ANALYSIS OF TOURISTIC DEVELOPMENT POTENTIAL OF SOME NATURA 2000 SITES

Mirela STANCIU

1“Lucian Blaga” University of Sibiu, Faculty of Agricultural Sciences, Food Industry and Environmental Protection, 5-7 Dr. Ion Ratiu Street, 550003, Sibiu, Romania, Phone: 0269-211338, E-mail: mirela_stanciu2008@yahoo.com

Corresponding author: mirela_stanciu2008@yahoo.com

Abstract

This paper performs the analysis of the tourism development potential of two sites in the Natura 2000 network. SWOT analysis concerning the potential of tourism development is made, indicating opportunities for lovers of ecotourism: visitors interested in bird species, visitors interested in flora and fauna. It also describes the potential development of tourism services under the concept of “slow tourism”. It describes the possible forms of tourism that can develop in this area, presenting a positive or negative impact on the environment and describe the type of interested visitors. The paper describes the main objectives of tourism development that should be included in the local development strategy promoted by the GAL’s in the area.

Key words: biodiversity, conservation, durable tourism, ecotourism, heritage

INTRODUCTION

“Natura 2000” is a network of nature conservation areas in the European Union, created to ensure the survival of the most valuable species and habitats in Europe. Designation sits is designed to accommodate rich and representative habitats and species, but also to ensure dispersal ability of organisms to function as a true ecological corridor. Natura 2000 is at the heart of EU policy concerning nature and represents Europe's commitment to work towards the conservation of biodiversity for future generations.

Natura 2000 is a European network of protected natural areas comprising a representative sample of wildlife and natural habitats of Community interest. It was created not only for nature protection, but also to maintain these natural resources in the long term to ensure socio-economic resources. [1]

The analyzed area is represented by SCI Podisul Sighisoara – Tarnava Mare and SPA Podisul Hartibaciului, it falls in Podisul Tarnavelor and partially in Podisul Hartibaciului, these areas have a relief characterized by hills, terraced valleys and meadows well individualized. The current appearance of the landscape is highly fragmented plateau valleys - corridors remain generally around 500-550 m and only exceptionally reach values of about 700 m (Padurea Dumarava, 642 m, a maximum altitude of 839m – Dealul Pietris). According to the Community/national law, the 267 438 ha of protected area Hartibaciu – Tarnava Mare – Oltului overlap following Natura 2000 sites: Podisul Hartibaciului ROSPA 0099, Sighisoara Tarnava Mare ROSCI0227. [2]

This area is characterized by the existence of very large meadows that are the object of farming. Flora and fauna are extremely varied, including many international endangered species mentioned in the Directive 'Habitats' of the European Union, over 40 species listed in Annex I to Directive "Birds," and more than 50 species of cultivated plants, which put particular importance to agro-biodiversity. More than 1,000 plant species have been identified in the area, representing about 30% of the flora of Romania. Most of these species are rare or threatened in Europe, this aspect gaining particular importance for conservation strategies with the enlargement of the European Union.

Traditional methods of pasture and hay turn led to the development of meadows which
covers most of the pilot area. Species-rich meadows contain a mixture of steppe flora, Mediterranean and Carpathian flora. Wild flora meadows are also a resource for future genetic selection of forage crops, particularly alfalfa, clover and other legumes. Dry grasslands containing more than 20 species included in the Red List of Romania and at least 9 of them are listed in Annex 2 of the Habitats Directive.

The traditional use of the land retained a high biological diversity. The area is of international importance, since probably last large grasslands in Europe are perfect ecologically functional. The traditional management established a balance between human activities and nature, which remains unchanged since the Middle Ages.

MATERIALS AND METHODS

To collect information for the analysis of the current situation of the Natura 2000 site visitors Sighisoara - Târnava Mare were used the following methods and information sources : questionnaires sent to all local authorities within the protected area, consultation with tour operators and non-governmental organizations involved in projects to promote sustainable tourism development, National Spatial Plan - Section tourist areas (Districts Sibiu, Mures and Brasov), the County of Statistics Sibiu, Mures and Brasov; Masterplan for tourism in the District Sibiu, Brasov Development Strategy, the chapter on tourism, culture, heritage, agricultural development priorities and strategies for the development of tourism of GAL Podisul Hartibaciului and GAL Podisul Secaselor, analysis of traffic on the main roads running through the protected areas. Also many visits have been made in the representative farms in the area.

RESULTS AND DISCUSSIONS

Public transport access to several points in the periphery of the site, but unfortunately it is very poorly developed within the site.

Air transport is possible by the cities Sibiu and Târgu Mureș. Trains are running on the rout Bucharest – Budapest – Vienna with stops in stations Brașov, Sighișoara, Mediaș. International trains run on routs Brașov – Sibiu, Sighișoara – Sibiu and Brașov – Mediaș, the personal trains stop in small stations as well. A local bus runs between the main towns and villages, but their frequency is low and the timetable is not easily accessible for external visitors.

An exciting opportunity for the development of public transport (especially tourism) within the site is the reopening of the narrow railway Sibiu - Agnita known as Mocanița Hartibaciului.

Although the analyzed site has a very large surface area, the infrastructure is poorly developed because - except for a few points, such as Sighișoara - this area has not been one of the traditional destinations of visitors from Romania and abroad.

In order to develop the touristic use of the site or it’s immediate vicinity are:
- Two information centers for cultural heritage (Sighisoara, Str. Muzeului no. 6 and Sibiu, Str. Cetatii no. 3-5);
- One tourist information center (Saschiz, Fundatia Adept);
- One Information point for Rezervatia Stejarilor Seculari Breite, Sighisoara;
- Four thematic routes (unmarked): drumul Verde al Așezărilor Săsești [3]; traseul Cultural Brukenthal [4]; Bike Trails in Transylvania – trails for ciclotourism [5]; routs for horseback riding [6, 7].
- Parking spaces in all areas within the site, but there are not special parking spaces for visiting natural areas of interest.

SWOT analysis of the tourism development potential Natura 2000 site Sighișoara - Târnava Mare

Strengths:
- Traditional rural landscape;
- Medieval History (including legends and myths surrounding the historic character Vlad Tepes and fictional character Dracula);
- Built cultural heritage (fortified churches, traditional houses and farms, mansions and castles of nobility);
-Floral and faunal biodiversity;
- Cultural and ethnic diversity;
- Heritage of agricultural, food and gastronomy;
- International access via Sibiu and Târgu Mureș airports, international train route Bucharest-Budapest-Vienna;
- Recent promoting of cultural medieval heritage (medieval festival Sighișoara, Sibiu with a rich cultural program promoted internationally).

**Weaknesses:**
- Declining and aging rural population, which entails the abandonment of traditional agricultural practices and land, with serious consequences for the integrity of the landscape;
- Lack of proper infrastructure for public transport (train, bus) within the protected area;
- Degradation of cultural heritage - tangible and intangible - that leads to loss or alteration of historical substance medieval and traditional communities;
- Pollution of the natural environment - both visible (rubbish in nature, especially PET) and invisible (groundwater pollution from animal droppings, industrial pollution, etc.)
- Worsening problem disadvantaged and marginalized social groups;
- Lack of local entrepreneurial base in the field of sustainable tourism. From the point of view of promoting the stands quite well, especially due to Sighisoara and Sibiu city, and through the work of international organizations (Mihai Eminescu Trust, Adept, GTZ, WWF etc.), But there are not enough local private entrepreneurs who provide tourist services;

**Opportunities:**
- Highlighting the specific qualities of the site: countryside, traditional lifestyles, medieval heritage and biodiversity;
- Development of ecotourism:
  a) *For visitors interested in the species of birds (bird watching)*
  Due to the rural landscape mosaic, with a low human impact and high habitat heterogeneity in this area is 50% of nesting avifauna of Romania.
  Forests are structural heterogeneous, the health of the forest habitats is clear due to the large number of species of woodpeckers reported here. Thus, of the 10 species of woodpeckers in Romania, nine are present in this area. Because alternating with open and forest habitats, the area is very rich in species of predator birds of day and night. Day raptors were observed here eight species, and 6 species of night raptor birds.
  
b) *For visitors interested in the flora*
  Complex orography with hills with different altitudes, inclinations and exhibitions, the existence of active floodplains and maintaining traditional use of land make this area to be a treasure trove for fans of flora species. Numerous plant species xerophile, mesophilic and hydrophilic can be seen in this picture, which hosts over 30% of the flora of Romania.
  Within that 10 plant taxa are endangered in Europe, being included in the annexes of the Habitats Directive and the Bern Convention, and 77 taxa are protected at national level, being included in the Red List of Romania.
  
c) *For visitors interested in trees*
  A special component of this traditional countryside are grasslands with secular oaks, whose genesis began in the Middle Ages. The value of these meadows with secular trees - some estimated age of 700 years - is cultural-historical and aesthetic, recreational and ecological.
  
d) *Development of tourism services under the concept of "slow tourism"*
  This form of tourism focuses on the quality (not quantity) of the visitors experience and runs a reduced rate, allowing interaction with local communities on a deeper level.
  Sustainable use of local resources (accommodation in traditional households, eating local food, transport by wagon or horseback).
  - Develop greenways (pilot route has already been launched, Drumul Verde al Așezărilor Săsești) [8].
  - Development of thematic routes that highlight the natural heritage within and in close proximity to Natura 2000 sites, such as a meadow with trees (Breite, Sighișoara) footsteps of bear and wolf, a large wetland
(ponds from Bradeni) an area glimee (Sona): a flood plain (Olt between Crihalma and Halmeag), an area with valuable open habitats (Luncile Saesului) an alluvial corridor (Valea Hârtibaciului between Altana and Nocrich) forest values (Oak Forest at Dosul Fanatului).

-Development of thematic routes that highlight the cultural heritage within and in the immediate vicinity of Natura 2000: UNESCO World Heritage monuments (Sighisoara citadel, fortified churches in Natura 2000 sites and in their immediate vicinity - Biertan Dârjiu, Saschiz Valea Viilor, Viscri);
-Other valuable fortified churches (Alma Vii Apold, Archita, Copşa Mare, Dealu Frumos, Drăușeni, Hosman, Ighisu Nou, Mălâncrav, Moșna, Richiş etc.). Noble heritage (Dumbrăveni Apaț castle, castle Bethlen from Cris, Castle Sükösd -Bethlen Racoș, mansion Apaț from Mălâncrav, House Gerendi from Alțâna, summer residence and park Samuel von Bruckenthal Avrig).
-The ruins of medieval castles (Rupea Saschiz, Făgăraș, Slimnic)
-Heritage belonging to other minorities in Transylvania (Sighișoara and Medias synagogues, Armenian church Dumbrăveni).
-Route Mocânița (formerly narrow railway Sibiu - Agnita – Sighisoara, built between 1895 and 1910, rehabilitated and partial reopening for tourism is one of the development priorities of Sibiu. Besides its historical and cultural route Mocânița also follows Valea Hârtibaciului alluvial corridor and a number of valuable open habitats that can attract ecotourism.

**Threats:**

-Degradation of communities, loss of traditional practices and historical substance.
-Degradation of natural habitats and landscape, where tourism development is not carefully monitored and not strictly followed national and European legislation regarding any investment.
-Increasing trend of unsustainable tourism activities: motorized tourism (SUVs, ATVs, etc.) Construction of hotels and hostels that do not respect the rules of engagement in the landscape or are located outside the city, in semi-natural or natural habitats;
-Development of road infrastructure at the expense of public transport development.

Among the possible forms of tourism that can develop in the future, we present the most important, the positive and negative impact on the environment:

**a) short relaxation**

The main visitors are nearby residents or out for a day picnic, fishing, hunting, swimming or sunbathing. Usually these trips are made with private car.

Such activity has on the one hand the positive impact in that it provides local opportunities for relaxation and contact with nature. The impact is positive as far as visitors go on foot or by bike trekking in the surrounding landscape of small towns, and / or encourage the appreciation and consumption of local traditional products, such experiences can be positive.

The negative impact is to light the fire in deserted areas, garbage pollution, noise pollution, high fuel consumption, degradation of natural habitats, collecting / injury / killing of species of wild animals and plants.

**b) Week-end travel and experience - an event**

Visitors are Romanian from Bucharest and other major cities of the country who come to cities like Sibiu and Sighisoara to spend the weekend. Usually, they either remain always in town or they are visiting several villages surrounding the run, with their own car. The visit may be linked to certain events that take place at fixed dates (medieval festival in Sighisoara, ethnic festival, theater festivals, film and jazz in Sibiu, etc.)

Positive impact: the local economic contribution to income growth (but usually concentrated in a small number of hotel operators) or promoting certain locations within or in the vicinity of the protected area.

Negative impact: high consumption of fuel and energy resources, concentration of income in a small number of beneficiaries, the small number of overnight stays, large weekly and seasonal fluctuations.

**c) Cultural Tourism**
Visitors are mainly tourists from abroad, especially coach traveling, staying overnight in Sibiu and Brasov, and quickly visit several cultural objectives (Sighisoara, Biertan etc.). This "conventional" cultural tourism offers visitors an superficial experience (eg, visits to museums, traditional dance performances, commercial souvenirs etc.) Tourists usually spend 5 days in the same place, eat local products and interact with the locals. They organize tours for small targets inside and outside the village usually means non-motorized transport (walking, wagon, horseback, etc.) A more sustainable concept, anthropological, cultural tourism has a strong interest from visitors in the know and learn the local culture in all its manifestations (including the life of communities).

Positive impact: economic contribution to revenue growth of a small number of local beneficiaries (hotel operators, souvenir sellers), the promotion of cultural heritage of the area internationally, tourists consume local products and interact with the locals, the economic profit is distributed widely in the local community.

Negative impact: small number of overnight stays, large seasonal fluctuations, in many cases, this type of cultural tourism "consumer" degrades the authentic cultural traditions of local communities (through trade, they become kitsch) the risk that the economic gap of visitors and locals to affect relations between them and the values and aspirations of local communities. Impact the restoration and/or lighting of monuments (fortified church towers) and on the species (bats).

d) Ecotourism

So far less developed in our area, ecotourism is - according to the definition adopted by IUCN in 1996 - a form of environmentally responsible visitation to natural areas, in order to appreciate nature (and accompanying cultural forms) that promotes conservation, has little impact and provide local benefits through active involvement.

For example, in this category can enter scientific and research trips, vacations voluntary purpose, thematic visits about learning traditional customs of local communities (especially those related to sustainable use of natural resources).

Positive impact: contributes directly to protect natural areas (eg additional funding, volunteering, etc.) Directly contributes to the welfare and benefit of local communities (eg, create new jobs, use local products, etc..) increase awareness and education of visitors and locals on environmental protection and biodiversity conservation, encourages and motivates the declaration of new protected areas or increase support for existing ones, increase scientific information by publishing studies.

e) Outdoor active experience

Various outdoor activities that include a certain degree of exercise: walking hiking, horseback riding and tours, bike tours, archery, gliding, activities and type orienteering competitions, "team building", scouts, ski and biathlon, canoeing, hot air ballooning.

Positive impact: Healthy immerse visitors, contribute to economic growth of local revenues (if they offer the necessary infrastructure), increased interest in nature.

Negative impact: some activities involve fuel or degrade natural habitats (eg paintball) Ignite fires or the abandonment of waste in nature.

f) Motor sports: Off-road, motorcycle, ATV, boats.

Positive impact: economic contribution to revenue growth of a small number of local beneficiaries.

Strong negative impact on the environment by natural and noise pollution, degradation of natural habitats, disruption of wildlife species and high fuel consumption.

g) Hunting and fishing

Holidays of a week or more. Hunting or fishing, usually addresses to foreign tourists or Romanians from other parts of the country. These activities are covered by the management plan and must comply with legislative requirements and restrictions applicable to such activities.
Positive impact: economic contribution to revenue growth fund of the hunting managers and a small number of private farms.

Negative impact: increasing pressure on wild populations of animals, encouraging the introduction of predatory fish species, poaching proliferation.

\textit{h) Holiday Theme}

Especially for foreign tourists interested in certain activities, such as photography, painting, drawing, gastronomy, learning a craft or folk custom, participation in traditional activities.

These can enter natural themes and related activities such as bird watching, botanical tours, after the bear / wolf etc.

Positive impact: number of overnight stays, usually in rural areas, use of non-motorized transport, using a local guide or instructor and interaction with the local community, promotion of artistic, cultural and natural destinations worldwide.

Negative impact: if local guides and organizers do not know very well the fragility of natural habitats can cause some degradation.

\textit{i) Educational Camps for children}

Camps for children usually have a character slowly, being accommodated in the same place for at least a week and assuming many outdoor activities.

Positive impact: ecological, public awareness, increase environmental education, increasing interest in nature, large number of overnight stays.

Negative impact: disturbing the peace, abandoning waste in nature.

\textit{j) "Summer Guests"}

This is also a special category of visitors, namely Saxons returning from Germany to spend a few weeks - a month in their villages, usually in July-August. "Summer Guests" spend most of their time in the same locality and participate fully in community life.

Positive impact: interaction with the local community, revitalization of traditional festivals, eating local products.

Negative impact: the risk that the economic gap between visitors and locals to affect relations between them and the values and aspirations of local communities.

\section*{CONCLUSIONS}

The main general objectives of the protected area analyzed overlap with Natura 2000 objectives: stopping the decline of biodiversity, conservation of habitats and species living in the habitats [9, 10, 11].

Existence of Natura 2000 does not exclude people, but it encourages harmonious coexistence between man and nature by conducting sustainable traditional existence of many valuable habitats and species is dependent on the continuation of traditional ways of land use;

Among the arrangements for tourism, it is essential they practice ecotourism and agritourism with a minimum of disruption to habitats and species and is focused on promoting the historical, cultural and natural values of the area, and the use of local services; [12]

Basic activities must target the production and marketing of traditional organic products (milk, honey, wine, fruit, etc.). the small producers are encouraged.

The number and origin of visitors in Natura 2000 sites Sighișoara - Târnava Mare - Hârtibaciu are extremely difficult to estimate, due to shortcomings of existing public statistics. [13] These data are unlikely due to the fact that they are watching the situation in the city or county level and make no reference to Natura 2000 site boundaries analyzed.

However, they learn some general conclusions:

Sighisoara attracts the largest number of visitors, 160,000 per year, mainly interested in the medieval city.

World Heritage Villages like Saschiz, Viscri and Valea Viilor also attract over 5,000 visitors every year.

Most other common do not receive more than 1,000 visitors annually (some even below 100).

Length of stay is short, averaging 1-2 days except "summer visitors" (Saxons living in
Germany) who usually spend a week in their home village. The main tourist services used are accommodation (usually in hostels) and catering, followed by facilities like fishing and hunting, guide services, riding centers and bicycle hire.

Activities of visitors currently focuses either on quick visit of cultural objectives (churches, castles, museums) or outdoor activities (fishing, hunting, walks and occasional bike riding or horseback riding).

Tourism development objectives are:
1. Rural ecotourism development based on the integration of visitors in the daily life in households and traditional communities;
2. Medieval natural and cultural heritage;
3. The promotion of non-motorized transport;
4. Growth of entrepreneurial base in local communities and diversification of opportunities for sustainable tourism;
5. Consecration Târnava Mare - Hartibaci as the most important destination in Medieval Rural Europe nationally and internationally.

All activities will be implemented in the future. In order to achieve these objectives will be subordinated to the primary objective of nature conservation.

REFERENCES

[2] Plan de comunicare SCI Sighetuara-Târnava Mare și SPA Podișul Hârtibacului, 2013, furnizat de Administrația celor două situri

[12] MASTERPLAN pentru dezvoltarea turismului in județul Sibiu