

The Tourist Image of the Protected Landscape of Biambare, Sarajevo

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Received: November 14, 2022 Accepted: January 11, 2023 Published: June 12, 2023

Keywords:

Protected landscape; Tourist impressions; Satisfaction; Loyalty; Promotion

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-Non-Commercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission. **Abstract:** The protected landscape (PL) of Biambare is one of the most famous green sites for local visitors and tourists of Sarajevo. This area is distinguished by beautiful Bosnian Alps (Dinarids) meadows and plenty of spectacular natural phenomena, especially caves; the Central Biambare Cave is currently the most popular. The terrain is situated at an elevation range of 915–1044 m above sea level, so it mostly has a pleasant pre-mountain climate, etc. Therefore, tourism supply is based on different products and activities: speleology; walking in nature; bicycling; riding; hiking; alpinism; fishing; hunting; skiing; and collecting medicinal herbs and mushrooms. The aim of the paper is to represent the Biambare tourist image based on identifying its central natural attributes and according to the evaluation of the visitor's experience. The two relevant parameters for understanding tourist impressions are: "satisfaction" and "loyalty". These are higher among foreign than resident visitors, particularly among Middle Eastern tourists, who favour this site above many others in Canton Sarajevo.

1. INTRODUCTION - THEORETICAL BACKGROUND

A ccording to Tapachai & Waryszak, "the destination images are perceptions or impressions of a destination held by tourists with respect to the expected benefit or consumption values" (Rayesh, 2013). It's "mental concept formed from a set of impressions" (Beerli & Martín, 2004). Beerli & Martin (2004 also define "image as tourists' perceptions of the brand and brand associations stored in their memory" (Žunić, 2018). It can also be understood as "an interactive system of thoughts, opinions, feelings, visualisations, and intentions toward a destination" (Tasci et al., 2007).

"Types of the destination image are:

- Organic- opinions of friends, magazines, newspapers, news, reports, etc.;
- *Induced* image proffered by commercial information sources, i.e., marketing efforts of various commercial agents to publicise a destination;
- Affective- visitor's feelings or emotional responses toward it;
- *Cognitive* knowledge of and beliefs regarding a place" (Huete-Alcocer & Lopez-Ruiz, 2019).

Factors of a destination's image can be different attractions: nature, culture and art, recreation, tourists and other infrastructure, the environment, and the atmosphere (ambience). Each of them can be the reason for tourists' satisfaction, but it's usually a complex of various things in the destination that participate in creating our feeling toward the visited place. Therefore, the image is the product of a very complex and, at the same time, personal visualization toward a destination. But when visitors share their experiences related to their holiday in a particular destination, we can generate and evaluate their level of satisfaction. The higher the level of visitor satisfaction, the faster the popularity of the destination grows.

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The relationship between destination image and tourist satisfaction worldwide is explored by numerous authors. According to Javier & Bing, "destination image has a direct relationship with perceived quality, satisfaction and intention to return and willingness recommend others" (Rayesh, 2013). Tourist impression is a powerful generator of destination image because visitors share their positive experiences and stimulate travels and new visitors (Urry & Larsen, 2011).

• *Tourist satisfaction* is "a person's feelings of pleasure or disappointment resulting from comparing a product are perceived performance (or outcome) in relation to his or her expectations" (Kotler & Keller, 2012). Customer satisfaction is a post-purchase attitude formed through a mental comparison of the product and service quality that a customer expected to receive from an exchange (Kim, 2012). *Attributes of satisfaction* could be: attractions, accommodation, accessibility, amenities, activities, efficiency, service quality, social value, play, aesthetics, perceived monetary cost, perceived risk, time & effort spent and perceived value.

Besides tourists' satisfaction, loyalty and *WOM* marketing are also countable as relevant parameters of the destination image assessment. Surely, there's a strong relationship between satisfaction, loyalty, and *"Word of Mouth"* promotion, as they affect each other and contribute to the complete tourist perception of a place.

- Loyalty is the quality of being faithful in your support of someone or something (Oxford). When it comes to tourists' loyalty, we can simply understand it as visitors who are faithful to a certain destination, which practically means that they are returning visitors. "Loyal customers as those who re-buy a brand, consider only that brand, and do no brand-related information seeking" (Newman & Werbel, 1973). According to Reynolds and Arnold (2000), "customers aim to dedicate all of their purchase categories to a particular service provider" (Jones & Taylor, 2007). Attributes of loyalty, according to G. Prayag, are: comfort facilities, safety & infrastructure, cultural attractions & shopping, tourist attractions & ambience and variety & accessibility. Tourist loyalty depends on the satisfaction of tourists and meeting expectations (Rayesh, 2013).
- *WOM marketing* is practically free "*Word of Mouth*" promotion of a destination. Therefore, it's one of the most desirable effects of tourist satisfaction. "It plays a vital role in marketing strategies, tourist spending, revisits intention and the overall image of the destination" (Yoon & Uysal, 2005). As stated by Urry & Larsen (2011), positive tourist impressions result in travelers sharing their experiences and stimulating new visitors. Furthermore, *word of mouth* has the strongest impact when it comes from a friend or other familiar person who has already visited the destination because of the inclination to listen to their perspective.



Figure 1. Rajesh's holistic model for destination loyalty Source: Rayesh, 2013.

2. METHODOLOGY

The research aims to present the protected area of PL Biambare and evaluate its touristic image through the perceptions and impressions of visitors. The paper is divided into two main sections: "Tourist-geographical profile of PL Biambare" and "Evaluation of the tourist image of PL Biambare." Relevant parameters for the tourist image are "satisfaction"- "pleasant environment and positive experience", "loyalty"- "return visitors even if the ticket price increases", and "WOM marketing"- "recommendation and persuasion". Field work included observations, map interpretation, surveys, and interviews (June-Sept. 2022). A closed-ended questionnaire was directly administered to visitors at two points: a) at the main entrance to the PL Biambare and b) at the entrance to the Central Cave. The structure of respondents counted foreign visitors at 53% and domestic visitors at 47% (total 72 = 100%). The intensity of the visitor's impression was measured on a Likert scale (1–5). The statistical presentation of results is percentage mod, AM. The overall picture of the tourist "affective" image of PL Biambare is positive, meaning this site represents a significant tourist resource.

3. TOURIST-GEOGRAPHICAL PROFILE OF PL BIAMBARE, ILIJAŠ, SARAJEVO

PL Biambare is located between two smaller bosnian towns: Olovo and Srednje, but it's also near Sarajevo, the capital of Bosnia & Herzegovina, as it's well connected by the magistral road Sarajevo-Tuzla (M18). PL Biambare takes the NE slopes of Ilijaš municipality (1 of 9 municipalities at Canton Sarajevo), which is surrounded by mountains: Zvijezda (N, NE), Ozren (S, SE), and Čemerska mt. (W, SW). Geomorphologically, it's situated between the villages of Nišići and Krivajevići, on the northeast area of the Black River plateau. This area includes the smaller plateau of Nišići (1500 m), which is located between Biambare Caves (N) and the hills Motika (E), and Duge Strane, Borka (S).



Figure 2. Location of PL Biambare in the Bosnia & Herzegovina and the region SE Europe Source: Google Earth Maps

IUCN-category: V	Protected landscape: area with significant ecological, biological, cultural and scenic value and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values
Total area	367,36 ha
Year of establishment	2003
State	Bosnia & Herzegovina
Entity	Federacija BiH
Canton	Sarajevo
Municipality	Ilijaš
Distance from the city centre	Sarajevo- 40 km, Tuzla- 80 km

Table 1. The basic geographic data of PL Biambare

Source: Nezirović et al., 2017.

According to the Spatial Plan of Biambare, this site is divided into 3 functional zones:

- A. Zone I (nucleus): 133,83 ha, includes the caves as the karst objects with the highest value;
- B. Zone II (buffer zone): 141,04 ha, includes well-preserved areas for research, education, and recreation, while the main features are: sinkholes, springs, 128 floristic endemic species, honey herbs, mushrooms, willows and trees e.g., *Salix fragilis & alba*, etc.;
- C. *Zone III (transitional zone):* 92,49 ha, includes panonic meadows, sinkholes and channels with hydrological and floristic value, while it allows activities in the field of forestry, agronomy, tourism and hospitality, based on the principles of sustainable development.



Figure 3. Spatial Plan of an Area of Special Characteristics "Protected Landscape of Biambare" Source: Development Planning Institute of the Sarajevo Canton, 2009.

Name	Length (m)	Depth (m)	Height (m)			
1. Central/Main Cave	533	-24	959			
2. Ledenjača/ Freezing Cave	323	-51	935			
3. Donja/ Down Cave	148	+6/-11	930			
4. Đuričina Cave	142	-28	950			
5. Gornja/ Upper Cave	112	+10	980			
6. Dimšina Cave	108	-30	935			
7. Ledenica/ Ice Cave	41	-18	940			
8. Nova/ The New Cave	28	-12	980			

Table 2. Cave objects in the protected area—PL Biambare, Sarajevo

Source: Nezirović et al., 2017.

The Central Cave has been a popular tourist spot and a speleological site for a long time. It's 420 m long only in the basic direction without individual branches but longer than 500 m. It has four halls with rich ornaments of all known creation forms: lateral blocks, stalactites, casts, stalagmites, and curtains. The fourth hall is the biggest (around 60 m in diameter and 15–30 m in height). It is also called the *"Music Hall"* for its acoustic effects.



Figure 4. Plan of the Central Biambare Cave **Source:** Milanolo & Mulaomerovic, 2007-2008.



Figure 5. The Central Biambare Cave and the "amazed" visitor by its stalactites Source: Author's private collection

Area of Biambare is not popular only because of its caves, but there are many other attractions and various activities to be done: speleology & cave tours; walking in nature; cycling; riding; hiking & alpinism; fishing; hunting; skiing; collecting medicinal herbs and mushrooms; the playing yard for the kids *"The Wood City"*. Above all, it provides impressive scenic views.



Figure 6. Impressive landscape at Biambare: the view of the coniferous (Picea abies) forest from the cave door Source: Author's private collection

4. EVALUATION OF THE TOURIST IMAGE OF PL BIAMBARE

The evaluation of the tourist image of PL Biambare was based on a survey directly conducted among 72 visitors (53% foreign, 47% residents). In the structure of respondents, dominant participation by arrivals counts Bosnia and Herzegovina (residents) at 47% and Kuwait at 35%.

• *Satisfaction*, which is determined by *"pleasant environment and positive experience,"* is majority positive (78%), while it's highest among visitors from the Middle East region (Kuwait, Bahrain, and the UAE), Australia, and Bosnians. At the same time, satisfaction is higher among foreign visitors than among domestic visitors (4.15 vs. 3.93).

Most foreign tourists came to Sarajevo because of its interesting culture, and they didn't even expect they would have the opportunity to enjoy such a beautiful green site as Biambare, which is only about 1 hour away from the city. Furthermore, this site is rich in karst phenomena, such as caves, and it is vastly different from their living environment; for example, people in the Middle East live in desert cities. As a result, and given that Arab visitors constituted the majority of foreign visitors, the expectation for them is even higher than for locals who are already accustomed to this type of attraction. Arabian tourists generally prefer green areas, while the Biambare site delighted them with a fresh boreal climate, coniferous forests, fascinating meadows, caves, water, and impressive scenic views. Previous research also showed that tourists from the Middle East favor Biambare (besides Baščaršija) among other Sarajevo tourist attractions because "they are missing green sites in their origin places" (Žunić, 2018). Stanković (2000) also stated that "green areas are a particularly desirable attraction for Arabian visitors, as they come from arid desert areas". Protected areas around Sarajevo have been increasing in number lately, and they present a most valuable addition to the urban tourist supply as they combine cultural and nature tourism, while tourists' preferences for green sites are growing too.



Figure 8. The structure of respondents by dominant participants in the survey Source: Own research



Table 3. Total satisfaction (%)

Marks (x)	Frequency (f, %)	Product (fx)	AM (x̄)
5	56	56*5=280	
4	22	22*4=88	
3	12	12*3=36	1.24
2	10	10*2=20	4.24
1	0	0*1=0	
	∑f=100	$\sum fx=424$	

Table 4. Arithmetic mean as an indicator of satisfaction

Source: Own research



Figure 10. The origin structure of satisfaction Source: Own research

• Loyalty, which is determined by "return visitors even if the ticket price increases," is a majority positive (67%), but it's some lower than total satisfaction (78%). It's highest among visitors from the Middle East region (Kuwait, Bahrain, the UAE, and Qatar) and the USA. In both cases, these are tourists from well-developed countries with higher life and economic standards than Bosnia's, so the ticket price is not as important as their level of comfort. That means they could still easily afford it, and they would do so gladly because they are satisfied with the product. Because most Arabian visitors are "desert-city people" and families, they prefer long days spent in a fresh nature setting that also includes a playground for children, etc. Although the sample of Americans here was small, the fact is that they are mostly "concrete-city people" (people who live in well-built and urbanized areas; for example, New York is popularly known as the "concrete jungle"), so the site of Biambare is an indispensable attraction.

It's important to note that among American visitors, some are actually of Bosnian origin, who have a strong connection to their native place and visit it often during the summer season. PL Biambare is an important site in their stay program, despite the fact that nature is not their primary motivation but rather VFR. There are several reasons why Bosnian Americans are returning visitors to Biambare (as they mentioned in the interview): quality time in nature; the availability and simplicity of a protected area; socialization; looking for an opportunity to find a partner from the same culture. In their opinion, open green areas are more practical than closed ones (cafés, etc.) for establishing new contacts. They even compared the availability and utilization of some protected areas in the *United States* to those in *Bosnia and Herzegovina*, and *Sarajevo*, and pointed out that *PL Biambare* is more suitable because of the short distance from the city; as well it enables a safe stay and an independent walk in a tamer forest; the ticket is cheaper; and the site is much nearer their residence.

Foreign tourists from faraway countries such as Malaysia and Australia are understandably neutral, given the enormous geographical distance and the fact that their primary motivation for visiting Sarajevo was its multicultural image as *"European Jerusalem"* rather than a green city. Plus, some of them stated they count themselves as *"world tavelers"* and prefer to meet new sites rather than visit the same ones.

When it comes to residents, the dominant contingent of respondents strongly disagreed that they would stay loyal to this site if the ticket price increased. It's mostly local people who live in the surrounding area (Krivajevići, Nišići, Olovo, Ilijaš, etc.) and have lower economic standards. Therefore, an expensive ticket could be a limitation for them to visit Biambare as their priority site.

Table 5. Total loyalty (%)					
Positive 67					
Neutral 8					
Negative	25				

Source: Own research



Figure 11. Total loyalty by the arrivals (%) Source: Own research

Marks (x)	Frequency (f, %)	Product (fx)	$AM(\bar{x})$
5	50	50*5=250	
4	17	17*4=68	-
3	8	8*3=24	
2	18	18*2=36	3.85
1	7	7*1=7	_
	∑f=100	∑fx=385	

Table 6. Arithmetic mean as an indicator of loyalty





However, loyalty is higher among domestic visitors than foreign ones (3.53 vs. 3.32), which is logical because protected areas are the biggest benefit for locals (return visitors), as they provide a pleasant stay in nature close to home. The green sites are preferable for weekend recreation and socialization, as well as for health improvement. Leung et al. (2014), EEA (2012), Žunić (2022), and other sources state numerous benefits of protected areas for local people: "socio-cultural", "economic", "environmental", and, in the first place, an improvement of health and quality of life. "Protected areas provide a set of health activities called "green exercises": recreation, joy, relaxation, walking, staying in nature, meditation, stress relief, and immunization" (Žunić, 2022). According to information at the Biambare reception, most frequent domestic visitors are from Olovo and Sarajevo. Their primary motive is to stay in nature, but family visitors favor this site because of its landscapes and available facilities for children (the Wood city, sports fields, playhouses, walking paths, and eco cart/ ,,train"). Most of the local respondents consider that staying at Biambare is useful time well spent because family and friends gather in a healthy environment, generating numerous benefits such as recreation, socialization, games and fun, health, etc.

WOM marketing, which is determined by "recommendation and persuasion," is majority positive (82%), and it's generally the dominant share of strongly agreeing on attitudes among three measured parameters (satisfaction, loyalty, WOM). It's even higher among foreign than among domestic visitors (4.35 vs. 3.93).

Table 7. Total WOM marketing (%)				
Positive	82			
Neutral 3				
Negative 15				

Table	7.	Total	wc)M	mar	ket1r	ıg	(%	6)	

Source:	Own	research

According to the structure of respondents by arrivals, the highest intensity of promotion intention (SA) is found among the visitors from the Middle East, USA, UK, and Australia, but it's also positive for Malaysians and residents. Their word of mouth will be an effective stimulant for new visitors to the Biambare site in the future.



Source: Own research

The fact is that the number of tourists from the Middle East at Biambare is growing lately, and they are the best living example of the type of visitors who are actually well inclined and stimulated by the recommendation of their friends and relatives, as Urry & Larsen (2011) emphesized. This is exactly what they responded to when they were asked about their way to deciding to visit Sarajevo and Biambare. Evidence of WOM effects on Arabian visitors of Sarajevo was confirmed by tourist employers who work with these clients as well (Žunić, 2018). USA visitors are also affected by WOM's promotion of Bosnia, Sarajevo, and Biamabre, not only by Bosnian Americans but also by other Americans who shared their positive impressions; some of them even announced them in the most popular daily magazine, *The New York Times*, which says "Bosnia is no longer a taboo destination, but a destination worth visiting" (Johanson, 2014).

Marks (x)	Marks (x) Frequency (f, %)		AM (x)
5	63	63*5=315	
4	19	19*4=76	
3	3	3*3=9	1.00
2	14	14*2=28	4.29
1	1	1*1=1	
	∑f=100	\sum fx=429	

Table 8. Arithmetic mean as an	indicator of WOM marketing
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AM (x)	Domestic	Foreign	Total
Satisfaction (S)	3.93	4.15	4.24
Loyalty (L)	3.53	3.32	3.85
(WOM) Promotion	3.93	4.35	4.29
Total average:	3.80	3.94	4.13

Table 9. Sum parameter evaluation

Source: Own research

From the table of sum parameter evaluation, we can conclude there's a strong relationship between S-L-WOM, especially between "satisfaction" and "WOM marketing," while "loyalty" could be more dependent on the profile of tourists. The overall tourist image of Biambare is positive. Obviously, this is a popular Bosnian green site with higher tourist value. Carballo et al. (2015) stated that "the image is a fundamental element in the promotion of tourism destinations since what differentiates one destination from another is key to its success" (Huete-Alcocer & Lopez-Ruiz, 2019).

5. FUTURE RESEARCH DIRECTIONS

Future research should focus on more specific attributes of satisfaction, loyalty, and WOM promotion, as well as on the aspects of loyalty in relation to the tourist profile. The study was based on a simple questionnaire to understand three relevant parameters of the site's image. It was 6th International Scientific Conference ITEMA 2022 Conference Proceedings

conducted directly on the site, and it was important to save visitors' valuable time. Additional information was collected in a more casual way during the parallel interview with respondents. As a result, future research should be divided into phases to separately measure each of the examined indicators, and the survey should include precise variables (attributes) defined selectively for satisfaction, loyalty, and WOM marketing. This type of research should significantly impact the further development of Sarajevo and the Biambare tourist supply.

6. CONCLUSION

Biambare's protected landscape has a positive tourist image. It's a popular Bosnian green site with rising tourist appeal. To improve the overall quality of satisfaction, PL Biambare's future development should focus on receptive content and the creation of special programs. Camping and well-organized thematic tours, such as guided forest hiking or herb and mushroom picking, are still lacking. There are also a limited number of rest areas (shadirwan, benches, and a cafe) and parking spots. Some general satisfaction barriers observed on the site include:

- parking deficiency;
- a lack of benches and "shade fountains" (shadirwan);
- a scarcity of well-marked forest trails;
- a lack of hospitality (catering);
- a lack of special programs (e.g., picking mushrooms and medicinal herbs with a tour guide, etc.);
- unexplored or insufficiently explored caves (Central Cave is the only well-organized cave for visitor tours).

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