



TOURIST RESOURCES ASSESEMENT IN PĂDUREA CRAIULUI MOUNTAINS

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Abstract

Considering the expansion and the increase of the impact of tourism on the natural environment, the present study deals with the assessment of the touristic resources of the Pădurea Craiului Touristic Destination, Bihor County, Romania. Thus, 73 objectives regarding the availability of turning a profit through tourism were analysed, ranked and systematised based on a methodology developed by the present study. The results obtained represent a valuable support for further scientific and practical steps in what the sustainable management and economic capitalisation of space is concerned.

Key words

Touristic destination, touristic assessment, touristic resources, touristic infrastructure.

INTRODUCTION

Tourism represents an essential economic component which has lately been in a continuous development state as a result of the socio-economic mutations determined by globalisation (Lechner, 2009) and by the change of the society from an industrial one to an informational one based on knowledge. Therefore, the assessment of the touristic resources in a given area are constituted in a main requirement which has a major impact in the development of the local economies (Ilieş et al., 2016; Liu, 2006; Johnson, 2010; Mgonja et al., 2015).

The aim of the assessment of the touristic heritage is the understanding of the development potential of an area as well as its limitations induced by the real capacity of the territory to sustain the touristic circulation with all its connected effects. In the sense of a sustainable development (Andronache et al., 2019; Herman et al., 2019; Wendt et al., 2019), the assessment of the touristic resources need to take into account both the advantages of a touristic destination (Herman et al., 2019; Matlovičová, Husárová, 2017) as well as its ruggedness defined by the

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ability to control, respectively to integrate the negative effects generated by the touristic activity into the operational mechanism of the society (Lee, 2013; Matlovičová et al. 2019; Goodwin and Santilli, 2009).

On this background, several quantification / assessment methodologies of the touristic potential were developed at a touristic objective, local, territorial administration unit level, etc. (Cetin et al., 2018; Lee et al., 2013; Hoang et al., 2018; Trukhachev, 2015).

Nevertheless, due to the complexity of tourism in general and especially its potential, new personalised approaches are imposed considering the assessment of the touristic potential taking into account the management, promotion and capitalisation through a sustainable and responsible tourism, in accordance to the needs of the local community (Matlovičová K., et al., 2016a; 2016b, 2014a; 2014b).

Such an approach was applied to the Pădurea Craiului Destination in Bihor County, Romania. The studied area is located in Apuseni Mountains, respectively Pădurea Craiului Mountains between Crișul Repede River in the north and Crișul Negru River in the south.

From an administrative point of view, the destination is spread over 12 territorial administrative units (Aștileu, Bratca, Bulz, Căbești, Dobrești, Măgești, Pomezau, Remetea, Roșia, Șuncuiuș, Vadu Crișului and Vârciorog) with a surface of 975 km², defined in 2012, through 60 municipalities comprising a population of 38,432 inhabitants. The largest municipalities, considering the number of inhabitants is Dobrești (5,260 inhabitants), Bratca (5,158 inhabitants), Vadu Crișului (4009 inhabitants) while the smallest ones were Vârciorog (2304 inhabitants), Bulz (2104 inhabitants) and Căbești (1848 inhabitants).

PURPOSE AND RESEARCH METHODOLOGY

The study regarding the assessment of the touristic resources of Pădurea Craiului Destination imposed the study of the speciality literature and the on site study of 73 objectives (39 natural objectives and 34 anthropic ones) which have a considerable share in the touristic phenomenon in order to carry out the present study and may be further turned into profit. From a methodologic point of view in order to carry out the present study, 10 defining indicators were used (interest, attractiveness, maintenance, accessibility, integrity, visibility, additional options, protection, touristic infrastructure and impact), each comprising four value levels of approach (Table 1). Based on the indicators, a scale was created for the touristic heritage with a range comprised between: 0.325 and 0.525 points (minor role); 0.526 and 0.725 points (medium role); 0.726 and 0.925 points (major role).

**Table 1** Criteria used for the quantification of the touristic heritage

No	Assessment Criteria	The value of the level of approach			
		I	II	III	IV
		0.25	0.50	0.75	1
1	Interest	0.25	0.50	0.75	1
2	Attractiveness	0.25	0.50	0.75	1
3	Accessibility	0.25	0.50	0.75	1
4	Additional options	0.25	0.50	0.75	1
5	Integrity	0.25	0.50	0.75	1
6	Visibility	0.25	0.50	0.75	1
7	Maintenance	0.25	0.50	0.75	1
8	Protection	0.25	0.50	0.75	1
9	Touristic infrastructure	0.25	0.50	0.75	1
10	Negative impact	1	0.75	0.50	0.25
Total		0.325	0.525	0.725	0.925

In order to identify, analyse and spatially interpret the obtained values, the ArcGis 10.6 software was used, respectively the spatial interpolation method. The purpose of this method is to estimate and compare the data around a reference point as well as creating prognoses when a piece of information or a value is missing (Xiao et al., 2016; Li și Heap, 2014; Hart and Zandbergen, 2014). The spherical model a the semivariogram was chosen to carry out the present study (Bilal et al., 2013; Johnson, 2010; Johnston et al., 2001; Moody, 2012; O'Connor, 2010; 2019; Oliver, 1990; Romocea et al., 2018).

RESULTS AND DISCUSSION

Following the general assessment of the touristic heritage concerning the perspective of capitalization through tourism, resulted that it has a medium potential on a minor to medium and large scale of values. The analysis of the potential of the touristic heritage highlighted the existence of a series of dysfunctionalities concerning the additional options (0.35 points; minor role), visibility (0.42 points; minor role) and interest (0.43 points; minor role). A better situation was highlighted by the indicators regarding accessibility (0.87 points; major role), negative impact (0.82 points; major role) and touristic infrastructure (0.80 points; major role) (Figure 1, Table 1).



Table 2 Criteria used for the quantification of the touristic heritage

No.	Assessment Criteria	Natural resources			Anthropic resources			Natural and anthropic resources		
		Total points	Total points / objective	Role	Total points	Total points / objective	Role	Total points	Total points / objective	Role
	Interest	19.5	0.5	minor	12	0.35	minor	31.5	0.43	minor
2	Attractiveness	29.25	0.75	major	18,5	0.54	medium	47.75	0.65	medium
3	Accessibility	34	0.87	major	30	0.88	major	64	0.87	major
4	Additional options	14.75	0.37	minor	11.5	0.33	minor	26.25	0.35	minor
1	Integrity	26.25	0.67	medium	22.25	0.65	medium	48.5	0.66	medium
6	Visibility	19.5	0.5	minor	11.75	0.34	minor	31.25	0.42	minor
7	Maintenance	27.5	0.7	medium	25.25	0.74	major	52.75	0.72	medium
8	Protection	32.25	0.82	major	22.5	0.66	medium	54.75	0.75	major
9	Touristic infrastructure	31.75	0.81	major	27.25	0.8	major	59	0.8	major
10	Negative impact	33.5	0.85	major	27	0.79	major	60.5	0.82	major
	Total	268.25	6.87	medium	208	6.11	medium	476.25	6.52	medium

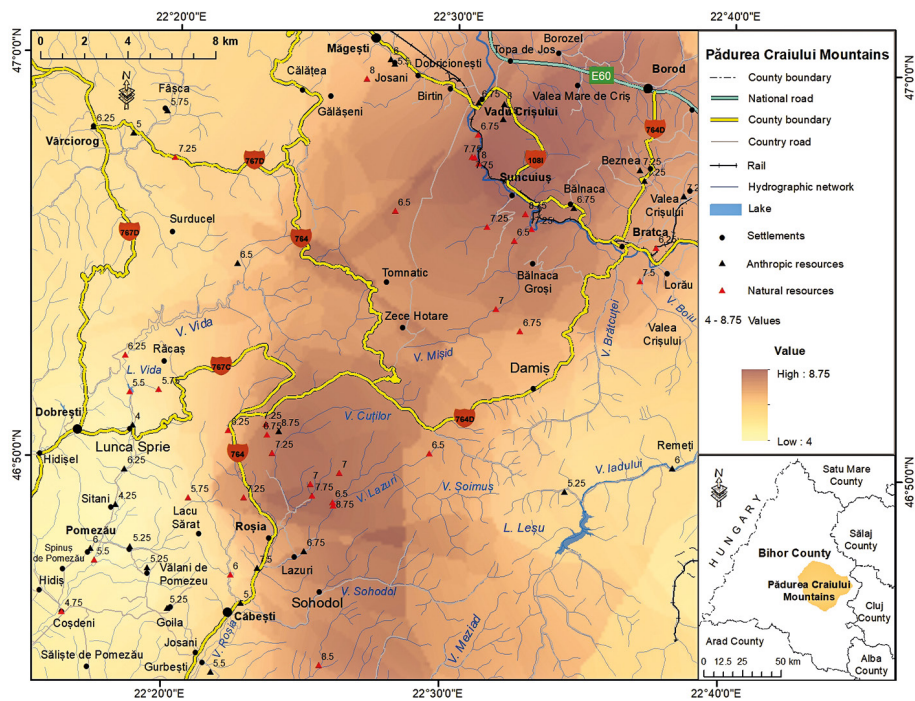


Figure 1

Map for the assessment of touristic resources in Pădurea Craiului Mountains

The analysis on category types of the potential of touristic resources highlights the importance of natural touristic resources (268.25 points; 6.8 points per objective), in relation to the anthropic touristic resources (208 points; 6.11 points per objective). Nevertheless, according to the assessment scale both resources categories, natural and anthropic, are comprised in the category of medium role resources considering the management promotion and capitalisation through tourism (Figure 1, Table 2).

The analysis of the touristic potential considering their role in the touristic capitalisation highlights three types of resources: I. resources with a minor role (9 touristic resources, 1 natural and 8 anthropic); II. Medium role resources (50 touristic resources, 29 natural and 21 anthropic); III. Major role resources (9 touristic resources, 9 natural and 5 anthropic).

The analysis of the points obtained after the assessment of the touristic heritage of the Pădurea Craiului Touristic Destination highlights, hierarchically, the following objectives: Farcu Mine (8.75 points); Vântului Cave (0.75 points), Runcuri Traditional House (0.75 points), Meziad Cave (0.85 points); Gălășeni Cave (0.8 points); Crișul Repede Gorge (0.8 points) and Petru Hașăș Pottery Workshop (0.8 points). On the



opposite site there are the Wooden Church of Lunca Sprie (0.4 points); The Water Mill of Sitani (0.25 points); Dobsa Manor (0.475 points); The Water Mill of Căbești (0.5 points) and The Water Mill of Vârciorog (0.5 points).

The spatial analysis of the potential of the touristic heritage highlights the existence of two spatial agglomerations, where the touristic resources are stands out through number, density and increased aesthetic-cultural value. The first agglomeration is located in the north-eastern part of Pădurea Craiului Mountains along the Crișul Repede River, comprising a series of natural resources of a major importance with real possibilities of capitalisation through tourism. Among these resources there are Vadu Crișului Cave, Vântului Cave, Bătrânului Cave, The Great Meander or Mișidul Gorge with Moanei-Lesiana carst system. The second agglomeration is located in the south-eastern part of Pădurea Craiului Mountains, within the hydrographic basin of Roșia Valley. This is individualise both through caves as natural resources, Farcu Mine, Ponor Griddle, Gruieț, Doboș, Craiului Cave, Albioarei Gorge, Cușilor or Lazurilor, as well as through man made objectives The workshop of the artist of the horn violin Dorel Codoban, The water mill of Roșia, or the Traditional House Complex, all with a major value. After the spatial repartition of the values obtained from the assessment of the touristic heritage of Pădurea Craiului Mountains, an availability in future investments is observed in a bipolar concentrated system, respectively in two major centers located in the north-eastern part of the studied area, along the Crisul Repede River and respectively the south-eastern part of Pădurea Craiului Mountains along Roșia Valley and its affluences (Sohodol, Șoimuș, Lazuri, Cușilor and Mișid).

CONCLUSIONS

Increasing the anthropic impact together with the increase of the number of populations together with its needs has led to the appearance of a major number of changes in the structure and functionality of the natural environment. Systemically observed the natural environment is similar to a living organism, therefore any change brought forth or induced in a subsystem, part of the geosystem, is reflected through other changes at the level of its other constituting subsystems in its tendency to self-regulate. Up to a point, the system has its own mechanisms to help it adapt in order for it to function properly. Considering that the studied area is a structural part, an important subsystem of the natural environment with a major role in the preservation and protection of biodiversity, the problem of promoting and capitalising it through tourism arises which is in complete accordance with the principle of development.

Therefore, the present study concerning the assessment of touristic resources, is very important, as it constitutes a strategic tool for the possibilities to promote and capitalise the analyse area through tourism. Moreover, an assessment meth-



odology for the 73 objectives (39 natural, 34 anthropic) was created consisting in the use of 10 defining indicators (interest attractiveness, maintenance, accessibility, integrity, visibility, additional options, touristic infrastructure and impact). The assessment of the touristic resources was carried out on two levels, the first level being based on points given for each objective while the second one was carried out on a spatial level which imposed an integrated analysis on a spatial level depending on the nominal value of each touristic resource. Taking into consideration all of the above, both the functional aspects as well as the dysfunctionalities were highlighted in what the capitalisation possibilities of each touristic resource is concerned considering them as a structural element. The creation of groups and ranks and the carrying out of a spatial analysis of the touristic resources were made based on the obtained results. The touristic resources with the largest number of points were highlighted, then the creation of groups for all the assessed resources was carried out on three typologies depending on their role, in order to finally using the ArcGis 10.6 software to carry out a spatial analysis which highlighted the existence of two areas of maximum importance considering the touristic resources and the value they have in tourism.

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