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## ECOTOURISM CONSTRAINTS: WHAT PREVENTS DOMESTIC TOURISTS IN SERBIA FROM VISITING ECO-DESTINATIONS?

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**Abstract:** Within the concept of sustainable development, ecotourism has emerged as a special form of tourism aimed at preserving and protecting natural and cultural resources, but also at contributing to the well-being of the local community. Although today the importance of ecotourism is recognized worldwide, there are countries that, despite their natural wealth and potential, have failed to popularize ecotourism. Considering that Serbia is one of them, the main goal of this research was to reveal ecotourism constraints and reasons which prevent domestic tourists from visiting eco-destination. In addition, the study aimed to determine how well the respondents are informed and familiar with the concept of ecotourism. To achieve that, the survey was conducted among 379 participants, residents of Serbia in September 2019. The constraining scale has been created, and by applying exploratory factor analysis, four factors have been singled out (Fears, Lack of resources, Lack of information, and Disadvantages of the tourism product). The findings showed that the biggest constraint preventing domestic tourists from visiting eco-destinations is inadequate waste disposal at such sites. It has also been found that the respondents are highly constrained by the lack of information, time, and money. The results also reveal the degree to which other factors contribute to non-visits to eco destinations, but also which of them do not have a key impact on tourists' decision to avoid such locations. The paper additionally discusses the potential impact of a lack of ecotourism knowledge on the respondents' answers regarding ecotourism constraints in Serbia.

**Keywords:** travel constraints; ecotourism; domestic tourists; Serbia

### Introduction

Tourism is one of the largest and fastest-growing industries in the world. The World Tourism Organization confirmed that as early as in 2018, two years earlier than expected (2020), 1.4 billion international arrivals in the world were generated (World Tourism Organization, 2019). With the increasing number of people involved in tourism, new challenges are emerging that tourism policy makers have to overcome. One of the biggest problems that appear is the increasing influence and pressure on tourism resources. It is therefore important to strike a balance and to ensure that meeting the needs of current generations will not prevent future generations from doing the same

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(Abubakar, 2017; Beljanski, 2018; Cerin, 2006; Čekrlija, 2017). Thus, at the end of the 20th century, the idea of sustainable development emerged. That implies a development whose realization is possible without depleting or degrading the resources on which it is based (Kanie & Biermann, 2017). Later, as part of such a concept, a special form of tourism, called ecotourism, developed, which is committed to preserving and protecting natural and cultural values and contributing to the well-being of the local community (Sharpley, 2006).

The diversity and richness of natural resources and the preserved environment are an integral part of Serbia's tourism product and one of its fundamental competitive advantages. Protected areas in Serbia cover an area of 677,950 hectares, which is 7.66% of the total territory of the country (Flores & Obradović, 2015). However, although it has great potential, Serbia has not yet found its place on the map of ecotourism destinations. Therefore, the Tourism Development Strategy of the Republic of Serbia for the period from 2016 to 2025 emphasizes the need for improving tourism in the protected areas and ecotourism is listed as one of the key tourism products of many destinations in Serbia (Vlada Republike Srbije, Ministarstvo trgovine, turizma i telekomunikacija, 2016).

The issue of low interest in visiting ecotourism destinations in Serbia has not yet been researched. So far, the researchers mainly focused on natural resources, protected natural areas, ecotourism destinations, and potentials for ecotourism development in Serbia (Beljanski, 2018; Jegdić, 2010; Novaković-Kostić & Trumbulović, 2016; Stojanović, Lazić, & Dunjić, 2018; Vujko, Gajić, & Kovačević, 2012). Only a few authors (Vasiljević et al., 2018) have studied visitors of Fruška Gora National Park, but in terms of geotourism. Since there is still no study in Serbia that addresses visitors to eco-destinations, the main goals of this research are to identify the constraints of ecotourism in Serbia and to reveal potential reasons why domestic tourists do not visit such destinations more frequently and what demotivates them. Considering that ecotourism in Serbia is still undeveloped and there are no data on visits and tourist traffic of foreign tourists, domestic tourists have been chosen as the target group of this research. In previous years, domestic tourists in Serbia were dominant. However, since 2018, the number of arrivals of foreign and domestic tourists has begun to equalize (Statistical Office of the Republic of Serbia, 2019). Despite that, in 2020, the world faced a crisis related to COVID-19 pandemic. The appearance of such situation left great consequences, first of all on health, but also on all other industries. One of them that has suffered great losses is tourism industry. With the introduction of various restrictions and lock downs, travel was disabled. As many destinations have not yet allowed tourist trips abroad, they have focused on encouraging people to explore their own countries in order to grow the domestic tourist market. It also represents a great opportunity for regions worldwide to recover from both the social and economic impacts of COVID-19 pandemic (World Tourism Organization, 2020).

In addition, the study seeks to find out to what extent the residents of Serbia are familiar with the notion of ecotourism and some of the eco-destinations in the country and how interested they are in visiting those places. Therefore, the research question that is to be addressed is whether the low level of visit of eco-destinations in Serbia is influenced by the lack of information and knowledge on ecotourism. The attitudes of Serbian citizens on this issue can significantly contribute to the identification and understanding of the current situation of ecotourism in Serbia and provide assistance for future development and progress. Ecotourism represents a significant opportunity for Serbia, and this topic can be of great importance for creating the strategy for the growth of ecotourism and for positioning Serbia on the international tourism market.

## Literature review

### *Defining the concept of ecotourism*

The first theoretical aspects and the evolution and trends of ecotourism became the focus of scientific research mostly in 90's (Bottrill & Pearce, 1995; Brandon, 1996; Diamantis, 1999; Ross & Wall, 1999; etc.). One of the first definitions of ecotourism was derived by Goodwin (1996), who states that ecotourism is tourism with a low impact on nature that contributes to the conservation of species and habitats, either directly by supporting conservation and/or indirectly, by providing income for the local community. Furthermore, Novaković-Kostić and Trumbulović (2016) outlined certain principles by which ecotourism differs from other forms of tourism such as nature-based development, protection of the natural environment and its conservation, the inclusion of cultural attributes, ecological sustainability, educational character, the involvement of the local community, safety, unique experience, and visitors' satisfaction. Definitions of ecotourism in the literature do vary, but what is recognized in each is that ecotourism is potentially an effective method of maintaining biodiversity conservation and ecosystem management (Lee & Iwasa, 2020).

With its appearance, ecotourism has produced a new type of travelers, the so-called responsible travelers (ecotourists). The sites they visit are called eco-destinations and can be defined as untouched natural and often protected areas (Lane, 2009). Ecotourism is not the only form of tourism that takes place in the natural environment (Tadić & Veljović, 2020). Therefore, it is important to mention and explain other forms of tourism related to the natural and rural ambience, since there is a possibility to cause confusion about different terms, especially in areas where such forms of tourism are not developed and popularized. Thus, Table 1 shows some of the definitions of terms related to tourism in natural areas.

Table 1  
*Definitions of terms related to tourism in natural areas*

Term	Definition	Source
Ecotourism	Environmentally responsible travel to untouched natural areas in order to enjoy the nature and experience of both past and present cultural features. It is often related to protected areas.	(Lane, 2009)
Rural tourism	A tourism product that gives to visitors a personalized contact, a taste of physical and human environment of countryside and allow them to participate in the activities, traditions and lifestyles of local people.	(Aref & Gill, 2009)
Ethno tourism	Activity that focuses on the works of human rather than nature and attempts to give tourists an understanding of the lifestyles of the local people.	(Bolnick, 2003)

### *Constraints for visiting ecotourism destinations*

Before the constraints and barriers came into the focus of research, the issue of travel motivation was studied. Motivation to participate in tourism activities is defined as the set of needs and attitudes that predisposes an individual to act and behave in a specific way (Pizam, Neumann, & Reichel, 1979). In the literature so far, there are various explanations and theories of tourist motivation. However, one of the most popular is the push and pull motivation theory (Crompton, 1979; Dann, 1977; Epperson, 1983; Pesonen, 2012; Prayag & Ryan, 2011; Smith, Costello, & Muenchen, 2010). According to that theory, there are two groups of motives: push motives, which

represent inner forces that encourage people to travel, and pull motives, which refer to the external attributes of the destination (Božić, Jovanović, Tomić, & Vasilijević, 2017). In addition, Crompton (1979) classified them into nine motives: seven socio-psychological, or push motives (escape, self-exploratory, relaxation, prestige, regression, kinship-enhancement, and social interaction), and two cultural, or pull motives (novelty and education).

Identifying motives for visiting certain destinations is one of the most common topics in tourism research. In the case of ecotourism, motivation is the dominant theme, but when it comes to factors that influence tourists' decision not to visit ecotourism destinations, the literature is very scarce. There are several studies on the constraints within the context of nature-based tourism (Božić et al., 2017; Hudson & Gilbert, 2000; Nyaupane & Andereck, 2008; Nyaupane, Morais, & Graefe, 2004; Pennington-Gray & Kerstetter, 2002; Thapa, Pennington-Gray, & Holland, 2002). For that purpose, authors mostly used a scale defined almost three decades ago by Crawford, Jackson, and Godbey (1991) that groups constraints into three dimensions: intrapersonal, interpersonal, and structural. Intrapersonal constraints are psychological barriers that lead to non-participation (Crawford & Godbey, 1987) such as lack of interest, stress, depression, anxiety, etc. This type of constraint is relatively unstable and can change over a short period. Interpersonal constraints arise from the unavailability of other people (for instance, family member, friend, or partner), which prevents an individual from participating in certain activities. Those constraints can shift during life stages and are usually dependent on marital status, family size, and type of activity. Structural constraints mainly include lack of time, money, information, opportunities, accessibility, and poor weather (Walker & Virden, 2005).

Although several mentioned researchers have studied the constraints of nature-based tourism, it is important to note that there are some differences between such tourism and ecotourism. Goodwin (1996) defined nature-based tourism as "travel for the purpose of enjoying undeveloped natural areas of wildlife". Every form of tourism that takes place in relatively intact areas is nature tourism, but, ecotourism has stricter principles that must be respected (Nyaupane, 2007), as discussed at the beginning of this chapter. Despite the fact that those two concepts differ from each other, some constraints defined in the context of nature-based tourism could find their application in the case of ecotourism as well. Leung, Spenceley, Hvenegaard, and Buckley (2015) and Perez-Verdin, Lee, and Chavez (2004) have addressed a similar problem and singled out a scale with factors that influence tourists' decision not to visit protected natural areas. In addition, Adeleke (2015) referred to the barriers to ecotourism trip, but from the perspective of residents of a particular region. However, there is still no research in which the authors have focused on the general domestic ecotourism market and more complex constraints.

Finally, it is essential to point out that the decision to visit a particular destination is not always influenced by the absence of constraints, but on the negotiation of those constraints (Crawford et al., 1991; Um & Crompton, 1999). Although leisure constraints mostly result in no participation, there is a possibility for them to evoke individuals' willingness to participate through the process of negotiation and substitutions (Crawford et al., 1991; Jackson, Crawford, & Godbey, 1993; Kay & Jackson, 1991; Scott, 1991). Thus, it is important to highlight that successful negotiation for leisure participation is determined by the strength of the interaction between constraints and motivation (Jackson et al., 1993; Xie & Ritchie, 2019).

## Methodology

### Study sample

The study was conducted on a sample of 379 respondents. All the persons included in the research are residents of Serbia older than 18 years, members of the general public. Their sociodemographic and socioeconomic characteristics are shown in Table 2.

Table 2  
*Sociodemographic and socioeconomic characteristics of the respondents (n=379)*

Gender	Percent (%)	Age				
Male	23	Range	18–69			
Female	77	Average	30 (SD = 10.213)			
Education	Percent (%)	Employment Status	Percent (%)			
High school	22.7	Employed	51.5			
Bachelor's degree	53.6	Unemployed	9.5			
Master's or Ph.D. degree	23.2	Student	36.7			
Missing data	0.6	Retiree	1.1			
		Housewife	1.3			
Income	Percent (%)	Employed	Unemployed	Student	Retiree	Housewife
Less than 382 €	47.2	14.2	6.1	25.3	0.8	0.8
382–763 €	32.5	22.7	2.1	7.4	0.3	/
763–1,144 €	9.8	6.3	0.8	2.4	/	0.3
Over 1,144 €	10.6	8.2	0.5	1.6	/	0.3

The majority of the respondents are women and the average age is 30 years (range = 18–69; SD = 10.213). More than half of the respondents are highly educated people with a bachelor's degree, while there is an almost equal share of the respondents with a master's or Ph.D. degree and high school degree. When it comes to the employment status, the highest number of the respondents are employed, followed by students. In terms of income, most respondents have income less than 382 euros which is below average. Among them, most are students who often have limited material resources, so this result is understandable.

### Procedure

The research was carried out in September 2019, through an online questionnaire (Google Docs) which was distributed via e-mail and social media (Facebook and Instagram) in order to reach respondents from different parts of Serbia. The respondents were informed of the general purpose of the study and that participation is anonymous and voluntary, as well as that the results will be used only for scientific and research purposes.

### Instrument

The questionnaire consists of 12 questions which are systematically divided into four parts. The first part measures the sociodemographic and socioeconomic characteristics of the sample (gender, age, education, employment status, and income). The second part consists of questions related to the frequency of travel (several times a year, once a year, once every few years) and the type of

destination most often visited (coastal, mountain, urban, rural, spa, and ecotourism destinations). In addition, some questions in this section aim to discover how well the respondents are familiar with the term “ecotourism” and whether they can properly define it and give examples of such destinations. The third part is created in order to assess the respondents' interest in visiting eco-destinations in Serbia. In this regard, respondents were required to mark the offered ecotourism destinations depending on whether they had visited them and if they had not, were they willing or not to visit them in the future. Considering that there are plenty of such destinations in the country, only certain protected natural areas of Serbia were listed. The fourth part is designed to measure constraints to visit ecotourism destinations. A 5-point Likert scale (1 – *I totally disagree*; 5 – *I totally agree*) was used to measure the reasons why the respondents do not choose this kind of destination. In that regard, a scale of 18 items was formed. Some items were taken from the previous studies while some were introduced by the authors (Table 3). Inspired by the claims related to fear, the item “fear of animals” was introduced, given that eco-destinations in Serbia are inhabited by a rich and diverse fauna. In addition, there is also a wealth of flora. However, the presence of certain plants can cause allergic reactions in humans. Thus, it has been considered adequate to introduce an allergy related claim. The following item was added given that travel agencies in Serbia rarely offer eco-destinations, which may be a restriction for people who prefer organized travel by an agency. Furthermore, the lack of professional staff can be a problem given that eco-destinations are mostly staffed by people who are not educated in the field of tourism (Lakičević & Žarevac, 2014), which can affect the quality of the offer. The last item presented is “Inadequate waste disposal”. Given that one of the most significant environmental issues in Serbia is solid waste and water waste management (Ilić & Nikolić, 2016), it was considered appropriate to examine the impact of this on visitors to eco-destinations.

Table 3  
*Constraints for visiting eco-destinations*

Items	Source
Fear of animals	Introduced by the authors
Fear of open space	Jovanović et al. (2013)
Fear of the unknown	Jovanović et al. (2013)
Allergy to something from nature	Introduced by the authors
Lack of company	Crawford and Godbey (1987)
Lack of time	Walker and Virden (2005)
Lack of money	Walker and Virden (2005)
Lack of information	Walker and Virden (2005)
Lack of recommendations (from family, friends, colleagues, etc.)	Božić et al. (2017)
Lack of interest	Crawford and Godbey (1987)
Lack of environmental awareness	Leung et al. (2015)
Inaccessible locations (underdeveloped transport infrastructure, distance, etc.)	Walker and Virden (2005)
Poor quality of eco-tourism product	Leung et al. (2015)
Lack of tourism infrastructure (accommodation and catering facilities, toilets, etc.)	Leung et al. (2015)
Lack of natural / cultural attractions	Leung et al. (2015)
Lack of organized tours and offers in travel agencies	Introduced by the authors
Lack of professional staff	Introduced by the authors
Inadequate waste disposal	Introduced by the authors

The collected data were analyzed using IBM SPSS Statistics version 23. For the research purposes, exploratory factor analysis, descriptive statistical analysis, correlation analysis, and ANOVA test were applied.

## Results and discussion

### *Descriptive statistics*

When it comes to the frequency of travel, the results show that most respondents travel several times a year (65.2%). Further, 24.5% of the respondents travel once a year, while 10.3% travel once every few years. In terms of the type of destination most frequently visited by the respondents, the results were varied (Table 4).

Table 4  
*Type of destination most frequently visited by the respondents*

Type of destination	Percent (%)
Coastal destinations	63.1
Urban destinations	54.9
Mountain destinations	46.2
Rural destinations	21.6
Spa destinations	18.2
Ecotourism destinations	6.9

The majority of the respondents stated that when traveling, they mostly visit coastal destinations. However, among the tourism destinations that the respondents do not visit so often are rural and spa destinations, while ecotourism destinations are the last on the list. Given that such results were partially expected, there was a need to identify constraints that prevent domestic tourists from visiting eco destinations. However, in order to accomplish that, it is necessary to determine how well domestic tourists are familiar with the term “ecotourism” (Table 5).

Table 5  
*Respondents' perception of the concept of ecotourism*

Familiarity with the concept of ecotourism	Yes		No	
	44.3%		55.7%	
Defining ecotourism	No answer	Correct answer	Incorrect answer	
	59.4%	32.5%	8.2%	
An example of an ecotourism destination	No answer	Correct answer	Incorrect answer	
	60.9%	37.8%	1.3%	

Thus, the results showed that less than half of the respondents think that they know what ecotourism is, while a slightly higher percentage is unfamiliar with this form of tourism. In the next step, the respondents were supposed to define ecotourism. A large number of the respondents did not answer that question. Besides those who gave an accurate explanation and showed that they understand what this form of tourism entails and what its characteristics are, there were also respondents who gave incorrect answers. Their explanations were wrong for several reasons, but most often because the respondents do not know the difference between ecotourism, rural, and ethno-tourism and do not separate the terms eco-destination and ecotourism. In addition, more than half of the respondents did not name any example of an eco-destination (Figure 1). On the other hand, respondents who knew examples of such destinations mostly named sites from Serbia. Respondents also cited countries around the world where ecotourism is developed, including Costa

Rica, Indonesia (Bali), Slovenia, Tanzania, Kenya, and Turkey, as well as some eco-destinations in the neighboring countries (Croatia, Bosnia and Herzegovina, and Montenegro).

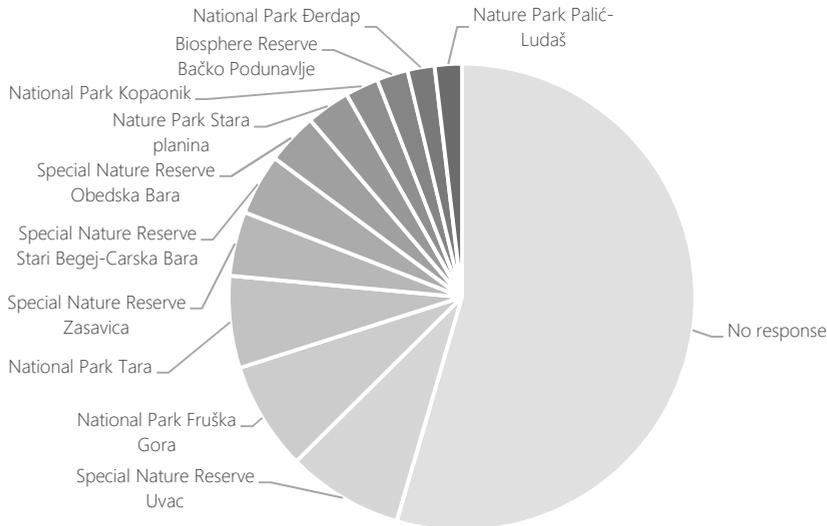


Figure 1. Examples of eco-destinations.

The results of the second part of the survey indicated what kind of perception domestic tourists have towards ecotourism. It showed that more than half of the sample is not familiar with ecotourism, nor can they give an example of an eco-destination and only one-third of the respondents gave accurate explanations of the mentioned form of tourism. What is also expressed is that domestic tourists rarely choose eco-destinations when traveling. This may be due to the lack of information or undeveloped awareness about ecotourism, which this part of the research has already shown.

As mentioned in the previous chapter, the third part of the research is designed to measure the interest of the respondents in visiting eco-destinations in Serbia. One of the aims was to find out how well the respondents are aware of the eco-tourist destinations in the country and whether they had already visited them. The list includes 20 selected protected natural areas and the attitudes of the respondents are presented in Table 6.

The results showed that the most popular destination is Fruška Gora National Park. The reason for this may be the proximity of the site since most of the respondents live near the city of Novi Sad and the aforementioned national park. The majority of the respondents have also visited Nature Park Palić-Ludaš and National parks Tara, Kopaonik, and Đerdap. However, the other 15 destinations have been visited by less than half of the respondents, with the Special Nature Reserve Pašnjaci velike droplje being the least visited of all. The mentioned natural area was also voted as a destination that most respondents did not want to visit in the future, but there were still 72.6% of the respondents who showed interest in this destination. Such a low interest may be the result of the physical characteristics of the area as it is a lowland (Pašić, Dolinaj, & Stojanović, 2008) without

specific geomorphological or hydrological structures that could attract visitors. Among the destinations most respondents were eager to visit in the future was one of the most attractive hydrological values of Zlatibor Mountain, Gostilje Waterfall, followed by Special Nature Reserve Suva Planina and National Park Šar Planina.

Table 6  
*Respondents' interest in visiting eco-destinations in Serbia*

Eco-destinations	Yes, I have visited (%)	No, and I don't want to visit (%)	No, but I want to visit (%)
Special Nature Reserve Uvac	22.7	7.9	69.4
Nature Reserve Zasavica	32.2	10.8	57
Special Nature Reserve Stari Begej-Carska Bara	44.9	11.1	44.1
Gostilje Waterfall	12.9	10.8	<b>76.3</b>
Natural Monument Krupaj Springs	13.2	14.5	72.3
Biosphere Reserve Bačko Podunavlje (Special Nature Reserves Gornje Podunavlje and Karadordevo, Nature Park Tikvara, Natural Monument Junaković Forest)	30.6	16.4	53
Special Nature Reserve Pašnjaci velike droplje	6.6	<b>20.8</b>	72.6
National Park Đerdap	59.4	3.4	37.2
National Park Kopaonik	63.1	3.4	33.5
National Park Tara	72.8	1.6	25.6
National Park Fruška Gora	<b>90.2</b>	1.6	8.2
Nature Park Stara Planina	24.8	7.9	67.3
Nature Park Palić-Ludaš	80.2	2.6	17.2
Special Nature Reserve Koviljsko-Petrovaradinski rit	28.2	12.7	59.1
Special Nature Reserve Obedska Bara	40.6	7.7	51.7
Gorge of Gradac River	17.7	13.5	68.9
Special Nature Reserve Rtanj	24	8.7	67.3
Special Nature Reserve Suva Planina	10.3	14	75.7
Landscape of exceptional features Vlasina	18.7	12.7	68.6
National Park Šar Planina	12.7	11.6	75.7

Note. Bold text denotes the highest values.

The results of the third part of the research showed that despite the natural wealth and attractiveness of eco-destinations in Serbia, domestic tourists do not often visit such places. That is also confirmed by the fact that only five of the twenty destinations offered were visited by more than half of the respondents. Also, it is noticeable that there is a lack of interest, but the lower values in the third column are generally such as most of the respondents have already visited those places. Each of the eco-destination offered has a certain number of the respondents who stated that they do not want to visit them. Still, these numbers are not large, so the problem can be overturned by applying an adequate marketing strategy. However, it is important that the respondents still showed great interest in destinations they had not visited before.

#### *Construct validity: Exploratory factor analysis (EFA)*

In terms of a constraint scale, the item analysis showed high scale reliability ( $\alpha = .775$ ). In order to extract constraining factors, principal component exploratory factor analysis (EFA) was carried out, with Promax rotation and Kaiser normalization. Kaiser-Meyer-Olkin (KMO) measure of sampling

adequacy equaled satisfactory .852 and Bartlett's test confirmed the adequacy of performing factor analysis ( $\chi^2 = 3049.7$ ,  $df = 153$ ,  $p < 0.00$ ). Such results indicate that factor analysis is appropriate for this data (Tabachnick & Fidell, 2007). We isolated four significant factors with the total of 62.63% of variance explained.

Factor 1 (4 items) includes *Fears* that could potentially occur in nature related to animals, open space, the unknown, and allergies. Factor 2 (3 items) represents *Lack of resources* such as time, money, and company. Factor 3 (4 items) refers to the *Lack of information* and includes a lack of recommendations, lack of interest, and lack of environmental awareness. Finally, factor 4 (7 items) involves the *Disadvantages of the tourism product* related to a location, quality of tourism product, infrastructure, attractions, organized agency tours, staffing, and waste. These four factors are presented in Table 7.

Table 7  
 Rotated component matrix (constraints)

Items	Fears	Lack of resources	Lack of information	Disadvantages of the tourism product
	$\alpha = .743$	$\alpha = .671$	$\alpha = .800$	$\alpha = .886$
Fear of animals	.665			
Fear of open space	.829			
Fear of the unknown	.843			
Allergy to something from nature	.636			
Lack of company		.671		
Lack of time		.790		
Lack of money		.728		
Lack of information			.655	
Lack of recommendations (from family, friends, colleagues, etc.)			.706	
Lack of interest			.729	
Lack of environmental awareness			.768	
Inaccessible locations (underdeveloped transport infrastructure, distance, etc.)				.689
Poor quality of eco-tourism product				.822
Lack of tourism infrastructure (accommodation and catering facilities, toilets, etc.)				.820
Lack of natural/cultural attractions				.673
Lack of organized tours and offers in travel agencies				.730
Lack of professional staff				.798
Inadequate waste disposal				.686

One phase of this part of the research involved the use of descriptive statistical analysis. The main objective was to identify which items or factors most influence the respondents' decision not to visit eco-destinations. Table 8 shows that all the mean values are quite low. However, the item with the highest mean value (3.4) is *inadequate waste disposal*. In this regard, it is evident that domestic tourists consider the polluted nature and waste to be the biggest problem that distracts them from visiting eco-destinations. Other items with high mean values include *lack of information*

(3.3) and *lack of organized tours and offers in travel agencies* (3.2). A large number of people still travel only within the organized tours through travel agencies, so the lack of ecotourism offer in Serbian agencies may be a problem for domestic tourists. In addition, *lack of time* (3.2) and *money* (3.2) are among the top five items, but these two are not directly related to ecotourism. The absence of free time is more related to a modern and hectic lifestyle, while money may reflect the adverse economic situation in the country. When it comes to *inaccessible locations* and *lack of recommendations* and *tourism infrastructure*, respondents had quite a neutral attitude (3.0). Furthermore, the item ratings for the *lack of professional staff* (2.9), the *poor quality of the eco-tourism product* (2.9), the *lack of company* (2.7), and the *lack of natural/cultural attractions* (2.3) are not high. Thus, the respondents do not consider them to be great restrictions for not visiting eco-destinations. The results also showed that the respondents might think that they have developed environmental awareness and that they are interested in ecotourism, so these items have low mean values. However, what turned out to be the least constraining items are *allergies* (1.9) and *fears of animals* (1.6), of *the unknown* (1.5), and *open space* (1.3).

Table 8  
 Descriptive statistics of constraints dimensions

Factors and items	M	SD
Fears	1.6	0.7459
Fear of animals	1.6	1.0326
Fear of open space	1.3	0.7546
Fear of the unknown	1.5	0.9409
Allergy to something from nature	1.9	1.1927
Lack of resources	3.0	1.1452
Lack of company	2.7	1.5236
Lack of time	3.2	1.4139
Lack of money	3.1	1.4855
Lack of information	2.7	1.1279
Lack of information	3.3	1.4422
Lack of recommendations (from family, friends, colleagues, etc.)	3.0	1.4456
Lack of interest	2.2	1.3741
Lack of environmental awareness	2.3	1.4451
Disadvantages of the tourism product	2.9	1.0639
Inaccessible locations (underdeveloped transport infrastructure, distance, etc.)	3.0	1.4067
Poor quality of eco-tourism product	2.8	1.3381
Lack of tourism infrastructure (accommodation and catering facilities, toilets, etc.)	3.0	1.3470
Lack of natural / cultural attractions	2.3	1.2865
Lack of organized tours and offers in travel agencies	3.2	1.4380
Lack of professional staff	2.9	1.3610
Inadequate waste disposal	3.4	1.4706

Note. M = Mean; SD = Standard deviation.

According to the data in Table 8, it can be concluded that there are no great constraints and that the above factors are not obstacles to visiting eco destinations. However, the first phase of the survey revealed that respondents rarely visit eco-destinations, which was later confirmed through the data in Table 5. Such a situation may be due to the lack of knowledge of the respondents about ecotourism and its characteristics. Thus, they are not able to discuss the barriers to the form of tourism that they are not familiar with.

### *Factors that affect perceived constraints*

Additional tests were conducted on constraining factors regarding participants' age, education, and employment status. Correlation analysis was applied to determine the differences between the answers of the respondents of different ages regarding constraining factors (Table 9).

Table 9  
*Correlation analysis – age of respondents and constraining factors*

	Age Pearson correlation coefficient ( <i>r</i> )
Fears	-0.080
Lack of resources	-0.238**
Lack of information	-0.111*
Disadvantages of the tourism product	0.047

Note. \*The correlation is significant at the level of  $p = .05$ ; \*\*The correlation is significant at the level of  $p = .01$ .

The results showed the presence of negative correlations with only two factors: lack of resources and lack of information. Therefore, older respondents are less likely to think that lack of company, time, and money, as well as lack of information, recommendations, interests, and environmental awareness, are obstacles that prevent them from visiting eco-tourism destinations in Serbia. Similar results were obtained by Pennington-Gray and Kerstetter (2002). Their study also showed younger respondents perceived significantly more lack of time and money as constraints than older people.

In terms of education, the respondents who participated in the research were divided into three categories: high school, bachelor's degree, and master's or Ph.D. degree. The results reveal that statistically significant differences in the respondents' answers exist only for the last constraining factor. Such data show that domestic tourists with a high school and bachelor's degree are less likely to consider the disadvantages of the tourism product as restrictions that prevent them from visiting eco-destinations in Serbia, compared to respondents with master's or Ph.D. degree. Therefore, it can be concluded that the factor entitled *disadvantages of the tourism product* is the constraining factor that most affects the respondents with the highest level of education.

The last application of the ANOVA test was based on the identification of statistically significant differences in the respondents' answers regarding their employment status and relation to the constraining factors. The results presented in Table 10 show that the differences in the respondents' answers exist in the case of the first two factors. Thus, fears represent greater constraint among students, compared to employed respondents. Another study (Bixler, Carlisle, Hammltt, & Floyd, 1994) showed similar results and found that students, especially those from urban areas, feared snakes, insects, and plants while exploring the wild. Aron and Witt (2011) added that the students were fearful of the unknown while Virden and Walker (1999) stated that some students perceived the forest as threatening. Lack of resources is not a major obstacle for retirees, which was also confirmed by Pennington-Gray and Kerstetter (2002) in their research. In addition, Nyaupane and Andereck (2008) emphasized that the oldest population is less constrained by lack of time since they usually have more free time and are not much committed to work or family. On the other hand, employees, the unemployed, and students consider this factor as a strong constraint for not visiting eco-tourism destinations in Serbia.

Table 10

*ANOVA test – employment status of respondents and constraining factors*

Factors	F-value	LSD post-hoc test
Fears	4.450*	1 < 3
Lack of resources	6.588*	1, 2, 3 > 4
Lack of information	1.345	/
Disadvantages of the tourism product	0.329	/

Note. \* $p < .05$ .

In addition, a *t*-test was performed to compare the responses of respondents of different gender, regarding constraining factors. An ANOVA test was also conducted to identify potential differences in the answers of the respondents with different levels of monthly income concerning constraint factors. In both cases, the results showed no statistically significant differences. This indicates that there is a balanced opinion on the aforementioned issue among the respondents of both genders and different monthly income levels.

## Conclusion

The results of this research showed that ecotourism in Serbia has not yet fully evolved, but that it is rather in its initial phase of development. Despite the wealth and attractiveness of natural resources, the level of domestic tourists' visits is still not at an enviable level. Eco-destinations have been ranked as the least popular and visited sites among domestic tourists. Moreover, the main problem that has been identified is that the citizens of Serbia are not very familiar with the concept of ecotourism, its characteristics, and principles and some even identify it with rural and ethno-tourism. Eco-destinations are also unknown to many domestic tourists. Thus, over 60% of the respondents did not know the examples of such destinations anywhere in the world and only five of the 20 eco-destinations in Serbia were visited by more than half of the respondents. The results also indicate that the most popular protected natural resources in the country are national parks. Four of Serbia's five national parks are among the most visited eco destinations in the country. On the other hand, the least visited eco-destination is the Special Nature Reserve Pašnjaci velike droplje. This specific location is a monotonous pasture that may not be attractive to visitors. Such sites that do not have some geomorphological or hydrological structures could compensate for the attractiveness by organizing certain activities in which tourists could participate and perceive a unique and memorable experience. As for other eco-destinations, a large number of domestic tourists is not aware of the attractiveness of certain locations, so it is understandable that they do not show interest. Therefore, promotional campaigns could influence tourists' perceptions and motivate them to visit eco-destinations. The research also found that the biggest constraint preventing domestic tourists from visiting eco-destinations is inadequate waste disposal in such areas. Serbia is a country that has a big problem with waste management, and tourists interested in ecotourism expect clean and untouched nature, so areas that have a problem with waste and garbage should deal with its adequate disposal. In addition, respondents showed that lack of information, time, and money are also obstacles that make them unwilling to visit ecotourism destinations. Considering that a large number of people still travel only within organized trips, the lack of offer in travel agencies is also a barrier for tourists. Thus, travel agencies and organizations should create and offer visits to eco-destinations. Accessibility to locations and tourist infrastructure on sites also determine, to some extent, whether tourists will visit eco-destinations. On the other

hand, fears have been shown not to be key constraining factors preventing tourists from visiting ecotourism destinations. In light of all the above, it can be concluded that domestic tourists are not yet aware of the natural wealth in their surroundings. The results relating to the constraining factors showed no match with the results of the first part of the study. However, this can still confirm the findings from the beginning, arguing the fact that many people are not familiar with the concept of ecotourism. Thus, they are not able to properly discuss the barriers to the form of tourism they do not know. Therefore, this research's question can be considered confirmed. Understanding what prevents people from traveling helps to better comprehend and predict travel decisions and tourist behavior. By identifying the main barriers and constraints of visits, the results of this research can contribute to the improvement and development of ecotourism destinations, as well as to the increased number of tourists. It is important that managers in such areas apply adequate strategies, especially management and marketing, in order to transform weaknesses into strengths and in addition to the development of tourism, contribute to the further development of these areas, economic benefits and preservation of protected areas for future generations. Limitation to the study can be perceived in the fact that it covers only the views of domestic tourists, while future research can be focused on foreign tourists in order to further compare the results. Also, the constraining scale may be extended by other factors that were not taken into account in this study and may potentially have an impact on eco-destination visits. Since this research identifies the most visited eco-destinations in Serbia, future studies should focus on individual ecotourism destinations that have not yet been developed nor positioned in the ecotourism market niche.

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