycles, survival,	1	1,0	1,0	97,1
	Sports training facilities	1	1,0	1,0	98,0
	The vices of society	1	1,0	1,0	99,0
	Tourist guide, organizers of outdoor activities	1	1,0	1,0	100,0
Total	102	100,0	100,0		
Ukraine	Valid	218	97,8	97,8	97,8
	Agriculture	1	,4	,4	98,2
	Grocery shop	1	,4	,4	98,7
	Industries do well to stay away from nature	1	,4	,4	99,1
	information and communication	1	,4	,4	99,6
Other transport	1	,4	,4	100,0	

Poland	Valid	Total	223	100,0	100,0	
			101	80,2	80,2	80,2
		A pub for sure.	1	,8	,8	81,0
		agriculture, training	1	,8	,8	81,7
		Chances of bringing humanity closer to a global catastrophe is a success	1	,8	,8	82,5
		Chemical technologies	1	,8	,8	83,3
		cuisine	1	,8	,8	84,1
		In healthcare, I mainly mean sanatoriums	1	,8	,8	84,9
		Innovation, film industry	1	,8	,8	85,7
		Landscape architecture	1	,8	,8	86,5
		Nature museums, forest nurseries	1	,8	,8	87,3
		reducing bureaucracy and fighting corruption guarantee the chances of success.	1	,8	,8	88,1
		Renovation and finishing services	1	,8	,8	88,9
		Shifting economic activity to unprotected areas	1	,8	,8	89,7
		The field of cinematography	1	,8	,8	90,5
		tourism	8	6,3	6,3	96,8
		Tourism, trade, entertainment culture and recreation	1	,8	,8	97,6
		Tourist activity, ecological and rural tourism	1	,8	,8	98,4
		Tourism	1	,8	,8	99,2
		Various jobs from the office/online	1	,8	,8	100,0
Total	126	100,0	100,0			
Slovakia	Valid	Total	99	92,5	92,5	92,5
		Any industry that will not destroy the nature, micro-flora and landscape of the regions there.	1	,9	,9	93,5
		Excursion, nature reserves	1	,9	,9	94,4
		only tourism and business that does not harm the environment!	1	,9	,9	95,3
		Sport	1	,9	,9	96,3
		Sustainable tourism, the sphere of health care.	1	,9	,9	97,2
		tourism	2	1,9	1,9	99,1
		Tourism, development of agriculture	1	,9	,9	100,0
		Total	107	100,0	100,0	
		Czech Republic	Valid	117	100,0	100,0

## CATEGORIZATION KEY – ANALYSIS OF PROMOTIONAL ACTIVITIES

### Instructions for aggregation of promotional campaigns

We are interested in enterprises that operate in protected areas in the area of the Carpathians. These companies may be located outside these regions, but their crucial activity is located in these areas and the firms refer to this fact in their promotional materials.

The research is focused on analysis of different practices of recalling protected areas in the area of the Carpathians as an advantage that is emphasized in communication with potential clients. In other words, the fact of operating in protected areas or being located in protected areas is actively presented as a strength.

Therefore, it is necessary to identify the companies that actively present themselves as businesses connected with protected areas and/or the Carpathians (eg. tour operators, craftsmen, hotels, traditional producers, food producers – the list is open). They may concentrate on environmental characteristics but also recall traditional values, traditions of production or unique materials etc.

The whole research is divided into two main groups of communication: traditional and with the use of the Internet. Furthermore, we search for examples of promotional materials presenting advantages of the Carpathians or protected areas (the best practices and examples are these that utilize both aspects).

The tool allows to identify different forms of promotion (that leads to analysis on dominating forms) but focuses on online activities (the last problem area – “the content of promotional materials that emphasizes”).

1. The tool (.xls file) consists of the columns:

- **enterprise / business** – full name of the company which campaign or promotional materials are cited in further columns;
- **the industry or industries in which the business is conducted** – the business may be conducted in more than one industry (eg. tourism and production), however the research is focused only on these activities that relate to protected areas and / or the Carpathians and / or are advertised with explicit references to protected areas and or the Carpathians;
- **enterprise / business address** – if the company is located outside the protected areas of the Carpathians, it is necessary to prove that it operates within these areas. The contradictory example is when the company is located in one (or more) of these regions but operate completely

outside (eg. internationally). If the localization is used in promotional materials as an emphasized factor – it is one of our searched examples;

- **the area where the company operates** – if it is possible to determine: locally, regionally, nationally, internationally. This is an expansion of the information in the previous columns. Four main examples (actual examples may meet some of these assumptions):
  - small family business located in protected areas that operate locally and emphasize in promotional materials the fact of being located in protected areas in the Carpathians;
  - business located outside but operating mainly in the regions of protected areas in the Carpathians;
  - business located in the researched area but operating on the state level or even internationally (however, in promotional materials exposing the fact of being located in these areas);
  - finally, business located outside and operating in different places, but also in the Carpathians or protected areas (and showing it in promotional materials dedicated for these areas);
- **awards and / or certificates** - if only the company exposes this type of information in any way – please list down what they show or present;
- **types of promotion / the channels of communication with the clients** – if it is possible, please just put an “x” in the column, if there is of the defined forms (leaving an empty space when it is impossible to identify given form of promotion):
  - **traditional forms** – 6 columns;
  - **2.0 (Internet)** – 4 columns;
- **the content of promotional material that emphasizes** (this is the most important part of the matrix and it will take some time to fill up – it is needed to present the exact content citations that focus on given aspects in the column, with the link to the online source – extremely important):
  - **the Carpathians** – if in any form (given below) it is exposed or mentioned, please copy the citation(s) with the links to the source promotional materials (online only):
    - **localization in the Carpathians** – the examples how it is presented (if not, leave an empty space);

- **recalling the history of the Carpathians** – the examples how it is presented (if not, leave an empty space);
- **recalling traditions and customs of the Carpathians** – the examples how it is presented (if not, leave an empty space);
- **other potential content threads that focus on the Carpathians (and are presented in promotional materials available online)** – the examples how it is presented (if not, leave an empty space);
- **protected areas** – if in any form (given below) it is exposed or mentioned, please copy the citation(s) with the links to the source promotional materials (online only):
  - **clean environment** – the examples how it is presented (if not, leave an empty space);
  - unique landscape – the examples how it is presented (if not, leave an empty space);
  - sustainable business operating – the examples how it is presented (if not, leave an empty space);

- ecology – the examples how it is presented (if not, leave an empty space);
- other potential content threads that focus on the protected areas (and are presented in promotional materials available online) – the examples how it is presented (if not, leave an empty space).

2. Each row in the matrix is for one example (citation) of the content of promotional materials online. It means that for one company (one enterprise / business) there might be few if not even more rows. **The most crucial are examples of promotion that expose and value positively the protected areas in the Carpathians.**
3. **How to choose enterprises / businesses for the research?** We search for examples of most outstanding promotional activities that will give us the broadest overview of good practices. Therefore, it is worth to focus on the most recognizable companies and brands that refer to the Carpathians and promote their activities by referring to the advantages of protected areas.
4. **How many examples do we need?** We look for five most recognizable brands or companies (enterprises / businesses) from each researched country. Well picked entities will provide few if not more examples of the content each.



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