

D.T1.4.4.

Pilot action completion report with recommendations

Pilot implementation
of the “Carpathian strategy for enhancing
biodiversity and landscape conservation
outside and inside protected areas”
- outside Pieniny National Park (Poland)

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Pilot implementation of the “Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas” outside Pieniny National Park (Poland) constituted part of Activity AT1.4, carried out in thematic work package No 1 “Integration of biodiversity conservation and sustainable development in the Carpathian region” of the Interreg CENTRAL EUROPE project [CE 1359 Centralparks - Building management capacities of Carpathian protected areas for the integration and harmonization of biodiversity protection and local socio-economic development](#), co-financed by the European Regional Development Fund.

Activity AT1.4 contributed to the achievement of the Centralparks project Output O.T1.4, described in the project Application Form as “*Pilot implementation of the strategy (jointly developed under Activity A.T1.1) for enhancing biological and landscape diversity conservation inside and outside protected areas, integration of Carpathian protected areas into broader landscapes, maintenance and improvement of ecological connectivity in areas surrounding and within protected areas*”.

This pilot action was carried out by Ekopsychology Society (Centralparks project partner No 4) within the project Reporting Period No. 5 (01.04.2021–30.09.2021) in close cooperation with the management of Pieniny National Park, with the support and involvement of the local governments of the four municipalities sharing the external buffer zone of the national park, that is Czorsztyn, Krościenko nad Dunajcem, Łapsze Niżne, and Szczawnica municipality.

This report explains the intervention logic of the thematic work package No 1 and its pilot action implemented in the Pieniny region, and briefly summarizes the pilot action implementation process and activities undertaken by Ekopsychology Society.

Moreover, this report describes also lessons learnt in the course of implementation of this pilot action, and includes some recommendations for further implementation of the Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas, elaborated in 2019–2020 under the Centralparks project, both in the region targeted by this pilot action, and in other regions of outstanding natural and landscape values, in CE Programme area countries and beyond.

This report is also available in the Polish language version at the [Centralparks project website](#).

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1. Introduction

1.1. Legal and strategic context for pilot action implementation

The most important legal act defining the objectives and principles, as well as determining the approach and methods used for implementing the Centralparks project pilot action in the Pieniny region was the [Framework Convention on the Protection and Sustainable Development of the Carpathians](#) (further the Carpathian Convention), adopted on 22 May 2003 in Kyiv. The Carpathian Convention (the official Polish language version published in the Journal of Laws: [Dz.U. 2007 nr 96 poz. 634](#)) ratified by the Republic of Poland (further RP) on 27 February 2006, entered into force for Poland on 19 June 2006.

Article 2 paragraph 1 of the Carpathian Convention defines its general objectives: *“The Parties shall pursue a comprehensive policy and cooperate for the protection and sustainable development of the Carpathians with a view to inter alia improving quality of life, strengthening local economies and communities, and conservation of natural values and cultural heritage”*.

Article 13 paragraph 2 of the Carpathian Convention states that *“The Parties shall pursue policies guaranteeing public participation in decision-making relating to the protection and sustainable development of the Carpathians, and the implementation of this Convention”*.

The Carpathian Convention is a "framework" convention that defines general objectives, principles of cooperation and obligations of the Parties. Therefore, its implementation requires the adoption, ratification and implementation of subsequent international agreements, i.e. thematic Protocols setting up more detailed obligations of the Governments of the Parties in particular areas covered by the Convention.

The Second Meeting of the Conference of the Parties (COP2) of the Carpathian Convention in 2008 in Bucharest adopted the thematic [Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity](#) (Polish Journal of Laws: [Dz.U. 2010 nr 90 poz. 591](#)), it entered into force for Poland on 28 April 2010. During COP3 of the Convention held in 2011 in Bratislava, the [Protocol on Sustainable Tourism](#) was adopted (Polish Journal of Laws: [Dz.U. 2013 poz. 682](#)), that entered into force for Poland on 29 April 2013.

Both above-mentioned Protocols are already in force in all 7 "Carpathian" countries, unlike the [Protocol on Sustainable Forest Management](#) (2011), [Protocol on Sustainable Transport](#) (2014, Polish Journal of Laws: [Dz.U. 2019 poz. 285](#)), and [Protocol on Sustainable Agriculture and Rural Development](#) (2017, Polish Journal of Laws: [Dz.U. 2020 poz.131](#)).

Pursuant to Art. 91 of the Polish Constitution, the entry into force of the Convention or its thematic protocols means that they become parts of the national legal system and are directly applicable. The Carpathian Convention and its thematic protocols ratified by RP apply in Poland to the area of 18,612.48 km² located within the boundaries of 200 municipalities of the Małopolskie, Podkarpackie and Śląskie voivodeships.



The following provisions of the relevant thematic Protocols to the Carpathian Convention in force for Poland were of key importance for the implementation of the pilot action in the Pieniny region:

- Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity (2008)
Article 9 Continuity and connectivity of natural and semi-natural habitats, ecological network in the Carpathians
 1. *Each Party shall take measures in its national territory with the objective to improve and ensure continuity and connectivity of natural and semi-natural habitats in the Carpathians, thus allowing dispersal and migration of wild species populations particularly of large carnivores, and genetic exchange between such populations.*
- Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity (2008)
Article 15 Enhancing conservation and sustainable management in the areas outside of protected areas
 1. *Each Party shall take measures in its national territory with the objective to enhance conservation and sustainable management in the areas outside of protected areas in the Carpathians.*
 2. *Each Party shall facilitate coordination and cooperation between all relevant stakeholders, so as to enhance conservation and sustainable management in the areas outside of protected areas in the Carpathians, in particular with the objective of improving and ensuring connectivity between existing protected areas and other areas and habitats significant for biological and landscape diversity of the Carpathians.*
- Protocol on Sustainable Agriculture and Rural Development (2017)
Article 9 Protection and management of traditional cultural landscapes
 1. *The Parties shall take measures for the protection and management of traditional cultural landscapes of the Carpathians with outstanding traditional features and of high ecological quality, including the presence of valuable mountain ecosystems, natural and/or valuable semi-natural habitats, in particular grasslands, agro-biodiversity, genetic resources, cultivated plant varieties and the related traditional ecological knowledge.*

Another legal act important in the context of the pilot action in Pieniny is the [Convention on Biological Diversity](#) adopted in 1992 in Rio de Janeiro (Polish Journal of Laws: [Dz.U. 2002 nr 184 poz. 1532](#)). Pursuant to its Article 8 *Each Contracting Party shall, as far as possible and as appropriate:*

- (c) *Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use.*

Particularly important in the Pieniny region is the obligation resulting from the [Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora](#) (so-called “Habitats Directive”), which Article 3 paragraph 3 states, that “Where they consider it necessary, Member States shall endeavour to improve the ecological coherence of Natura 2000 by maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora”.



Moreover, the following acts of the Polish national law were particularly important for the implementation of this pilot action of the Centralparks project:

- Ustawa z dnia 8 marca 1990 r. o samorządzie gminnym ([Dz.U. 2021 poz. 1372](#)) - 1990 Law on the municipal self-government
- Ustawa z dnia 27 marca 2003 r. o planowaniu i zagospodarowaniu przestrzennym ([Dz.U. 2021 poz. 741](#)) - 2003 Law on spatial planning and land development
- Ustawa z dnia 16 kwietnia 2004 r. o ochronie przyrody ([Dz.U. 2004 nr 92 poz. 880](#)) - 2004 Law on nature protection
- Ustawa z dnia 24 kwietnia 2015 r. o zmianie niektórych ustaw w związku ze wzmocnieniem narzędzi ochrony krajobrazu ([Dz.U. 2015 poz. 774](#)) - 2015 Law amending certain other Laws for the enhancement of the landscape protection tools
- Rozporządzenie Ministra Środowiska z dnia 1 lipca 2014 r. w sprawie ustanowienia planu ochrony dla Pienińskiego Parku Narodowego ([Dz.U. 2014 poz. 1010](#)) - Ordinance establishing a protection plan for the Pieniny National Park.

The strategic framework for this pilot action was set, *inter alia*, by the [Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - EU Biodiversity Strategy for 2030 Bringing nature back into our lives](#), emphasizing the importance of setting up ecological corridors to prevent genetic isolation, allow for species migration, and maintain and enhance healthy ecosystems.

Moreover, it is necessary to mention Task No. 18 "Incorporation of indications of protection plans or plans of protective tasks for protected areas into sectoral documents and acts of local law" provided for in the Program for the Protection and Sustainable Use of Biological Diversity together with the Action Plan for 2015-2020 ([National Biodiversity Strategy and Action Plan v.3](#)), approved by the Council of Ministers on 6 November 2015 (Polish Official Journal [M.P. 2015 poz. 1207](#)), under its Specific Objective B "Improvement of the nature protection system" and its direction of intervention B.II concerning strengthening the institutional management system of protected areas.

1.2. Natural, economic and social context in the Polish part of the Carpathian region

Mountain regions have always been an area clearly distinguishable from other regions of Poland, both due to their geographical distinctiveness or cultural identity, as well as different living conditions, farming and land management methods more appropriate for the mountains. Most of the municipalities in the Polish part of the Carpathian region are classified as less-favoured areas (LFAs). In the Carpathians, the agricultural usefulness of soils is even lower than in the Sudetes, moreover, soils are more exposed to intense surface water erosion than observed in the Sudetes and Świętokrzyskie Mountains. The Carpathians are also one of the few regions in Poland where the share of forests ranges from 60% to almost 90% of the area of some municipalities.

Apart from unfavorable farming conditions and exceptionally high forest cover, the Polish part of the Carpathian region is characterized by a high share of the area covered by various forms of nature protection. The total area of the six Carpathian national parks constitutes almost 4.47% of the geographical scope of application of the Carpathian Convention in Poland (while the average



value of this indicator for the whole country is below 1%). Protected areas of different legal categories cover approx. 70% of the Polish part of the Carpathian region (in 2020 the country average was 32.3%), and in most Carpathian municipalities the share of protected areas exceeds 75% of their total territory.

Simultaneously, the Polish part of the Carpathian region is characterized by the highest population density in rural areas. Among all 16 voivodeships of Poland three "Carpathian" provinces occupy the first three places in this respect. According to the data from 2020, the rural areas population density in Małopolskie and Śląskie (Silesian) voivodeships (131 pers./km² and 124 pers./km², respectively) exceeded more than twice the average (53 pers./km²) for Polish rural areas, and five times the average for the three provinces, where this indicator is the lowest: in the north-eastern Podlaskie (24 pers./km²) and the northern ones: Warmińsko-Mazurskie and Zachodniopomorskie (25 pers./km²).

Such a high population density in rural areas highly influences both the character and quality of agricultural and rural settlement landscapes, in particular in areas where the scattered settlement pattern prevails.

The progressive dispersion of development in rural areas is largely caused by the pressure of land owners on local governments, which results in the allocation of excessive land reserves for new buildings. As a result, about 150 million inhabitants could live in the areas designated by the end of 2017 in the "Studies of conditions and directions of spatial development" (SUiKZP) adopted by municipalities, while the country's population was then 38.4 million. The building dispersion caused by such an oversupply of building land results in higher costs of servicing the settlement network (e.g. connecting and maintaining linear infrastructure) burdening the budgets of local governments, which may in turn have a direct impact on the gradual deterioration of the quality of life of the inhabitants.

Such high population density of rural areas and the dispersed settlement pattern in the Polish part of the Carpathian region, in combination with a higher share of the area covered by various forms of nature and landscape protection than in other regions of Poland, automatically translates into the scale of problems in spatial planning and conflicts between the need to protect natural and landscape values and the economic pressure on land development, agricultural use or building up most of the non-forested land.

Consequently, such conflicts are more intense and severe in the Carpathian region than in other regions of Poland. This might have been one of the important reasons for the recognition of the "*closer cooperation with the local and regional level*" as one of the priorities of the current three-year (2020-2023) Polish Presidency of the Carpathian Convention. Article 13.2 of the Carpathian Convention states that "*The Parties shall pursue policies guaranteeing public participation in decision-making relating to the protection and sustainable development of the Carpathians, and the implementation of this Convention*".



1.3. Centralparks Thematic Work Package No 1 - intervention logic

The activities undertaken in the frame of the thematic work package No. 1 of the Centralparks project were aimed at supporting the implementation of the two thematic protocols (in force for all Carpathian countries) to the Carpathian Framework Convention, at the local and regional level, in line with the priority of the current three-year (2020-2023) Polish Presidency of the Convention.

The basic assumption and intervention logic of the Centralparks thematic Work Package No 1 (WPT1) “Integration of biodiversity conservation and sustainable development in the Carpathian region” was that the reconciliation, linking the conservation of biological and landscape diversity to sustainable local socio-economic development, and raising the support of local communities for protected area operations is possible, if:

- well protected natural and landscape values
- are properly used as the drivers and assets for the local economic development (in particular for sustainable tourism development)
- while the conservation objectives, and benefits arising from the above synergy are effectively communicated to the local stakeholders.

Consequently, the task of the three TTTFs (thematic transnational task forces, or expert working groups) established under WPT1 in 2019, and operating in 2019-2020, was to jointly develop three, resulting from the above assumption, mutually supporting and complementary documents:

- (draft) Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas (resulting from, and aimed to support the implementation of the 2008 Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity to the Carpathian Convention);
- (draft) Strategy for local sustainable tourism development based on natural and cultural heritage of the Carpathians (resulting from, and aimed to support the implementation of the 2011 Protocol on Sustainable Tourism to the Carpathian Convention);
- Guidelines on communication between protected areas and local communities in the Carpathians.

In accordance with the intentions of the Parties, the implementation of the Convention is primarily intended to serve the inhabitants of the Carpathian region, but will hardly be possible without their participation and commitment.

Due to the above-mentioned priority of the Polish Presidency in the Carpathian Convention, the strategies developed under Centralparks WPT1 are not addressed to Governments of the Parties and central administration bodies, but directly to the inhabitants of the Carpathians, represented by their local governments, and administration of Carpathian protected areas. Nevertheless, both strategies elaborated under WPT1 were duly presented in 2021 to the relevant intergovernmental Working Groups of the Convention, and later submitted (as draft versions) for their expected endorsement by the Parties to the Convention.



The WPT1 intention to provide our stakeholders mutually supporting and complementary documents or "products" resulting from the WPT1 implementation means that the implementation of the local sustainable tourism development strategy also supports the protection of biological and landscape diversity, for example by measures aimed to prevent or mitigate the negative impact of tourism development on protected areas. Simultaneously, the purpose of the Guidelines on communication between protected areas and local communities is not only to facilitate the effective communication of the objectives of nature and landscape protection, but also to build and strengthen the sense of common ownership and responsibility for protected areas among the local residents.

In 2021, the testing phase began, in order to evaluate the effectiveness and usefulness of both draft strategies, under pilot actions carried out in Poland (in the buffer zone of Pieniny National Park and in Magura National Park region), Czech Republic, the Slovak Republic and Hungary. However, the guidelines on communication were tested only in Poland, as part of training courses for employees of protected areas designated in the Polish part of the Carpathian region.

1.4. Pilot action intervention logic - selection of the target region for implementation

At the stage of preparing the Centralparks project proposal (i.e. in 2017/2018) it was assumed that the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas" will be tested under two pilot actions, carried out respectively "inside" or "outside" protected areas located in different Carpathian countries, which will allow to compare the effects and evaluate the effectiveness of the implementation of this strategy in two different applications and in a different socio-economic context, as well as for the exchange of results and experiences of the Centralparks consortium partners.

It was then planned that the pilot action to test the above-mentioned the strategy "outside" the protected area will be implemented in the Polish part of the Carpathian region, but the specific location of this action was not indicated. However, one of the conditions for the final approval of the entire Centralparks project by the authorities of the Interreg CENTRAL EUROPE Programme in early 2019 was to define the exact locations of the pilot actions planned for implementation in Poland.

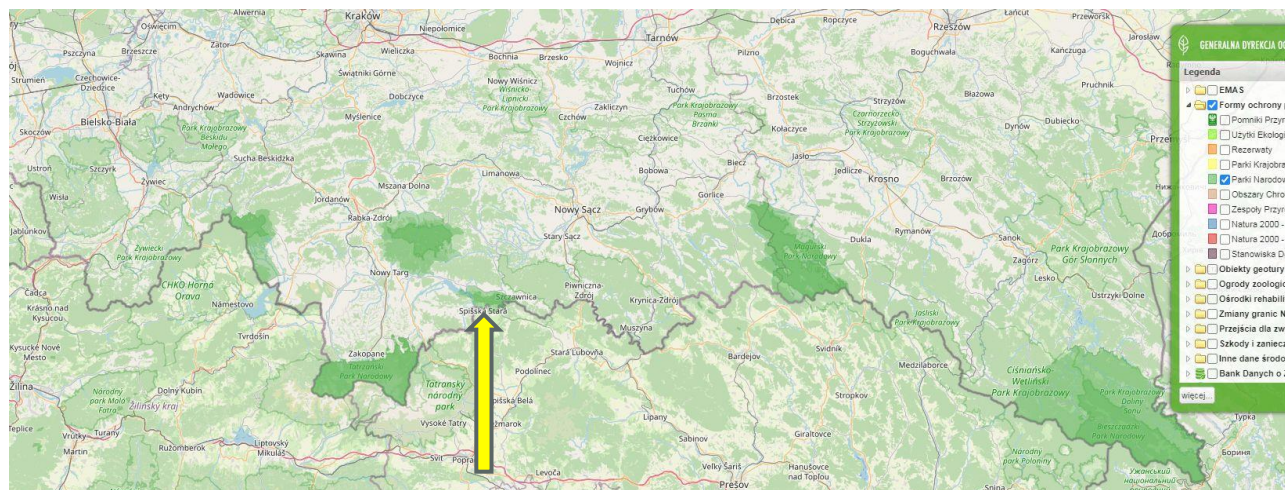
Taking into account that the pilot action was to be implemented "outside" the protected area, several criteria for selecting its location were adopted. Firstly, it was assumed that the implementation of the tested strategy "outside" may have the most significant positive impact on nature protection in the case of a protected area with a relatively small area, therefore potentially most exposed to the negative impact of phenomena occurring in its immediate vicinity.

Another criterion was the degree of fragmentation of natural ecosystems and habitats in areas surrounding the protected area, resulting in disturbance of the permeability of ecological corridors connecting a given protected area with neighboring areas of a high degree of naturalness (e.g. larger forest complexes), especially with other protected areas.

The third and last selection criterion was the validity of a protection plan, the availability of which would allow for the reduction of expenditure from the project funds for the identification and assessment of the intensity of external threats for a given area, and for supporting, under this pilot action, only activities planned and approved by the relevant nature protection authorities.

The only protected area meeting all three above-mentioned criteria was Pieniny National Park (hereinafter referred to as the Pieniny NP), spatially the smallest national park in the Polish part of the Carpathian region, separated by built-up or agricultural areas from other natural complexes on the Polish side, and by the Dunajec River gorge from the adjacent Slovak Pieniny National Park (*Pieninský národný park, PIENAP*), spatially the smallest national park in Slovakia.

Furthermore, the external buffer zone of Pieniny NP is not much larger than the area of the park itself, therefore it can provide little protection against external factors. Moreover, Pieniny NP Park was at that time the only national park in the Polish part of the Carpathian region having a valid protection plan.



Map 1. Location of Pieniny National Park (map source: Geoserwis GDOŚ)

Also tentatively taken into account, the next spatially smallest Babia Góra National Park (however 43% larger than Pieniny NP) is surrounded by an external buffer zone more than three times larger than the external buffer zone of Pieniny NP, furthermore it has maintained direct ecological connections with the nearby vast natural complexes, both on the Polish and Slovak sides of the state border. Moreover, Babia Góra National Park did not have a valid protection plan in March 2019 (such plan was approved only in July 2019 and published in September 2019, i.e. already during the implementation of the Centralparks project).



1.5. Key protected area targeted by the pilot action

Pieniny National Park was established by the ordinance of the Minister of Agriculture of 23 May 1932 on the creation of a special organizational unit from the reserve in the Pieniny Mountains under the name "National Park in Pieniny" ([M.P. 1932 nr 123 poz. 156](#)). After the Second World War, the park was recreated by the Regulation of the Council of Ministers of 30 October 1954 on the designation of Pieniny National Park ([Dz.U. 1955 nr 4 poz. 24](#)).

As many as 2,848 species of plants and fungi and 7,369 animal species, including 255 species of plants and fungi and 305 species of animals remaining under legal protection, 563 species of plants and fungi and 145 species of animals considered endangered have been found in the area of Pieniny NP. The park is a mainstay of 58 locally endemic species and 3 endemic varieties, and 6 relict species. Among the species and habitats protected in Pieniny NP, 3 species of plants, 2 species of invertebrates, 2 species of amphibians, 7 species of birds and 3 species of mammals, and 14 natural habitats require protection in the form of designating areas of the Natura 2000 ecological network.

Due to the above, in 2008-2011 in the area of Pieniny NP, two almost completely overlapping Natura 2000 areas with the common name of Pieniny were designated, i.e. the Special Area of Conservation (Habitats Directive) encompassing 2,346 ha (area code: PLH120013) and a Special Protection Area (Birds Directive) with an area of 2,336.4 ha (area code: PLB120008). Therefore, the Protection Plan for Pieniny NP, approved in 2014, defines the protection objectives as well as the scope of protection and monitoring of PLH120013 and PLB120008 areas of the Natura 2000 network. Both these areas were merged in 2013 and now form the PLC120002 "Pieniny" area encompassing 2,336.4 ha.

The area of Pieniny NP currently accounts for 2,371.75 ha, of which over 31.36% is under strict protection, 22.47% under active protection, and over 46.16% is located in the landscape protection zone. The external buffer zone of the Pieniny NP covers only 2,653.8 ha.

As the pilot action in the Pieniny Mountains was aimed at supporting the implementation of the Carpathian Convention - it is worth recalling little-known facts from the history of this region, closely related to the genesis of this Convention. In March 1924 the League of Nations / Société des Nations (replaced in 1946 by the United Nations Organization) requested Czechoslovakia and Poland to agree upon the exact delineation of the state border *"in the Jaworzyna district"* and prepare a protocol aimed at *"regulating the interests of municipalities and people adjacent to this part of the border"*.

Already less than two months later (on 6 May 1924) both countries signed a bilateral Protocol in Kraków, through their commissioners at the Polish-Czechoslovak International Delimitation Commission. It is worth mentioning that the Commissioner of the Polish side was Dr. Walery Goetel, a geologist, creator of zoology (a field of science dealing with active protection of the natural environment), co-creator of the concept of the designation border national parks in the Polish part of the Carpathians (Tatra, Pieniny, and Babia Góra).



The commissioners representing Czechoslovakia and Poland instructed their Governments to "*conclude as soon as possible*" two new international agreements:

- a) *a **tourist Convention**, which would enable and facilitate the development of tourism on the entire Polish-Czechoslovakian mountain border, primarily by lifting passport difficulties, facilitating communication, etc.*
- b) *the **Convention on a natural park (reserve)**, which, following an analogous convention between the United States of America and Canada, would create in the Polish-Czechoslovak border region areas reserved for the culture, fauna and flora, and the character of the local landscape."*

The goal described in the above point b) was partially achieved 4 years later, when the "National Park in Pieniny" (established on 23 May 1932) along with the adjacent "Slovak Nature Reserve in Pieniny" (established on July 12, 1932) were announced on 17 July 1932 to form Europe's first International Nature Park, the world's second transboundary protected area after [Waterton-Glacier International Peace Park](#), which was announced just a month earlier (18 June 1932).

On the other hand, the postulate contained in the above point a) was implemented only in 2003, by adopting the Framework Convention on the Protection and Sustainable Development of the Carpathians, part of which is the thematic Protocol on Sustainable Tourism adopted in 2011.



2. Preparation of pilot action implementation in the Pieniny region

2.1. The sequence of activities of the pilot action in the Pieniny region

For the implementation of the pilot action of the Centralparks project in the Pieniny region, the following logical sequence of actions necessary for its implementation was adopted. The same or a similar sequence of actions may also be successfully applied in any other region.

1. Identification of the most urgent challenges and problems that the pilot action should address.
2. Selection of appropriate measures recommended in the Centralparks strategy, feasible under the pilot action (taking into account the time frame specified in the application and the size of the budget available for the implementation of the action).
3. Defining the area of pilot action implementation.
4. Defining the relevant pilot action target group and other stakeholders (in accordance with the methodology set out in Chapter 1 of the Guidelines on communication between protected areas and local communities in the Carpathians, developed under Centralparks WPT1).
5. Acquiring and gathering data and information on the area of pilot action implementation, important from the point of view of the challenges to be addressed by the pilot action.
6. Analysis of the collected data and information, assessment and diagnosis of the existing situation in the area of the implementation of the pilot action and in individual municipalities covered by the pilot action.
7. Development of a communication and meeting conduct methodology appropriate for individual target groups (also taking into account the recommendations of the above-mentioned Guidelines developed under Centralparks WPT1).
8. Searching, acquiring, collecting and selecting appropriate materials useful for conducting the planned workshops and meetings, including best practice examples from other parts of the Carpathian region, to be able to use and propose the participants of the pilot action solutions that worked in similar circumstances and in a similar local socio-economic context.
9. Preparation of materials needed to conduct planned workshops and meetings, tailored to individual groups of recipients and the specificity of individual municipalities [*Deliverable D.T1.4.1*].
10. Organizing, preparing and conducting 3-day workshop in the protected area in order to prepare further meetings necessary to achieve the goal of the pilot action, including agreeing with the management of the protected area their framework program, substantive contents and messages addressed to representatives of local communities, communication and meeting conduct methodology, selecting substantively competent protected area employees who should take part in planned meetings with representatives of local communities [*Deliverable D.T1.4.2*].
11. Organizing, preparing and conducting a series of 4 one-day meetings in municipalities, with the participation of representatives of the pilot action target group and, if possible, also other local stakeholders [*Deliverable D.T1.4.3*].
12. Elaborating and summarizing conclusions from the pilot action implementation, and formulation of recommendations for the implementation of the Carpathian strategy for enhancing biodiversity and landscape conservation outside protected areas, in the Pieniny region or in other regions [*Deliverable D.T1.4.4*].



2.2. Identification of challenges to be addressed by the pilot action in the Pieniny region

As mentioned in section 1.4 describing the intervention logic of this pilot action, an important criterion for selecting its location was the existence of protection plan for the key protected area targeted by the pilot action. The availability of such document significantly facilitated the identification and assessment of the intensity of external threats for this protected area. Moreover, the fact that the pilot action supported the measures considered important and urgent by the central public administration bodies competent for nature and landscape protection, approving the Protection Plan for Pieniny National Park, was much more important.

Among the existing external threats, the Protection Plan for Pieniny NP mentions, inter alia:

- fragmentation of the protected area network and isolation of the Park area resulting from its too small area, surrounded by urbanized areas;
- narrowing ecological corridors connecting the Pieniny Mts. with the neighboring mountain ranges (in particular Beskid Sądecki, Gorce, Pieniny Spiskie and Magura Spiska) by existing or planned developments;
- adverse changes caused by the construction of the Czorsztyn-Niedzica and Sromowce Wyżne Complex of Water Reservoirs;
- loss of landscape and cultural values resulting from the new development of space and the disappearance of traditional construction patterns;
- degradation of feeding grounds of species that are the subject of protection (e.g. in the oxbow lakes of the Dunajec River and in undeveloped areas in the Park buffer zone).

Potential external threats listed by the Protection Plan for Pieniny NP, are e.g.:

- construction of cableways and ski lifts;
- construction of petrol stations, commercial facilities, other cubature facilities, fences, parking lots in Piaski - part of the town of Szczawnica, resulting in a significant limitation or intersection of the ecological corridor connecting the Pieniny Mountains with Beskid Sądecki;
- construction of cellular telephone masts or other tall buildings in areas of significant landscape values located in the buffer zone of the Park, which may limit or distort the natural landscape of the Pieniny Mountains, in particular in the villages of Sromowce Niżne and Sromowce Wyżne.

Due to the above, the most urgent challenges and problems that should be addressed by the pilot action carried out in the external buffer zone and surroundings of Pieniny NP were:

- threats to the preservation of high landscape values of the Pieniny region;
- threats to maintaining ecological connectivity in the Pieniny region.

The above decision determined the direction of subsequent actions taken in the course of this Centralparks pilot action implementation in the external buffer zone and surroundings of Pieniny NP, in accordance with the adopted logical sequence of actions, i.e. determining the appropriate target group of the pilot action and other stakeholders, and the type of data and information concerning the pilot action implementation area, significant from the point of view of the challenges that this pilot action should address.



2.3. Selection of relevant measures recommended in the Centralparks strategy

The aim of the pilot action carried out in the Pieniny region was to test the solutions of the strategy developed as part of the Centralparks project to enhance the protection of biological and landscape diversity inside and outside protected areas, integrate Carpathian protected areas with the surrounding areas, maintain and improve ecological connectivity in areas either surrounding or located inside protected areas.

This strategy is expected to support the implementation of the Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity, in force in Poland since 28 April 2010, by undertaking activities at the local and regional level, in line with the priority of the current three-year (2020-2023) Polish Presidency of the Convention.

Due to the timeframe of the Centralparks project and the limited budget for the implementation of the pilot action in the Pieniny region, it was possible to test only some of the measures recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas".

Such a solution is suggested by the instruction formulated in the introduction to the above-mentioned strategy saying that *"The local stakeholders as the 'end-users' and beneficiaries of this Strategy shall select the most proper and feasible measures and activities, accordingly to the local priorities, needs, and management challenges, as well as the capacities of the local partners implementing the Strategy, and the specific local socio-economic context"*.

Two external threats to Pieniny NP, indicated in its Protection Plan, were recognized as the most urgent challenges and problems that should be addressed by the pilot action carried out in the buffer zone and surroundings of the Pieniny National Park, i.e.:

- threats to the preservation of high landscape values of the Pieniny region;
- threats to maintaining ecological connectivity in the Pieniny region.

Consequently, two Strategic Goals of the above-mentioned Strategy, concerning the above-mentioned threats, were considered the most important for the pilot action carried out in the Pieniny region:

- Strategic Objective 3 - Preservation, protection, restoration, revitalization, and sustainable use of landscapes in the Carpathian region;
- Strategic Objective 4 - Ensuring continuity and connectivity of natural and semi-natural habitats, landscapes, strengthening the ecological network in the Carpathian region.

Measures recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas" selected for implementation in the frame of this pilot action in the Pieniny region are listed in Table 1 below.

Table 1. Measures recommended by the Carpathian strategy developed under the Centralparks project selected for implementation in the frame of the pilot action in the Pieniny region.

Strategic Objective 3		
Preservation, protection, restoration, revitalization, and sustainable use of landscapes in the Carpathian region.		
Operational Objective 3.1	Assessment of the conservation status of landscapes.	
	Measure 3.1.3.	Assessment of the conservation status of landscapes.
	Measure 3.1.4.	Identification and assessment of threats to the preservation of landscapes.
Operational Objective 3.2	Planning the measures and activities for the preservation, protection, restoration, revitalization, and sustainable use of landscapes.	
	Measure 3.2.1.	Identification of the target intervention areas for the preservation, protection, restoration, revitalization, and sustainable use of landscapes.
	Measure 3.2.4.	Planning the protection of landscapes in the target intervention areas by integrating the landscape preservation and protection requirements into the spatial planning at the local and regional level.
	Measure 3.2.5.	Planning measures and activities for the protection, restoration and revitalization of landscapes in the target intervention areas.
Strategic Objective 4		
Ensuring continuity and connectivity of natural and semi-natural habitats, landscapes, strengthening the ecological network in the Carpathian region.		
Operational Objective 4.1	Assessment of the local and regional state of ecological connectivity.	
	Measure 4.1.3.	Local and regional ecological gap assessment (incl. identifying the ecological continuity and connectivity spatial gaps, critical zones and hot-spots, and other areas that create barriers and bottlenecks for annual and seasonal species movement or migration).
	Measure 4.1.4.	Identification and assessment of threats to the preservation of the local and regional ecological connectivity.
Operational Objective 4.2	Planning the preservation, restoration, and enhancement of the local and regional ecological connectivity and ecological network.	
	Measure 4.2.1.	Identification of the priority ecological connectivity intervention areas.
	Measure 4.2.2.	Planning the preservation, restoration, and enhancement of the local and regional ecological connectivity by the modifications of the economic use of the area (incl. integration of the requirements of preservation, restoration and enhancement of ecological connectivity in the local or regional priority ecological connectivity intervention areas into the relevant land use/spatial plans).
	Measure 4.2.3.	Planning measures and activities for the restoration or enhancement of the local and regional ecological connectivity.
Operational Objective 4.3	Implementation of measures and activities for the preservation, restoration, and enhancement of the local and regional ecological connectivity and ecological network.	
	Measure 4.3.4.	Supporting the restoration, and enhancement of the local and regional ecological connectivity and ecological network by informative, educational and awareness raising activities.



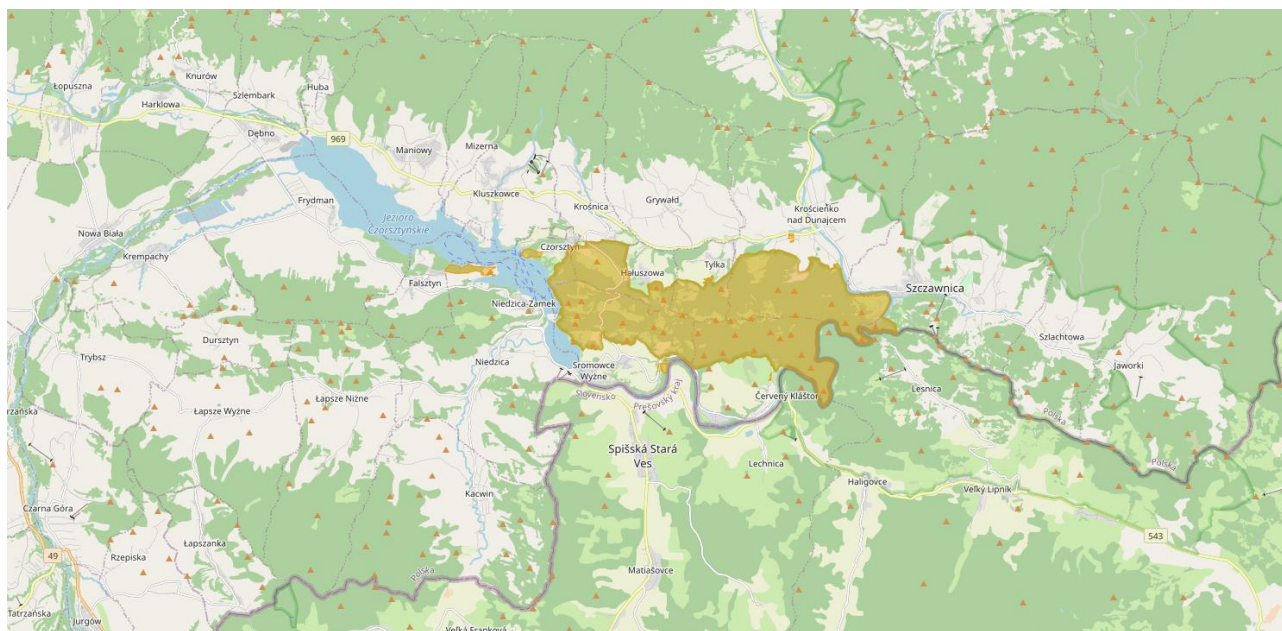
2.4. Defining the area of implementation of the pilot action in the Pieniny region

As mentioned in section 1.4, already at the stage of preparing the Centralparks project proposal (i.e. in 2017/2018) it was assumed that the pilot action implemented in the Polish part of the Carpathian region will test the Carpathian biological and landscape diversity protection strategy developed under the thematic work package No. 1 only "outside" the protected area. According to the intervention logic of the pilot action, its implementation should be aimed at reducing external threats to the selected protected area.

Therefore, the area of implementation of this pilot action included areas located outside Pieniny NP within the administrative borders of four administrative units in which this national park and its external buffer zone were created, i.e. the areas of the communes of Czorsztyn, Krościenko nad Dunajcem, Łapsze Niżne and Szczawnica, located in the Nowy Targ County of the Lesser Poland (Małopolskie) Voivodeship.

Each of the above-mentioned four communes have sections of administrative borders that coincide with the state border between the Republic of Poland and the Slovak Republic.

Due to the border location of the pilot action implementation area, it could be expected that its implementation would also bring positive cross-border effects (e.g. due to the possible impact of the pilot action on maintaining ecological connectivity in the entire Pieniny region through which the state border runs), which would be the added value of this action.



Map 2. Pieniny NP area, within the larger region targeted by the pilot action. (Source: Geoserwis GDOŚ).



2.5. Defining the target group for the pilot action in the Pieniny region

Art. 4 of the Law on Nature Conservation stipulates that care for nature is the responsibility of public administration bodies, legal entities and other organizational units as well as natural persons, and public administration bodies are obliged to ensure legal, organizational and financial conditions for nature protection.

Art. 10.6 of the Law on Nature Conservation stipulates that the projects of studies of the conditions and directions of spatial development in communes, local spatial development plans, spatial development plans for voivodeships in the part concerning the national park and its buffer zone require agreement with the director of the national park regarding the arrangements of these plans, which may have a negative impact on the protection of nature of the national park.

According to the intervention logic of the thematic work package 1 of the Centralparks project, the addressees and potential users of the Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas are not the Governments of the Parties to the Convention, but in particular the administrations of protected areas and other organizational units or bodies which powers and duties include the protection of nature and landscape, and the local communities of the Carpathian region, represented by local self-government units (public administration bodies). After all, issues related to spatial order, real estate management, environmental and nature protection are included in the commune's own tasks, pursuant to Art. 7 of the Law on the Municipal Self-Government, and the head of the commune or the mayor of the town is the authority for nature protection in the commune, pursuant to Art. 91 of the Law on Nature Conservation.

Therefore, the target group of the pilot action of the Centralparks project, expected to test the usefulness of the solutions contained in the above-mentioned strategy in the Pieniny region, includes mainly public administration bodies, organizational units and people having a direct impact on spatial planning and real estate management in the Pieniny NP external buffer zone and its surroundings, i.e. local self-government units (at the commune and county level) and owners or managers of privately owned land.

The target group of this pilot action therefore included:

- the heads of the communes of Czorsztyn, Krościenko nad Dunajcem, Łapsze Niżne,
- the mayor of the town and commune of Szczawnica,
- councilors of the above-mentioned municipalities,
- substantively relevant employees of the Offices of the above-mentioned municipalities,
- Department of Construction and Architectural Administration of the Nowy Targ County Office
- County Building Supervision Inspector in Nowy Targ,
- County Road Administration in Nowy Targ,
- Management Board of the Niedzica Complex of Hydroelectric Power Plants,
- private landowners or private land managers.



Other important stakeholders were the territorially relevant Local Action Groups (LAGs) operating under the LEADER initiative - the European rural development support program, developing Local Development Strategies (LDS) for the LAG area of operation, and then implementing the approved LDS with the support of Rural Development Program (RDP) funds:

- Association Local Action Group Spisz - Podhale,
- Association Local Action Group „Gorce-Pieniny”.

Moreover, other important participants of the spatial planning process in the pilot action implementation area are:

- Director of Pieniny National Park, as the body agreeing draft planning documents in the part concerning the national park and its buffer zone;
- Regional Directorate for Environmental Protection in Krakow, conducting proceedings aimed at agreeing on spatial development projects in the part concerning the Natura 2000 area, nature reserve, landscape park and protected landscape area, and the decision on development conditions in relation to areas under legal protection;
- Voivodeship Office for the Protection of Monuments in Kraków - Branch Office in Nowy Targ;
- Maria Modzelewska Urban Planning Office (involved in the development of, *inter alia*, local development plans and other planning documents for Czorsztyn, Krościenko n. D., and Łapsze Niżne communes, and the Spatial Development Chapter for the needs of the Pieniny National Park Protection Plan).

Another important target group for this pilot action were other local opinion leaders, including:

- village heads in the communes of Czorsztyn, Krościenko nad Dunajcem, Łapsze Niżne and Szczawnica;
- school heads;
- non-governmental organizations: the Pieniny Rafters Association, the Polish Tourist and Sightseeing Society (PTTK) - the Pieniny Branch in Krościenko n. D., the Pieniny Branch of the Polish Tourist and Sightseeing Society (PTTK) in Szczawnica;
- Center for Culture and Promotion in Krościenko n. D.

The target group also included larger companies and private investors whose activities relate to the use of land or water in the area of this pilot action:

- Szczawnica Spa S.A .;
- Polskie Koleje Linowe S.A . (Polish Cable Railways);
- Czorsztyn-Ski Sp. z o.o .;
- KOLEX Sp. z o.o .;
- Port Pienin company.

However, due to the need to conduct a pilot action during the COVID-19 pandemic and the related sanitary restrictions and restrictions (e.g. regarding the maximum limit of meeting participants), it was possible to predict that the meetings planned as part of the pilot action in the Pieniny region will not gather all the important members of the target group (which a limited budget would not have allowed anyway).



3. Implementation of the pilot action in the Pieniny region

3.1. Analysis of demographic, socio-economic and legal conditions, and spatial planning challenges

The pilot action area covered four municipalities within which Pieniny National Park and its external buffer zone were established, i.e. Czorsztyn, Krościenko nad Dunajcem, Łapsze Niżne and Szczawnica communes, located in the Nowy Targ County of the Małopolskie (Lesser Poland) Province (Voivodeship).

The total area of these four communes is 33,295 ha. The largest in area is Łapsze Niżne commune (12,579 ha, i.e. 37.78% of the entire area of the pilot action implementation), then Szczawnica commune (8,790 ha, i.e. 26.40% of the total, of which 5,500 ha is in its rural area, and 3,290 ha in the town of Szczawnica), Czorsztyn commune (6,208 ha, i.e. 18.65%) and Krościenko n. D. commune (5,718 ha, i.e. 17.17%).

The total population of these four communes is 30,913 people, so the average population density of the pilot action area, amounting to less than 93 people / km², is much lower than the average population density of rural areas in the Małopolskie Voivodeship (131 people / km²).

The largest population has the spatially largest Łapsze Niżne commune (9,355), then Czorsztyn (7,664), Szczawnica (7,145, of which 1,490 people inhabit its rural area and 5,655 the town of Szczawnica), the smallest population inhabits Krościenko n. D. commune (6,749).

According to the above data, the highest population density is characteristic of the Czorsztyn commune (over 123 people / km²) and the commune of Krościenko n. D. (118 people / km²), while this indicator is much lower in Szczawnica commune (on average some 81 people / km², and in its rural area only 27 people / km²) and in the commune of Łapsze Niżne (over 74 people / km²).

According to the Local Data Bank of the Central Statistical Office [Bank Danych Lokalnych GUS](#) over the years 2010-2020 (according to data as of December 31 of a given year) the number of permanent residents increased in the municipalities of Czorsztyn (from 7,373 to 7,664 people), Krościenko n. D. (from 6,619 to 6,749 people) and Łapsze Niżne (from 9,043 to 9355 people).

As can be seen from the above data, the number of inhabitants has increased over the last 10 years, but only in three communes, i.e. Czorsztyn (increase by 291 people, i.e. 3.95%) and the commune of Łapsze Niżne (by 312 people, i.e. 3.45%), slightly less in the smallest Krościenko n. D. commune (by 130 people, i.e. by 1.96% of the population of this commune as of 31.12.2010).

However, in the same period, the number of permanent residents of the Szczawnica commune decreased from 7,425 to 7,145 people (i.e. by 3.92%). However, only the Szczawnica town population decreased from 5,982 to 5,655 (by 327 people, 5.47% of the town's population as of December 31, 2010), while the number of inhabitants of the rural area of this commune increased from 1,443 to 1,490 people (by 3.26 %).



The latest available data from the Local Data Bank of the Central Statistical Office (GUS), showing the structure of land use in the area of the pilot action, refer to the years 2012-2014. According to these data, in 2014 agricultural land occupied a total of 13,892 ha (41.72% of the total area), these lands decreased mainly in the rural area of the Szczawnica commune, as a result of abandoning the use of permanent pastures.

At that time, forest, wooded and bushy land covered 16,739 ha (50.27% of the total area), of which forests covered a total of 16,394 ha (49.24% of the total area). The area of forests increased in the rural area of Szczawnica commune, mainly in the area of former pastures.

In 2014, built-up and urbanized land covered a total of 906 ha (2.72% of the total area), in 2012-2014 these areas systematically increased from year to year (this tendency probably not only continued, but also intensified in recent years).

The share of built-up and urbanized land was, for obvious reasons, the highest in the town of Szczawnica (5.17%), then in Czorsztyn commune (3.12%), Krościenko n. D. commune (2.87%), Łapsze Niżne commune (2.36%), and significantly lower in the rural area of Szczawnica commune (1.47%). The total area of residential areas accounted for 114 ha and was constantly increasing in all four communes, the fastest (by as much as 50%) in the rural area of the Szczawnica commune.

In the above context, it is worth analyzing statistical data on population migration. They show that over the last 5 years (2016-2020), as a result of migration (both internal and foreign), the number of permanent residents of municipalities has increased slightly only in the Czorsztyn (by 7 people) and the commune Krościenko n. D. (by 6 people). In the same period, the number of permanent residents of the commune decreased as a result of migration in Łapsze Niżne commune (by 52 people) and in Szczawnica commune (by as many as 134 people).

This means that the constantly growing residential housing area in all municipalities covered by the pilot action is not due to the influx of new permanent residents migrating from other regions or from abroad and settling taxes on their income here. Therefore, new housing investments in these communes are primarily used to meet the housing needs of their current inhabitants (including their adolescent offspring) and the demand of investors, especially external ones, for apartment construction.

However, there is no statistical data available that would allow to assess how many apartments in newly commissioned residential buildings are purchased by non-residents of the Pieniny region for investment purposes, e.g. for short-term rental in the tourist season. There is also no statistical data that would allow to assess the number of individual recreation buildings erected in the region, built in accordance with the construction law and applicable planning documents, or erected without complying with legal requirements (unauthorized constructions).

In the Pieniny region, the coverage of the area of individual communes with the valid local spatial development plans (abbreviated in Polish as “mpzp”) varies. The communes of Czorsztyn and Łapsze Niżne have valid local spatial development plans covering the areas of entire communes (except the area of Pieniny NP), while the communes of Krościenko n. D. and Szczawnica have developed the local spatial development plan only for selected areas.



Due to the above, also part of the Pieniny Mountains is subject to a general tendency spread across the country, that local spatial development plans are developed in the first place for already built-up areas or areas located in the immediate vicinity of existing buildings, treated as a natural reserve of land for new housing and service buildings.

Due to the costs related to the preparation of planning documents, the local spatial development plans for other areas, especially those located far away from previously built-up areas and equipped with technical infrastructure, are prepared in the second place, or these areas (often valuable in terms of nature and landscape) are left without an applicable local spatial development plan. Therefore, both the communes of Czorsztyn and Łapsze Niżne, fully covered by the binding local spatial development plans, are notable glorious exceptions to the above rule.

Nevertheless, the mere fact of covering the entire area of any commune with spatial development plans does not yet guarantee the maintenance of spatial order and the protection of valuable landscape areas, due to, for example, the possibility of making a "point" change in the provisions of the applicable local development plan at the request of even a single investor.

However, generally much less favorable is the situation in areas not covered by the local spatial development plans, where the law allows the possibility of development only on the basis of a decision on building conditions (hereinafter referred to as WZ) obtained by the investor. Pursuant to the intention of the legislator the WZ was expected to be an auxiliary instrument, used as an exception in areas not covered by the local spatial development plan, due to the limited coverage of the entire country with the applicable local plans.

Unfortunately, this makeshift solution is widely abused, leading to deepening spatial chaos in Poland. Moreover, the law currently in force does not provide municipalities with a legal basis for refusing to issue a WZ, even if the planned investment violates the provisions of the previously adopted study of the conditions and directions of spatial development (SUiKZP) of a given commune. This sometimes leads to situations in which investors block the development of the local spatial development plan for a given area in order to obtain approval for development on the basis of a WZ which obviously violates the provisions of SUiKZP, which would not be possible if the local spatial development plan was in force.

It should be emphasized that in areas extremely attractive to investors (which are undoubtedly the areas located in the commune of Krościenko n. Dunajcem and commune of Szczawnica), the issuance of even a single WZ for a given location, resulting in the construction of a single building, causes an avalanche of subsequent applications for issuing WZ for the neighboring plots, with reference to the so-called "principle of good neighborhood" when determining the parameters for new buildings (due to the requirement to continue the functions, dimensions and architectural form of buildings, building lines and intensity of land use). This leads to the expansion of scattered development, especially in areas most attractive to investors.

High investment pressure on undeveloped areas, and thus high prices offered by potential land buyers, may also constitute a significant incentive for owners of agricultural land to exclude them from agricultural production by changing the use of land for non-agricultural purposes in the applicable local spatial development plan.



It should be noted here that due to the unfavorable conditions of farming in the mountains, agriculture has long ceased to be the basis of the local economy in the area of the pilot action, and forest management will not play a similar role (e.g. due to the relatively low forest cover in this area compared to other Carpathian regions) and will not be able to absorb the surplus labor force. Therefore, the further development of tourist functions is decisive for the socio-economic development of the Pieniny communes.

The tourism industry is an important source of income for a significant part of the region's population. However, at the same time, the uncontrolled development of the tourism function generates and deepens the problems and challenges related to rational spatial planning and landscape protection that the region is currently struggling with.

3.2. Spatial forms of nature and landscape protection in the Pieniny region

The area of Pieniny NP constitutes only 7.1% of the total area of the four communes being the area of the pilot action implementation. The principles of protection of the national park, its economic use (e.g. for the purposes of extensive farming and traditional pastoralism on agricultural lands under landscape protection) and making it available to visitors are regulated in detail by the Protection Plan for the Pieniny National Park approved in 2014 (which is also a protection plan for the areas PLH120013 and PLB120008 of the Natura 2000 network located within its borders, currently merged and forming PLC120002).

The external buffer zone of Pieniny NP, designed to protect the park area against external threats resulting from human activity, accounts for less than 7.95% of the total area of these communes. Due to the need to eliminate or limit external threats to the Park, which may have a source in its buffer zone, projects of studies of the conditions and directions of spatial development (SUiKZP) in municipalities, local spatial development plans (mpzp) and spatial development plans of the voivodeship in the part concerning Pieniny NP and its buffer zone require agreement with the director of Pieniny NP concerning provisions of these plans, which may have a negative impact on the protection of nature in the national park.

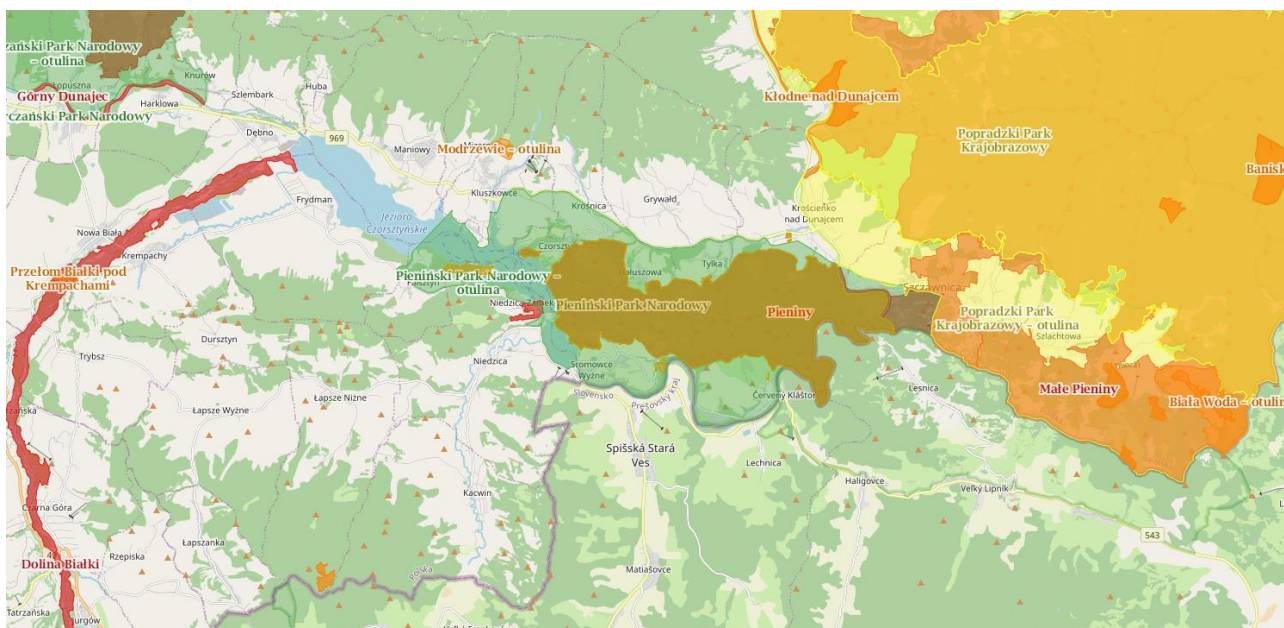
Due to the above, Pieniny NP has a direct impact on planning and spatial development of approx. 15% of the total area of municipalities covered by the pilot action, while the spatial policy for the remaining 85% of the pilot action area is shaped by other entities (mainly local self-government units and the State Forests) without park participation.

Nevertheless, it is worth emphasizing here that the entire area concerned by this pilot action (i.e. the entire area of these four communes) is covered by various other (than the national park) spatial forms of nature protection, as:

- the majority of the Szczawnica commune and the eastern part of the Krościenko n. D. commune are located in the Poprad Landscape Park or in its buffer zone;
- the entire area of all four municipalities outside the Pieniny National Park and Poprad Landscape Park is part of the Południowomałopolski (Southern Małopolska) Protected Landscape Area.

In addition, there are also other protected areas in the area of the pilot action implementation:

- in three communes (apart from the commune of Krościenko n. D.) nature reserves have been created: Niebieska Dolina (floristic reserve) in Łapsze Niżne commune, Modrzewie (forest reserve) with its buffer zone in Czorsztyn commune, Nad Kotelnicznym Potokiem (forest reserve) and 4 landscape reserves: Homole Gorge, Wysokie Skatki, Zaskalskie-Bodnarówka and Biała Woda in Szczawnica commune (the last mentioned, covering 43.36 ha has its external buffer zone of 286.69 ha, stretching between the village of Jaworki and the state border with the Slovak Republic);
- apart from Natura 2000 network area PLC120002 of the (within the boundaries of Pieniny NP) in 3 communes (except for Czorsztyn commune) there are also other areas of this network, SACs: Dolina Białki (PLH120024) and Niedzica (PLH120045) established in Łapsze Niżne commune, Ostoja Popradzka (PLH120019) and Środkowy Dunajec z doptywami (PLH120088) designated in Krościenko n. D. and Szczawnica communes, as well as Małe Pieniny (PLH120025) and Podkowce w Szczawnicy (PLH120037) in Szczawnica commune.



Map 3. Protected areas in the Polish part of the Pieniny region, other than Południowomałopolski Protected Landscape Area (source: Geoserwis GDOŚ)

Due to the above, the planning and spatial development of areas outside the Pieniny National Park and its buffer zone are significantly influenced mainly by the Regional Directorate for Environmental Protection in Krakow, supervising Natura 2000 sites and coordinating their functioning, and conducting proceedings aimed at agreeing the draft of all planning documents regarding spatial development in the part concerning the Natura 2000 area, nature reserve, landscape park and protected landscape area, and the WZ decisions on development conditions in relation to areas under legal protection.

3.3. Assessment of the state of preservation of landscapes and identification of threats

Based on the results of data and information analysis concerning the area of the pilot action, the state of preservation of landscapes in the Pieniny region was assessed and the main threats to the preservation of high landscape values were identified.

These were actions consistent with those recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 3.1.3. Assessment of the conservation status of landscapes;
- Measure 3.1.4. Identification and assessment of threats to the preservation of landscapes.

Assessment of the state of preservation of landscapes in the Pieniny region

In the area of the pilot action implementation, in addition to perfectly preserved natural landscapes typed into the Red Book of Polish Landscapes (effectively protected, among others, in Poprad Landscape Park and in Special Areas of Conservation, e.g. in the extremely valuable landscape area of Małe Pieniny, PLH120025), there are also well-preserved agricultural landscapes of high aesthetic value, shaped as a result of the application of traditional land use practices.

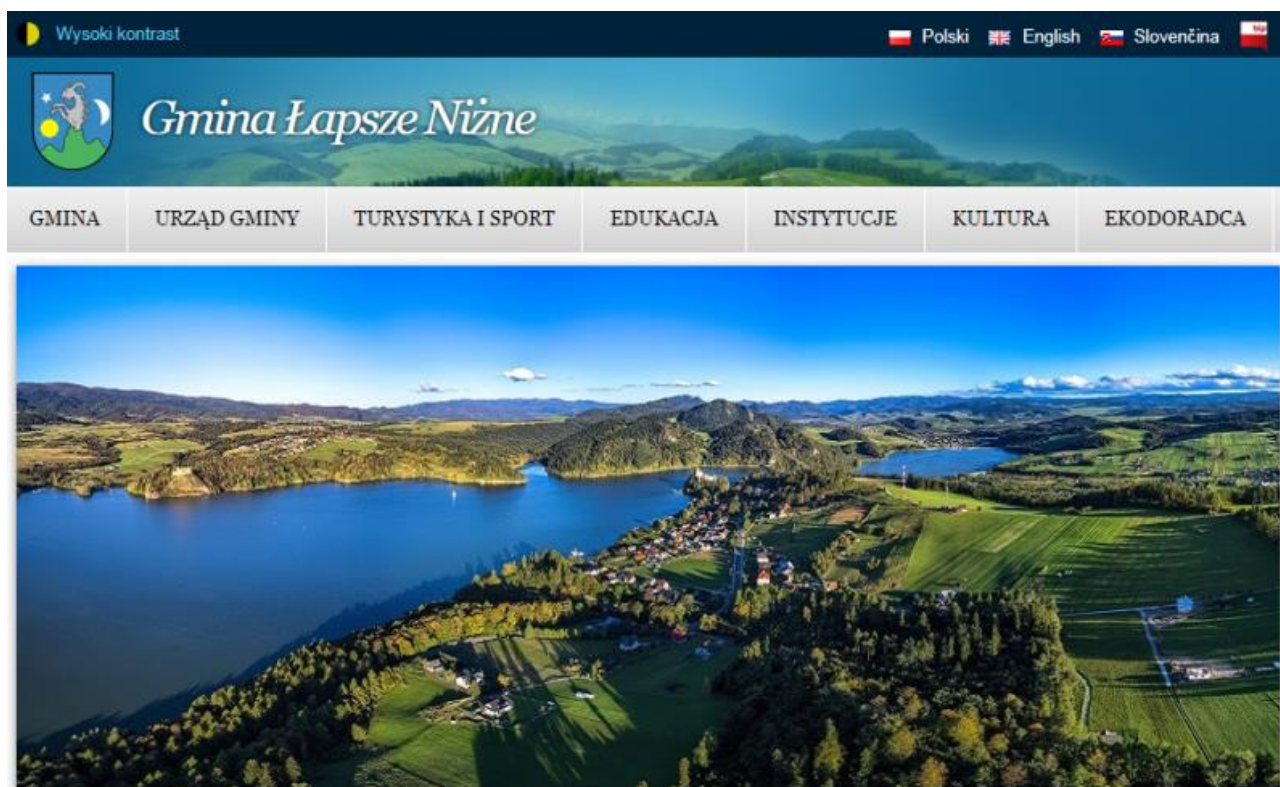


Fig. 1. Traditional natural and cultural landscapes of high aesthetic value in Łapsze Niżne commune.
Source: [Łapsze Niżne municipality website](#)



However, in recent years, there has been an intensive development of buildings in the Pieniny communes, not always through the gradual densification of the built-up areas, but much more often through the rapid spread of scattered buildings into the open spaces of fields, meadows and pastures between settlements, thus the distance between the neighboring towns and villages, which persisted for centuries, is now declining or disappearing.

There is an expansion of single-family housing estates or individual recreation buildings, never previously noted on such a scale, often not serving the housing needs of local residents. A significant part of the scattered new buildings entering the open and formerly uninvested land, is intended for tourist accommodation. These investments disrupt the harmony of the landscape (which is one of the main factors of the tourist attractiveness of the Pieniny region) and open the way for further investments, justifying the issuance of WZ for neighboring plots, most often with reference to the "principle of good neighborhood".

The historically shaped traditional spatial arrangements of villages and the style of construction are also gradually disappearing. Residential buildings are rebuilt into more durable and much larger ones (e.g. able to accommodate more guests). Due to the progressive withdrawal of the region's inhabitants from farming and cultivating agricultural land, no new farm buildings are erected, while old residential or farm buildings are not always renovated and adapted to modern standards and functions. Both in the case of new and existing buildings, there is a visible withdrawal from the local traditional architectural patterns of Pieniny. Despite the return to wood as a construction or finishing material, objects erected in the "regional style" are rarely actually associated with the traditions of this region, at best they have decorative elements and motifs characteristic of the Pieniny region. Such buildings deepen the chaos in the styles used in the region rather than continue the building traditions of the Pieniny Mountains.

The countryside landscape is changing, shaped by the tastes of property owners. The modern development of most plots is devoid of greenery. The traditional Pieniny homesteads had front gardens, orchards and vegetable gardens around the buildings, which, together with the high greenery surrounding the houses (protecting the buildings against wind gusts in winter and against excessive heating in summer), created a specific rural landscape, where houses were drowned in tall and low greenery. Currently, the traditional species of native and characteristic deciduous trees and shrubs for the Pieniny are replaced by conifers, most often thuja and cypress trees, which are alien elements in the local landscape and tradition.

The situation is additionally worsened by the spatial chaos generated by advertisements (billboards, advertisements placed on buildings and fences, advertising boards placed by roads), often completely unreadable for drivers (also due to their excessive density) and obscuring mountain panoramas or the view of monuments. Dissonant in the landscape of Pieniny are also visually aggressive advertisements and equipment of roadside gastronomic points, aesthetically questionable attractions for children (e.g. multicolored inflatable "castles-slides") blocking the view of the mountains and monuments, and even metal barriers along the developing network of bicycle paths, in many places unnecessary from the point of view of the necessity to ensure safety (or due to their design, even posing a threat to the users of the paths), painted with red and white stripes visible from a distance.

The above-mentioned unfavorable phenomena occurring in the Pieniny landscape contribute to the reduction of its aesthetic value and tourist attractiveness. What is worse, it also results in a lack of feeling, both among residents and tourists, that the region they live in or in which they are temporarily located is extremely beautiful, valuable and worth protecting.

It should be emphasized here that all four communes in the vicinity of Pieniny NP develop on the basis of the landscape and natural values of the region. Therefore, most of the promotional materials show not only the main natural and historical attractions of the region, but also the beauty of its landscapes, including mosaic cultural and natural agricultural landscapes (i.e. landscapes characterized by a mosaic of arable fields, hay meadows, pastures, bounds, farm and roadside greenery, mid-field and waterside), harmoniously filling the open space between forest areas. It is in the well understood interest of the inhabitants of the Pieniny region to care for the maintenance of such traditional development.



Fig. 2. Traditional natural and cultural landscapes of high aesthetic value in Łapsze Niżne commune.
Source: [Łapsze Niżne municipality website](#)

Unfortunately, due to the spatial scale and the growing intensity of the above described negative phenomena, agricultural natural-cultural landscapes of high aesthetic, cultural and natural values, occurring in a large part of the pilot action area, should already be considered highly endangered landscapes (which means that irreversible damage may occur there in the near future).



Identification of the main threats to the preservation of high landscape values

Upon the preliminary assessment of the state of preservation of landscapes in the Pieniny region and the phenomena occurring in the area of the pilot action implementation, the identification of the main sources of threats to the landscape values and their effects begun.

The most important threats to the preservation of the characteristic features of the landscape of the Pieniny region and its aesthetic, cultural and natural values are:

- unlimited development of settlement resulting in excessive scattering of buildings;
- disappearance of traditional spatial patterns of villages and forms of construction;
- improperly designed investments in technical and communication infrastructure;
- inadequately designed investments in tourist infrastructure;
- the disappearance of traditional forms of farming and the land management pattern;
- advertising chaos in space (both in and outside built-up areas).

The effects of chaotic settlement, not provided for in local plans (mpzp), difficult to limit due to the lack of effective legal instruments, include:

- degradation of landscape physiognomy by scattering buildings, spreading the dense residential housing clusters along the main roads and communication tracts leading to the connection of neighboring towns and villages, development covering the culmination of the terrain as well as the landscape viewing lines, points and foregrounds;
- breaking and narrowing the tracts of habitats and ecological corridors;
- blurring the diversity of geological and geomorphological forms of the area and destroying its microrelief (that is, the spatial diversity of the relief of the land surface);
- depletion of the biologically active surfaces.

The effects of the disappearance of traditional spatial layouts of villages and forms of construction are already visible:

- transformation and thickening of the historical layouts of villages, and introducing regionally non-native and non-stylistic forms;
- spreading buildings over previously open spaces of fields, meadows and pastures, creating historically shaped gaps between settlements.

The effects of inadequately designed investments in technical and communication infrastructure, e.g. overhead power transmission lines, high (due to the topography of the area) radio, TV and mobile telephony towers, and public roads are mainly:

- degradation of the aesthetic and scenic values of the landscape;
- impediments to the free movement of wild animal species.

The effects of improperly designed investments in tourist infrastructure (e.g. resorts, ski lifts and slopes, bicycle paths) on the Pieniny landscape include:

- investments aimed at tourism development encroaching over areas valuable in terms of landscape and nature, as well as into areas exposed in the Pieniny landscape, thus perfectly visible both from popular viewpoints (located both inside and outside Pieniny NP, e.g. at main roads and passes) and from built-up areas, e.g. accommodation facilities



(which automatically reduces the aesthetic value and attractiveness of panoramas visible from these tourist facilities);

- creating barriers along ecological corridors;
- creating additional sources of light and noise pollution.

Visible effects of the disappearance of the traditional forms of agriculture and land management pattern for the Pieniny region (especially the recession of traditional forms of shepherd and meadow economy) are, above all, the following:

- gradual loss of high aesthetic and scenic values, characteristic of this region, mosaic of cultural-natural agricultural landscapes;
- gradual shrinkage of open spaces of fields, meadows and pastures, separating settlements, as a result of natural succession of forest communities to post-agricultural areas.

The potential effect of the further visible advertising chaos in the Pieniny area, both in built-up areas and beyond, may be a radical reduction in the quality of the aesthetic landscape, which will reduce or even result in the loss of the tourist attractiveness of the entire Pieniny region.

It should be obvious that at a time when most customers are checking the availability of services or goods on the Internet, it makes little sense to advertise on roadside billboards (effectively covering mountain panoramas or the view of monuments), e.g. window frames, local concrete plant, or offers of complex operations plastic and aesthetic surgery.

One of the greatest attractions of the Pieniny region, and at the same time its most effective advertisement, are undoubtedly its well-preserved natural and cultural-natural landscapes.



Fig. 3. Panorama of the Tatra Mountains from Łapsze Niżne commune.
Source: [Łapsze Niżne municipality website](#)



3.4. Identification of key areas for the preservation of landscapes in the Pieniny region

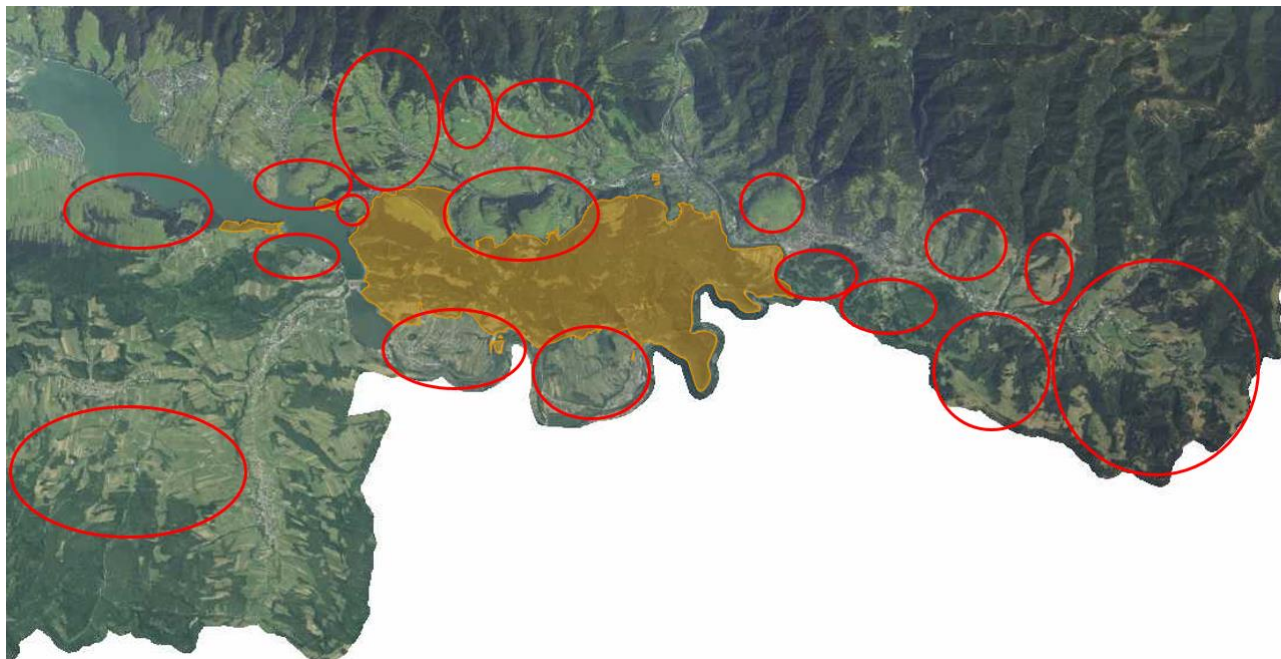
Based on the previously made assessment of the conservation status of landscapes and the main threats, key areas for the preservation of landscapes in the Pieniny region have been identified.

This was an action consistent with the measure recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 3.2.1. Identification of the target intervention areas for the preservation, protection, restoration, revitalization, and sustainable use of landscapes.

The areas of key importance for the preservation of landscapes, and at the same time extremely attractive for both individual investors and professional developers, planning new housing, recreational or tourist infrastructure facilities, and therefore particularly exposed to intense investment pressure, are previously undeveloped land in open areas located:

- near the bank of the Czorsztyn Reservoir in the external buffer zone of Pieniny NP, in Czorsztyn and Kluszkowce (Czorsztyn commune), and in Falsztyn and Niedzica-Zamek (Łapsze Niżne commune) on the northern slopes of the Pieniny Spiskie Mts.;
- near the bank of the Czorsztyn Reservoir, outside the external buffer zone of Pieniny NP, Maniowy (Czorsztyn commune) and Frydman (Łapsze Niżne commune);
- in other most scenic locations in the external buffer zone of Pieniny NP, i.e. in the valley between the main Pieniny range and the gorge section of the Dunajec River, in Sromowce Wyżne and Sromowce Niżne (Czorsztyn commune) and in the area between Czorsztyn and Kluszkowce (Czorsztyn commune) and Krośnica (Krościenko n. D. commune);
- in other most scenic locations outside the external buffer zone of Pieniny NP, to the north of Snozka Pass on the slopes of the Wdżar mountain in Kluszkowce (Czorsztyn commune) and Krośnica (Krościenko n. D. commune), and in Grywałd and Krośnica (Krościenko n. D. commune), on the exposed southern slopes of the Gorce Mountains, between the existing buildings of these villages and the agri-forest border;
- in the external buffer zone of Pieniny NP between Hałuszowa and Tylka (Krościenko n. D. commune);
- outside the external buffer zone of Pieniny NP on the land south of Łapsze Niżne - around its southern hamlets and between these hamlets and Kacwin (Łapsze Niżne commune) in the Spisz Foothills, due to their exposure well visible from Pieniny NP;
- in the external buffer zone of Pieniny NP and in SAC Podkowce w Szczawnicy (PLH120037) on the northern and western slopes of Mt. Szafranówka (in Szczawnica commune) due to their exposure well visible from the Pieniny NP area;
- in the external buffer zone of Poprad Landscape Park on the slopes of Mt. Biała and Mt. Cizów between the eastern hamlets of Krościenko n. D., and the western part of the town of Szczawnica;
- in the external buffer zone of Poprad Landscape Park on the southern slopes of the Radziejowa range in Beskid Sądecki Mts., in the rural area of the Szczawnica commune and in Szlachtowa (Szczawnica commune), in the areas between the currently existing buildings and the agri-forest border;
- in the external buffer zone of Poprad Landscape Park and in SAC Małe Pieniny (PLH120025), on land in the rural area of the Szczawnica commune, and Biała Woda, Czarna Woda, Jaworki and Szlachtowa villages (Szczawnica commune).



Map 4. Key areas for the preservation of high landscape values on the orthophotomap of areas surrounding Pieniny NP (map source: Geoserwis GDOŚ).

The key areas for the preservation of landscapes listed in the last two points of the above list (i.e. the 5 most easterly areas indicated on map 4), all located in the buffer zone of Poprad Landscape Park, and some of them also in SAC Małe Pieniny (PLH120025), are exceptionally attractive for investors due to their location in the vicinity of the Szczawnica spa for numerous tourists and holidaymakers visiting this health resort, it is an excellent starting point for trips not only to Pieniny NP, but also to the picturesque mountain range of Małe Pieniny and the Radziejowa range in Beskid Sądecki Mts.

It is worth emphasizing that particularly attractive to investors are locations that provide the opportunity to admire the panoramas of not only the Pieniny Mts. or the Czorsztyn Reservoir, but also panoramas of the Gorce and Tatra Mountains (sometimes also Mt. Babia Góra), which is possible only from higher locations on open areas, mainly in the communes of Czorsztyn, Łapsze Niżne and Krościenko n. D. Apart from the localities mentioned in the above list of key areas for the preservation of landscapes, such opportunities provide the villages of Huba and Mizerna (Czorsztyn commune), as well as Dursztyn, Kacwin, Łapsze Wyżne and Niedzica (Łapsze Niżne commune). Whereas in Krościenko n. D. commune, the panorama of the Tatra Mountains is visible exclusively from the lands of Grywałd and Krośnica villages, indicated on the map no. 4.

Such exposed locations are perfectly visible in the landscape of the Pieniny Mountains, especially from the closest mountain passes, slopes and peaks, e.g. from the peak of Mt. Trzy Korony in Pieniny NP, massively visited by tourists. Therefore, the development of such areas exposed in the landscape will result in the reduction of landscape values of the entire region.



Fig. 4. Panorama of the southern part of Łapsze Niżne commune (the Tatra Mountains in the distance).
Source: [Łapsze Niżne municipality website](http://www.lapsze-nizne.pl)

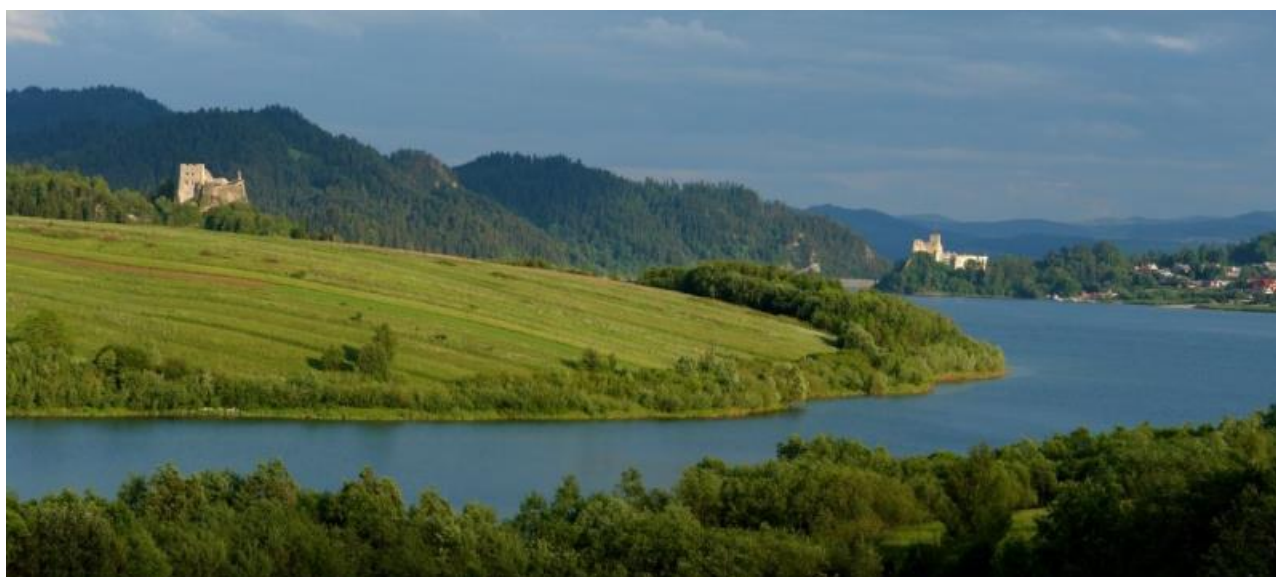


Fig. 5. Pieniny NP external buffer zone, Kluszkowce village - Czorsztyn and Niedzica castles viewing foreground. Photo: M. Majerczak



Fig. 6. Newly erected buildings in the village of Czorsztyn with a panorama of Czorsztyn Castle and the Tatra Mountains in the background. Photo: E. Zajac



Fig. 7. Panorama of the Tatra Mountains, in the foreground the undeveloped land of the village of Sromowce Wyżne. Photo: M. Majerczak



3.5. Assessment of the state of ecological connectivity and identification of threats

Based on the results of data and information analysis concerning the area of pilot action implementation, the state of ecological connectivity in the Pieniny region was assessed and the main threats to its maintenance were identified.

These were actions consistent with those recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 4.1.3. Local and regional ecological gap assessment (incl. identifying the ecological continuity and connectivity spatial gaps, critical zones and hot-spots, and other areas that create barriers and bottlenecks for annual and seasonal species movement or migration);
- Measure 4.1.4. Identification and assessment of threats to the preservation of the local and regional ecological connectivity.

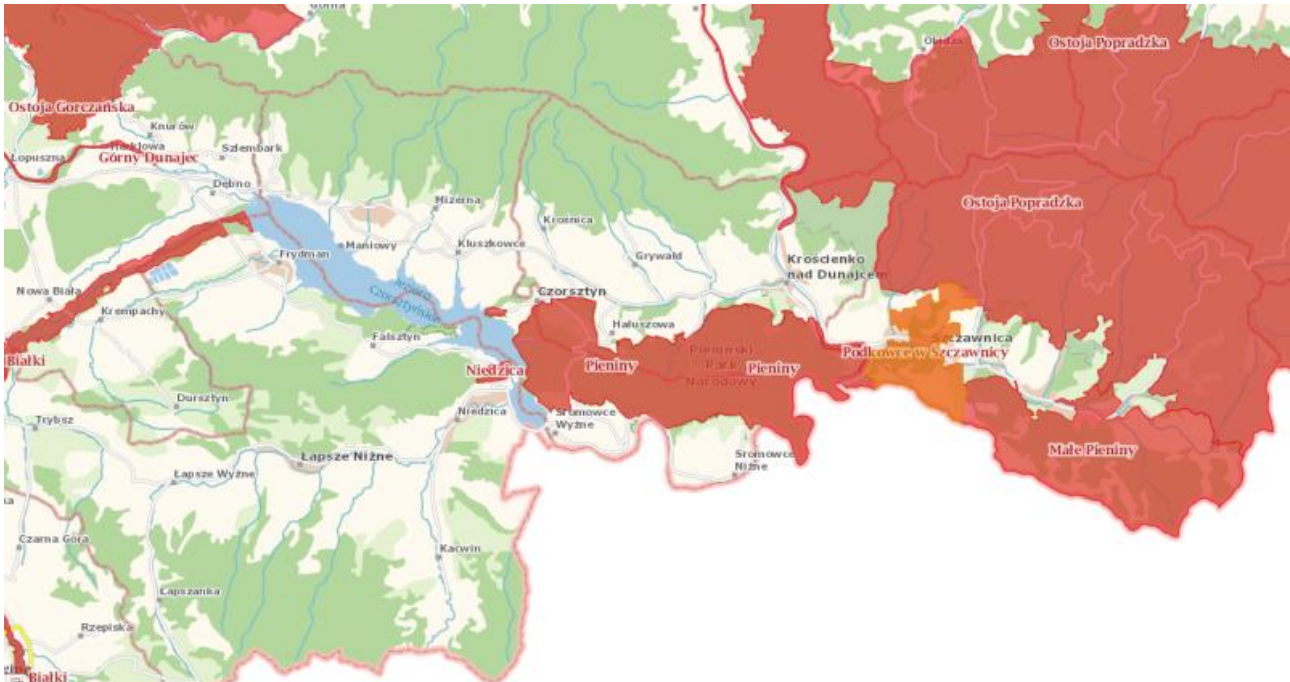
The development of new areas located far from the historic centers of the settlement network, by the gradual spread of new buildings (especially dispersed) to subsequent areas, contributes to the progressive development of the areas of ecological corridors, gradually narrowing their area and limiting their permeability or completely blocking their course, preventing their functioning.

As mentioned in section 1.4. (*Pilot action intervention logic - selection of the target region for implementation*), one of the criteria determining the selection of the surroundings of Pieniny NP was the degree of fragmentation of natural ecosystems and natural habitats in the vicinity of the protected area, resulting in disturbance of the permeability of ecological corridors connecting a given protected area with adjacent areas of high naturalness (e.g. larger forest complexes) and especially with other protected areas.

As mentioned in section 2.2. (*Identification of challenges to be addressed by the pilot action in the Pieniny region*), the current Protection Plan for Pieniny NP indicates that this protected area, being the smallest national park in the Polish part of the Carpathian region, is already largely isolated from other protected areas.

Among the existing threats to maintaining ecological connectivity, the Protection Plan mentions the narrowing of the existing or planned development in the area of ecological corridors connecting Pieniny with the neighbouring mountain ranges, in particular with the Beskid Sądecki, Gorce, Pieniny Spiskie and Magura Spiska.

The main goal should therefore be to maintain the permeability of ecological corridors connecting Pieniny NP with the nearby other protected areas, i.e. with Gorce National Park and Poprad Landscape Park, hence simultaneously maintaining the coherence of the Natura 2000 network, due to maintaining the permeability of spatial connections between areas PLC120002 (in Pieniny NP) and PLH120045 in Niedzica village, and the nearby SACs Ostoja Gorczańska (PLH120018), Podkowce in Szczawnica (PLH120037), Małe Pieniny (PLH120025) and Ostoja Popradzka (PLH120019).



Map 5. Pieniny PLC120002 and Special Areas of Conservation (SACs) in neighbouring regions (source: Geoserwis GDOŚ).

Moreover, extremely important is also to maintain ecological connectivity on a cross-border scale. However, the migrations of mammal species between Pieniny NP (PLC120002 site) and the vast, relatively well-preserved natural areas of the Pieniny Spiskie Mts. and the Spisz Foothills located in Łapsze Niżne commune, and the forest complexes of Magura Spiska located on the territory of the Slovak Republic, adjacent to the area of this commune, are quite limited, mainly due to the occasional freezing of the Czorsztyn-Niedzica Water Reservoir, the technical infrastructure of the water dam in Niedzica, and the below located compensatory Sromowski Reservoir and the water dam in Sromowce.

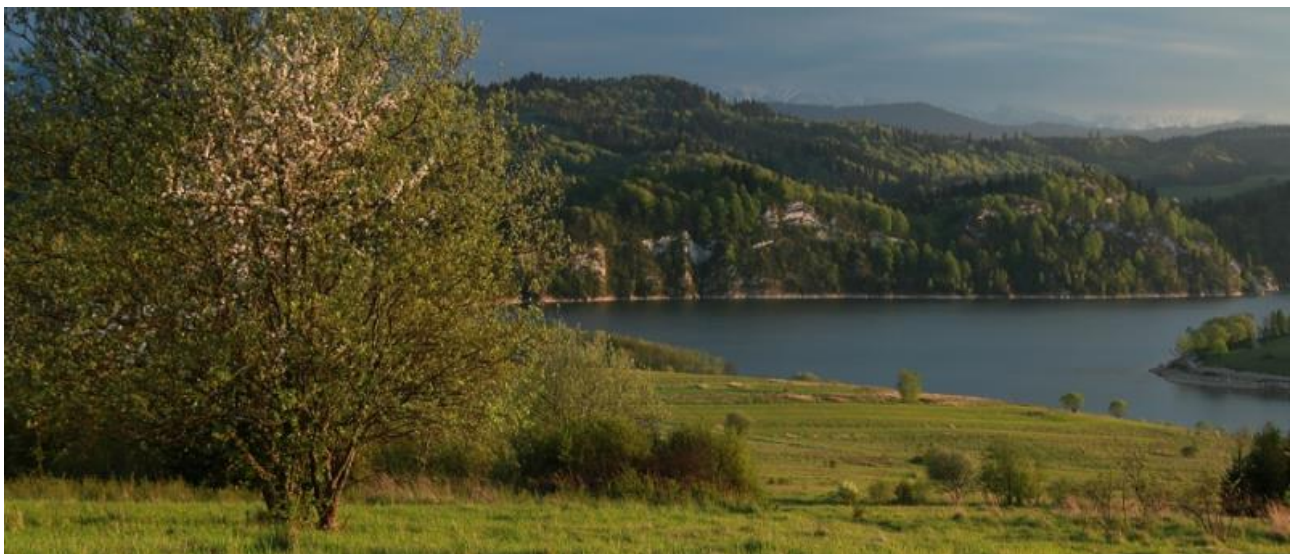


Fig. 8. The narrowness of the Czorsztyn Water Reservoir near Zielone Skalki (Green Rocks) - a possible route for the migration of mammals. Photo: E. Zajac

Both water reservoirs together with the dam infrastructure create a barrier to the migration of mammals of a total length of approx. 17 km (from the mouth of the Dunajec River to the Czorsztyn Reservoir near the village of Dębno in the Nowy Targ commune to its outflow from the Sromowski Reservoir). Further downstream, the dense buildings of Sromowce Wyżne village stretch along the river Dunajec on a distance of approx. 1.35 km below the dam in Sromowce, which constitutes the continuation of this barrier.

Niedźwiedź w Pieninach. "Szuka sposobu na wydostanie się"

W mediach społecznościowych opublikowano nagranie, na którym widać młodego niedźwiedzia w Sromowcach Wyżnych. Być może to ten sam osobnik, którego ślady znaleziono w Pienińskim Parku Narodowym.

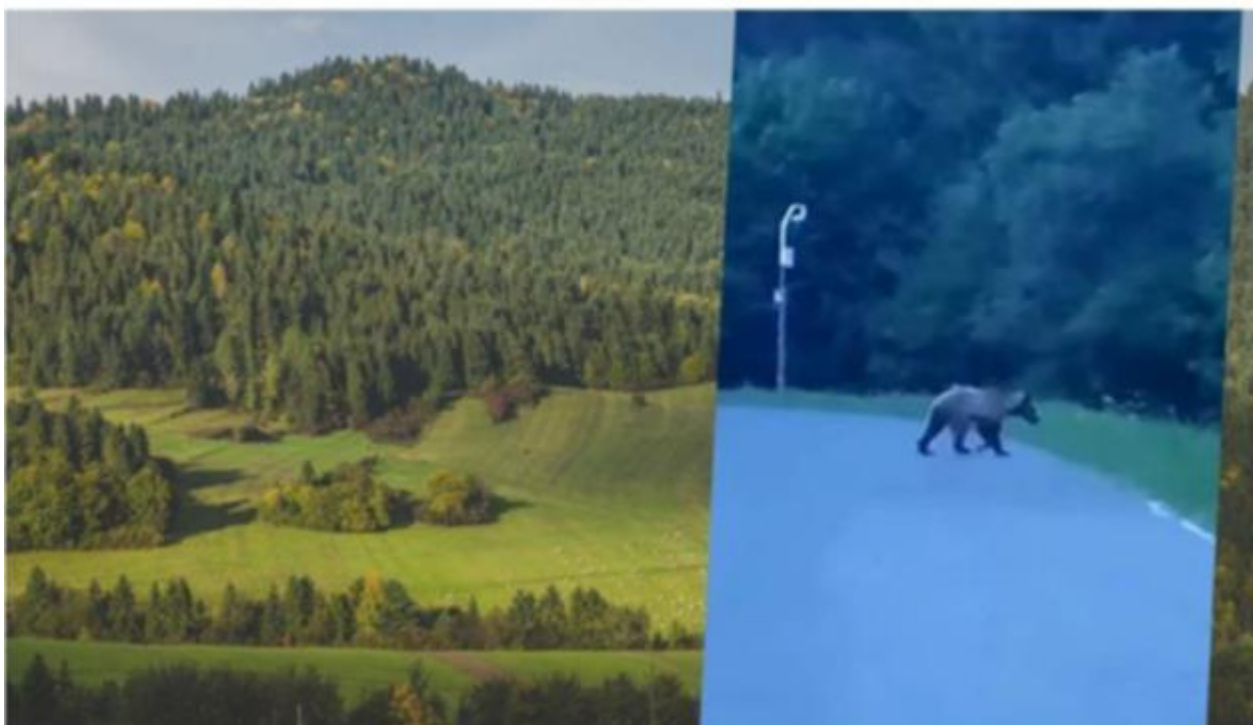


Fig. 9. Press clipping from an article in the local press, concerning the problem of hindered migration of wild animals - in the photo on the right a young bear on the road in the village of Sromowce Wyżne ([link to video recording](#)). Sources: A. Bociński/Facebook, Pieniński PN, Tygodnik Podhalański

Further, the deep and inaccessible Dunajec River gorge, with extremely steep slopes, and the rushing current of this border river constitutes another barrier to the migration of mammals between the two neighboring national parks: Pieniny NP (PLC120002) and the Slovak Pieniny National Park (*Pieniňský národný park, PIENAP*) on the southern bank of the Dunajec River and SAC SKUEV1337 on the Slovak side.

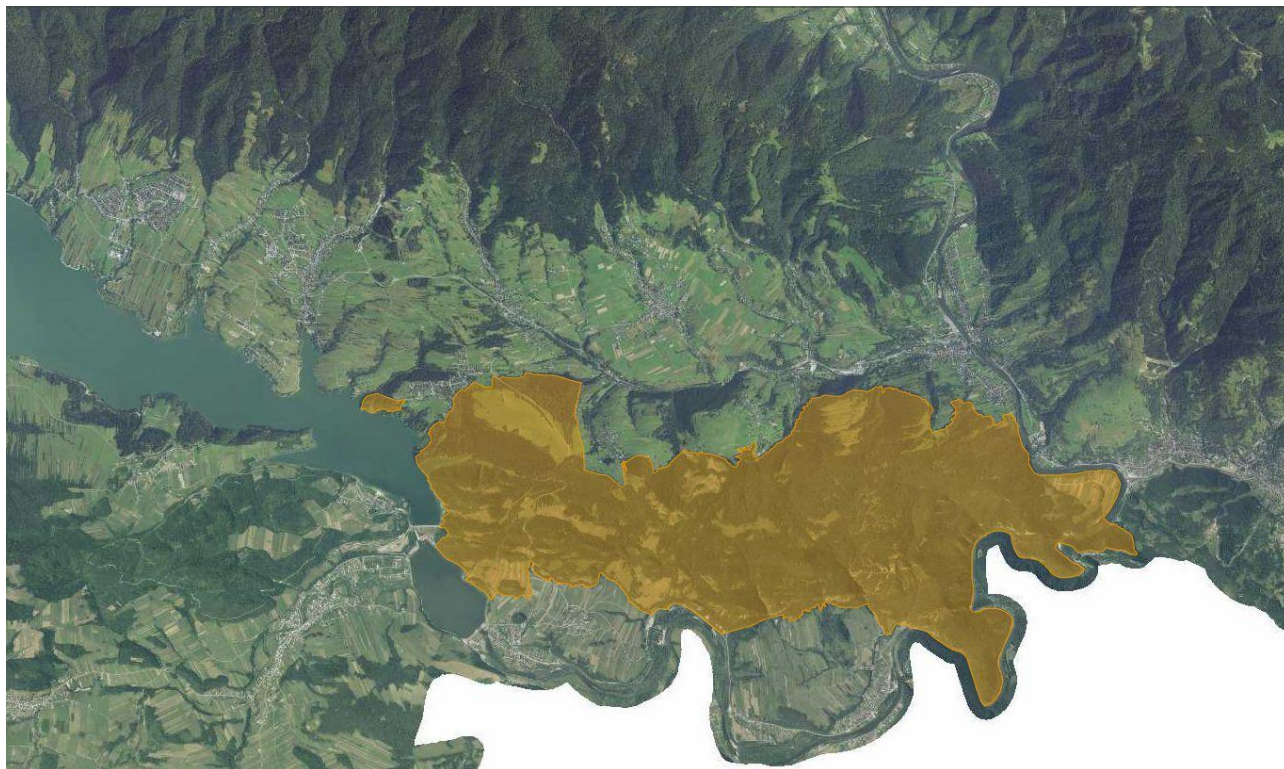


Fig. 10. Deep gorge of the Dunajec River, separating the two adjacent national parks - Pieniny NP and PIENAP. Tatra Mts. visible far left in the background. Photo: M. Majerczak

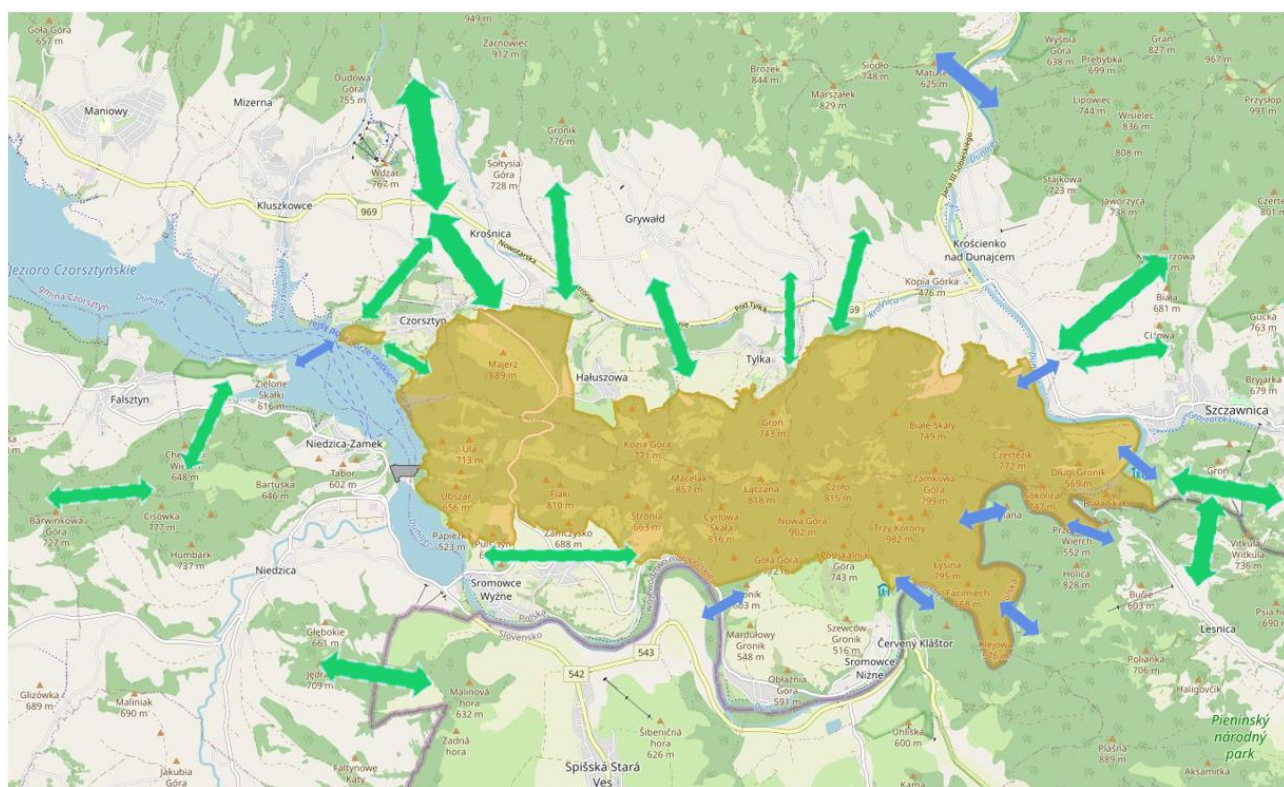
Due to the above, such cross-border migrations are probably possible primarily through the border areas of Małe Pieniny (PLH120025) and Podkowce in Szczawnica (PLH120037) SACs located on the Polish side of the state border, where mammal species may migrate from the neighboring Slovak Pieniny National Park (SKUEV1337 area) both to Pieniny NP (PLC120002 area) and to the nearby Ostoja Popradzka (PLH120019).

For similar reasons, the possibility of migration of many animal species between the Pieniny area (PLC120002) and the nearby Małe Pieniny (PLH120025) and Ostoja Popradzka (PLH120019) through the SAC Podkowce w Szczawnicy (PLH120037, marked in orange on map No. 5) is limited due to the topography of the terrain of the gorge section of the Dunajec River in the south, as well as the dense development of Krościenko n. D. in the north. In this part of the pilot action area, the only convenient passage for many species of mammals is the shallower section of the Dunajec River near Piaski (western part of the town of Szczawnica) at the border of Krościenko n. D. commune with Szczawnica commune, that is in the Natura 2000 network area „Środkowy Dunajec z dopływami” (PLH120088).

Taking into account the above limitations, resulting from the existence of wide water reservoirs and rushing water courses, very important for maintaining ecological connectivity of Pieniny NP (Pieniny PLC120002) with the nearby protected areas are the ecological corridors connecting Pieniny NP with the nearby Gorce National Park (Ostoja Gorczańska PLH120018), running in the vicinity of Czorsztyn and Kluszkowce villages (Czorsztyn commune), and of Krośnica, Grywałd, Hatuszowa and Tylka villages (Krościenko n. D commune).



Map 6. Orthophotomap of areas surrounding Pieniny NP (source: Geoserwis GDOŚ).



Map 7. Map of areas surrounding Pieniny NP (source: Geoserwis GDOŚ) indicating the main ecological corridors (corridors where animal migration requires crossing water bodies are marked by blue arrows).



3.6. Identification of key areas for maintaining ecological connectivity in the Pieniny region

The assessment of the state of ecological connectivity and identification of threats (part 3.5.) allowed to identify key areas for maintaining ecological connectivity in the Pieniny region, i.e. maintaining the permeability of spatial connections linking Pieniny NP with the nearby natural complexes and protected areas, as well as maintaining the coherence of the Natura 2000 network, both on a local and cross-border scale (due to the location of the pilot action implementation area in the region along the state border between the Republic of Poland and the Slovak Republic).

This was an action consistent with the measure recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 4.2.1. Identification of the priority ecological connectivity intervention areas.

This action was also expected to facilitate the fulfillment by the Republic of Poland (at least on a local scale, spatially limited by the area of implementation of this pilot action) of its obligations arising from:

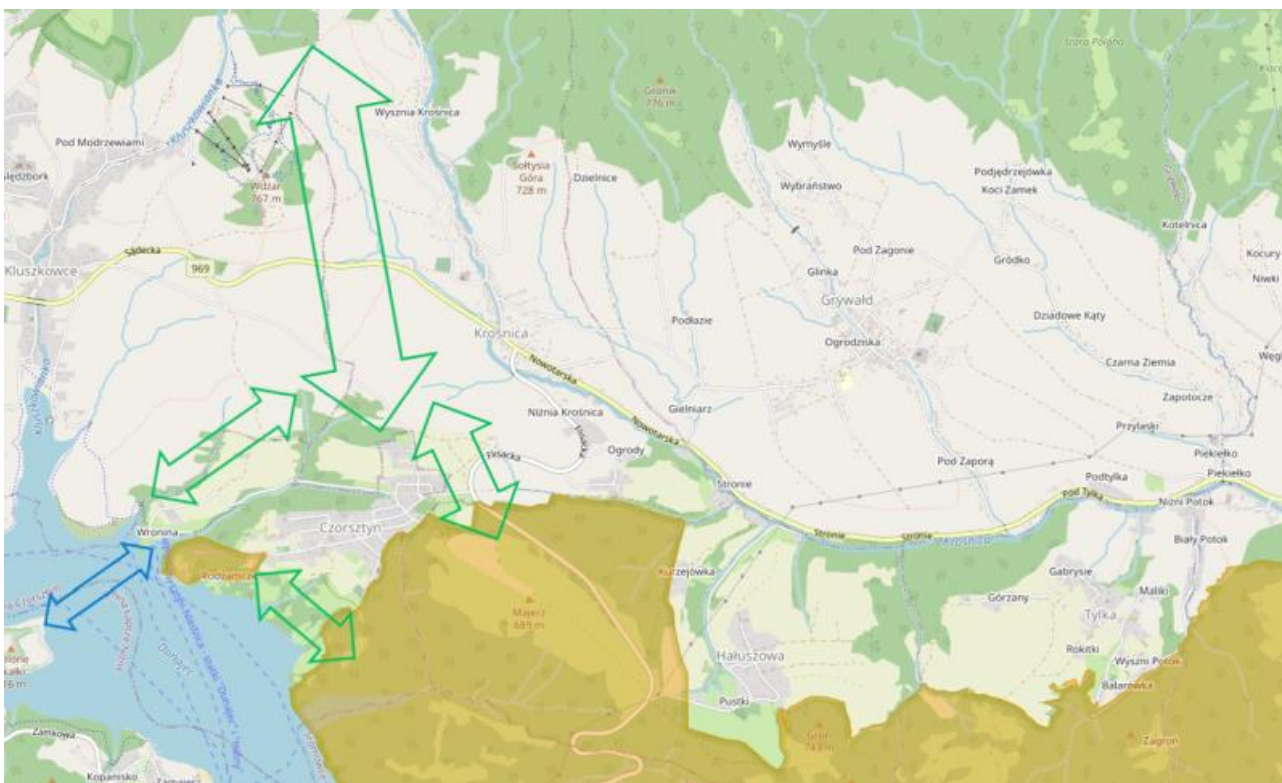
- thematic Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity (Polish Journal of Laws: [Dz.U. 2010 nr 90 poz. 591](#)) to the Framework Carpathian Convention, in force for Poland since April 2010, which Article 9 paragraph 1 states „*Each Party shall take measures in its national territory with the objective to improve and ensure continuity and connectivity of natural and semi-natural habitats in the Carpathians, thus allowing dispersal and migration of wild species populations particularly of large carnivores, and genetic exchange between such populations.*”;
- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, which Article 3 paragraph 3 states, that “*Where they consider it necessary, Member States shall endeavour to improve the ecological coherence of Natura 2000 by maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora*”.

The following were recognized as the most important key areas for maintaining ecological connectivity in the Pieniny region:

- areas located inside and outside the external buffer zone of Pieniny NP in the vicinity of Snozka Pass and the villages of Czorsztyń and Kluszkowce (Czorsztyń commune) and Krośnica (Krościenko n. D. commune), connecting Pieniny NP (Pieniny, PLC120002) with Gorce National Park (Ostoja Gorceńska, PLH120018);
- areas located partly in the external buffer zone of Pieniny NP and partly in the external buffer zone of Poprad Landscape Park near Piaski (western part of the town of Szczawnica) along the border between the communes of Krościenko n. D. and Szczawnica, connecting Pieniny NP with Poprad Landscape Park, and several Natura 2000 network SACs: Pieniny (PLC120002), Podkowce w Szczawnicy (PLH120037), Małe Pieniny (PLH120025), Ostoja Popradzka (PLH120019) in Poland, and the SKUEV1337 area in the Slovak Republic.



Map 8. Orthophotomap of Czorsztyn, Kluszkowce, Krośnica and Grywałd villages, Pieniny NP area marked dark yellow (source: Geoserwis GDOŚ).



Map 9. Map (source: Geoserwis GDOŚ) indicating Pieniny NP area, and routes of existing ecological corridors near Snozka Pass and Czorsztyn, Kluszkowce and Krośnica villages.



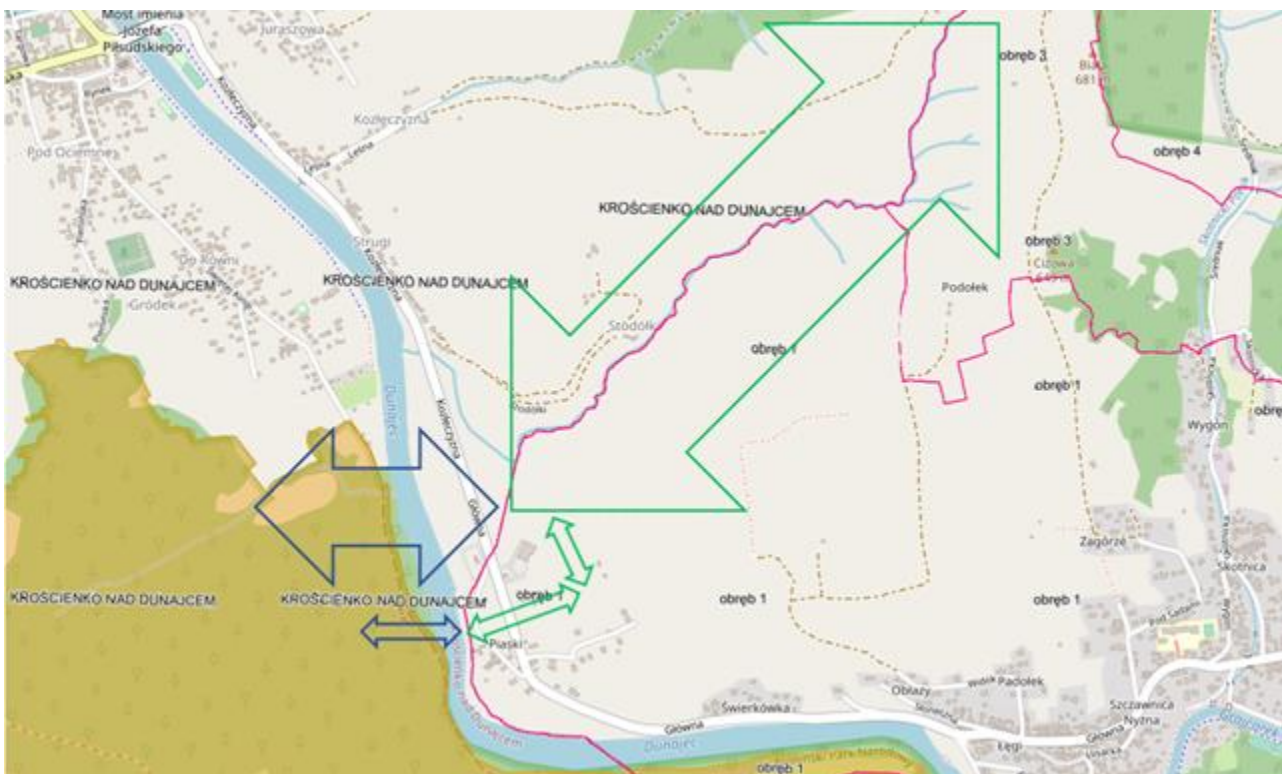
*Fig. 11. The vicinity of the ecological corridor running through the Snozka Pass, the Gorce range visible in the background, the Wdżar mountain on the left, visible gradual encroachment of new buildings.
Photo: Z. Niewiadomski*



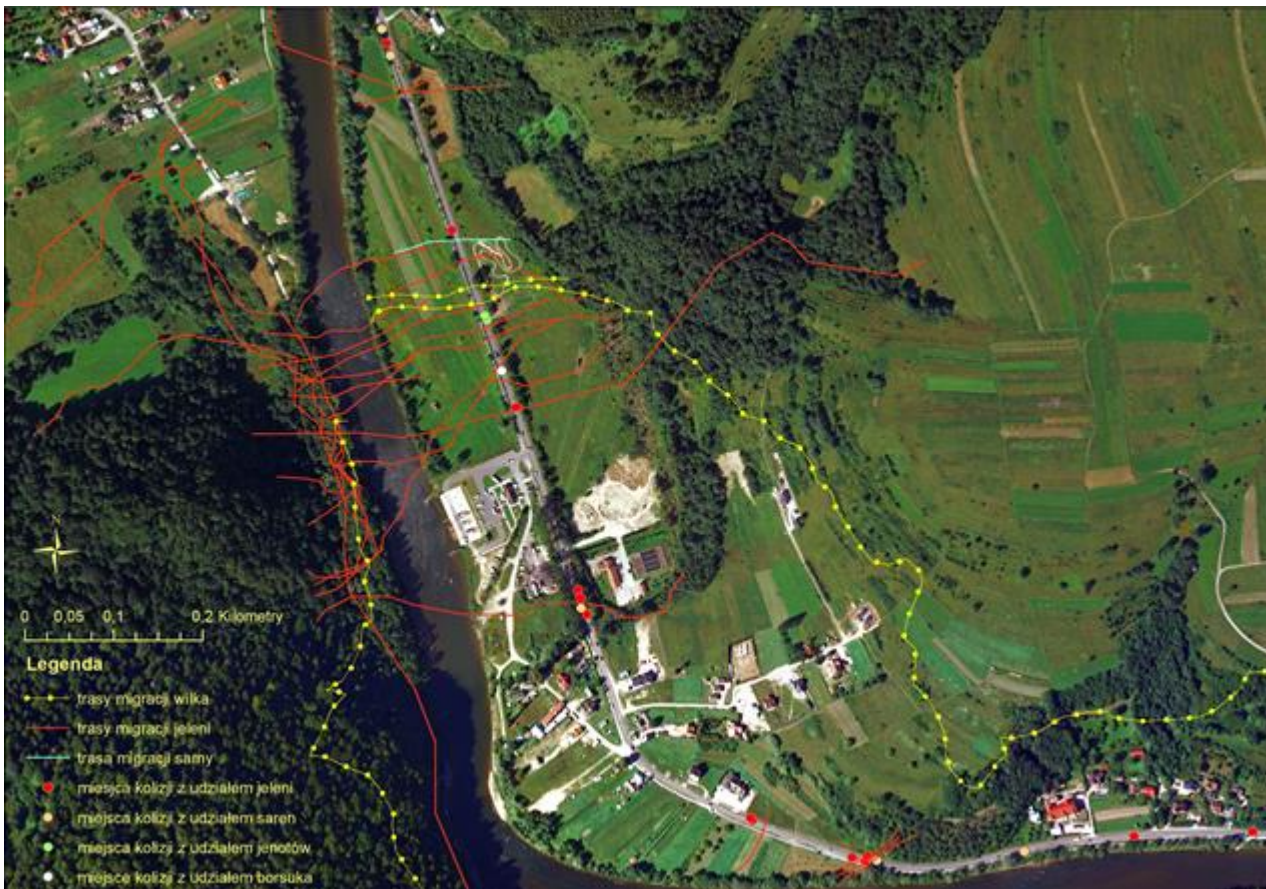
*Fig. 12. Part of the ecological corridor area running through the Snozka Pass.
Photo: E. Zajqç*



Map 10. Orthophotomap of areas between Krościenko and the town of Szczawnica, Pieniny NP area marked dark yellow (source: Geoserwis GDOŚ).



Map 11. Map (source: Geoserwis GDOŚ) indicating Pieniny NP area, and routes of existing ecological corridor linking Natura 2000 network sites: Pieniny (PLC120002) and Ostoja Popradzka (PLH120019).



Map 12. Ecological corridor in the Piaski area - migration routes of wolves, red deer and roe deer; places of road collisions (in selected period) with deer, roe deer, raccoon dogs and badgers. Source: Pieniny NP.



Fig. 13. Female red deer crossing Dunajec River from Pieniny NP near the kayak rental in Piaski, the town of Szczawnica (27.09.2020) inside Natura 2000 site „Środkowy Dunajec z doływami” (PLH120088). Photo: B. Kozik, source: Pieniny NP.



Fig. 14. View of the Piaski area (part of the town of Szczawnica) along the ecological corridor connecting Natura 2000 sites Pieniny (PLC120002) and Ostoja Popradzka (PLH120019). Photo: M. Majerczak

3.7. Diagnosis of the situation in individual municipalities of the Pieniny region

Based on the results of the analysis of data and information on the area of the pilot action, separate diagnoses of the current situation in each of the municipalities covered by the pilot action (Czorsztyn, Krościenko nad Dunajcem, Łapsze Niżne and Szczawnica) were also prepared.

The aim of this action was to identify specific problem areas in each of these municipalities from the point of view (specified in section 2.2.) of the most urgent challenges and problems addressed by the pilot action, i.e. threats to the preservation of the high landscape values of the region, and to maintaining ecological connectivity in the Pieniny region.

This action consisted in detailing the situation in the scale of individual municipalities for testing Measures no. 3.1.3., 3.1.4., 4.1.3. and 4.1.4., recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas", developed under the Centralparks project.

This allowed for the appropriate individual adjustment of the contents of materials and presentations prepared for meetings with representatives of local communities in the Pieniny region to the specificity of individual communes, by appropriate selection of examples from the area of a given commune, and therefore personally known to participants of subsequent meetings.



Czorsztyn Commune

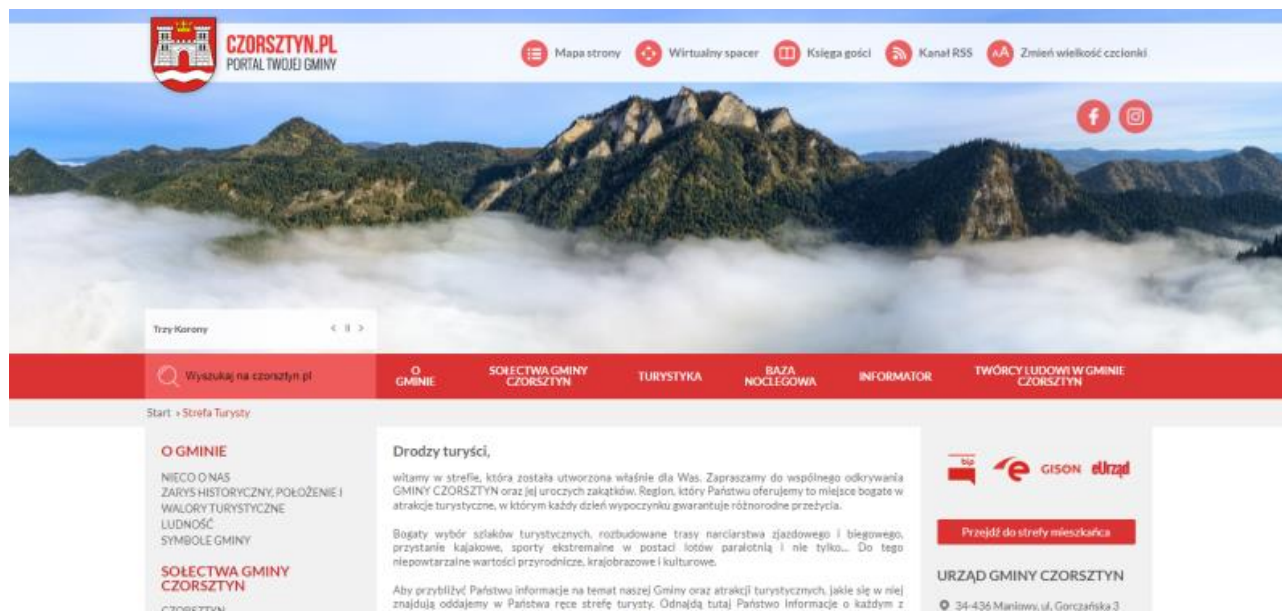


Fig. 15. The panorama of Pieniny NP on the Czorsztyn municipality website.
Source: [Czorsztyn municipality website](http://czorsztyn.pl)

The commune of Czorsztyn constitutes 18.65% of the entire pilot action implementation area and is already characterized by the highest population density (over 123 people / km²) among the Pieniny communes. Over the last 10 years, the number of inhabitants of this commune has increased by 291 people (i.e. by 3.95%).

The entire area of the Czorsztyn commune located outside Pieniny NP (where the Protection Plan applies) has a valid local spatial development plan (mpzp). The reserves of development areas designated in the local plan have not yet been fully used, which means that their area is sufficient, and even exceeds the current demand, taking into account the demographics of this commune.

Despite this, the pressure from the side of commune's inhabitants and external investors on further (and therefore excessive) enlargement of areas allowing all-year residential development, seasonal recreational (e.g. summer houses) and service buildings with tourist functions (e.g. hotels and gastronomy) is huge. This is the result of the outstanding landscape, natural and cultural values of the Czorsztyn commune, contributing to the dynamic development of the commune's tourist function.

The socio-economic situation of the commune was significantly influenced by the construction of the anti-flood Czorsztyn Reservoir, completed in 1997, which resulted in significant and irreversible changes in the settlement and transport network, nature and landscape, as well as in the shape and development of the area.

The entire Maniowy village, established around 1320 in the Dunajec Valley along the Nowy Targ - Szczawnica road, was demolished, and its inhabitants (around 1,900 people) were relocated to a new settlement, built specially for this purpose on much higher located agricultural land on the slopes of Gorce Mts.



The present-day Maniowy village, the seat of the Czorsztyn Commune Office since 1993, has the character of an urban estate, with an orderly network of streets and modern architecture.

The few objects of traditional 19th and 20th century wooden architecture from the flooded village of Maniów (and from Czorsztyn and Kluszkowce, demolished to a lesser extent), were transferred to the open-air museum called Osada Czorsztyn, located by the Czorsztyn Reservoir on the Stylchyn peninsula in Kluszkowce village, initially managed by a local company formed as a joint venture of the Czorsztyn commune and the State Treasury.



Fig. 16. Fragment of the Osada Czorsztyn open-air museum (in the village of Kluszkowce) on the Czorsztyn municipality website. Source: [Czorsztyn municipality website](http://Czorsztyn.municipality.website)

However, after the open-air museum was taken over by a private company, the historic villas, until recently successfully functioning as guesthouses (e.g. in October 2014 Ekopsychology Society co-organized there the first ever joint meeting of two intergovernmental Carpathian Convention Working Groups, on spatial planning and on biological and landscape diversity) are no longer used and decaying, deprived of conservation care.

The construction of a large water reservoir additionally intensified the investment pressure on undeveloped areas in the Czorsztyn commune. Thus, both in the vicinity of the deteriorating Osada Czorsztyn on the Stylchyn peninsula and in other scenic locations, modern guesthouses and hotels are erected, designed to maximize the use of the plot area at the expense of biologically active areas, unadjusted with its shape and volume to local buildings, constituting an aesthetic dissonance in the landscape of this commune, and obscuring views, e.g. on the Czorsztyn Castle and the Pieniny landscape.

On the land near the Czorsztyn Reservoir, purchased from the inhabitants of the Czorsztyn commune, clusters of terraced houses built by professional development companies and intended for buyers from large cities recently emerged, clearly visible in the landscape of the Pieniny Mountains, as not yet surrounded by high greenery.



*Fig. 17., 18., 19. New development of the areas over the Czorsztyn Reservoir in the commune of Czorsztyn.
Photo: E. Zajac*

In the Czorsztyn commune, the most endangered (despite the validity of the local spatial development plan for the entire commune area) by the spreading of new residential and recreational buildings are mainly undeveloped lands located near the banks of the Czorsztyn Reservoir in Czorsztyn, Kluszkowce and Maniowy villages. Moreover, due to the high landscape values (visibility of the Tatra Mountains panoramas), the plots of land in the still open areas near the villages of Huba and Mizerna are also attractive to investors.



*Fig. 20. Undeveloped area (in the Pieniny NP buffer zone) of Kluszkowce village, Czorsztyn commune.
Photo: E. Zajęc*

The progressing development threatens the ecological corridor recognized as a key area for maintaining ecological connectivity in the Pieniny region, near Snozka Pass, which connects Natura 2000 sites Pieniny (PLC120002) and Ostoja Gorczańska (PLH120018), running near Czorsztyn village located in the Pieniny NP external buffer zone, and then, already outside this zone, near Kluszkowce village along the border between the communes of Czorsztyn and Krościenko n. D.

One of the potential sources of threats to the permeability of this corridor is the planned further development of the Czorsztyn Ski resort, located in the upper part of the Kluszkowce village, using the western and northern slopes of Mt. Wdżar. In its present shape, this center is relatively well integrated into the landscape and does not threaten the permeability of the nearby ecological corridor running along the eastern slopes of Mt. Wdżar. However, further expansion of this center towards the east may pose threats both to the preservation of the high landscape values of this area and the maintenance of ecological connectivity in the entire cross-border region of the Pieniny Mountains.

The pressure to increase the area of housing development is also visible in the villages of Sromowce Wyżne and Sromowce Niżne, located in the external buffer zone of Pieniny NP at the Dunajec River gorge and offering the most beautiful views of the highest peaks of the Pieniny Mountains. The new buildings in such exposed locations will adversely affect both the scenic values of these surroundings and the attractive view from Mt. Trzy Korony to the Tatra Mountains, admired by tourists visiting Pieniny NP (see Fig. 7).



Fig. 21. Panorama of Pieniny NP from the undeveloped area of the village of Sromowce Wyżne (located in the external park buffer zone). Photo: E. Zając



Fig. 22., 23. View over the highest peaks of Pieniny NP (Trzy Korony - Three Crowns) from two neighboring locations in the village of Sromowce Niżne (located in the park external buffer zone), Czorsztyn commune. Photo: Z. Niewiadomski



The prices of land located in areas so attractive in terms of landscape, in the immediate vicinity of the main tourist attractions of the Pieniny region, i.e. Pieniny NP, the Czorsztyn Reservoir, Dunajec River gorge, "Dunajec" castle in Niedzica and the ruins of the Czorsztyn Castle, are very high. It is therefore not surprising that the permanent residents of the Czorsztyn commune are so eager to sell their plots to external investors, both professional developers and individual buyers from outside the Pieniny region.

Krościenko nad Dunajcem Commune



Fig. 24. Panorama of the Tatra Mountains seen from Mt. Sokolica in Pieniny NP.
Source: [Krościenko nad Dunajcem municipality website](https://www.kroscienko.pl/)

The commune of Krościenko nad Dunajcem is the smallest in terms of area of all the four communes of Pieniny (the area of this commune is only 17.17% of the entire area of the pilot action implementation) and is also facing a lot of investment pressure, both for further housing development and for the development of tourist infrastructure.

Due to the relatively small area, Krościenko n. D. commune is characterized by a relatively high population density (118 people / km²), slightly lower than in the neighboring Czorsztyn commune.

Undoubtedly, an unfavorable factor for the protection of the landscape and natural values of this commune is the fact that the local spatial development plan (mpzp) applies only to selected areas, and therefore development of other areas in this commune is possible on the basis of the WZ decisions on the building conditions (mentioned in section 3.1.).

The attractiveness of the commune of Krościenko n. D. for investors is increased by its location along the voivodship road No. 969 (connecting the cities of Nowy Targ and Stary Sącz), decisive for the relatively good accessibility of this commune (only slightly lower than of the neighboring commune of Czorsztyn, and better than of the Łapsze Niżne and Szczawnica communes).



Fig. 25. Krościenko n. Dunajcem, the market square and the bridge over the Dunajec River (on the road to Szczawnica). Source: [Krościenko nad Dunajcem municipality website](https://www.kroscienko.pl/)

Apart from the well-connected center of the commune area, i.e. Krościenko n. D. (which is the seat of Pieniny NP headquarters), most exposed to investment pressures are the areas near the villages of Hałuszowa and Tylka (in the external buffer zone of Pieniny NP) and the lands of the villages of Grywałd and Krośnica (outside this zone) on the exposed southern slopes of the Gorce Mountains, especially in higher locations, allowing to admire the panoramas of not only the Pieniny Mountains, but also the Tatra Mountains visible from there.



Fig. 26. Progressive dispersion of new buildings on the slopes of Gorce Mts. in Krościenko n. D. commune. Photo: M. Majerczak

For some time now, the problem visible in Krościenko n. D. commune is scattered buildings, leading to a gradual "merging" of nearby villages, as on the slopes of Mt. Lubań, where the borders between the villages of Grywałd and Krośnica are disappearing. The disappearance of open spaces between localities becomes a serious obstacle, and in some places even completely prevents the migration of wild animal species and increases the risk of road collisions with the migrating individuals.



*Fig. 27. Formation of densely built-up clusters blocking animal migrations, Krościenko n. D. commune.
Photo: Z. Niewiadomski*



*Fig. 28. The vicinity of the ecological corridor through the Snozka Pass in Krościenko n. D. commune.
Photo: M. Majerczak*

Threatened by development are, *inter alia*, key areas for maintaining ecological connectivity in the Pieniny region, located in the Krościenko commune:

- the eastern part of the ecological corridor leading through the Snozka Pass along the border with the Czorsztyn commune, connecting Pieniny NP with Gorce National Park (Natura 2000 network areas Pieniny PLC120002 and Ostoja Gorceńska PLH120018);
- the northern part of the ecological corridor connecting Pieniny NP with Poprad Landscape Park (Natura 2000 areas Pieniny PLC120002 and Ostoja Popradzka PLH120019) running across SAC „Środkowy Dunajec z doływami” (PLH120088) through the shallower section of the Dunajec River in the vicinity of Piaski (western part of the town of Szczawnica) along the border between Krościenko n. D. and Szczawnica communes.

Łapsze Niżne Commune



Fig. 29. Panorama of the Czorsztyn Reservoir and castles in Niedzica and Czorsztyn.
Source: [Łapsze Niżne municipality website](#)

Łapsze Niżne commune is the largest in terms of area among all Pieniny communes (its area accounts for as much as 37.78% of the entire pilot action implementation area), therefore, despite the largest number of inhabitants among these communes, the population density here is only slightly over 74 people / km² (a lower indicator in this region is only in the rural area of Szczawnica commune). Over the last 10 years, the number of inhabitants of the commune has increased by 312 people (i.e. by 3.45%).

Spisz is a region that continues to defend itself against chaotic development and boasts many areas of well-preserved natural-cultural agricultural landscapes of high aesthetic and natural values, shaped as a result of centuries of sustainable traditional land use practices.

The area of the Łapsze Niżne commune is characterized by a varied landscape with many forms of topography. The oldest rural settlements are compact and located in the valleys. The slopes and flattened parts of the ridges are covered with forests, farmlands, meadows or pastures. Such a spatial arrangement combined with the location of this commune somewhat off the beaten track, i.e. at a certain distance from the main communication artery of the Pieniny - voivodship road No. 969 (connecting the cities of Nowy Targ and Stary Sącz) and the most popular and frequented tourist centers (such as Krościenko n. D. or Szczawnica) means that the Łapsze Niżne commune can still boast unique landscape values, even in the scale of the entire Pieniny region.



*Fig. 30. Natural and cultural landscapes of high aesthetic values in Łapsze Niżne commune.
Photo: E. Zajac*



*Fig. 31. Natural and cultural landscapes of high aesthetic values in Łapsze Niżne commune.
Fot: M. Śmigielska / Pixabay*



That is why it is so important that the entire area of the Łapsze Niżne commune located outside Pieniny NP (where the Protection Plan applies) is covered by the valid local spatial development plan (mpzp).

This translates into a good degree of preservation of high aesthetic values and maintenance of the characteristic features of the landscape of Spisz, protected by the provisions of the current plan against excessive investment.

Such sustainable spatial planning can be the source of not only the exceptional tourist attractiveness of the Łapsze Niżne commune, but also its numerous competitive advantages, mainly due to the fact that the nearby Podhale and other neighboring regions have already been irreversibly marred by uncontrolled development of buildings.

However, in recent years, the pressure of external investors (both professional development companies and individual potential buyers from outside the Pieniny region) to buy and develop land has also increased significantly in the Łapsze Niżne commune.

Therefore, it should again be emphasized that the mere fact that the local spatial development plan is in force for the entire area of the Łapsze Niżne commune does not yet guarantee the maintenance of spatial order and the protection of valuable landscape areas in the long term, due to the possibility of making point changes to the plan at the request of land owners interested in selling or development of areas where any development is currently excluded by the provisions of the applicable local spatial development plan.

In the Łapsze Niżne commune, the most endangered by chaotically spreading new residential and recreational buildings are mainly undeveloped land, located on the northern slopes of the Pieniny Spiskie Mts. near the shores of the Czorsztyn Reservoir in the villages of Falsztyn and Niedzica-Zamek.

In addition, due to the high landscape values and excellent visibility of the Tatra Mountains panoramas, the land in the still open areas near the villages of Dursztyn, Kacwin, Łapsze Niżne, Łapsze Wyżne and Niedzica are also exceptionally attractive to investors.

In the areas inhabited during the recent decades, there has been an intensive development of buildings, often dispersed, climbing higher and higher up the slopes. They are mostly small (with a building area of up to 35 m², and therefore not requiring a building permit), serving as a typical weekend vacation spot, used mainly in the summer season, erected on land purchased from local residents of the Łapsze Niżne commune by people coming from large cities (such as Warsaw, Kraków or Nowy Targ).



*Fig. 32., 33., 34. Progressing recreational development of land in Falsztyn village, Łapsze Niżne commune.
Photo: E. Zajqç*



Szczawnica Town and Commune

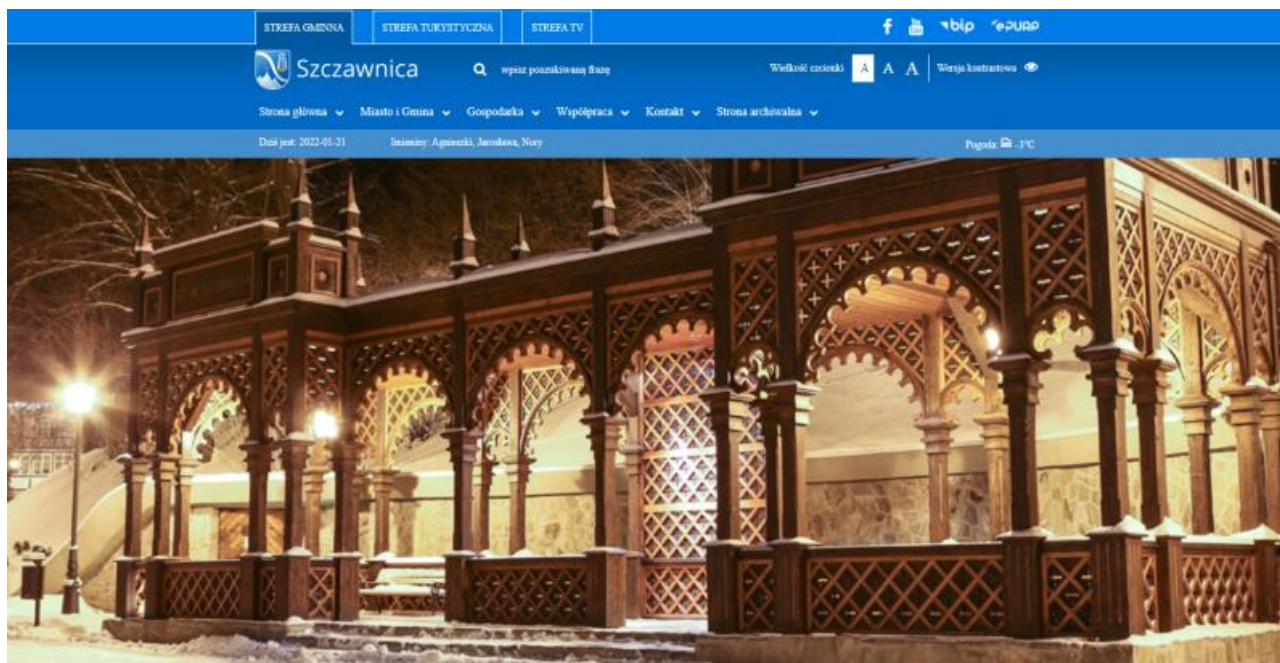


Fig. 35. Characteristic decorative ornaments of the 19th century spa architecture in Szczawnica.
Source: [Szczawnica Town and Commune website](#)

The area of the urban-rural commune of Szczawnica (8,790 ha, of which 5,500 ha in the rural area, and 3,290 ha in Szczawnica) constitutes over ¼ (26.4%) of the pilot action implementation area.

It is the only municipality of Pieniny where the number of permanent residents has decreased over the last 10 years (by 3.92%). However, this tendency concerned only the town of Szczawnica, as the number of inhabitants of the rural area of this commune slightly increased during this period (by 3.26%). In 2012-2014, it was in this area that the greatest increase in the area of residential areas was recorded (by as much as 50%). Despite this, the rural area of the Szczawnica commune has so far been characterized by the lowest population density (only 27 people / km²) in the scale of the entire pilot action implementation area.

The town of Szczawnica, which serves as a health resort, is the largest settlement center in the Pieniny region, and is an excellent starting point for tourists and holidaymakers, both to Pieniny NP and to the picturesque mountain range of Małe Pieniny (the Little Pieniny, contrary to its name are slightly higher than the Pieniny Mts.) or the forested Radziejowa range in Beskid Sądecki Mts.

However, such an attractive location of Szczawnica results in high tourist and investment pressure. Both in the town of Szczawnica and in its surroundings, there are already many tourist, sports and recreational infrastructure facilities, including a chairlift managed by Polskie Koleje Linowe S.A., which, together with several nearby lifts, supports numerous ski and snowboard slopes on Palenica and Szafranówka mountains, the Jaworki Homole Ski Arena center (cable car and two ski lifts), there is also a ski lift under Mt. Durbaszka. The further expansion of the existing or building new ski lifts is still planned.



*Fig. 36. Panorama of the Pieniny and Gorce Mountains seen from the ridge of the Little Pieniny Mountains
Photo: Jerzy Górecki / Pixabay*

The development of the spa and tourist functions of the Szczawnica commune is a direct cause of the growing investment pressure on the areas located in the immediate vicinity of the town of Szczawnica and of the larger (existing or planned) recreational infrastructure facilities.

As already mentioned in section 3.4., exceptionally attractive for both individual investors and professional developers planning new housing, recreational or new tourist infrastructure facilities, and therefore particularly exposed to intense investment pressure are the lands in the rural area of the commune of Szczawnica, and the villages of Biała Woda, Czarna Woda, Jaworki and Szlachtowa. All these areas, of key importance for preserving landscape values, are located in the external buffer zone of Poprad Landscape Park, and some of them additionally also in the SAC Małe Pieniny (PLH120025).

However, due to the fact that the local spatial development plan (mpzp) applies only to selected areas of the Szczawnica commune, development of these areas is possible not only as a result of making point changes to the provisions of this plan (where applicable), but also on the basis of the decision on development conditions (WZ) obtained by the investors (in the area not covered by the local spatial development plan).

In Szczawnica commune further development threatens an area recognized as crucial for maintaining ecological connectivity in the Pieniny region (also in the cross-border aspect), i.e. the southern part of the ecological corridor connecting Pieniny NP with Poprad Landscape Park (Pieniny PLC120002 with Ostoja Popradzka, PLH120019) running in the Natura 2000 network SAC "Środkowy Dunajec z doptywami" (PLH120088) through the shallower section of the Dunajec River near Piaski (western part of Szczawnica) at the border with Krościenko n. D. commune. This area is partly located in the external buffer zone of Pieniny NP, and partially in the external buffer zone of Poprad Landscape Park.



It is practically the only place where the banks of the Dunajec River are not strengthened and animals can freely cross the river. Meanwhile, for several years now within this corridor a newly erected supermarket of the "Biedronka" chain and a car wash, as well as new kayak and canoe harbors with fenced parking lots effectively block the passage along this corridor.



Fig. 37., 38. Progressing development in the area of an ecological corridor, Piaski, town of Szczawnica.
Photo: Z. Niewiadomski



Fig. 39., 40. Canoe harbours in Piaski, the town of Szczawnica - advertisements lowering the landscape values along the Krościenko - Szczawnica road, and the toughened bank of the Dunajec river (in Natura 2000 SAC Środkowy Dunajec z doptywami, PLH120088) after removing riverside vegetation belt.

Fig. 39. Photo: E. Zając, Fig. 40. Photo: M. Majerczak

New plans to further invest in this area emerge. The increasingly denser buildings in Piaski and Świerkówka (western parts of the town of Szczawnica) and the fences installed there constitute an impassable barrier for migrating animals. The continuation of the development will lead to the closure of the migration corridor, which will multiply the risk of interactions between humans and animals that are dangerous to both sides (e.g. road collisions, see: Map 12) and will disrupt the natural migration cycle of these animals, preventing the flow of genes between populations living in Pieniny and Poprad mainstays.

The area around Piaski and Świerkówka is also valuable for landscape reasons. However, already in 2013, the authors of the Catalog of building forms in Pieniny NP external buffer zone¹ drew attention to the trend in the development of this place, unfavorable for the landscape. The chaotic development of strong forms and large scale creates an unfavorable landscape context for the Park on the slopes above Piaski. The buildings scattered in the higher parts of the areas that until recently were used for agriculture, began to climb the higher parts of the hill, strongly exposed. This area is well visible from Pieniny NP, from almost all the most frequented tourist routes, including the Dunajec rafting route.

¹ Forczek-Brataniec, U., Nosalska, P. (2013). Katalog Form Budownictwa rejonu otuliny Pienińskiego Parku Narodowego (Opracowanie na zlecenie Pienińskiego Parku Narodowego). Kraków, 2013.



3.8. Preparation of materials for the pilot action implementation [Deliverable D.T1.4.1]

Based on the collected data, materials and information on spatial development of the pilot action area, previously identified threats to the preservation of high landscape values and maintaining ecological connectivity in the Pieniny region and materials on examples of best practices from other parts of the Carpathian region, a set of materials was prepared (e.g. charts, maps, prints of photos and graphics, presentations) necessary to conduct workshops with the participation of nature protection services employees and a series of meetings with representatives of the target group of the Centralparks pilot action in the Pieniny region.

The purpose of the materials prepared for the meetings with local communities of the Pieniny region was not only to identify and present the problems and threats that were the subject of the pilot action or to show examples of good practices, but above all to inspire the meeting participants to discuss the problems of spatial development and the protection of landscape and natural values of individual Pieniny municipalities.

The main topics presented at the meetings were benefits for the inhabitants of the region, socio-economic development and the enhancement of tourist, recreational and spa functions of Pieniny communes, resulting from the protection and preservation of biological and landscape diversity, including in particular the preservation of high landscape values (determining the tourist attractiveness of individual municipalities) and maintaining ecological connectivity in the cross-border Pieniny region.

The meetings were also used as an opportunity to present the binding legal acts of the Carpathian Convention, its origins (so strongly connected with the Pieniny region - see: part 1.5.) and the progress in its implementation, with emphasis on the priority of the current Polish Presidency in the Carpathian Convention, concerning cooperation with the local level.

In addition, basic information on the Interreg CENTRAL EUROPE CE 1359 Centralparks project, the concept of its thematic work package No. 1 as well as information on the activities undertaken as part of this work package and the objectives of implementing the pilot action in the Pieniny region were presented. Selected examples of projects implemented by the Ekopsychology Society for the implementation of the Carpathian Convention with the participation of local governments in previous years were also mentioned.

The issues and content, presented as an introduction to discussions at meetings with local communities of the Pieniny region, were divided into three thematic blocks:

- Centralparks project, Carpathian Convention and participation of local communities in its implementation;
- Biodiversity - protection not only of nature;
- Why is it profitable to protect nature and landscape?

The above thematic division of the presented and discussed content was indicated in the programs of workshops or meetings organized as part of the pilot action, attached to the invitations for their potential participants.



As part of the above-mentioned thematic blocks, the following topics were mainly presented:

CE1359 Centralparks project and the Carpathian Convention

- basic information on the Centralparks project (with the indication of the project website addresses as sources of more detailed information) and the tasks of Ekopsychology Society as a project partner;
- the genesis of the Carpathian Convention, its goals and Parties, the status of ratification of the Convention and its thematic protocols, their validity in Poland (with the indication of relevant Journals of Laws), area of application, legal basis for public participation in implementation, the relevant priority of the Polish Presidency in the Carpathian Convention;
- goals and concept of thematic work package 1 of the Centralparks project, its activities and their synergy, achievements so far (e.g. the Carpathian strategy tested in the Pieniny region)
- objectives of the pilot action carried out in the Pieniny region;
- examples of previous projects for the implementation of the Carpathian Convention with the participation of local governments.

Biodiversity - protection not only of nature

- global warming of the climate and its effects (torrential rains, heat waves, droughts, flooding, floods, landslides also occurring in the Carpathians);
- ecosystem services and their benefits for humans, i.e. basic, supply, regulatory and protective services as well as cultural services (including aesthetic, recreational and landscape values) on which the economic development of four Pieniny communes is based;
- the benefits of preserving the elements of blue and green infrastructure in the Pieniny Mountains in the context of the guidelines of the European Commission of 2010, and examples of good practices in their preservation (e.g. from other parts of the Carpathian region in Poland and Hungary);
- retention functions of wetlands and examples of good practices from the Polish part of the Carpathian region in their use for environmental education and nature tourism ("Enklawa Przyrodnicza Bobrowisko" - "Natural Enclave Beaver Marsh");
- functions of green areas, trees and shrubs for wild animal species and the resulting benefits for agriculture and human well-being;
- consequences of disturbance of water circulation - regulation of water courses, removal of their biological riverside casing (on the example of the nearby Białka River Valley) or its replacement with artificial insurances (strengthening) of the banks and the bottom, and excessive sealing of the land surface (examples of floods in 2021 in Western Europe and floods and flooding) in the communes of Czorsztyn, Krościenko n. D., Łapsze Niżne and Szczawnica in recent years);
- consequences of removing elements and areas of green infrastructure;
- consequences of deforestation, inadequate management or development of landslide-prone areas and shores of water reservoirs (for example from the vicinity of the Czorsztyn Reservoir in the Łapsze Niżne commune and other parts of the Carpathian region in Poland);



- consequences resulting from inadequate or poorly designed tourist and recreational development in mountain areas, e.g. ski resorts and routes (on examples from other parts of the Carpathian region in Poland).

Why is it profitable to protect nature and landscape?

- why small-scale nature protection is no longer enough? - landscape-scale nature protection (linking to the EU Biodiversity Strategy 2030 Bringing Nature Back to Our Lives and the IPBES Report 2019);
- threats to biodiversity, the rate of extinction of species and the resulting negative consequences for the human economy;
- natural habitats and "non-obvious" refuges of protected species (e.g. churches, attics, cemeteries, gardens and orchards) shaped as a result of human economy;
- importance and types of ecological corridors;
- threats to the permeability of ecological corridors (barriers to migration, scattered buildings, noise and light pollution);
- economic consequences of dispersed development for the municipal budgets;
- benefits for man and nature from landscape protection;
- the importance of preserving traditional buildings and garden layouts;
- threats to the maintenance of landscape values;
- effects of insufficient protection of nature and landscape;
- sustainable development and types of pressure on areas of natural and landscape values;
- "the curse of the area's tourist attractiveness" for permanent residents;
- advertising chaos in space.

The materials prepared for the three-day workshop with the participation of nature conservation services employees contained more detailed information about the Centralparks project, the correspondence of the activities of the thematic work package No. 1 and their results with individual thematic protocols to the Carpathian Convention, progress in the proceedings by the Parties of the Convention with the strategies developed under this work package and in their testing in the "Carpathian" countries.

Much more information was also provided on the significance of the Carpathian Convention for shaping mountain policy than at meetings with local communities. The employees of nature protection services were also provided with basic information about the Alpine Convention and the mechanisms for its implementation, the Alpine network of protected areas [ALPARC](#), EU macro-regional strategies and related financial mechanisms ([Interreg Alpine Space Programme](#), [Interreg Danube Transnational Programme](#)). Separate presentations informed on the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas" and potential problem areas in the external buffer zone of Pieniny NP.

Among the materials prepared for the workshops and meetings (distributed to participants) there were maps of the region covering the Pieniny National Park and its buffer zone (extremely useful during discussions on spatial development and landscape protection) and thematically related publications from other "Carpathian" projects previously implemented.

The materials were constantly updated as soon as more information was obtained, which allowed, *inter alia*, to take into account the latest events, e.g. heavy rainfall, the effects of which the town of Szczawnica experienced on 17.09.2021 (a few days before the meeting on 21.09.2021).

Zalało budynek banku w Szczawnicy

Zagrożenia miejscowe Szczawnica



Strażacy zostali wezwani dzisiaj do zalanego budynku banku przy ul. Głównej w Szczawnicy.

Woda zalała także parking za budynkiem. W ruch poszła motopompa.

Fig. 41. Excerpt from the article published on the regional information portal of Podhale, concerning flooding of the bank in Szczawnica by torrential rain (17.09.2021), used in the presentation at the meeting in Szczawnica four days later (21.09.2021). Source: Zakopane Serwis Informacyjny Podhala [Góral Info](https://goral.info)

In addition to adjusting the materials to the form of the meeting and groups of recipients, it was also extremely important to adapt the content of the presentations prepared for the planned meetings with representatives of local Pieniny communities accordingly to the specificity of individual municipalities and identified threats and problems, e.g. by selecting specific examples (e.g. landscapes, endangered areas, elements of green infrastructure or cultural and historical heritage) coming from the territory of a given commune, therefore personally known to participants of subsequent meetings.

Nevertheless, as the pilot action concerned the entire Pieniny region, during meetings with representatives of the community of a given commune, selected examples from the neighboring Pieniny region communes were also usually presented.

Some of the illustrations used during the meetings organized under the pilot action were included in the earlier parts of this report. The following pages show only a few, selected examples of other illustrations presented at these meetings, aimed at (in accordance with the adopted methodology of communication) to demonstrate, among others:

- threats caused by climate change, excessive sealing of land surfaces and reduction of water retention capacity, development of landslide-prone areas and shores of reservoirs and water courses;
- negative changes in the Pieniny landscape, potential effects of further uncontrolled development and examples of advertising chaos;
- examples of good practices that can be applied in the Pieniny region;
- examples of possible solutions - adjustments in the landscape.



*Fig. 42., 43. Rises of Dunajec River (2010) - flooded boulevards in Krościenko and harbor in Szczawnica.
Photo: P. Chachuła*

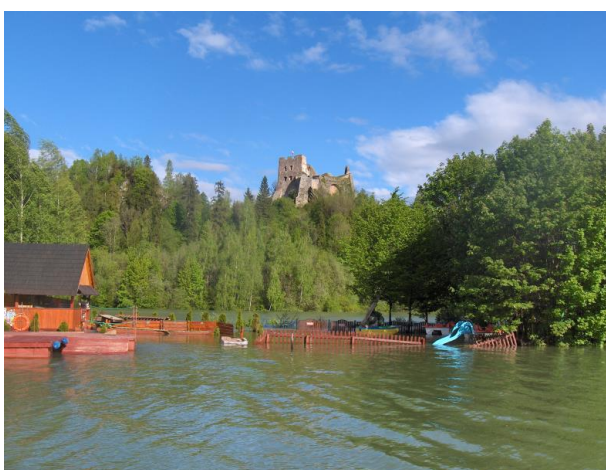


Fig. 44. Flooded harbor under Czorsztyń castle (2014) Photo: M. Sokółowski



Fig. 45 Czorsztyń reservoir shore abrasion, Falsztyn. Photo: E. Zajac

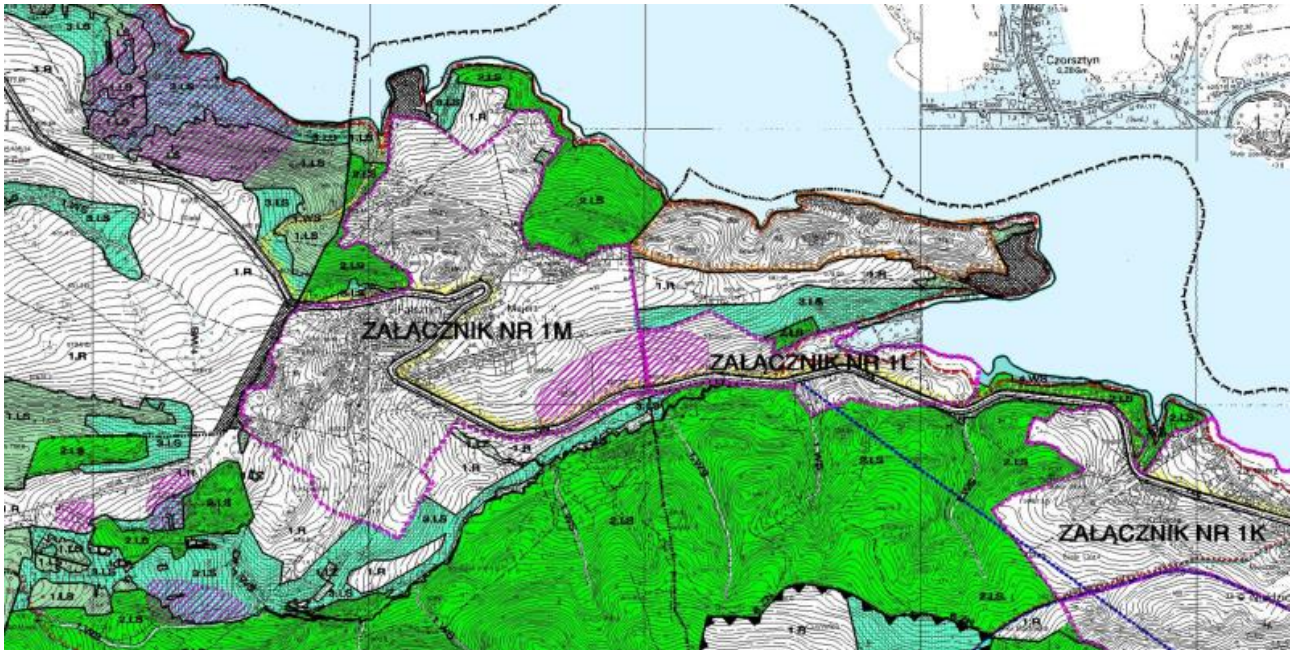


Fig. 46. Landslide-prone areas (marked with pink diagonal lines) in the village of Falsztyn.
Source: Miejskowy Plan Zagospodarowania Przestrzennego Gminy Łąpsze Niżne



Fig. 47. Building of a landslide-prone area in the village of Falsztyn in the external buffer zone of Pieniny NP - in the picture above, a single building existing in 2013, in the picture below, the boundaries of the development area allowed by the provisions of the Local Development Plan, in the lower picture, visualization of possible further development of the landslide-prone area - causing potential loss of the slope stability, threatening by the landslide together with buildings, and irreversible negative changes in the landscape of Pieniny NP buffer zone.

Visualization authors: D. Brachaczek, N. Figzał, M. Szarnicka



Fig. 48., 49. The village of Czorsztyn and Majerz Meadow - the boundaries of the areas of planned development (blue line) and areas exposed to investment pressure (red line), below a visualization of possible changes in the landscape. Photo: E. Zajac; visualization - A. Bogusz, K. Byrska, B. Grycman



Fig. 50., 51. Encroachment of recreational development, location: meadow Cisówka nad Niedzica, Łapsze Niżne commune, the photo shows the state of 2021, below a visualization of possible further negative changes in the landscape. Photo: E. Zajac; visualization - A. Bogusz, K. Byrska, B. Grycman



Fig. 52., 53. Czorsztyn and Kluszkowce villages, Czorsztyn commune - the boundaries of areas of planned development (blue line) and areas exposed to investment pressure (red line), below a visualization of possible changes in the landscape. Photo: E. Zajęc; visualization - A. Bogusz, K. Byrska, B. Grycman



Fig. 54., 55. Sromowce Wyżne village, Czorsztyn commune (Pieniny NP external buffer zone) - boundary of the area exposed to investment pressure (red line), below the visualization of possible changes in the landscape. Photo: E. Zajęc; visualization - A. Bogusz, K. Byrska, B. Grycman



Fig. 56. An example of the proper integration of the bicycle path in the landscape of the Pieniny Mountains.
Source: [Łapsze Niżne municipality website](#)



Fig. 57. An example of a bicycle path not properly integrated into the landscape of the Pieniny Mountains.
Photo: E. Zajęc

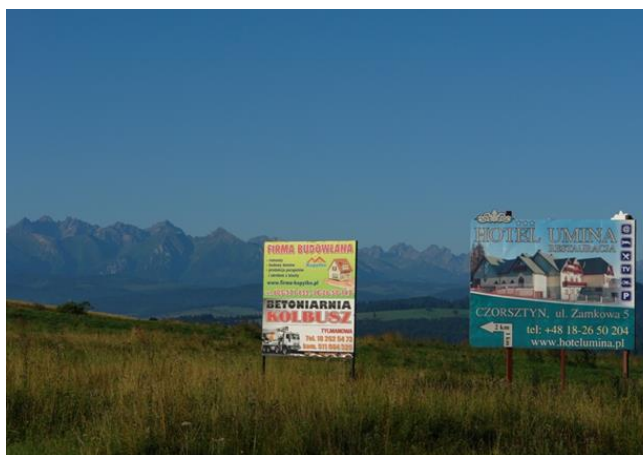


Fig. 58., 59. Comparison of the Alpine landscape in Austria, free from roadside advertisements (Photo: P. Manowiecki) and the panorama of the Tatras seen from Pieniny, obscured by billboards (Photo: M. Majerczak).



Fig. 60., 61. The landscape of the Pieniny Mountains, obscured by roadside advertisements. Photo: M. Majerczak

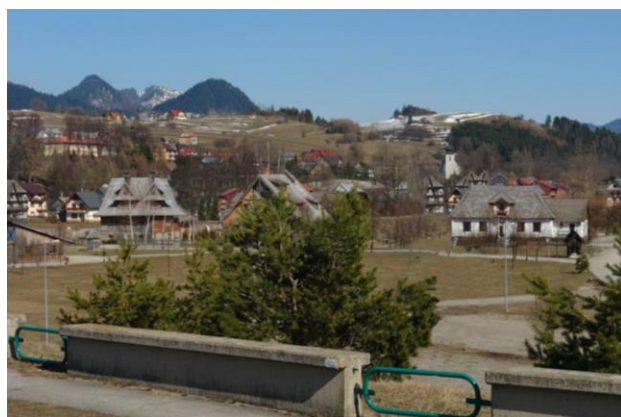


Fig. 62., 63. The Pieniny landscape, obscured by advertisements and road signs, and its possible correction. Photo: M. Majerczak, visualization: B. Grycman



Fig. 64., 65., 66., 67. Elements introducing dissonance in the landscape - the current state and the possibility of correcting the elements visible in the landscape. Photo: E. Zajac, visualization: A. Bogusz, K. Byrska, B. Grycman

„STARY SĄCZ I LEWOCZA
- KARPACKIE MIASTECZKA
Z KLIMATEM”



Fig. 68., 69. Examples of good practices: Stary Sącz and Lewocza project - Carpathian towns with a climate. Innovative, cross-border product of cultural tourism [Stary Sącz i Lewocza - karpackie miasteczka z klimatem. Nowatorski, transgraniczny produkt turystyki kulturowej](#)/[Stary Sącz a Levoča - karpatské mestčká s klímou. Novátorský, cezhraničný produkt kultúrnej turistiky](#), co-financed by the European Union from the European Regional Development Fund under the Interreg Poland - Slovakia Cross-Border Cooperation Program 2007-2013. Elaboration of illustrations: J. Lelek, Mayor of Stary Sącz.

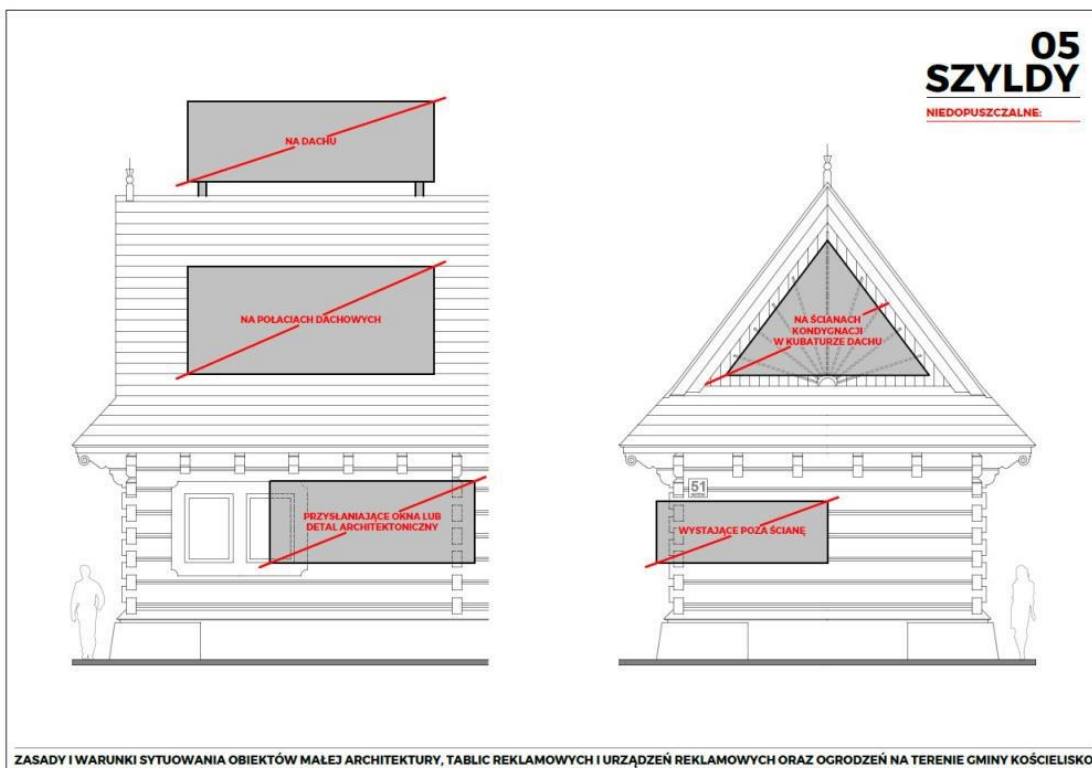
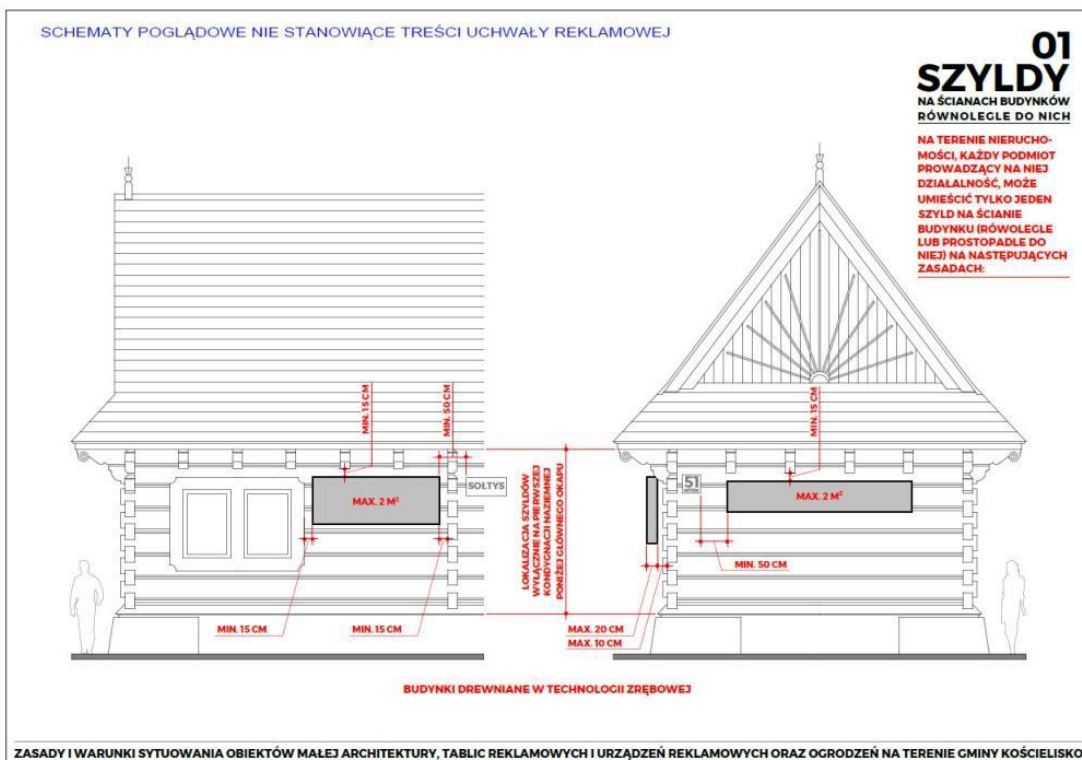


Fig. 70., 71. Examples of good practices: the "Advertising Code" „Kodeks reklamowy” adopted by the Kościelisko Commune. Source: [Kościelisko municipality website](http://www.koscielisko.pl)



KATALOG FORM BUDOWNICTWA REJONU OTULINY PIENIŃSKIEGO PARKU NARODOWEGO
Szczawnica Niżna .

zleceniodawca:

Pieniński Park Narodowy, Krościenko nad Dunajcem, ul Jagiellońska 107

opracował zespół w składzie:

dr inż. arch. Urszula Forczek – Brataniec

mgr inż. Paulina Nosalska arch. krajobr.

Kraków 2013

Karta inwentaryzacyjna badań terenowych 2

Genina: Krościenko nad Dunajcem
Miejscowość: Krościenko nad Dunajcem
Adres: ul. Trzech Koron 22
Stan: Nawastwiony, współczesny z siemieniami głównego, tradycyjnego układu
Właściciele: Maria i Jan Czapiek

Dokumentacja rysunkowa i fotograficzna

LEGENDA
1 - śpita, tliła cordata
2 - jabłoni „cytrynowka”
A - nasadzenia bylinowe - wejście

fol. 1. Stary budynek mieszkalny i zabudowa gospodarcza;
fol. 2. Ogród warzywny;
fol. 3. „Sycyli”;
fol. 4. Zabudowa gospodarcza;
fol. 5. Zabudowa gospodarcza;

Kinga Piskonska, Marcelino Smolarczyk, Jolanta Słyma Architektura Krajobrazu Politechnika Krakowska prowadzącej: dr inż. arch. Urszula Forczek-Brataniec, mgr Ewelina Zajac

Fig. 72., 73. Examples of good practices: activities of the Pieniny NP on inventorying, protection and promotion of traditional architectural patterns of the Pieniny region (one of the four catalogs of construction forms of the Pieniny National Park buffer zone, available to local stakeholders).



Fig. 74., 75. Wielkie Pole in the external buffer zone of Pieniny NP, Czorsztyn commune - highlander dance lessons conducted by the local team "Mali Maniowianie" for candidates for the Miss Supranational 2021 title, in the background Pieniny landscapes - the source of pride of the region's inhabitants and its tourist attractiveness. Source: [article](#) published at the [internet portal of Tygodnik Podhalański](#)



3.9. Workshop preparing a series of meetings in municipalities [Deliverable D.T1.4.2]

The next stage of implementing the pilot action in the Pieniny region was to organize, prepare and conduct a 3-day workshop at the Pieniny National Park in order to prepare the next meetings necessary to achieve the goal of the pilot action.

The main objective was to agree with the management and employees of Pieniny NP upon the framework program of subsequent meetings planned for autumn 2021, the selection of appropriate substantive content and messages addressed to representatives of local communities, communication and meeting methodology, and the selection of substantively competent employees of Pieniny NP who should participate in planned meetings with representatives of local communities of Pieniny communes.

These were actions consistent with those recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 3.2.5. Planning measures and activities for the protection, restoration and revitalization of landscapes in the target intervention areas;
- Measure 4.2.3. Planning measures and activities for the restoration or enhancement of the local and regional ecological connectivity.

The workshop in the headquarters of Pieniny NP in Krościenko nad Dunajcem was held on 28-30 June 2021, with the participation of 14 employees of Pieniny NP (including Mr. Michał Sokołowski - National Park Director, and Ms. Iwona Wróbel - Deputy Park Director), a representative of the Regional Directorate for Environmental Protection in Krakow, deputy director of the Landscape Parks Complex of the Małopolska Region and five experts of the Ekopsychology Society team implementing the pilot action.



Fig. 76., 77. Workshop at the Headquarters of Pieniny NP, June 2021.
Photo: Z. Niewiadomski



At the beginning of the first day of the workshop (28.06.2021), participants were provided basic information on the Centralparks project and the objectives of its pilot action carried out in the Pieniny region, related to the implementation of the Carpathian Convention, that is perceived as an instrument for shaping a coherent mountain policy in the region, with particular emphasis on the needs of nature protection and local development.

Then, the activities of the thematic work package No. 1 were presented. The progress in dealing with the strategies developed under this work package by the Parties to the Convention and ways of testing them in individual "Carpathian" countries was also reported.

In separate presentations, the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas" elaborated under the above mentioned work package and tested under the pilot action in the Pieniny region, as well as potential problem areas identified by a team of experts of the Ekopsychology Society in external the buffer zone of Pieniny NP were presented.

During the discussion on the first day of the workshop at Pieniny NP, firstly the problems of inhabitants of its external buffer zone and areas directly adjacent to the national park, as well as external threats to the preservation of high landscape values and maintaining ecological connectivity in the Pieniny region, were tackled.

Then, the materials prepared by a team of experts of the Ekopsychology Society, based on the previously collected data and information on the area of implementation of the pilot action, were presented to the workshop participants. The scheme of presentations proposed for meetings with the authorities and local communities of four Pieniny communes planned for autumn 2021, the content of which was grouped in three thematic blocks (presented in detail in section 3.8 of this report) was presented and discussed.



*Fig. 78., 79. Workshop at the Headquarters of Pieniny NP, June 2021.
Photo: Z. Niewiadomski*



During the second day of the workshop (29.06.2021), other topics related to the protection of biological and landscape diversity (other than the problem areas discussed earlier) were also discussed, such should also be covered in the course of meetings in individual municipalities.

The possible forms and language of communication that would be used during meetings with the authorities and communities of the Pieniny communes were discussed together. It was found that the most appropriate and convincing would be to use the "language of benefits" by presenting measurable benefits for the inhabitants of the region and for the local, sustainable socio-economic development (based primarily on the development of tourist, recreational and spa functions of Pieniny communes), resulting from the protection and preservation of biological and landscape diversity, including in particular the benefits of maintaining high landscape values which determine the tourist attractiveness of individual Pieniny communes.

The argumentation considered expedient was based on the comparison of examples of good and bad practices and the use of visualizations developed by students of the Institute of Landscape Architecture of the Krakow University of Technology, presenting, among others, potential negative changes in the landscape after the maximum investment of land allowed for development in planning documents, and agricultural land that can be transformed into construction land. The selection of appropriate arguments and answers to questions that may concern the planned investments perceived as problematic in the buffer zone of Pieniny NP were also considered.

Much more difficult would be to make the local inhabitants aware of the need to maintain the permeability of ecological corridors and ecological connectivity in the cross-border Pieniny region. The discussion included arguments that could be used to convince the inhabitants on the need to protect areas considered crucial for maintaining ecological connectivity, both in Pieniny NP external buffer zone and in its vicinity.

The effect of the June workshop at the Pieniny NP headquarters was the agreement with the Park management and employees on the most important "case studies" in its external buffer zone, that should be discussed during the meetings planned for autumn 2021 in individual Pieniny communes, as well as other difficult issues urgently requiring intervention, which also should be discussed at meetings with representatives of local authorities and communities.

Moreover, a framework program of planned meetings was determined, as well as the substantive scope, form and content of the message addressed to representatives of local communities.

It was also emphasized that it would be extremely important to convince the inhabitants that selling land to external investors from outside the Pieniny region does not lead to the proper development of the commune and will not necessarily provide jobs for them and their adolescent children, while further chaotic, disorderly and uncontrolled buildings disturbing the spatial order in communes will not only result in the deterioration of the quality of life of themselves and their children and grandchildren, but over time it will reduce or cause irreversible loss of landscape values, which will inevitably reduce the tourist attractiveness of all Pieniny communes, and thus reduce the income obtained by municipalities and their inhabitants from the tourist services.



The most interesting examples of good practices from other parts of the Carpathian region, which could be applied in the four communes of Pieniny, were selected for their presentation and promotion among the participants of meetings with local communities.

The Park Director has also appointed substantively competent employees of the Pieniny National Park, who should take an active part in the planned meetings with representatives of the authorities and communities of Pieniny communes.

During the last day of the workshop (30.06.2021), a field vision organized and conducted by Pieniny NP employees was conducted, during which the most sensitive areas and locations in the external buffer zone of the national park were visited, endangered by the most intense investment pressure and at the same time recognized as key areas for the preservation of the Pieniny landscapes and / or key areas for maintaining ecological connectivity in the entire cross-border Pieniny region. During the field inspection, the scale of the problems occurring there was assessed *'in situ'*.



*Fig. 80., 81., 82., 83. Field vision in problem areas in the external buffer zone of Pieniny NP.
Fig. 80., 81., 82. Photo: Z. Niewiadomski, Fig. 83. Photo: M. Braun.*



3.10. Meetings with representatives of local communities in the Pieniny region [*Deliverable D.T1.4.3*]

The next, undoubtedly the most anticipated and most important stage of the Centralparks pilot action in the Pieniny region was the organization, preparation and conduct of a series of four one-day meetings in municipalities, with the participation of representatives of the authorities and communities of individual Pieniny municipalities.

These were actions consistent with those recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 3.2.4. Planning the protection of landscapes in the target intervention areas by integrating the landscape preservation and protection requirements into the spatial planning at the local and regional level;
- Measure 4.2.2. Planning the preservation, restoration, and enhancement of the local and regional ecological connectivity by the modifications of the economic use of the area (incl. e.g. integration of the requirements of preservation, restoration and enhancement of ecological connectivity in priority ecological connectivity intervention areas into the relevant land use/spatial plans);
- Measure 4.3.4. Supporting the restoration, and enhancement of the local and regional ecological connectivity and ecological network by informative, educational and awareness raising activities.

The purpose of four one-day meetings in the communes of Pieniny, which took place in September 2021, was to discuss the previously diagnosed problem areas in individual communes, identify the threats for the preservation of high-quality landscapes and for maintaining ecological connectivity in the cross-border Pieniny region, listen to the comments and opinions of invited guests, answer their questions, initiate and moderate discussions aimed at developing appropriate solutions.

At the beginning of each meeting, basic information on the Carpathian Convention, its thematic protocols in force in Poland and the Centralparks project was presented. The need for the participation of local communities of the Carpathian region in the Convention implementation was emphasized, the basic assumptions of the thematic work package No. 1 and the objectives of the pilot action in the Pieniny region, carried out in cooperation with Pieniny NP and significant support by the Municipal Offices, that offered the possibility of holding meetings in rooms at their disposal, were briefly explained.

In each of the communes, key areas for the preservation of landscapes and / or maintaining ecological connectivity in the Pieniny region were discussed, with particular emphasis on areas threatened by uncontrolled development. By using visualizations of areas included in local plans as reserves of land for development, it was demonstrated how may these places look in the future, if the investors pressure on their development is not mitigated or stopped.



Moreover, negative consequences of dispersed development pattern for the budgets of entire individual communes were emphasized, related to the necessity to incur higher investment costs in technical and line infrastructure (e.g. access roads connection, current repairs and winter maintenance, connecting chaotically dispersed buildings to energy, telecommunication, water and sewage networks), as well as the possible negative consequences of improper spatial planning (or the lack thereof) for particularly valuable landscape areas, and the possible results of developing land unsuitable for construction purposes (e.g. in landslide-prone areas or floodplain) were reminded.

The value of a harmonious landscape was also reminded, important both for the quality of life of the inhabitants of the region and for maintaining the value of their real estate, as well as for tourists visiting the Pieniny Mountains. Benefits for the inhabitants of the region, sustainable socio-economic development and for the enhancement of tourist, recreational and spa functions of Pieniny communes were emphasized, largely benefiting from the protection and preservation of biological and landscape diversity, including in particular the preservation of the still very high aesthetic values of the Pieniny landscapes, determining the tourist attractiveness of both individual Pieniny municipalities and the entire common region. Moreover, the necessity to maintain ecological connectivity in the entire cross-border region of the Pieniny was emphasized, as well as the specific negative consequences of further restriction or blocking of ecological corridors in the external buffer zone of the Pieniny National Park and its surroundings (e.g. increased risk of road collisions involving migrating individuals of various species of wild animals).

Examples of good practices, usually (but not exclusively) from other parts of the Carpathian region, were presented, and the participants of the meetings were presented with suggestions of possible solutions, e.g. the possibility of making minor adjustments in the surroundings of public roads and in the villages themselves by controlling and reducing the advertising chaos in space.

To initiate discussions on the above topics, presentations prepared on the basis of the scheme and methodology agreed during the workshop at the Pieniny NP headquarters in June 2021, in three consecutively presented thematic blocks (described in detail in section 3.8) were used.

The presentations concerning the current situation in the area of the pilot action implementation were each time adjusted to the specificity of individual communes and the threats and problems identified in their area, incl. by selecting specific examples from the area of a given commune, as personally known to the participants of subsequent meetings. Nevertheless, since the pilot action concerned the entire Pieniny region, during meetings with community representatives of a given commune, selected examples from the neighboring Pieniny communes were also presented.

Due to the need to conduct a pilot action during the COVID-19 pandemic and the related sanitary restrictions, including the limit on the number of participants of the meetings and due to the limited budget of the pilot action, it was not possible to meet all the important representatives of the authorities and community of Pieniny communes - the target group of this action.



Meeting in Łapsze Niżne Commune (06.09.2021)

The meeting on 6 September 2021 at the Łapsze Niżne Commune Office was attended by 14 people, including the head of the Łapsze Niżne Commune, chairman of the Łapsze Niżne Commune Council, relevant employees of the Łapsze Niżne Commune Office, president of the Management Board of the Niedzica Complex of Hydroelectric Power Plants, head of the Construction and Architectural Administration Department of the Nowy Targ County Office, president of the Local Action Group Spisz - Podhale, as well as representatives of the Voivodship Office for the Protection of Monuments in Krakow, Nowy Targ Branch, and Pieniny NP.

Other people invited to this meeting, including heads of Falsztyn, Łapsze Niżne, Łapsze Wyżne, Niedzica and Niedzica Zamek villages, representatives of the Krościenko nad Dunajcem Forest District, the County Building Supervision Inspectorate and the County Road Administration in Nowy Targ, for various individual reasons, did not participate.



*Fig. 84., 85., 86., 87. Meeting with representatives of Łapsze Niżne community and municipal authorities.
Photo: Z. Niewiadomski*



Meeting in Czorsztyn Commune (20.09.2021)

The meeting, which took place on 20 September 2021 at the Czorsztyn Commune Office in Maniów, was attended by 19 participants, including the mayor of the Czorsztyn Commune, the chairman of the Czorsztyn Commune Council and five councilors of the Czorsztyn Commune, heads of Maniowy, Sromowce Wyzne and Sromowce Niżne villages (the latter also as the chairman of the Management Board of the Company for the Development of the Land Community of the village of Sromowce Niżne), representative of the Infrastructure and Economic Development Department of the Czorsztyn Commune Office, head of the Construction and Architectural Administration Department of the Nowy Targ District Office, representative of the Niedzica Complex of Hydroelectric Power Plants and representatives of Pieniny NP.

Other invited people, including heads of Czorsztyn, Huba, Kluszkowce and Mizerna villages, president of the Pieniny Rafters Association, representatives of the Association Local Action Group Gorce - Pieniny and the company Czorsztyn-Ski, did not participate in this meeting for various individual reasons.



*Fig. 88., 89., 90., 91. Meeting with representatives of Czorsztyn community and municipal authorities.
Photo: Z. Niewiadomski*



Meeting in Szczawnica Commune (21.09.2021)

The meeting on 21 September 2021 held at the Szczawnica Town and Commune Office, opened by the Mayor of Szczawnica, was attended by 16 people, including the deputy mayor of the Szczawnica Town and Commune, two councillors of the Town Council in Szczawnica, the head of Jaworki village, the substantively competent employees of the Department of Local Development, Municipal Infrastructure and Environmental Protection of the Szczawnica Town and Commune Office, head of the Construction and Architectural Administration Department of the Nowy Targ County Office, County Building Supervision Inspector in Nowy Targ, the substantively competent representatives of Polskie Koleje Linowe SA (Polish Cable Railways), representatives of the Local Action Group Association Gorce-Pieniny and Pieniny NP.

Other invited people, including other councilors of the Town Council in Szczawnica, the head of Szlachtowa village, representatives of the Szczawnica Spa, the Association of Pieniny Rafters, the Pieniny Branch of the Polish Tourist and Sightseeing Society in Szczawnica, the KOLEX company (an important investor operating in Szczawnica) and the Port Pienin tourist company, for various individual reasons, did not take part in this meeting.



Fig. 92., 93., 94., 95. Meeting with representatives of Szczawnica community and municipal authorities.
Photo: Z. Niewiadomski



Meeting in Krościenko nad Dunajcem Commune (29.09.2021)

The meeting, which took place on 29 September 2021 at the Krościenko nad Dunajcem Commune Office, was attended by 23 participants, including the deputy mayor of the Krościenko n. D. Commune, chairman of the Krościenko n. D. Commune Council, head of the Property Management Department, Environment and Spatial Development Office of the Krościenko n. D. Commune Office, head of the Municipal Economy Department in Krościenko n. D., County Building Supervision Inspector in Nowy Targ, representatives of the Urban Planning Office Maria Modzelewska, representatives of the Culture and Promotion Center in Krościenko n. D., Polish Tourist and Sightseeing Society - Pieniny Branch in Krościenko n. D., directors and representatives of primary schools in Grywałd, Krościenko n. D. and Krośnica, head of the Communal Public Library in Krościenko n. D. and representatives of the Association Local Action Group Gorce-Pieniny and Pieniny NP.

Other invited people, including councilors of the Krościenko n. D. Commune Council, heads of Dziadowe Kąty, Grywałd, Hałuszowa, Kąty-Niwki, Krościenko-Centrum, Krościenko-Zawodzie, Krośnica and Tylka-Biały Potok villages, and representatives of the Association of Pieniny Rafters, for various individual reasons, did not participate in this meeting.



Fig. 96., 97., 98., 99. Meeting with representatives of Krościenko nad Dunajcem community and municipal authorities.

Fig. 96., 97. Photo: E. Zajęc; Fig. 98., 99. Photo: M. Ochwat-Marcinkiewicz



4. Conclusions from the pilot action implementation and recommendations for the implementation of the Carpathian strategy outside protected areas [Deliverable D.T1.4.4].

The final stage of the pilot action of the Centralparks project carried out in the Pieniny region was the elaboration and summary of conclusions from the implementation of the pilot action and the formulation of recommendations for the implementation of the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas" developed under the thematic work package No. 1 in the Pieniny region or in other regions.

These were actions consistent with those recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 3.2.5. Planning measures and activities for the protection, restoration and revitalization of landscapes in the target intervention areas;
- Measure 4.2.3. Planning measures and activities for the restoration or enhancement of the local and regional ecological connectivity.

Conclusions resulting from the course and results of the pilot action

All four Pieniny communes develop mainly on the basis of the use of the landscape and natural values of the region. In addition to perfectly preserved natural landscapes, the undeniable advantages of the area where this pilot action was implemented are also areas of well-preserved agricultural landscapes of high aesthetic value, shaped as a result of the application of traditional land use practices. It is in the well understood interest of the inhabitants of the Pieniny region to care for the maintenance of such traditional practices.

Servicing the tourist traffic is an important source of income for a significant part of inhabitants of this region. However, at the same time, the uncontrolled development of the tourism function generates and deepens problems and challenges related to the need for rational spatial planning and landscape protection.

The main sources of various threats to the preservation of the high landscape values of the Pieniny region and their effects are described in detail in section 3.3. of this report.

Nevertheless, the biggest problem in all four municipalities of Pieniny, and therefore the most urgent challenge for public administration bodies at the local level - the authorities of local self-government units, seems to be uncontrolled and overly scattered development, encroaching on relatively well-preserved open areas, in particular in locations that provide the possibility of admiring the vast panoramas of the Pieniny Mountains, the Czorsztyn Reservoir, the Gorce, Tatra and Babia Góra ranges, or the Radziejowa range in the Beskid Sądecki, and therefore at the same time in locations perfectly visible in the Pieniny landscape.



The gradual development of open areas inevitably leads to a reduction in the landscape values of the region, and thus:

- reduction in the value of land, severe both for people who have already purchased and built up land in the external buffer zone of Pieniny NP or its further surroundings, as well as for owners of undeveloped land who considered the possibility of selling them for construction or recreational purposes to potential investors;
- lowering the tourist attractiveness of the entire Pieniny region, resulting in a decrease in the income of permanent inhabitants of the region, obtained from servicing tourist traffic.

From the nature conservation point of view, the spread of new buildings to other areas also leads to a gradual reduction in the permeability (or blockage by buildings) of ecological corridors connecting Pieniny NP with other natural complexes and protected areas located nearby, larger than this Park. Over time, this would lead to the loss of coherence of the Natura 2000 network in the Pieniny, Spisz, Magura Spiska, Gorce, Mały Pieniny and Beskid Sądecki regions, both on a local and cross-border scale (due to the location of the Centralparks pilot action implementation area at the state border between the Republic of Poland and the Slovak Republic).

As it was emphasized many times during the meetings with representatives of the authorities and communities of Pieniny communes - the implementation of the Carpathian Convention and its thematic Protocols is primarily to serve the inhabitants of the Carpathian region, but it is not possible without their involvement.

Similarly, the preservation of the high landscape values of the Pieniny region, crucial for the further sustainable local socio-economic development of the Pieniny communes, as well as the maintenance of ecological connectivity (both in the Pieniny region itself and between this region and the neighboring regions in Poland and the Slovak Republic) is not possible without support and involvement of people who manage the Pieniny region on a daily basis, i.e. its inhabitants.

It is not possible to maintain the above-mentioned values only through the efforts of employees of protected areas (national and landscape parks) and other organizational units whose powers and duties include nature and landscape protection (such as the Regional Directorate for Environmental Protection in Krakow). As mentioned in section 3.2. of this report, Pieniny NP has a direct impact on planning and spatial development of only 15% of the total area of the four Pieniny communes.

The spatial policy for the remaining 85% of the pilot action area is shaped mainly by the local governments of Pieniny communes, in accordance with Art. 7 of the Act on the Commune Self-Government, which stipulates that issues relating to spatial order, real estate management, environmental protection and nature protection are included in the commune's own tasks.

The course of the meetings conducted as part of this pilot action with the participation of representatives of the authorities and communities of Pieniny communes proves that they are fully aware of all the threats described in this report to the preservation of the high landscape values of the Pieniny region and that they are afraid of negative consequences for the local economy and lowering the quality of life of its permanent residents.



Nevertheless, a very important conclusion resulting from the course of the pilot action of the Centralparks project implemented in the Pieniny region is the fact that even a high level of environmental awareness, represented by the participants of all four meetings held in Pieniny municipalities, their determination and willingness to act to limit the negative effects of various threats identified in this report is not yet a sufficient condition to make significant changes in the current situation.

Participants of the meetings in all Pieniny communes emphasized that a serious problem and limitation of the possibilities for taking actions by competent authorities (in particular municipal authorities) is the lack of regulations enabling effective enforcement of the provisions of the applicable law, supporting rational spatial planning in communes, necessary for the protection of spatial order, landscape and natural values of the Pieniny region, including the possibility of maintaining the permeability of existing ecological corridors.

A common practice is the discontinuation of proceedings before common courts concerning prohibited acts, i.e. crimes and offenses against nature and landscape protection, which are too often assessed as acts of low social harm. Persons who violate the obvious interests of the entire community are not disciplined by the symbolic amount of mandates imposed and low penalties for non-compliance with the law protecting the environment and spatial order, understood as a public good. Changing the provisions of the law and increasing its enforceability is the only solution here. Also, the introduction of higher penalties for breaking the law related to the protection of nature and landscape seems to be necessary (with the current low rates of fines, it is often profitable to maintain and rent an illegally built and illegally used building).

In order to preserve the mosaic features of the landscape, which are so important for the Pieniny region, the current way of agricultural land use with the characteristic arrangement of fields and meadows should be maintained. Not yet developed agricultural land is a harmonious landscape foreground of Pieniny NP, distinguished by vast panoramas. Such should be protected against development and remain open, agriculturally used and generally accessible. Their successive reduction by allocating in subsequent editions of studies and spatial development plans for various types of buildings will reduce, and in extreme cases, deteriorate the above-mentioned values.

Unfortunately, the pressure to change the use of agricultural land for construction remains high. An example of this is the strong pressure of the inhabitants of the village of Sromowce Niżne (located in the external buffer zone of Pieniny NP) to expand areas allowed for development in areas currently intended for agricultural uses, but at the same time with high landscape viewing values. Therefore, changes in systemic solutions seem necessary, such as a higher level of RDP agricultural subsidies for owners of small plots of land located in areas that make farming difficult due to the topography. The current rates do not correspond to the actual costs of activities related to the maintenance of semi-natural habitats in the Carpathian region.

Covering only a part of the areas of two of the four Pieniny communes with local spatial development plans is not very promising. Local spatial development plans, valid only in part of the region covered by the pilot action, show a pro-investment character and gradually increase the invested areas.



Local plans allocate much more land for development than it results from the current demographic needs, which results in an accidental development of buildings in a loose and chaotic arrangement. An example is the excess of land designated for housing construction in the villages of Niedzica and Frydman. The vastness of construction areas and the lack of detailed guidelines regulating the rural layout of the newly created housing estates will cause further devastation of the landscape.

Also, buildings should not be entered into undeveloped areas, distant from those already invested, which on the one hand entails negative consequences for the budgets of individual communes due to the necessity to incur higher investment costs in technical and line infrastructure (e.g. access roads connection, current repairs and winter maintenance, creating the possibility of connecting chaotically dispersed buildings to energy, telecommunication, water and sewage networks).

On the other hand, it causes the dispersion of buildings (the effects of which have been described many times in this report) and the shrinkage of the biologically active space, introducing more and more hardened and sealed surface - which on the one hand contributes to the depletion of groundwater resources, and on the other hand may increase the size of local flooding and floods in the event of torrential rainfall, which in turn has a negative impact on the quality of life of local communities.

Experience shows that issuing permission to locate one building will inevitably start the process of building adjacent areas with other objects, justifying the issuance of the WZ decision for neighboring plots, most often with reference to the misinterpreted and abused "principle of good neighborhood".

Unfortunately, illegal development of the most attractive landscape locations is becoming a more and more common problem. Even if a given building was erected in gross violation of the applicable provisions of the local plan and / or construction law, it is extremely difficult to remove it, even if a decision to demolish it has already been legally issued.

It would be very important to undertake educational activities aimed at both adults and children. Awareness of the human dependence on nature, knowledge on ecosystem services and nature conservation mechanisms is largely lacking in school curricula.

There is also a lack of education covering the aesthetic aspects of spatial management. This is evidenced by the pollution and littering of the space with advertising, the expectations of some residents addressed to the municipal authorities regarding the management of greenery in the commune in accordance with their low ecological awareness (lawns that are mowed low, trees "not littering" with falling leaves) and the way of arranging the space around houses based on similar criteria, architectural chaos - all this can largely come from the lack of such education.



Conclusion concerning the Pieniny region

The outstanding natural values of Pieniny NP are understood and appreciated primarily by nature experts - scientists and amateur naturalists. An average tourist or vacationer can, of course, at least briefly, get to know the nature of the Park, taking advantage of its ecological education offer, visiting the nature exhibition at the Park Headquarters or educational pavilions in Czorsztyn (at Hala Majerz), Szczawnica, Sromowce Niżne and Sromowce Wyżne-Kąty.

The imagination of every tourist will undoubtedly be stimulated by the presence of numerous endemic, rare and endangered species in the Park. However, a tourist's chances of seeing a lynx, wildcat, wallcreeper, golden eagle or peregrine falcon with their own eyes will remain small.

Therefore, the main tourist attractions of the Pieniny region, famous far beyond the borders of Poland, are, among others rafting on the gorge of the Dunajec border river flowing in a deep ravine between rocky slopes with a height of 300 to 500 m, view of the picturesque Dunajec gorge from the top of Mt. Sokolica, panorama of the Tatra Mountains and other nearby mountain ranges seen, for example, from the peak of Mt. Trzy Korony, medieval castles in Niedzica and Czorsztyn, rising above the waters of the Czorsztyn Reservoir, the Gothic wooden churches in Grywałd and Dębno Podhalańskie (the latter was entered on the UNESCO World Heritage List in 2003), or the landscape nature reserves "Homole Gorge" and "Biała Woda".



Fig. 100. Google search results after entering the keyword "Pieniny tourism".

It is the unique landscapes, both natural and cultural, that determine the exceptionally high attractiveness of the Pieniny Mountains, constituting a significant advantage for local economic development based on sustainable tourism development, and a source of competitive advantages over other regions, with landscapes much more transformed by the human economy.

However, while valuable natural habitats and rare species of plants, fungi and animals are effectively protected in the area of Pieniny NP, the quality of Pieniny natural and cultural landscapes is significantly influenced by activities undertaken outside the Park, in its external buffer zone and in its immediate vicinity.

Lowering the quality of landscapes results in an automatic decrease in the tourist attractiveness of the entire region. If, therefore, human activity led to a significant reduction or irreversible loss of the landscape values of the Pieniny Mountains - at least some tourists' motivation to visit this region will diminish.



Instead of coming to the Pieniny Mountains and staying for a weekend or holiday stay in one of the villages in the buffer zone of Pieniny NP, would-be tourists will then be able to save some time, energy and money, limiting themselves only to "virtual sightseeing of the Pieniny Mountains" as beautiful as they were in the past, an obvious damage to the condition of the local economy.



Fig. 101. The start page of the Virtual Walk portal in the area of the Gorce - Pieniny Local Action Group created as part of a project co-financed by the European Union, the European Agricultural Fund for Rural Development under the action "Support for local development as part of the LEADER initiative".

Source: [360 studio Łukasz Lisiecki](#)

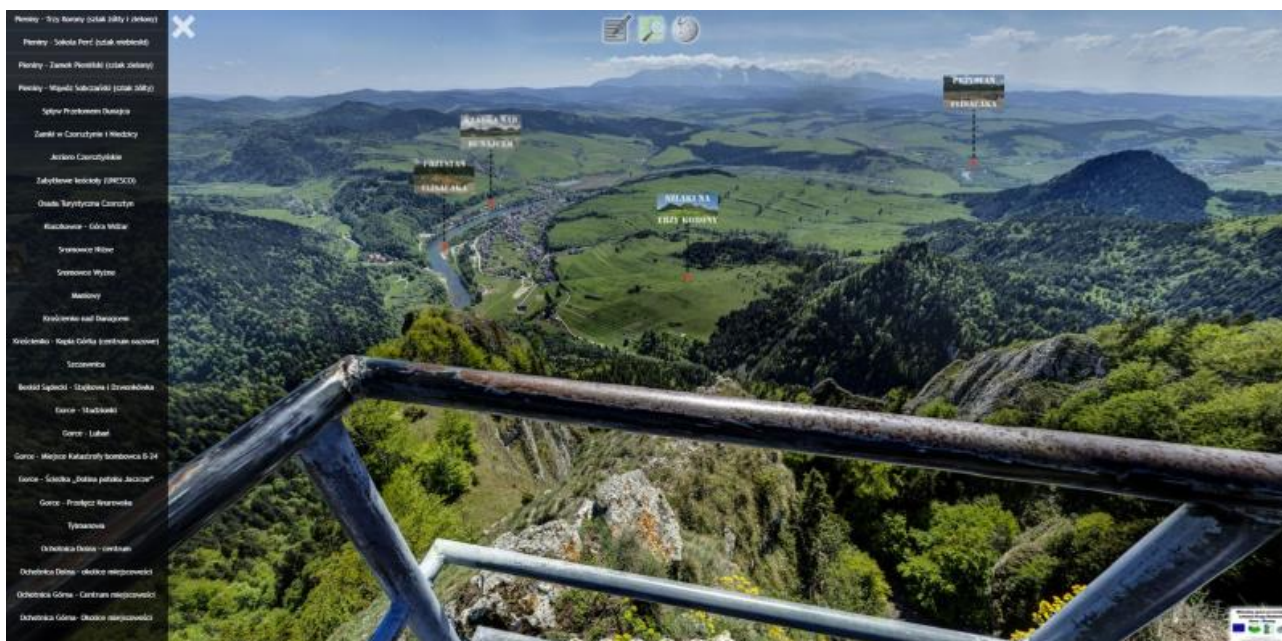


Fig. 102. Panorama from the top of Trzy Korony in Pieniny NP over Sromowce Niżne village, Łapsze Niżne commune and the Tatra Mountains on the website of a virtual walk around the area of Gorce - Pieniny Local Action Group. Source: [360 studio Łukasz Lisiecki](#)



Recommendations for the further use of the Carpathian strategy outside protected areas

As mentioned earlier - it is impossible to effectively protect the high landscape values of the Pieniny region and maintain ecological connectivity in this cross-border region only by the efforts of employees of national parks, landscape parks or the Regional Directorate for Environmental Protection in Krakow. To protect these values, the involvement and support of the inhabitants of the Pieniny Mountains is indispensable, in particular by the authorities of the local self-governments of the Pieniny communes.

In this context, it is worth emphasizing that protected areas are not only nature reserves and national parks or, to a much greater extent allowing economic use of the protected area, landscape parks and Natura 2000 sites, the establishment of which remains beyond the competences of local level public authorities.

Polish law also provides for other forms of area nature and landscape protection, the introduction of which may solely be decided under local law by the Commune Council. For example, the recognition of an area as a “natural and landscape complex” or a cultural park does not exclude it from economic use, but on condition that it complies with the restrictions aimed at protecting its unique character.

What is particularly important, the establishment of certain forms of nature and landscape protection and the management of the areas covered by them by local self-governments does not require incurring fixed costs (apart from the costs of preparing the documentation necessary to adopt a resolution of the Commune Council and updating the local spatial development plan).

However, these rights are rarely used by municipalities located in the Polish part of the Carpathian region, probably mainly due to the unfavorable social climate for the idea of creating new protected areas. For example, nature and landscape complexes (ZPK) were created in only 8 out of 200 Carpathian communes, and out of all 331 ZPK in Poland (as of 2018) only 18 of them (i.e. only 5.4% of all ZPK) were established in area of application of the Carpathian Convention (4 ZPK in the Carpathian part of the Małopolskie Voivodeship, 6 ZPK in the Carpathian part of the Śląskie Voivodeship and 8 ZPK in the Carpathian part of the Podkarpackie Voivodeship).

Making use of these important powers by the Commune Councils would imply the implementation of the two actions recommended in recommended in the "Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas":

- Measure 3.3.5. Protecting landscapes in the target intervention areas by the extension or designation of protected areas for the preservation, protection, or restoration of landscapes;
- Measure 4.3.3. Preservation, restoration, and enhancement of the local and regional ecological connectivity and ecological network by the extension or designation of protected areas.



Other activities that may serve the implementation of the ""Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas"" in areas located outside protected areas, both in the Pieniny region, covered by this pilot action of the Centralparks project, and in other similar regions with outstanding natural and landscape values, in countries covered by the CE Program as well as other countries, can in particular be:

- development and adoption of local spatial development plans (or equivalent planning documents in other countries) for all the most valuable natural and landscape areas, including areas through which the routes of ecological corridors run [Measures 3.2.4., 3.3.3. and 4.3.2. of the „Carpathian strategy...”];
- limiting the possibility of intensive linear development of areas located outside the zones of building concentration, consistent with the local settlement tradition [Measures 3.2.5., 3.3.3. and 4.3.2.];
- limiting the possibility of dispersing development in open areas, excluding the possibility of locating new “habitat buildings” in these areas, mainly related to agricultural activities [Measures 3.2.5., 3.3.3. and 4.3.2.];
- designating land for development in local spatial development plans in accordance with the settlement tradition of a given area, by promoting dense development pattern with a clear architectural layout and at the same time limiting the possibility of spreading any buildings (compact or dispersed) in areas where it could negatively affect the panoramic view [Measures 3.2.5., 3.3.3. and 4.3.1.];
- preservation of the traditional field layout and traditional extensive forms of agricultural land use, important for the preservation of agricultural landscapes of high aesthetic value, shaped as a result of the application of traditional land use practices [Measures 3.2.5., 3.3.1., 3.3.3., 4.3.1. and 4.3.2.];
- erection of buildings following the architectural forms and styles of construction traditional for a given region (example of good practice - Catalogs of construction forms in the area of the buffer zone of Pieniny NP, commissioned by Pieniny NP and made available to interested persons) [Measures 3.2.5. and 3.3.4.];
- restoration, renovation and adaptation to modern standards and functions of old residential or farm buildings, which are examples of local traditional architectural patterns characteristic for a given region [Measure 3.3.4.];
- the use of trees and shrubs in the form of cover and composition in the case of existing buildings and the introduction of high greenery as a compositional background in relation to both existing and planned buildings (due to the time needed for trees and shrubs to grow) with the use of species native to the region and characteristic of its traditions [Measures 3.2.5. and 3.3.4.];



- correcting the landscape exposure of existing buildings by adjusting the colors of the materials used on roofs and facades of buildings to the needs of landscape protection and local architectural traditions [Measures 3.2.5. and 3.3.4.];
- supplementing the existing or establishing new roadside tree lines and mid-field tree groups, using native species typical for the tradition of a given region [Measures 3.2.5., 3.3.4. and 4.3.2];
- organization of campaigns promoting the establishment of naturally rich backyard gardens, orchards, and vegetable and flower gardens [Measures 3.3.4. and 4.3.4.];
- revealing points and panoramic views [Measures 3.2.5. and 3.3.4.];
- the use of technical solutions in areas with outstanding landscape values allowing to protect these values by limiting the permissible height of wind turbines, cellular telephone masts and other broadcasting networks or other building structures that may constitute a landscape dominant or otherwise significantly disturb the harmony of the landscape of a given area, also by installing telecommunications infrastructure devices (e.g. mobile telephony transmitters and radio and TV transmitters) on the already existing cubature structures [Measures 3.2.5 and 3.3.3.];
- limiting the possibility of placing information and advertising boards only to built-up areas and adjusting the allowed number, area, manner of placing on buildings or fences, size, height and colors of boards, banners and advertising signs, advertising devices and the so-called billboards to the dimensions, colors and historical character of the existing buildings; with the total exclusion of the possibility of using fluorescent and reflective colors on boards, banners and signs (examples of good practices - "Advertising Code" of the Kościelisko commune, Polish-Slovak project "Stary Sącz and Lewocza - Carpathian towns with a climate") [Measures 3.2.5 and 3.3.3.];
- limiting in areas particularly valuable due to outstanding landscape values or existing objects of cultural and historical heritage (e.g. monuments) the possibility of using the so-called "pneumatic advertising devices" and similar inflatable attractions for children, especially those unadjusted in their form, material and colors to the requirements of the protection of natural or cultural landscape (example of good practice - "Advertising Code" of the Kościelisko commune) [Measures 3.2.5 and 3.3.3.];
- exclusion of the possibility of building with construction objects or narrowing technical barriers (including "impermeable" fences in the form of solid walls and fences made of prefabricated elements made of concrete, sheet metal, plastic nets, polycarbonate) routes of the existing ecological corridors [Measures 4.2.3. and 4.3.2.];
- limiting the possibility of building or further expanding ski resorts in the areas of the existing ecological corridors, in other cases, the use of solutions minimizing the negative impact of these investments on nature and landscape, both when designing new lifts and downhill skiing routes (e.g. by using ski slopes covers with high greenery, not only masking their routes in the landscape, but also preventing the blowing of snow on e.g. artificially snowed slopes) as well



as during their use during the ski season (by limiting the time of their use and lighting of lifts, slopes and ski runs after dark and not using sound systems in open area, i.e. outside the very facilities of the ski-cable stations) [Measures 4.2.3. and 4.3.2.];

- limiting the lighting time of public roads on sections running outside built-up areas, e.g. by installing temporary power switches that extinguish the lighting at night, when these roads are occasionally used, or automatic switches that temporarily activate the lighting for the time needed to use these road sections in night time by vehicles, cyclists or pedestrians [Measures 4.2.3. and 4.3.2.];
- a significant limitation (e.g. only to built-up areas in locations invisible from the surrounding open areas) of the possibility of placing signboards using light projection or emitting light of varying intensity, in particular large screens and LED and laser advertising (example of good practice - "Advertising Code" of the Kościelisko commune) [Measures 4.2.3. and 4.3.2.];
- designating, at the request of the owner or administrator of land (being private or municipal property), limited areas in which motor sports are conditionally permitted for recreational or sports activities (e.g. with the use of quads and motorcycles), and at the same time intensified monitoring of the traffic of these vehicles on public and rural roads, forest and hiking trails; rigorous enforcement of the existing bans, and immediate prosecution of the criminal liability provided for in the relevant provisions for breaking these bans in environmentally valuable areas [Measures 4.2.3., 4.3.1 and 4.3.2.].