

Nature-based development potential of Cserhát

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Summary

The Cserhát is rich in natural values, on which its development could be built upon. In this article, we assess the natural values perceived by the local stakeholders in the Cserhát and the potential for development based on these values. We conducted semi-structured interviews with mayors as well as with tourism, nature conservation and forestry professionals of the Cserhát, which were analyzed using qualitative content analysis. The interviewees mentioned natural values in general (e.g. habitat, special flora and fauna) and other nature-related values (e.g. Rónyai lookout, Pogány fortress). Our results are grouped into two main categories, natural and infrastructure-based developments. We further divided these two main categories into two parts. By natural values development we mean interventions that aim to improve the landscape. Interviewees mentioned the need for controlling big game and the rehabilitation of scarred landscape. Tourism development ideas related to natural values included the construction and improvement of various paths (hiking, cycling, horse riding, greenways). According to the local experts, infrastructure development is essential in the area. Emerged economic development ideas based on natural values would provide livelihood for families (e.g. small businesses or farms). Our fourth part is other economic and infrastructure development, because the majority of the settlements in the Cserhát are facing social and economic problems. Regarding this theme the interviewees mentioned e.g. building nursery, improving accommodation, establishing a processing plant and refrigerated warehouse. For the development of the region, we propose targeted, complex development that builds on the natural values and also responds to social and economic needs.

Keywords: Cserhát mountain, interviews, nature, tourism, infrastructure development

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Introduction

In many cases, economically and socially disadvantaged areas have more natural values than developed areas (Orosz–Barczy, 2019). The Cserhát is one of the most forested parts of Hungary, which has a number of development opportunities based on its natural values. The development problem of the region stems from its disadvantaged situation that is reflected in several areas (economic, infrastructural, social). Nógrád county and the Cserhát are considered to be the recreation zone of the capital city, its landscape and nature provide many opportunities for active recreation (Without author, 2020).

Nowadays, landscape and natural values play an important role in attracting tourists to rural areas (Rovira et al. 2022). The development of thematic routes, created by adding scattered attractions of minor importance, offers an increasing opportunity to integrate rural areas into the tourism network (Pentz, 2023). Ecotourism events linked to the natural values of forests (e.g. guided tours for mushroom, herb and berry picking) are mentioned as special tourism activities (Rovira et al. 2022). Products produced using local raw material contribute to the development of a local

brand/image, strengthen local identity and increase the income and employment of local residents (Szöllősi et al. 2014).

In Hungary only a few studies focus on natural value-based development. Piskóti et al. (2015) investigated the application of identity and brand models in disadvantaged small regions. Benkhard et al. (2018) conducted visitor monitoring studies in the Pilis Biosphere Reserve. Orosz–Barczy (2019) assessed the role of natural characteristics in the development of mesoregions. Pentz (2023) studied the innovative tourism potential of traditional local products and handicraft products through thematic routes. Havel et al. (2023) investigated the links between natural values and development opportunities in Börzsöny, and Ferencz-Havel et al. (2024) compared the natural value-based and other development opportunities of Börzsöny and Cserhát based on questionnaire surveys conducted among tourists of the two areas. In Europe, Skłodowski et al. (2013) conducted a questionnaire survey to investigate respondents' preferences for different types of hiking trails and infrastructure elements during forest visits. Paletto et al. (2017) conducted a preference-based questionnaire survey in the Tuscany region to explore visitors' perceptions of forest management in order to increase the attractiveness of peri-urban forests. According to a review article by Ciesielski and Sterenczak (2018), the demand for forest visits is influenced by a number of factors. The aim of the present paper is to reveal what natural values are considered important by the local stakeholders of the Cserhát, whether they consider them in the development of the area, and what development opportunities they see to solve economic and social problems.

Material and method

Study area

We chose the settlements of the Cserhát Nature Park as our study area. The concept of a nature park is defined by Act LIII of 1996, § 4, point q) as "a cooperation in a defined area, which is the result of the cooperation of local communities (local governments, social organisations, farming organisations and the population concerned), which supports the realisation of the goals of spatial and rural development based on the conservation and sustainable use of landscape, natural and cultural values".

The areas of the nature park are located within the operational area of the Bükk National Park Directorate and overlap with the Hollókő (1977) and Kelet-Cserhát (1989) landscape protection areas (Figure 1). The Cserhát Mountains are a hilly landscape, many parts of which are included in the Natura 2000 network, a special area of conservation under the Habitats Directive: Bézma (HUBN20057), Tepke (HUBN20056), Bujáki Csirke Hill and Kántor Meadow (HUBN20058), Bujáki Hényeli Forest and Alsó Meadow (HUBN21094), Szandai Hilltop (HUBN20059), Nagylóci Kő Hill (HUBN21095) (275/2004. (X.8.); <https://natura2000.eea.europa.eu/>). In 1987, the old village of Hollókő and its landscape were inscribed on the UNESCO World Heritage List (<https://whc.unesco.org/en/list/401>).

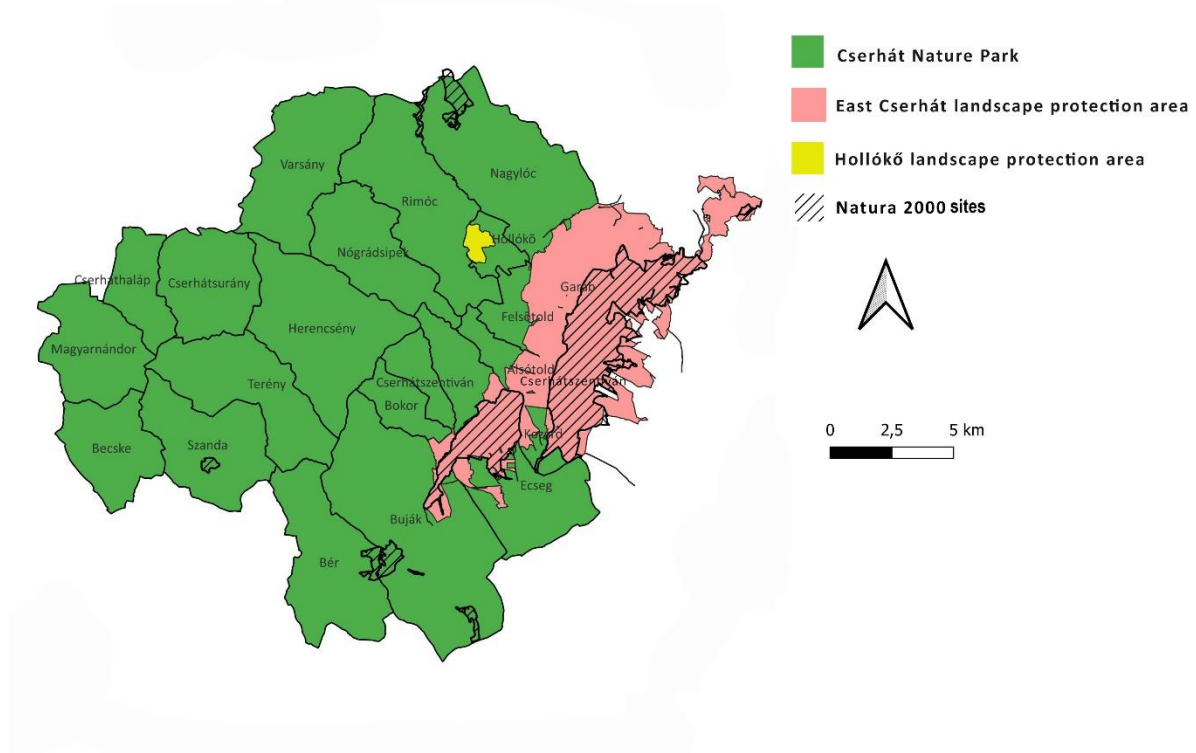


Figure 1 The surveyed settlements and related areas of conservation importance

Source: György Orosz, 2024

The 22 settlements forming the core area of the nature park can be divided into three small areas: the Central Cserhát, Terényi hills, Szécsényi hills (Dövényi et al. 2010), and according to the new classification of Csorba (2021), the areas are called Kopasz (Northern) Cserhát and Central Cserhát. The altitude of the Cserhát ranges from 144 to 574 m a.s.l., it is a low mountain range (Harmos et al. 2009). The annual precipitation is 580–630 mm, the climate is moderately cool to moderately dry, and the mean annual temperature ranges between 8–9.5 degrees (Csorba, 2021; Dövényi et al. 2010). The Cserhát Mountains, named after the turkey oak (*Quercus cerris*), once provided a continuous forest cover of the hills (Harmos et al. 2009). Today, the landscape is mosaic, with alternating patches of woodland on the hills, grassland in wooded pastures and wetlands at the bottom of the valleys. Beech woodlands form only a few patches of forest (Csorba, 2021; Dövényi et al. 2010). Native tree species are dominant (sessile oak, turkey oak, beech, European hornbeam). Among the non-native species, black locust has the largest territory (33%) (Führer–Kovacevics 2017). Besides the forested areas, steppe meadows and semi-arid grasslands are typical, while in the valleys, groves and wet, lush meadows and grasslands occur (Csorba, 2021; Dövényi et al. 2010).

Data gathering

Semi-structured interviews (Newing et al. 2011) were conducted in the spring of 2022 with local experts of the settlements connected to the Cserhát Nature Park (mayors and local experts involved in nature conservation, tourism and forestry), 13 persons in total (Table 1). The average duration of the interviews was 1–1.5 hours.

Table 1 Distribution of interviewees by stakeholder groups

| Main stakeholder groups | Number of interviewees |
|----------------------------|------------------------|
| Mayor | 8 persons |
| Nature conservation expert | 1 person |
| Tourism expert | 2 persons |
| Forestry expert | 2 persons |
| Total | 13 persons |

Source: Alexandra Ferencz-Havel, 2024

The interview consisted of four major parts: 1) visiting habits, 2) landscape and natural conditions, local products, ecosystem services, 3) gaps, opportunities for development, 4) demographic data. In this article we focus on the analysis of parts 2) and 3). Interviews were recorded using a sound recorder and transcribed verbatim. Transcripts were analyzed with qualitative content analysis (Patton, 2002) with the assistance of the QCMap software (<https://www.qcmap.org/ui/en/home>). In our article, we seek to answer three main questions: 1) What natural values of Cserhát are considered valuable by local experts? 2) What kind of development could be based on natural values of the Cserhát, boost tourism and provide jobs for the residents of the region? 3) What problems does the region face and what are the plans of the local governments to solve them? The texts were analyzed based on pre-defined codes associated with the questions. In the Results section some quotes are used for illustration. The codes after the quotes indicate the type of interviewee (which expert group he/she belongs to) and a number to secure anonymity (M-mayor, F-forestry, T-tourism expert, N-nature conservation expert, e.g. M1, F1, T1, N1).

In Table 2 the main natural values and nature related tourist attractions of Cserhát are listed.

Table 2 Natural values and nature-related tourist attractions of Cserhát

| Nature values | Nature-related tourist attractions |
|---|---|
| Quercus cerris-Quercus spp. woodlands, beeches, rocky grasslands, Nagy hill, Ecsegi castle hill, Szanda hill, Várdomb, Szuha brook, Zsunyi brook, Debercsényi brook, Bokor brook, Bér brook, Garábi brook, Lóci brook, Kozárd brook, Szanda brook, Black water, Zsunyi-canyon, Felső-canyon, Cserkúti-valley, Dolinka-valley, Pappenheim-sandstone cave, Béri andesite pillars, sandstone of Kő-oldal, Doboskúti spring, Arethus-spring, Egidius-spring, Hármass-spring, Kápolna-spring, Mária-spring, Büdöskei-spring, Lake Tábi, Rézparti water reservoir, Lake Kozárdi, bubbling of Debercsényi brook, old oaks in Buják, Bujáki Pappenheim cave | Palóc path, Mária path, Gyöngyök path, Sasbérci lookout, Isten tenyere (Kéz - Hand) lookout, Nagy lookout, Tepke lookout, Cross protecting the Palóc ethnic group (Palócok Vigyázó Keresztje), Hollókő fortress, Szanda fortress, Puszta fortress, Bujáki fortress ruin, Szent Anna chapel, Bujáki calvary, Rimóci forest bicycle path, Debercsényi fortress hill, Magyarnándori Mária chapel, Pogányvári quarry, Vár-hegyi geological path, Kertek-alja educational path, Vártúra educational path, Becske buddhist stupa, Bokri cheese factory, Bujáki forestry educational path, Ecseg-Cserhátszentivány educational path, Gyenes water mill, Ezerangyal riding hall |

Source: Alexandra Ferencz-Havel, 2024 (compiled based on Harmos et al. 2009, Dövényi et al. 2010, Kondor et al. 2011, Kukely et al. 2021, <https://cserhatnaturpark.hu>)

Results

First the natural values and nature-related values mentioned by the interviewees and then development ideas related to the natural values are presented. It is followed by the summary of the economic development ideas that are based on natural values, other economic, infrastructure development and social development ideas.

Table 3 Natural and nature-related values of Cserhát mentioned by the interviewees

| Nature values | Nature-related values |
|---|---|
| <ul style="list-style-type: none"> – habitats: <ul style="list-style-type: none"> – forest; – grassland in Pohánka; – wildlife: <ul style="list-style-type: none"> – wildlife, living creature; – favourable wood species composition; – special flora and fauna; – diverse vegetation; – wild fruits, berries; – collection of medicinal plants, mushrooms, moss and acorn; – collection of truffle collecting (by non-locals); – collection of snail; – topography: <ul style="list-style-type: none"> – forest cover; – mosaic forest areas; – diverse landscape features; – intact natural assets: <ul style="list-style-type: none"> – water; – soil; – geological formations; – ecosystem services: <ul style="list-style-type: none"> – pollination; – Rézparti water reservoir; – Virgin Mary spring; – Andesite pillars in Bér; – Lake Tábi | <ul style="list-style-type: none"> – beautiful hiking places; – collection of antler; – Rónyai lookout; – Sasbérc lookout; – Nagy lookout; – Educational path; – Count's stone table (stone table with benches found in the forest); – calvary in Buják; – Pogány fortress |

Source: Alexandra Ferencz-Havel, 2024

Table 3 shows that in addition to specifically defined natural values (e.g. Rézparti water reservoir), interviewees also mentioned habitats, various elements of nature, terms related to topography and ecosystem services. The nature related values in general were mentioned, but specific sites are also mentioned, such as the Sasbérc lookout.

Development opportunities

Development opportunities are presented in two tables (Tables 4 and 5). Few responses were received related to the development of natural values, but the restoration of degraded post mining landscape in different areas of the Cserhát was mentioned by several respondents. *"The natural landscape of this area is quite nice and can be left to our grandchildren. I think it would be good if we could restore the artificial, man-made scars in the landscape that are here, even with the rehabilitation of mines"* (F2).

Another problem that needs to be solved is the overpopulation of big game, which leads to the degradation of the forests, and often also to the straying of wildlife into the settlements. For this reason, it is important to control the population of big game, according to some local experts. *"The big game population plays a huge role in why the state of forests is so bad. They are already having a very serious negative impact on forests as well as other habitats."* (N1) *"Now the wild boars, the deer, the roe deer are really coming into the village."* (M3)

Table 4 Ideas for the development of natural values and nature-related tourism development

| Development of natural values | Tourism development related to natural values |
|--|--|
| <ul style="list-style-type: none"> – rehabilitation of the landscape after quarry and mine activities; – keeping big game populations within appropriate limits to preserve natural values | <ul style="list-style-type: none"> – identification of highlighted natural values as a target; – designation of landart points along the greenways – improving the signposting of greenways creating new ones; – designation of horse riding and bike touring routes; – creation of cycle paths; – further developing hiking trails; – establishing hiking trail in Varsány; – increase the number of educational paths in Hollókő; – renovation of the Dobogó-tető lookout tower; – improving the state of the Sasbérc lookout tower; – a visitor centre in the area; – linking natural values and attractions and offering them in a package |

Source: Alexandra Ferencz-Havel, 2024

Nature-based tourism development proposals by the interviewees focused on existing landscape elements. Several interviewees mentioned that the development of tourism and ecotourism could be a development opportunity for the Cserhát. They also see it as an economic potential, the revenue from which could at least partially solve the financial problems of the deprived settlements. *"In any case, [we have] the beautiful natural environment. This is what I think is also a very important break-out*

point from an economic point of view. I think we can even profit from this beautiful natural environment. In any case, we need to develop tourism and we need it precisely so to improve our economic situation a little bit." (M1)

Experts considered it important to highlight natural values that could be an attractive destination for tourists. *"So, if we can showcase a natural value that can be an attractive destination for visitors, it will both help to spread the good reputation of the area and really act as a bait or a target destination for visitors. You can build on that to get them to use other services."* (F2)

There are more than 200 km of greenways in the Cserhát Mountains, which require continuous maintenance in terms of painting signs, and the local experts are also considering the designation of new landmarks. *"I don't know if you've seen it [the greenway] on a map, but it's 260 kilometres. So basically, we'll paint the ones that haven't been painted yet, [on a guided tour], and we'll fix what needs to be fixed. So the aim is to include the whole nature park [in the greenway network]. We actually wanted to have landart points along the greenway. Just like the Kéz (Hand) lookout. So not exactly like that, but more simple, to attract you to go for a hike, to give you something extra where you can take a photo or have a nice view or something."* (T1)

Several interviewees called for the creation and development of different types of trails (e.g. horseriding trails, hiking trails, bicycle trails). *"We hope that the expansion of the bicycle network will be launched next year."* (M6) *"It is really missing, anyway. I think we could have beautiful cycle paths, we have a fantastic natural environment."* (M3) *"Once this high point could be operated as a lookout point, either by creating a horse riding or a touring cycle route linking it to Hollókő, it could certainly be exploited in all sorts of ways. There's the Dobos-kúti rest area, if it could be more involved in that."* (M8)

In Varsány, the local experts would like to create a hiking trail with complex touristic elements on a hill, which would allow visitors to spend 2–3 hours more in the village. *"We would like to develop such a small hiking trail. We are also getting more people coming to our restaurant, and if they are coming, there should be something more for them. I go out to Varsány, there's a little hill here, and from the top of it there's a beautiful panorama of the surrounding mountains. And there we would like to build a small lookout tower, a nice little playground, even with a ropeway, we would really like to do that, and to mark what plants live here, maybe animals, bugs, something for the children."* (M3)

In Hollókő there are currently two educational paths. The municipality is in favour of creating more paths, which would thematically present the current and former values of the municipality. *"And then our aim is to increase the number of paths we have, so that there are even more attractions, because we have seen how popular they are."* (M6)

In addition to the educational paths, the lookout towers are popular destinations for excursions among the visitors. There are several lookout towers in the Cserhát area, some of which require renovation (e.g. Dobogó-tető, Sasbérc-lookout tower). *"There's a high point, called Dobogó-tető. At the top of that mountain, there's a lookout tower which is a monument built from concrete, which is dangerous. It's signposted, but everyone who goes there goes up. I took the initiative to build a lookout tower. It would cost a lot of money to pave it and make it safe. But it is also a natural place that attracts people."* (M8)

In the whole of the Cserhát, there is no visitor centre or similar nature-tourism reception facility, which is much needed according to our interviewees. *"If the county and Hollókő supported it, it could be done. There's no student accommodation, there's no place in Hollókő where groups of children groups can arrive [and can be welcome]. There is no visitor center, there is nothing to do in rainy weather."* (T1)

Local experts thought that there are not enough attractions in the settlements for the tourist to spend a whole weekend here, therefore, many have suggested that a package of programmes should be offered, combining the attractions, to encourage visitors to stay for several days. *"If we could combine all these natural resources and opportunities in a package and if we could offer this, it is very much missing, and we already have something to offer. I see that there are things to combine, now everyone has developed so much*

with services and many other things that could be combined, and there is a lot of natural beauty and natural opportunities." (M3)

Table 5 Infrastructural development ideas affecting natural values or related to nature-based tourism (development with a potential negative impact on nature is marked with *)

| Economic development based on natural values | Other economic and infrastructure development |
|--|--|
| <ul style="list-style-type: none"> – providing local products along the hiking trails; – small businesses or family farms adapted to or respecting nature, e.g. organic farming, livestock breeding; – persuade farmers to shift to diverse land use from monoculture; – collecting herbs, rosehips for own use in the Rozmaring restaurant (Varsány); | <ul style="list-style-type: none"> – incubator house for small businesses; – establishment of catering facilities; – small and large-scale accommodation; – improving the quality, facilities, comfort and quantity of existing accommodation; – establishing a guest house in Varsány; – creation of a house of local traditions in Nógrádsipek; – creation of a sledding track with artificial snow (Hollókő)*; – establishing a processing plant (e.g. mushrooms, vegetable chips), refrigerated warehouse – wood processing sawmill on site; – possibility of developing industrial sites*; – development of public transport, rail network; – development of accessible roads and pavements; – sewage treatment facilities in Alsótold; – establishment of a residential elderly home – for the ageing population; – creating leisure facilities: playground, youth club, event hall; – building a nursery; |

Source: Alexandra Ferencz-Havel, 2024

The development options in Table 5 are divided into two categories and the results will be discussed in this structure.

Economic development based on natural values

Some interviewees suggested the inclusion of local products in a thematic route as one of the development directions of gastronomic tourism. *"So the development of tourism, ecotourism, a network of this, from which local people could also benefit, local products, this could be a good starting point. For that we need infrastructure."* (F1)

Local experts welcomed nature-based farms and family businesses, and the possibility of more people engaging in this kind of value creation and local employment. Some examples already exist as highlighted by one of the nature conservation experts. *"Some small businesses or family farms that are nature-based or nature-sensitive have been created. I mean here now, from organic gardening in Terény to these, what I said, some of these smaller livestock farming families."* (N1)

Due to the characteristics of the Cserhát, many people earn their livelihood from agriculture, but locals believe that small-scale diverse landscape management is more preferable than large-scale monoculture farming. *"It would also obviously help [development] if farmers did not necessarily want to produce monoculture. But they are terribly difficult to get along with. The quality of the land here is not excellent either."* (M1)

The Rozmaring restaurant in Varsány has been using locally grown seasonal ingredients since it opened. The social workers temporarily employed by the municipality collect the rosehip in season, and there are plans to restore the herb and medicinal herb garden to produce the herbs needed for the restaurant. *"Well, the local government collects rosehips. We also have an herb garden, for the municipality, it's just about to be a bit restored and tidied up. We make tea from the herbs we grow here, especially the spices. We are now cooperating with the restaurant to see what they need and obviously those spices will be the first thing to be produced."* (M3)

Other economic, infrastructure improvements

The development of small businesses was mentioned by several municipal leaders as a way of stabilising the economy of the municipality and creating jobs locally. Almost all small municipalities need this. One mayor came up with the idea of an incubator house to help micro-enterprises to start up locally. *"I would like to see some kind of incubator type initiation for smaller businesses, ... who could do well in a more ideal environment, let's say. And here I'm thinking of everything from software development to many things."* (M1)

The idea of opening restaurants has been raised in several municipalities and at regional level, as in many cases visitors have to travel several kilometres to find a place to eat. *"There are dining facilities here, and I would say that there are some good initiatives, but now someone coming from far away can have problems where to go to eat, for example, can I eat on a Sunday afternoon, or is something still open on a Friday evening? In the smaller villages there are no shops anymore, so pubs are closed."* (F1)

Several mayors and experts also mentioned the potential for developing accommodation, one of which was the development of small and large accommodation for groups. Meeting the 21st century needs of existing accommodation and upgrading its comfort level was another suggestion made. *"If there were one or two accommodations in Magyarnándor, that would be great, but I prefer to think of such large accommodations. So there are a lot of cyclists in the area, motorbike tourists, so if such a 20–30 person accommodation could be created, I think it would work."* (M5) *"There are village guesthouses, but their facilities, or the comfort level, or the extra services, such as the bath, pool, sauna, are quite limited. So the wellness part is not very strong in these."* (F1)

The Rozmaring restaurant could be further developed by building a guesthouse, which would increase the number of accommodation options. *"Everything we produce in the village goes to the restaurant and we can serve our guests very tasty, fresh local food. And, of course, we have goals to build a guesthouse on top of that."* (M3)

In the case of Nógrádsipek, the local administration is considering the construction of a memorial house with accommodation, as the blue hiking trail passes through the village, so there would

be a demand for accommodation among hikers. *"Two [hiking] trails pass through the village. As a municipality, we're trying to develop a house of local traditions so people who want to stay overnight, even for one night, have places where we can accommodate everyone."* (M8)

In order to increase the supply related to tourism in the area, one of the mayors raised the possibility of a sledding track to increase the number of visitors in winter, but this development could be a threat to the natural environment. *"For example, something that would be very lucrative, like a sledding track, obviously, but you might need artificial snow for that. This year we're barely seeing snow, so maybe that's the way to go, but it would really boost tourism."* (M6)

The gypsy is a significant ethnic group in the settlements of the Cserhát. From spring to autumn, after the rainy season, they often collect mushrooms, which they sell to a company in the area, or in smaller quantities to the local population. Because of the large quantities of mushrooms, herbs and fruits collected in the wild, one of the mayors suggested that it would be worthwhile to set up a processing factory locally to provide jobs and to sell the processed product at a higher price than the raw material. *"Gypsy people collect mushrooms. I could imagine a mushroom processing factory, a refrigerated warehouse, because they gather a lot of it here in the season. We should open something towards agriculture, some kind of processing. Now the Hungarian Charity Service of the Order of Malta is thinking of buying land and then using the [vegetables] produced there to make potato chips, carrot chips, beetroot chips, so they would like to produce something like that."* (M7)

Other municipal leaders have also raised the idea of setting up a factory adapted to local conditions, which would generate profits locally. *"The only way to think here is agriculture, which is livestock farming. That could be exploited, and not the Ipoly Forest Ltd. would take the profit, but the wood that is transported here could be processed locally. If a sawmill could be run locally, which a good businessman would have done a long time ago. The wood could be sent away processed, not in logs as it is now."* (M8)

The creation of industrial parks would be a prerequisite for the establishment of processing factories and businesses, an idea that has been mentioned by most mayors, as it would bring development to the municipalities in many ways (e.g. income from business tax, job creation). In the establishment of industrial parks the threats to natural values should be taken into account and only companies that do not damage nature should be allowed. *"An industrial park is very important. So, I keep on saying that because I see that not only I cannot attract new businesses here, but I can't even preserve the old ones. We don't have an area where I can say that industrial operation is possible. We don't have such an area, we have the plans for it, I could develop ten or fifteen sites."* (M7)

The municipalities face a number of infrastructural problems. The quality of the road network is inadequate, public transport has a low frequency of services and pavements are missing in many places. *"The infrastructure is very bad. The most striking thing for the visitor is that there are serious infrastructure deficiencies. This is whether it is the road network, public transport, or scheduled public transport, e.g. rail."* (F2)
"I don't think that having passable roads and pavements in the 21st century should be an issue, but it still is." (M8)

In Alsótold, the municipality's plans include the construction of a modern sewage network. *"The most important for the municipality is wastewater [treatment]. Wastewater [treatment] is the first priority ..."* (M4)

The disadvantaged settlements in the Cserhát are ageing because very few young people remain due to the limited number and quality of jobs. This problem has been recognised by several municipal leaders and the construction of a residential home for the elderly has been identified as a development solution. *"We have now started to plan very seriously a residential home for the elderly, because there are a lot of people waiting in the municipality. We and the municipalities in the area are unfortunately ageing municipalities and we have to think about the elderly. There are a lot of elderly people, especially those who will be left alone, and we will have to take care of them."* (M3)

To retain the younger generations, brainstorming has started in several places to create outdoor and indoor spaces where local young people can spend time together. *"Places for young people to spend their leisure time, such as a playground. Places for them to get together, youth clubs or event spaces where they can spend their time."* (M8)

Fortunately, in addition to the elderly, in some municipalities the nursery age group is also important for the municipal leaders, so in the case of Magyarnándor, the local administration has set the goal of establishing a nursery in order to provide adequate daycare for many children. *"For Magyarnándor, one more nursery [is needed]"* (M5)

Discussion

We have chosen the 22 settlements of the Cserhát Nature for investigation. The nature park was previously the subject of a spatial development strategy called "Living Cserhát" Integrated Landscape Rehabilitation and Spatial Development Strategy (Kondor et al. 2011) (hereinafter: The Spatial Development Strategy). Based on our results, the geological formations, the diverse vegetation, the special flora and fauna and the forest are important natural values for the local stakeholders of the Cserhát. The Spatial Development Strategy lists only a few natural values per municipality. The basic aim of the Spatial Development Strategy is to create a sustainable local society and economy, and it approaches development opportunities from this perspective. Therefore, it pays less attention to natural values, but it does list several alternative ideas for the rehabilitation of the landscape in its natural context.

Several interviewees mentioned the restoration of degraded parts of the landscape. It is also mentioned in the Spatial Development Strategy (2011), but it does not propose a solution, instead calling for the restoration of traditional landscape use (grazing livestock, complex use of orchards, manual mowing).

Among the tourism development ideas to showcase and build on natural and landscape values, our interviewees repeatedly mentioned the designation and development of educational paths, hiking trails, cycling paths, horseriding routes, lookout towers and landmark points. The Spatial Development Strategy (2011) mentions only the development of the cycle path network. Development ideas based on local food ingredients and gastronomy tourism did not come up in the interviews in the Cserhát, despite the significant Palóc identity in the area. In our previous questionnaire survey among tourists (Ferencz-Havel et al. 2024), the word Palóc was explicitly mentioned a lot, so the Palóc tradition and Palóc culture is still very much appreciated by visitors. According to the interviewees, there is a great need for catering facilities in the Cserhát. These statements are confirmed by our earlier questionnaire survey (Ferencz-Havel et al. 2024). A good example in the area is the Rozmaring restaurant in Varsány, which produces seasonal food by processing ingredients produced in the local social economy and tries to serve traditional Palóc dishes.

Among the local food-related developments, the idea of processing factories (mushrooms, chips) was raised by the mayors as an economic development opportunity. The processing factory would be based on locally produced and collected raw materials. The Spatial Development Strategy mentions processing factories (milk, meat, fruit) from two angles, one as a local economic development opportunity and the other as a means of promoting community development (joint jam-making, drying, pickling).

In the Cserhát there are very few businesses and services, and the idea of an incubator house has been raised to develop them. In addition, the interviewees could imagine small family businesses adapted to or respecting nature (e.g. organic vegetable growing, animal husbandry). The interviews

in the Cserhát show that the region needs economic, infrastructural development that can be based on natural values.

Among the economic developments based on natural values, the establishment of a visitor centre would be essential, which is currently lacking in the 22 settlements surveyed, while in Börzsöny there are several visitor centres (Havel et al. 2022, Ferencz-Havel et al. 2024). In the Cserhát there is a lack of accommodation of adequate quality and comfort or suitable for larger groups.

In many cases, the improvement of public transport, roads, pavements and the railway network were mentioned by local experts of Cserhát as the most important infrastructure development options. The Spatial Development Strategy (2011) refers to the region as the inner periphery of the Carpathian Basin due to poor transport, but as it focuses on local sustainable social and economic development, it does not address the development opportunities for transport infrastructure. The Spatial Development Strategy (2011) states that railways only touch the western edge of the study area and that the area is also bypassed by the busier roads.

In both mountain ranges, interviewees mentioned infrastructural development ideas (e.g. sledging track with artificial snow, development of industrial areas) that damage natural values. Therefore, it is worth considering their potential negative impacts and looking for alternative, sustainable solutions. The surveyed settlements of the Cserhát have almost no or hardly any industrial areas, which has preserved the character of the landscape, clean air and the absence of smoke chimneys. Many mayors considered the development of industrial areas as a way out for their municipalities. Some of them were thinking of small-scale agricultural businesses, while others were negotiating with larger companies about the possibility of establishing business in the area. If municipalities are successful in developing industrial sites, emphasis should be placed on preventing and reducing negative impacts on nature at the planning stage. The Spatial Development Strategy (2011) does not mention industrial areas, but instead proposes traditional lifestyles, extensive farming adapted to the landscape, diversification of arable farming, restoration of pastures, grazing, restoration of old vineyards and orchards as an alternative solution, which would provide livelihoods, employment and tourism potential for local people.

The population in these settlements is ageing, young people are moving away, mainly to the conurbation, leaving elderly parents and grandparents. The need for residential homes for the elderly has been mentioned by the leaders of several municipalities, and in some settlements, plans are already in place. The Spatial Development Strategy (2011) does not address this issue in detail. In addition to the ageing population, there are also problems with the daycare of children of nursery age in some municipalities, for which the construction of a nursery would provide a solution. According to the interviewees, there is also a need to create leisure facilities for young people (e.g. playgrounds, youth clubs, meeting rooms). The Spatial Development Strategy (2011) recommends organising community events where local people could work and recreate together.

One of the greatest potentials of the Cserhát is the landscape itself therefore we suggest that the development strategy utilizes this potential without degrading the natural values of the area.

Conclusions and suggestions

The latest development strategy for the Cserhát Nature Park was prepared in 2011, which does not address infrastructure and transport development. Involving the main stakeholder groups in the preparation of development concepts can help to avoid future conflicts.

The establishment of a cycling network in the settlements could create a demand for cycling services, which would in turn create new services (accommodation, catering, service points) and jobs in the area.

Besides the museums in Hollókő, there are three other important museums in Rimóc (a bindery, a peasant life museum and a doll museum), but they do not get much media coverage. We suggest that a marketing strategy is developed to promote the outstanding natural and cultural values of the study area.

The development of industrial sites might seem to be a quicker and easier option for economic development but in our opinion the restoration of traditional farming would be a better development path. The landscape has been shaped by the presence of grazing animals and the revival of animal farming would ensure the long-term preservation of the landscape. In addition, traditional farming would also provide the local population with a sense of local value through local products and a livelihood, using the natural assets of the area in a sustainable way without external assistance.

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