NATURAL POTENTIALS OF SIGNIFICANCE FOR THE SUSTAINABLE TOURISM DEVELOPMENT – THE FOCUS ON THE SPECIAL NATURE RESERVE

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Abstract: The Special Nature Reserve “Zasavica” is a significant wetland and Ramsar site of the southwestern part of Vojvodina Province (Northern Serbia). This complex of aquatic habitats has been formed by the effects of the Sava and the Drina rivers. This former riverbed of the Sava River and the today’s Zasavica stream makes the basic hydrographic resource of this protected area. The reserve is inhabited by numerous rare and endangered plant and animal species, which unitedly make rare biodiversity, unique in the country and the region. Whether the area of the Special Nature Reserve “Zasavica” represents a significant potential for the development of tourism will be concluded in this paper by using two scientific methods. The obtained results from a conducted questionnaire, as the first method, will be used to analyze the interplay of factors and their interrelations as potentials for sustainable tourism development, outlined in the Sustainable Tourism Development Strategy of Serbia. The obtained results can examine the main hypothesis that the SNR is a significant tourist potential for ecotourism both at the level of the Republic of Serbia and at the level of the countries in the region, such as Hungary, Romania, Bulgaria, Croatia, Bosnia and Herzegovina, as well as other European countries. By enhancing sustainable tourism and protecting the space of this reserve, and by implementing the national tourist offer, higher socio-cultural, economic and ecological benefits can be achieved.

Keywords: sustainable tourism development; Zasavica; wetlands; biodiversity

Introduction

Area protection is one of the fundamental European values. In most modern constitutions, the right to a healthy environment is defined as one of the basic human rights (Simeunović-Bajić, 2011). For its development, tourism includes space where tourist movements and needs can be applied and achieved due to a large number of both domestic and foreign tourists (Štetić & Šimičević, 2018). Many areas in the world differ from each other in terms of special geographical features which arise the idea of geographical or natural integrity within ourselves. Among them, morphological
characteristics are the first that come into focus. Morphological differences are also associated with other differences arising from the latitude, climate, vegetation, soil fertility, etc. With the association of ideas, we move from these geographical characteristics to the historical features of an area, as well as to its successive culture and its contemporary status (Cvijić, 1918/2011). Undoubtedly, natural potentials are the basis for the development of tourist destinations which also complement the existence of other elements of the development such as anthropogenic potentials (Miljković & Živković, 2012). Other potentials for tourism development also depend on their quality and diversity (Šteitić & Šimičević, 2018). The natural environment and sociocultural offer are the basis for tourism development (Marković, Perić, Mijatov, Doljak, & Žolna, 2017).

The hypothesis of this paper is that specific factors of sustainable tourism development at the level of protected natural resources can fully affect the tourist offer, its quality, the entire living world (Bennett et al., 2018), and geological forms (Carr, Ruhanen, & Whitford, 2016). The subject of the research are the natural potentials of the Special Nature Reserve “Zasavica” and their role in sustainable tourism development.

Research area

The Special Nature Reserve “Zasavica” is located in the northern part of Mačva, south of the Sava River and east of the Drina River (Stojanović, Lazić, & Džunić, 2018). The today’s reserve covers the surface of 1,128.55 ha which is 457.56 ha more than the previously constituted protected area with the surface of 670.99 ha, which represents an increase of 68.2% (Pokret Gorana Sremska Mitrovica, 2011; Šteitić, Cvijanović, & Šimičević, 2014).

Favorable geographical and traffic positions are significant advantages and characteristics of this protected natural site (Figure 1). The vicinity of Belgrade and Novi Sad (as the two largest cities in Serbia), and other city centers, as well as of Bosnia and Herzegovina, Croatia, and Hungary as important tourist arrival zones are of importance for the development of tourism and the management of this protected area.

The status of the area protection of the Special Nature Reserve "Zasavica" was established in 1997, as the I category natural site of exceptional significance for the Republic of Serbia (Pokret Gorana Sremska Mitrovica, 2011). The major part of the Zasavica River basin was included, with its paleomeandrium, oxbow lakes, canals, and other smaller hydrographic objects, which altogether make this area a significant wetland. A protection zone of 3,462.65 ha was established around the protected area (Pokret Gorana Sremska Mitrovica, 2011). The manager of the reserve is the Highlander Movement "Sremska Mitrovica". According to the IUCN system of international protection, it is classified in the IV category—The area of the habitat or species management, i.e., the area managed by active protection measures in order to preserve the habitats and provide conditions for the preservation of specific species (Pokret Gorana Sremska Mitrovica, 2011).

This protected area has had an international significance as a Ramsar site since 2008 (1,913 ha); IBA site (4,670 ha); IPA site (7,934 ha); PBA site (1,819 ha); EMERALD site (671 ha), and a potential NATURA 2000 site. The area is a member of the international "Sava Parks" and "Parks Dinarides" networks (Puzović et al., 2015). Of the 25 species of fish, a special place belongs to the European mudminnow (Umbra krameri), which is the only representative of the Umridae family, and the endemic representative of the Danube basin to which Zasavica belongs as well (Freyhof, 2013; Sekulić, Budakov, & Branković, 1998). The European mudminnow is classified as a vulnerable species (VU) according to the IUCN (Red List of Threatened Species), while at a national level, it is categorized as a critically vulnerable species (CR) and a species threatened with extinction (Mesaroš, 2014). According to the IUCN criteria for Europe, the most endangered species in Zasavica is Peregrine Falcon (Falco peregrinus), which is classified as an endangered species (EN). In the whole country, there are only 40 pairs (BirdLife International, 2015). Of the total of 30 species of mammals, the presence of the European Beaver (Castor fiber), which was returned to the area of Zasavica (reintroduced) in 2004 after its extinction in Serbia with the assistance of the German Government (Amidžić, Krasulja, & Belij, 2007; Bush & Wissinger, 2016).

**Short literature overview**

The Special Nature Reserve "Zasavica" is a significant wetland and the Ramsar site of this southwestern part of Vojvodina Province (Northern Serbia) (Uredba o utvrđivanju prostornog plana područja posebne namene Specijalnog rezervata prirode „Zasavica“, 2011). This complex of wetland habitats is affected by the Sava and the Drina rivers (Karadžić, Jarić, Pavlović, & Mitrović, 2015). The whole area of the reserve along the Zasavica River abounds in ponds and swamps, which represents a unique spatial unit of great significance to the protection of rare and endangered representatives of flora and fauna, and tourism development, as well as for the development of the science-research tourism nautical tourism, ecotourism, and bird and animal watching, without the effects on the environment. Favorable climatic conditions have positive effects on the development of tourism activities. These natural conditions are important basis for the implementation of various forms of tourist movements, which, due to the natural base of the area must be based on the protection and promotion of the area. It is also a basic prerequisite for the development of sustainable tourism.
development (Trišić, 2019). On this occasion, the principles of sustainable development, environment, and economic benefits must be taken into account (Brandt, Christensen, Svenningsen, & Holmes, 2013). We can say that sustainable development is a general direction, the desire to create a better world, balancing social, economic, and environmental factors (Štetić & Šimičević, 2018). Tourism development in areas of significant natural and ethno-social values, such as the area of the Special Nature Reserve "Zasavica", can result in revitalization, the preservation of plant and animal habitat, as well as in the improvement of a destination (Fennell, 2015). This contributes to the economic, socio-cultural, and ecological prosperity because the areas that are not touristically valorized can become significant tourism destinations. On the other hand, the money acquired from this form of tourism is invested in the improvement of the protection (Holden, 2016). Today, the orientation of tourists toward protected areas (natural and anthropogenic potentials) is rising (Jojić-Glavonjić, Todorović, Doljak, & Golubović, 2017). On the other hand, such potentials are increasingly used as a catalyst for the tourist and overall development of such areas (Buclet & Lazarević, 2015).

Methodological approach

The natural potentials of this protected area can be very significant for the development of sustainable tourism and the improvement of the tourist offer of Serbia. The importance of protected natural spaces in the tourist industry at the local, national and regional levels can be seen from the model that was obtained by analyzing the mutual influence and integration factors affecting tourism in protected natural areas. These factors are presented in the Tourism Development Strategy of the Republic of Serbia (Table 1). They also form the basis of the survey conducted in 2018 by tourism students (Tables 2 and 3). A survey involving 200 respondents was conducted by tourism students of the College of Tourism Belgrade. By gender and age, the respondents were asked a total of 12 questions. The respondents are from Belgrade, Novi Sad, Kragujevac, Kraljevo, Čačak, and Kladovo. They include 83 males and 117 females. The majority of the respondents have acquired secondary education (47%), followed by: high education (36%), higher education (11%) and primary education (6%). Among the answers significant for this analysis, there are those regarding the recognition of attractive destinations in the Republic of Serbia according to the type of tourism motives. The respondents, according to their discretion, stated certain destinations according to the types of tourist motives and they ranked each destination from 1 to 5 in the model of the Lickert Scale (Joshi, Kale, Chandel, & Pal, 2015).

The analysis of the interplay between tourism factors of the survey results and the data from the Tourism Strategy presents the significance of natural potentials in defining the tourist activities as well as their current representation in the tourist offer of the Republic of Serbia. The sustainable tourism development of the Special Nature Reserve "Zasavica" can be an important model for strategic tourism planning. The authors of this paper also aimed to examine the hidden desires of tourists. They particularly wanted to examine whether there is a desire to visit protected natural areas in the broad mass of tourist demand directed toward different natural resources. In this way, the authors would like to create a basis for further research of tourist needs and their targeting to the lesser-known protected natural areas.

Results and discussion

The number of protected areas greatly affects the fluctuation of the tourist offer in general. If it is relatively a small area under protection, no significant share of economic income from tourism can
be expected. The representation percentage of protected natural areas in a tourist offer at the local, national, and regional levels will not be significant if the total values at the regional or national level are relatively low. The share of protected areas in the Republic of Serbia in relation to the entire national territory and the share in the selected countries in the region is shown in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Classification and Number of Protected Areas According to the IUCN Classification in the Republic of Serbia and the Selected Countries of the Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Serbia</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Total area under protection in km²</td>
</tr>
<tr>
<td>Percentage of territory</td>
</tr>
<tr>
<td>Number of protected areas according to the international criteria</td>
</tr>
<tr>
<td>Ia Strict Nature Reserve</td>
</tr>
<tr>
<td>Ib Wilderness</td>
</tr>
<tr>
<td>II National Park*</td>
</tr>
<tr>
<td>III Nature Monument</td>
</tr>
<tr>
<td>IV Areas of Special Habitats and Species</td>
</tr>
<tr>
<td>V Protected Landscape</td>
</tr>
<tr>
<td>VI Protected Area with the Sustainable Use of Natural Resources</td>
</tr>
<tr>
<td>Unclassified</td>
</tr>
</tbody>
</table>

Note.*according to the unofficial IUCN classification in the Republic of Serbia, there are 2 areas that correspond to the characteristics of national parks, although there are 5 national parks according to the Act on Nature Protection (author’s remark). Adapted from Vlada Republike Srbije, Ministarstvo trgovine, turizme i telekomunikacije. (2016). Strategija razvoja turizma Republike Srbije za period 2016–2025 [Tourism Development Strategy of the Republic of Serbia for the period 2016-2025]. Retrieved from http://mtt.gov.rs/download/3/strategija.pdf.

According to the international protection criteria (IUCN), the number of protected areas in the Republic of Serbia is below average compared to the countries displayed. Protection zones I and II, according to the Law on Nature Protection, correspond to the zones Ia and Ib according to the IUCN classification. Protection zone III corresponds to the zones V and VI (Maksin, Ristić, Nenković-Riznić, & Mićić, 2018). The Republic of Serbia, according to the IUCN classification, has only 7% of the total national territory under protection (Table 1).

Table 2

<table>
<thead>
<tr>
<th>Types of Motives</th>
<th>Ranking</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Caves</td>
<td>33 32 58 43 34</td>
<td>16 16 29 22 17</td>
</tr>
<tr>
<td>Monasteries</td>
<td>17 18 39 75 51</td>
<td>8 9 19 38 26</td>
</tr>
<tr>
<td>Mountains</td>
<td>1 13 20 58 108</td>
<td>2 7 8 29 54</td>
</tr>
<tr>
<td>Canyons</td>
<td>34 40 53 51 22</td>
<td>17 20 26 26 11</td>
</tr>
<tr>
<td>Lakes</td>
<td>12 32 48 67 41</td>
<td>6 16 24 33 21</td>
</tr>
<tr>
<td>Town centers</td>
<td>10 15 17 46 112</td>
<td>12 13 23 17 35</td>
</tr>
</tbody>
</table>

Note: 1 = I completely disagree; 2 = I partially disagree; 3 = neutral point of view; 4 = I partially agree; 5 = I completely agree.
In Tourism Development Strategy of the Republic of Serbia, a significant expansion of the size of protected areas with various protection regimes has been planned in order to increase their number up to 15 and 20 percent of the total territory of the Republic of Serbia until 2025 (Vlada Republike Srbije, Ministarstvo trgovine, turizma i telekomunikacija, 2016). If we take into account that in the Republic of Serbia 575,310 ha (461 protected areas under a protection regime) was under protection, which is 6.51% of the total national territory (Filipović, 2017), we come to the conclusion that the protected area is quite small. The analysis of the selected responses of the questionnaire conducted by the students of the College of Tourism Belgrade can be used as a model to show to which extent the protected areas of the Republic of Serbia and the Vojvodina Province can be recognized as tourist destinations, i.e., how great their representation in a tourist offer is. All the answers to the question about what attracts tourists the most in Serbia can be ranked in 6 types of destinations according to specific motives (Table 2). Data analysis in Table 2 shows that the respondents distinguished canyons and caves as the most significant motives of tourist travels. The answers of the respondents regarding the aspect and form of tourism are shown in Table 3.

Table 3
Answers of the Respondents According to the Choice of Travel Type

<table>
<thead>
<tr>
<th>Type of Motive</th>
<th>Evaluation</th>
<th>Ranking</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spa tourism</td>
<td>34</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Rural tourism</td>
<td>50</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>City break</td>
<td>17</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Mountain tourism</td>
<td>3</td>
<td>4</td>
<td>28</td>
</tr>
</tbody>
</table>

Note: 1 = I completely disagree; 2 = I partially disagree; 3 = neutral point of view; 4 = I partially agree; 5 = I completely agree.

Data analysis in Table 3 shows that the respondents distinguished mountain tourism as the most acceptable form of tourist travels. Mountain and city tourism achieved the highest rank in percentage. The results in Tables 2 and 3 indicate that the protected natural areas are almost excluded from the choice of tourist motives and the type of travel according to the ranked destinations. The mountain and, partly, lake form of tourist travels can have the only relation to the protected areas. If the results obtained from these selected answers in the conducted survey are compared to the results in Table 1, it can be concluded that the protected areas of the Republic of Serbia have an insignificant share in creating the tourism offer of the Vojvodina Province and the Republic of Serbia. Although the survey was conducted on a relatively small number of respondents (200 in total), the obtained results can represent a significant sample for the analysis and comparison with other results. Since the National Tourism Development Strategy has identified this problem, the answers of the respondents can be related to the lack of information on the existence of current protected areas as potential tourist destinations (Castro et al., 2015; Trišić, Štetić, & Krstić, 2018). In fact, the number of the existent protected areas is inadequate to its equal implementation in the tourist offer with other motives as attractive attributes (Štetić & Trišić, 2018). The development of sustainable forms of tourism within protected natural areas can improve the overall tourist offer at the local, national, and regional levels (Trišić, 2018).

The problem that often arises in protected areas in our country is an inadequate connection of the subjects on the field, as well as gradually increasing promotion both in the domestic and
international market. Therefore, in order to improve sustainable tourism, we must also use the experience of the developed countries.

**Conclusion**

Given that tourism is the future of the development of many areas, this means that planning for the development of tourism must be given special attention. Areas that were once hidden and out of the reach of tourists remained preserved to the present day in their original form. Many geospatial are under global or regional protection, and as such, they should be maintained for future generations as well.

The connection of the increased tourist interest for the protected natural areas should be sought in the primal link of the man and nature and their desire to re-establish a somewhat lost contact with it. In addition to this, the severe pollution of the basic natural resources such as air, water, and land, the escalated noise in urban areas, and rising level of stress among population due to the great pressure of everyday living and working environment have greatly affected the need of modern tourists to turn to the preservation of the environment and preserved areas. The Special Nature Reserve “Zasavica” has a favorable geographical location, climate, relief, and what is especially significant, it owns exceptional hydrographic potential. This classifies this reserve in the group of important international wetlands. The reserve is inhabited by rare and endangered plant and animal species, among which the most significant representatives are the European Beaver, the White-tailed Eagle, the European Mudminnow, Aldrovanda Vesiculosa, Buttercup, and others. The reserve is located in Srem whose inhabitants have a rich cultural tradition. These ethno-social motives can have a complementary meaning in defining a tourism offer.

Tourism planning of this natural reserve should also involve ecotourism and science-research tourism as well as bird and animal watching, and rural and sports-recreational tourism. By modeling the world, ecotourism can represent a significant model of biodiversity conservation. In addition to numerous effects of tourism on the economy and social and natural environment, it is necessary to submit the areas with the tourist fluctuations to the process of planning and protection in order to make tourism a positive factor of the prosperity of social and natural environment.

**References**


