

Integrating Ecotourism into Regional Development: A Study on Natura 2000 Sites in the North-East Region of Romania

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Abstract

Romania has aligned itself with objectives related to the conservation and protection of biodiversity, the safeguarding of natural habitats, and the protection of wild species by identifying and assessing Natura 2000 sites. These are recognized and protected not only at the European level but also internationally. They can be connected to broader ecological networks, such as the Pan-European Ecological Corridors and international biodiversity protection networks, playing a significant role in promoting sustainable development by integrating nature conservation with socio-economic activities. Additionally, they provide opportunities for biodiversity conservation, sustainable resource utilization, tourism development, and involvement of local communities.

The study aims to identify the main forms of tourism practiced, as well as those with potential within the 15 Natura 2000 sites in the North-East region of Romania. In a comparative manner, it highlights best practices and measures necessary for promoting ecotourism and other sustainable economic activities that support nature conservation.

Key words: Natura 2000 site, tourist valorization, sustainable tourism

J.E.L. classification: Q26, Z32

1. Introduction

The commitment of the European Union and its member states to protect and conserve biodiversity and natural habitats has been implemented through a series of regulations and ongoing efforts to ensure the long-term protection of these valuable areas. The conservation of natural habitats and wild fauna and flora, the main objective of establishing the European Natura 2000 network, is complemented by other aspects addressed in environmental policy through multiannual plans. The new program, adopted in 2022 (European Commission, 2022), aims to achieve six priority objectives: reducing greenhouse gas emissions and achieving climate neutrality; increasing adaptability, strengthening resilience, and reducing vulnerability to climate change; promoting a regenerative growth model and accelerating the transition to a circular economy; zero pollution, including for air, water, and soil, and protecting the health and quality of life of Europeans; protecting, conserving, and restoring biodiversity and improving natural capital; reducing pressures on climate and the environment related to production and consumption, especially in the areas of energy, industrial development, buildings and infrastructure, mobility, and the food system.

Regarding tourism policies, although there is a priority oriented towards the green transition (Council of the European Union, 2022), Natura 2000 sites are not explicitly included in the plans. The objectives focus on general aspects to support cooperation between the public and private sectors (Aruștei *et al.*, 2014) regarding research and innovation projects and pilot projects that develop models and transferable practices for sustainable tourism throughout the EU, including on islands

and in ultra-peripheral regions (Talmaciu *et al.*, 2020).

In the last century, natural ecosystems in Europe have changed, leading to the decline of many ecosystem services (European Parliament, 2023). In this context, Natura 2000 sites play an extremely important role in biodiversity protection in the European Union. Romania has aligned itself with objectives related to the conservation and protection of biodiversity, the safeguarding of natural habitats, and the protection of wild species by identifying and assessing Natura 2000 sites within its national territory. However, there are many barriers to harnessing these sites in accordance with locally made plans. Our study aims to identify the main forms of tourism practiced, as well as those with potential within the 15 Natura 2000 sites in the North-East region of Romania. In a comparative manner, it highlights best practices and the necessary measures to promote ecological tourism and other sustainable economic activities that support nature conservation.

2. Literature review on cultural ecosystem services

2.1. Categories of ecosystem services

Ecosystem services are considered outputs from ecosystems, based on which people obtain social and economic benefits. The flow of ecosystem services depends to a large extent on the sustainable management of natural capital. Ecosystems offer numerous interdependent services that interact in intricate ways. There are situations where the provision of multiple ecosystem services benefits from synergy (European Commission, 2000), but there are also situations where the generation of one ecosystem service is diminished as a result of exploiting another ecosystem service.

The value of ecosystem services is often overlooked by decision-makers. Many services appear to be public property and available to everyone for free. Human experiences connected to the environment, particularly ecosystems, are intricate social constructs characterized by symbolic dimensions and multidimensional aspects (Winthrop, 2014). The approach based on the ecosystem services network represents a systematic process by which we can ensure that the benefits provided by natural ecosystems are taken into account by decision-makers. Through the evaluation of ecosystem services, we can enhance awareness regarding the imperative for nature conservation. This process furnishes additional compelling reasons for conservation, subsequently bolstering both public and private support, and refining decision-making among accountable entities (Talmaciu *et al.*, 2022).

There are four major categories of ecosystem services: provisioning services (production of food, raw materials, and water supply), regulating services (carbon storage, regulation of extreme events, and air, water, and soil pollution), cultural services (contact with nature, recreation, knowledge of nature, or its spiritual value), and supporting services (primary production, soil formation, nutrient cycling), all of which are interconnected.

The process of assessing and translating ecosystem services into economic and financial language is inherently complex, with subjective elements, given that it includes components from areas that are challenging to bring together – ecological, social, and economic, with benefits especially manifesting in the long term and differentiated for stakeholders (Talmaciu, 2015). Simultaneously, it demonstrates its efficacy in resolving conflicts that may arise among potential beneficiaries of ecosystem services (Small *et al.*, 2017). This involves facilitating compromises among these parties to promote a more sustainable management of ecosystems.

2.2. Cultural ecosystem services and goods

In a comprehensive context, cultural ecosystem services encompass non-material advantages derived from people's engagement with nature. Various definitions attribute cultural services to experiences resulting from interactions with nature, recreational activities, or the intangible satisfaction derived from the existence of nature and its spiritual values. These non-material benefits encompass cognitive enrichment, personal development, reflection, recreation, and aesthetic experiences that individuals obtain from ecosystems. There is still no universally accepted framework for defining and evaluating cultural services, but certain categories appear to be included: ecotourism and recreation; goods for health; spiritual and religious goods; cultural heritage and

identity; ecological education. Cultural services, such as recreational and those associated with physical/mental health benefits, are linked to much more intangible values than those related to spiritual goods and cultural identity (Pascua *et al.*, 2017).

Of all the benefits provided to people by ecosystems, cultural services are probably the most frequently overlooked, in part due to the difficulty of identifying/measuring their value through traditional estimation methods. Although considered integral to various types of ecosystem services and acknowledged as significant, they have been given scant attention in the literature and in site valorization plans. Research endeavors aimed at evaluating cultural services usually entail gathering qualitative data from users and visitors through surveys, interviews, or participatory methods.

There are several potential indicators for evaluating cultural services. The number of visitors depends on a series of factors: the availability of alternatives (the range of circumstances/environmental settings suitable for recreational activities); accessibility (the quality and quantity of transport infrastructure and the distance between the site and populated centers); site attributes (the structure and quality of the habitat, visitation infrastructure). Individuals' aesthetic preferences for various natural environments are heavily influenced by the ecological state of the surrounding area. One primary motivation for visitors to explore protected areas is the enjoyment of a spiritual experience in nature, marked by solitude, beauty, tranquility, and harmony (Tengberg *et al.*, 2012). Numerous cultural services exhibit interconnections and overlap to a certain degree. Many Natura 2000 sites serve as natural settings where individuals can engage with nature and are favored locations for relaxation, recreation, and tourism. People visit these natural environments for a variety of purposes, such as physical exercise, relaxation, enjoying fresh air, appreciating scenic beauty, and observing wildlife.

Natura 2000 sites potentially provide physical, mental, and social benefits for the health of the population. There is evidence indicating a positive correlation between physical and mental health and exposure to nature. The intricate manner in which contact with nature contributes to people's well-being and, consequently, their health is not well comprehended at present. Although there is limited information on how biodiversity influences health, greater diversity of environments tends to lead to better health, undoubtedly with a cultural component in this regard. While it is challenging to establish direct connections between these aspects and the benefits at the scale of a site, they can provide a useful tool for argumentation and communication about the importance of the natural environment for public health. In the future, it will be essential to measure the impact of the quantity, quality, and accessibility of the natural environment on the extent of physical activity and to examine their correlation with health benefits and the potential reduction in costs associated with treating specific diseases. In addition to possible physical exercise, access to Natura 2000 sites can contribute to human health and well-being through the mere exposure of individuals to nature, leading to numerous physiological, emotional, and mental benefits, reducing stress and improving the quality of life. The economic evaluation of this category of services is associated with the assessment of recreational services since a direct determination with methods allowing a precise assessment of this service category is not possible due to impediments in identifying the direct contribution to human health of site services. For these reasons, relaxation in an environment with the specific characteristics of the site is considered to have both direct and indirect impacts on human health.

Natura 2000 sites that hold religious and spiritual significance are among the oldest protected natural areas and are essential for the spiritual well-being of many religious groups (Pascua *et al.*, 2017). Assessing spiritual and religious services in economic or monetary terms is exceptionally difficult given their intangible nature. Efforts to quantify these services pose notable philosophical and religious challenges. The spiritual values associated with a site, which people hold dear, have a significant non-instrumental component, making them unsuitable for economic analysis. The natural world has the power to elicit emotions such as inspiration, harmony, peace, and security. Translating these emotions into economic terms poses a challenge. The significance of sacred or aesthetically pleasing locations can contribute to the faith of religious communities, shaping their perspectives on the natural environment.

There exist cultural bonds between humanity and the environment that play a role in shaping cultural identity. In Europe, certain landscapes have, for centuries, depicted the interplay between human society and nature, carrying significant cultural importance and value. Assessing ecosystem services related to cultural identity and heritage presents challenges. Similar to other cultural

services, markets may provide a monetary gauge and indicate their appeal to tourists. A significant hurdle in evaluating the values of cultural identity and heritage lies in determining the spatial extent of these services and identifying the individuals and communities to include in the assessment. Various indicators, such as the number of visitors, visitor surveys, and the correlation between visitation motivation and the site's cultural identity/heritage significance, have been recognized. However, quantitative indicators may fall short in capturing many facets of cultural heritage and identity.

A widely used tool (Zakariya *et al.*, 2019) is the Landscape Character Assessment (LCA), which identifies the features that give a locality its uniqueness. LCA can be employed in various situations, such as designing indicators to calibrate changes in the landscape and inform regional planning, local development, environmental assessment, and the management of protected areas.

Ecological education is based on the premise that the environment surrounding the sites serves as an outdoor educational framework, where contact with nature can lead to the development of knowledge about nature and positive educational effects in general. Ecological education has gained prominence as a priority for numerous educational institutions worldwide. The objectives of specific programs organized by educational institutions include a substantial enhancement of knowledge and attitudes concerning both direct and indirect relationships with the environment (Borza, 2020).

Educational tourism and ecotourism have garnered heightened interest in recent years, leading to the implementation of local, national, and international projects aimed at fostering the development of these tourism forms (Manolescu *et al.*, 2015). These initiatives come with distinct advantages for stakeholders in the tourism industry.

The proportion of different types of cultural ecosystem services and goods varies substantially from one site to another, with the decision of local authorities and communities to capitalize on them remaining essential.

2.3. Tourism valorization of cultural ecosystem services

The inclusion of Natura 2000 sites in the vision of regional development is a complex and time-consuming process. Natura 2000 areas are very often located in less developed areas, given their geographic (areas with difficult access) and administrative (on the periphery of regions, near borders where economic development has been hindered by specific closed-border protocols) characteristics. During crisis situations, leveraging local tourist resources proves to be a viable solution, safeguarding the resilience of destinations (Talmaciu *et al.*, 2021). Nations or regions characterized by a relatively modest tourism potential, or those traditionally viewed as non-touristic, are turning towards niche tourism forms (Manolescu *et al.*, 2021). They focus on locally exploiting their tourism resources in this approach.

Tourism valorization plans for Natura 2000 sites involve the participation and expertise of multiple specialists to ensure the prioritization of funding for recreational resources without affecting ecosystems (Rocchi *et al.*, 2020; Borza *et al.*, 2015).

There are opinions suggesting that the balance within natural sites is fragile and, therefore, any economic-social activity must be limited. However, studies show that a high level of biodiversity at a site does not automatically imply reduced tourist activity (Cortina *et al.*, 2014) and that the impact of visitors on sites is relatively low compared to other activities (e.g., animal farms, logging, biological invasions, trail maintenance). The implementation of tourist activities must complement measures ensuring ecological stability. This can be achieved by adjusting the number of visitors to the system's capacity, maintaining trails, and selectively removing opportunistic plants (Queiroz *et al.*, 2014). Eco-tourism has the potential to contribute to the conservation of biodiversity by generating revenue for the management of Natura 2000 sites, as long as it is overseen in a manner that avoids adverse impacts on the site.

The predominant recreational activities in the sites are diverse: sports-related (hiking, cycling, walking trails, horse-riding, quads driving, paragliding), as well as wine and food tasting, mushroom picking, mountaineering or climbing for alpine sites, and education (e.g., guided tours) alongside short trips, vacations, relaxation, and enjoying nature (Schirpke *et al.*, 2018).

Certain sites are recognized for their exceptional scientific value (Cruz *et al.*, 2009): habitats for endemic species, living laboratories for testing invasive species eradication, and habitat restoration; they are places where activities of international scientific projects take place. However, activities for the general public can also be organized, such as bird-watching and botanical circuits.

Coastal areas are privileged sites – recreational services include beach activities, bathing, and diving, whereas activities away from the coast include sailing, wildlife watching, and fishing (Russi *et al.*, 2016).

Some integrated sites can generate significant income for the community. A relevant case study (Pabian *et al.*, 2009) shows that there are direct revenues associated with activities within the site (entrance fees, hunting licenses, horse riding, provisioning services like mushrooms and honey extraction). Tourist activities stimulate investments in the area (guesthouses, restaurants), museums, educational and scientific centers, as well as sports facilities representing hubs for local development, providing jobs, including highly skilled ones. Summer festivals join workshops, lectures, and seminars.

Another interesting characteristic of the sites is their multicultural nature. Often located in peripheral zones, near borders, they offer a mosaic of traditions, rituals, and languages that find expression in folk music, local habits, and architecture, making them suitable for ethnic tourism, diaspora tourism, or family reunion events.

One solution to avoid/minimize landscape fragmentation is the development of a coherent ecological network (WWF, 2023) that combines existing patches of habitat with other still functional natural sites (Kadlečík *et al.*, 2021). Natura 2000 sites can contribute to creating a regional brand if the vision for exploiting their components and integrated communication are priorities in regional development (Manolescu *et al.*, 2019).

3. Research methodology

The analyzed Natura 2000 sites are located in the Northeast Region of Romania, an economically underdeveloped region. Moreover, two out of the three counties where the 15 sites are situated are the least developed nationally, both economically and in terms of tourism (Vaslui and Botosani).

The research was conducted in stages: documentation from the sources of institutions and local public authorities; direct observation through site visits and completion of observation sheets; analysis and interpretation of data.

The variables considered were qualitative, focusing on the resources within the 15 Natura 2000 sites that can be exploited as goods and cultural ecosystem services, based on components such as ecotourism and recreation; health; spiritual and religious attractions; heritage and cultural identity; ecological education.

By analyzing the presence of these resources, the site's positioning in relation to other tourist attractions, the existence and development of tourist infrastructure, in a comparative manner, the types of ecosystem services characteristic of each site were highlighted, as well as the possibilities for development to better capitalize on tourist resources while preserving the natural habitat and involving local communities.

4. Findings and discussion

Based on the results obtained from documentation and direct observation, the main components of cultural heritage, landscape characteristics, and attractions that can be considered tourist objectives for a critical mass of visitors were highlighted in a synthetic manner (table no. 1).

These components form the basis for categorizing the types of exploitation of cultural ecosystem services and goods through various forms of tourism, such as ecotourism and recreation; goods for health; spiritual and religious goods; heritage and cultural identity; ecological education, as well as other niche forms.

All sites are suitable for ecotourism and health tourism. Sites with high potential include ROSPA0119 Horga – Zorleni, where the natural setting with exceptional value favors the development of agritourism. The forested areas covering the hills and the clean air allow the development of recreational tourism. Additionally, ROSCI0309 The Lakes around Măscurei

represent a site that is attractive for sport fishing on the lake in Bacău County, as well as for water-related activities (swimming, games, and swimming) due to the suitable natural environment.

Table no. 1. The results of the descriptive analysis of the studied sites

Code / Natura 2000 site name	Cultural Heritage	Landscape	Tourist Attractions
ROSCI0041 Coasta Rupturile Tanacu	Human habitation traces dating back to the Neolithic era, Cucuteni Culture.	Herbaceous vegetation on the slope, furrowed by coast runoff.	Museum of Traditions; Wooden Church of St. Nicholas; Wooden Church of St. Michael and Gabriel Voivodes.
ROSCI0080 Fânașurile de la Glodeni	Archeological site at Rateșu Cuzei, with settlements dating from pre-Neolithic, Neolithic Cucuteni culture, Bronze and Iron Ages - Latene and Hallstatt, Roman, Migration, Medieval periods.	Open landscape, hills with gentle or steeper slopes occupied by meadows; due to the rugged terrain, a variety of grassland habitats has been created in small spaces, generating a diversity of landscapes.	Hunting potential.
ROSCI0117 Movila lui Burcel	Religious and cultural-historical heritage.	Hill, meadow.	Monastery of Saints Constantine and Helena; Statue group; Folk and religious event.
ROSCI0133 Pădurea Bădeana (Tutova)	Archaeological sites. Tutova Valley – rich in folklore and ethnography.	Forest-specific for medium altitudes; includes diverse plant and animal species.	Village Museum "Casa Răzașului"; Centuries-old oak tree with icons in the Bădeana Natural Reserve; A pool at Bădeana, with a sports field, and a playground park.
ROSCI0158 Pădurea Bălteni-Hârboanca	Ethnic roots (Ruthenians); Ceramic remnants from the 2nd-3rd centuries; Neolithic inventory and Roman coins.	Bălteni Grove: lowland, with periodically flooded micro-depressions, especially in spring	Oakwood churches; "Stone Bridge" in Căntălărești; Archaeological sites
ROSCI0169 Pădurea Seaca – Movileni	Events in the Moldovan rural area	Specific to the hilly area, with a gentle hill appearance, featuring forests and agricultural lands	Trails through the forest.
ROSCI0213 Râul Prut	Architectural and religious monuments, archaeological sites, wood sculpture workshops.	The Prut River meadow, populated by species of herbaceous plants that form the composition of tall herb communities.	The memorial house and mansion of Costache Negruzzi; the village museum "At Grandma's House"; the Jewish Cemetery.
ROSCI0286 Colinele Elanului	Archaeological sites.	Predominantly in the plains, with meadows and occasional pastures interspersed with thickets of wild roses and hawthorn	The Constantin Corbu Manor in Mălăiești; The archaeological site at Giurcani.
ROSCI0309 Lacurile din jurul Măscurei	Folk craftsmen or practitioners of traditional trades.	Dominated by the water's sheen, complemented by willow groves and tall herbs.	The wooden church of St. Nicholas from the former Strâmba hermitage; Three old wooden churches, listed as historical monuments.

ROSCI0330 Oșești – Bârzești	Traditions: the brass band from Cozmești; weaver in Vulturești; wood processing in Vulturești.	Gentle hills, with forests and agricultural lands; authentic landscapes with a strong archaic-traditional touch.	Vulturești Village Museum - ethnographic objects.
ROSCI0335 Pădurea Dobrina – Huși	Numerous historical monuments.	Dominated by hilly, wooded terrain, with steep slopes resembling a submontane landscape.	Dimitrie Cantemir Monastery.
ROSCI0360 Râul Bârlad între Zorleni și Gura Gârbovățului	Human settlements dating back to the Paleolithic era, evidenced by remnants of material culture (primitive tools made of stone, bone, or wood), in archaeological sites.	Dominated by the developed riparian vegetation along the Bârlad River and the floodplains of its main tributaries; occasional patches of salt marshes are present.	Numerous points of interest related to religious, historical, cultural, and recreational/sporting aspects.
ROSPA0096 Pădurea Micleşti	Wooden churches dating back approximately 200 years; archaeological sites; traditional crafts.	Pronounced fragmentation, including steep slopes that favor land degradation processes, with narrow interfluvial plateaus appearing as ridges or hills.	The Dimachi-Arghiropol Manor in Gugești; The fortress in the village of Bunești.
ROSPA0119 Horga – Zorleni	Traditional crafts: pottery and wicker weaving workshop; series of settlements from the late Bronze Age, the early Iron Age, and a settlement from the beginning of the Middle Ages; fossiliferous point.	Wooded areas covering the hills.	Ruins of the Soci Fortress; Bujoreni Monastery; Grăjdeni Monastery; Heroes' Monument; Linden Tree Festival.
ROSPA0130 Mața - Cârja – Rădeanu	Historical and religious monuments.	The overall appearance of the meadow is that of a wide depression; accumulation forms (ridges) and negative forms (former lakes, depressions, ponds).	The fishery complex Cârja-Mața-Rădeanu (Vădeni); Pogănești Forest Nature Reserve.

Source: authors' contribution

The sites with the highest potential in the analyzed areas for the development of various forms of tourism are highlighted in Table no. 2.

Table no. 2. The sites with high potential in the development of various forms of tourism

Type of tourism	Ecotourism and health	Spiritual and religious	Cultural and historical heritage	Ecological education
The sites with high potential	ROSPA0119 Horga – Zorleni ROSCI0309 Lacurile din jurul Măscurei ROSCI0169 Pădurea Seaca – Movileni ROSCI0286 Colinele Elanului ROSCI0360 Râul Bârlad între Zorleni și Gura Gârbovățului ROSPA0130 Mața - Cârja – Rădeanu	ROSCI0117 Movila lui Burcel ROSCI0133 Pădurea Bădeana ROSCI0041 Coasta Rupturile Tanacu	ROSCI0133 Pădurea Bădeana ROSPA0096 Pădurea Micleşti ROSCI0158 Pădurea Bălteni-Hârboanca ROSCI0335 Pădurea Dobrina – Huși ROSPA0119 Horga – Zorleni ROSCI0080 Fănațurile de la Glodeni ROSCI0213 Râul Prut ROSCI0330 Oșești – Bârzești	ROSCI0133 Pădurea Bădeana ROSCI0117 Movila lui Burcel ROSCI0158 Pădurea Bălteni-Hârboanca

Source: authors' contribution

For spiritual and religious tourism, ROSCI0133 Pădurea Bădeana and ROSCI0117 Movila lui Burcel are of special importance. Thus, at the western edge of the Pădurea Bădeana site, there is a tourist attraction of spiritual and ecological importance, but little known to the general public. It is popularly known as "The Oak with Icons" or "La Stejări," and locals consider it a place charged with supernatural powers. Older locals believe that the oak is over 500 years old and is the only specimen left from the time of Ștefan cel Mare's peasants.

In the case of the Movila lui Burcel site, the existence of the monastic settlement and the religious practices specific to Orthodoxy conducted here gives the place a specific spiritual value, even if the establishment was relatively recently built (after 1989). On the other hand, the construction of the monastery and ancillary buildings, as well as the behavior and decisions of those involved in religious service, have had, in most cases, a negative impact on the biodiversity values of the site. To the extent that religious practices can be combined with biodiversity protection practices, the two can crystallize into a locally distinctive and interesting brand. There are certainly elements that identify the specific historical value and cultural identity: it is the legend of the place, with historical value, which announces the "spirit of the place." However, visitors who come to the area are more attracted to the religious value conferred by the existence of the monastic settlement. It is not recommended for the number of tourists to exceed a certain threshold, given the relatively small area of the site and the risk of vegetation damage if many people are on the site at the same time (as is the case with folklore and religious events). The threshold of sustainability must be determined, and site administrators must take specific measures to limit the damage to protected species. Characteristic of this site is that these tourists are grouped over time, while it is desirable for these areas with low sustainability to have a lower and more dispersed number of visitors over time, throughout the year.

For tourism based on the exceptional cultural and historical heritage, the majority of the analyzed sites are of great importance.

Thus, within the ROSCI0133 Pădurea Bădeana, there are the villages of Polocin and Pogonești, localities possessing archaeological sites: the 4th-century AD Necropolis at Pogonești-La Movilă, the medieval settlement at Polocin – "La Cruce," the Sântana de Mureș Necropolis at Polocin – "La Colea," the biruthal Necropolis from the migration period at Polocin – "Islaz," and the boyar residence at Pogonești-La Beci, some dating back to the 4th century. Archaeological camps are periodically organized in this area. From a folklore and ethnographic perspective, the richest area in Vaslui County is Valea Tutovei. Folk costumes are still worn in the villages of Pogonești and Ivești. These two villages are representative folklore centers, with folk art being widely cultivated.

ROSPA0096 Pădurea Miclești is also a representative site for crafts and folklore: here we find folk costumes; specific musical instruments, sculptures, and paintings; spoon and barrel makers; traditional handmade carpets; brass bands of popular performers on wind and percussion instruments. Within the ROSCI0158 Pădurea Bălteni-Hârboanca is the village of Brăhășoiaia, founded at the end of the 18th century, exclusively populated by Ukrainian (Ruthenian) refugees from northern Bukovina, occupied by the Habsburg Empire. However, over time, the language spoken by the locals disappeared. The ROSCI0335 Pădurea Dobrina – Huși site has an exceptional historical heritage, with 152 historical monuments. ROSPA0119 Horga – Zorleni holds a rich archaeological and ethnographic material, attesting to the uninterrupted presence on the current territory of Vaslui County of Dacian black pottery, preserving ancient forms and ornamentation techniques to this day.

Ecological education-based tourism also has high potential in the territory of most of the analyzed sites.

Within the ROSCI0133 Pădurea Bădeana, international astronomy camps have been organized for over 5 years (Pădurea Bădeana being preferred for its exceptionally favorable position for studying the stars), the existence of rare species of flora and fauna allowing the organization of excursions, summer schools, and practical teaching hours, all contributing to the development of cultural-scientific tourism.

The ROSCI0117 Movila lui Burcel and ROSCI0158 Pădurea Bălteni-Hârboanca sites have the potential to offer educational resources (rare species), and opportunities for educational excursions. In these sites, numerous educational activities to understand the biodiversity of the site have taken place in recent years, involving students from schools in neighboring communities, activities prompted by the implementation of environmental projects.

As niche tourism forms that can be mentioned are gastronomic/wine tourism within the ROSCI0335 Pădurea Dobrina – Huși - the fame of these places is represented by the vineyards and remarkable wines of Huși, as well as dark tourism, with events intensely publicized at Tanacu Monastery as a source.

Tourist infrastructure is poorly developed in all analyzed sites. Sites with pronounced anthropic components, such as ROSCI0117 Movila lui Burcel, but also sites located near extensive communities - ROSCI0133 Pădurea Bădeana, ROSCI0158 Pădurea Bălteni-Hârboanca, or those spread over a larger territory - for example, ROSCI0213 Râul Prut or ROSCI0360 Râul Bârlad between Zorleni and Gura Gârbovățului, are comparatively more advantaged from this point of view.

5. Conclusions

The integration of Natura 2000 sites into the development of communities and, implicitly, into regional development is a strategic endeavor that must be based on a long-term vision and detailed documentary and participatory information. Although the analysis of Natura 2000 sites in the North-East Region of Romania has shown, on the one hand, that there are significant resources that can be valorized, and on the other hand, that the growth potential is limited, and tourist infrastructure can be considered deficient, there are good practices at the international and national levels that can be integrated into tourism development plans. Thus, following the analysis and determination of the sustainability threshold to avoid habitat deterioration, multiple measures can be used for the development and valorization of cultural ecosystem services and goods. The development of integrated thematic routes/trails based on similar or complementary resources and their promotion through extensive community networks, the use of environmental and development funding in partnership through projects targeting the creation of tourist products and appropriate infrastructure, the expansion of services that can be offered to locals and occasional visitors, the establishment of institutional networks, especially with schools and universities in the region, for promoting and increasing tourism resilience, are measures that can significantly contribute to the integration of these sites into regional tourism and, implicitly, to community development.

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